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**ANXIETY AND DEPRESSION IN COLLEGE STUDENTS AND HOW COLLEGES
CAN HELP**

**A MASTER'S THESIS
SUBMITTED TO THE FACULTY
OF BETHEL UNIVERSITY**

**BY
SUNNY L. CROWDER**

**IN PARTIAL FULFILLMENT OF THE REQUIREMENTS
FOR THE DEGREE OF
MASTER OF ARTS**

AUGUST 2018

BETHEL UNIVERSITY

**ANXIETY AND DEPRESSION IN COLLEGE STUDENTS AND HOW COLLEGES
CAN HELP**

SUNNY L. CROWDER

AUGUST 2018

APPROVED

Advisor: Katie Bonawitz, Ed.D.

Program Director: Katie Bonawitz Ed.D

Abstract

The focus of this research is to better understand causes of anxiety and depression among college students and how colleges can better assist these students. For various reasons, social anxiety is linked to excessive drinking and binge eating/exercising. A comorbid relationship exists between anxiety, depression and sleep disturbance. Sleep disturbance has multiple causes, but this research mostly focused on how technology interferes with sleep. In addition to sleep disturbance, excessive drinking, and binge eating/exercising/anxiety and depression are linked to perfectionism, goal setting, living accommodations, parent attachment and transition, and career planning. Remedies explored for anxiety and depression treatment and prevention were yoga, mindfulness, visualization, tai chi chuan, journaling, Emotional Freedom Technique, and biofeedback.

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CHAPTER I: INTRODUCTION

The U.S. Bureau of Labor Statistics reported (2018) that more than half of the United States population goes to college after high school. The decision to go to college after high school is not right for all students. In fact, according to the American Psychological Association, a third of college students experience depression and approximately half reported feeling anxious (Novotney, 2014)

Depression is a down mood that lasts for substantial periods of time, not just a day or two (Sutton, 2011). It can interfere with the activities of daily life like doing homework, eating, waking up for the day. Depression can also cause physical impairments including headaches and stomach upset (Sutton, 2011). Anxiety is a feeling of nervousness or fearfulness that does not match the situation (Craske & Stein, 2016). For example, social situations can be perceived as potentially threatening and cause anxious feelings that prevent the person from participating (Craske & Stein, 2016). Avoidance behaviors cause the person to avoid situations even going to school. Like depression, anxiety can disrupt daily functioning. (Craske & Stein, 2016). A better understanding of potential causes of anxiety and depression in college-age students is warranted. In addition, it is important to learn ways colleges can help.

History of Economic Change

General History of the Manufacturing Economy

Back in the 1960s and 1970s, the economy depended more on manufacturing than knowledge which meant college was not usually necessary. As a country, we manufactured six times more product than we do now, and they used twice the people (Arnett, 2015). This made life more simplistic because men did not have to go to college to get a good paying job that could

support a family. Women had few opportunities for employment not to mention careers. This made a woman supporting herself nearly impossible therefore women needed to find a man to have a life apart from their own parents. In the mid-1960's, the average family was established by the age of 20 for women and age 23 for men compared to 27 for women and 29 for men now (Arnett, 2015). Due to this new reality, Arnett (2015) believes there is a new stage of development which he refers to as emerging adulthood.

Emerging adulthood

Arnett (2015) described a new stage of development that exists between adolescence and adulthood today called emerging adulthood. Emerging adulthood occurs between high school graduation and when a stable career is achieved which can be delayed into the 30's. This stage came about because it takes much longer to prepare for adulthood now due to four primary factors.

Four Stages of economic change

Technology. Technology advanced over the decades in the form of knowledge. Sixty years ago, manufacturing was our primary economy, but now knowledge is our primary economy. For example, informational technology (IT) and other services require substantial education to acquire the necessary skill set (Arnett, 2015).

Sexual revolution. The sexual revolution arose in the 1960's due to the invention of the birth control pill. This was the first time there was a divide between sexual relations, marriage, and procreation. Due to birth control, women were afforded more flexibility (Arnett, 2015).

The Women's movement. The women's movement originated because of the sexual revolution. Women had more control of their futures because they had the option to plan their families. Currently, there are 16 percent more women in college than men (Arnett, 2015).

The Youth movement. The youth movement of the 1970's made it less desirable to be an adult. This was a time of political unease primarily due to Vietnam. Emerging adults realized they had a voice and many organized and protested the war and establishment overall (The Odyssey, n.d.). This mentality took away the hurry to grow into the authoritarian figure of the adult, remain youthful and enjoy a free life (Arnett, 2015).

Knowledge economy

For the most part, the knowledge economy has replaced the manufacturing economy in America. The knowledge economy consists of continuous learning, usually from college to acquire and maintain the skills and expertise necessary to stay competitive in fields such as computer programming (Piotrowski, 2016). Young adults often view their 20's as a time to prepare for their careers since it takes a substantial amount of work to do so. Also, women are preparing for their careers equally or more than their counterparts, therefore it is not unusual for families to form when people are in their 30's.

Depression and Anxiety in the College-Age Population

Scarcity

With the knowledge economy came the requirement of substantial training. With all this preparation, does everyone get the career they worked to get? Unless people choose the right major in college, they probably will not (Schwab, 2015). Each year, Kindergarteners are asked what they would like to do when they grow up. When making the decision, Kindergarteners do

not ponder pay range or college years necessary to get the job; they decide what they want to be and state it confidently. Usually, princesses and superheroes are the most popular career choices for the age group. Unfortunately, that changes when they figure out what the expectations of the adults around them are. As children grow, they learn that some students are better at academics than others and they begin to limit themselves (Schwab, 2015). The realization that some students seem more gifted continues until they learn the word, scarcity. In this context, scarcity means there is not enough room for everyone to do what they want to do, and more stress builds through high school (Schwab, 2015) When students get to college and find that scarcity exists there too, but at a higher level, the stress of real life arises (Schwab, 2015). School is no longer just school. School used to be preparation for college, but college is preparation for adulthood which can be a very stressful realization.

Social media

Social media like Facebook, Twitter, and Instagram, is adding to depression and anxiety in college-age students as 18 – 24 year olds are the most active age group using social media (Parnell, 2017). The center for collegiate mental health found that the three most common mental health diagnoses on a college campus - anxiety, depression, and stress, can be connected to social media. Parnell (2017) found four common reasons for the level of distress related to social media. First, people compare themselves to others even when it is entirely unrealistic as in comparing to celebrities. Second, when people post things on the social media platform, they receive social currency in the form of likes and comments to their post. This means value is attached to what other people think and this could change the identity of people this age. Next, the fear of missing out (FOMO) is a real fear. In fact, Parnell worked with the Canadian Universities to survey college students and found seven out of ten people would get rid of social

media if it were not for fear of being left out. Finally, Parnell (2017) cited online harassment as the last of the four main anxiety and depression producing elements of social media. On average, two hours of every day are spent on social media.

Educators can help the college-age population regulate their social media use by assisting students to become aware of their negative feelings when using social media and helping them change how social media is used. For example, unfollowing groups or people that create negative emotions. Social media can create a positive experience if used correctly but unfortunately, if it is not used correctly, it can create a lot of anxiety and potentially depression.

Transition to College

Transition to college is a time when emerging adults discover their independence and autonomy in an environment away from home (Huynh & Fuligni, 2012). Time management is one of the most challenging things for young adults to master (Arnett & Fishel, 2013). There are no parents there to remind the student to go to bed, wake-up, go to work or most importantly, do homework. On average, college students have double the homework they did in high school, but no one is there to help them organize it. In time, most students will learn how to manage their freedom, but until then, it could produce substantial anxiety (Arnett & Fishel, 2013). Finding independence from parents can also be very stressful for some students. College is the perfect place for the emerging adult to learn about who they are as an independent person.

Unfortunately, finding a place of balance between asking parents for help, or needing emotional support from parents can be difficult, especially for females (Kenyon, 2009). Kenyon (2009) referred to this as the autonomy expectations from both parents and student. How much should the student continue to depend on their parents for support as they try to find their own way?

How much help should parents offer? Arnett and Fishel (2013) found the more support provided

by parents that was desired by the student, the less anxiety and the more autonomy the student found when the time was right. But not all students have the necessary support from parents. This lack of support could be the cause of increased feelings of anxiety if the emerging adult feels unprepared with no place to turn.

Definitions of Common Terms

There are words and phrases used in Chapter II that should be briefly reviewed. *Social anxiety/disorder* which was previously referred to as *social phobia* refers to the fear experienced when considering how others could judge one in a social situation. *Social anxiety/disorder* can also occur in specific situations like speaking in front of a group (Richards, n.d.). *Social anxiety/disorder* should not be confused with *general anxiety/disorder (GAD)*. GAD can be defined as excessive ongoing worry. People with *general anxiety disorder* are uncomfortable and nervous in most situations (Richards, n.d.). *Depression* is the emotional state of feeling down or unmotivated. Depression can be difficult to define because it is experienced quite differently by people. Depression is the most common mental health disorder (Sutton, 2011). The word *binge* refers to excessive amounts of eating or drinking. The term *binge* can be measured by drinking more than four alcoholic beverages for a female and five for a male in one sitting. *Binge* eating can be defined as eating significantly more in a two-hour period than most could eat (Kelly-Weeder, 2009). The term, *Negative effect* is frequently used in chapter two and is meant to include both anxiety and depression (Kaiser, Milich, Lynam, & Charnigo, 2012). *Comorbid* is defined as being present at the same time. For example, ADHD and anxiety are comorbid about half of the time (Story, 2016). *Ruminations* are thoughts or behaviors which direct a person towards negative feelings and moods (Zawadzki, Graham & Gerin, 2013). *Self-efficacy*, a part of Bandura's social cognitive theory, is the belief that one can complete goals or tasks required in a

situation (Isik, 2012). *Mindfulness* can be defined as being aware of feelings moment to moment. To be mindful of the present moment (Falsafi, 2006). Lastly, *biofeedback* is the electronic monitoring of normal bodily function for gaining control of the function. For example, in practice, an individual can slow the heartbeat down at will (Ratanasiripong, Sverduk, Prince, & Hayashino, 2012).

The all-encompassing guiding question for this thesis is, “Why are depression and anxiety in college-age students so prevalent and in what ways can we better support them?” The latter question is subdivided into the following two questions:

1. In what ways can colleges better support students experiencing anxiety and depression?
2. In what ways can colleges better equip students during their college experience?

CHAPTER II: REVIEW OF THE LITERATURE

More than half of the population in America will go to college after high school (U.S. Bureau of Labor Statistics, 2018). While in college, more than one-third of students will experience anxiety and depression (Novotney, 2014). High school staff work diligently to prepare potential college students academically but not necessarily for college culture (Myers, 2016). Also, to be successful in going away to college, students must adapt to being apart from family, friends, and home (Kenyon, 2009). Many students will successfully transition to college, but unfortunately, there is a percentage of students that will experience substantial anxiety and depression (Novotney, 2014). Why do these college students fall victim to depression and anxiety and how can colleges help these students?

In researching this topic, searches were done on CLIC which is an online search engine that shares access to many online databases including EBSCO Megafire and Academic Search Premier. Many studies were available that included college-age depression and anxiety, and the search was adjusted to areas that had substantial research conducted. Eighty-two percent of empirical studies were conducted within the past decade, and 14 percent had been done since the year 2000. The research consisted predominantly of empirical research. To a lesser degree, TED Talks, books and meta-analysis were consulted.

The following chapter includes a breakdown of primary causes and effects of anxiety and depression in college students and possible ways colleges can help them. The first part includes studies that focus on how binge drinking, binge eating, and other compulsive activities are linked to the experience of anxiety and depression. The next part focuses on sleep disturbance in general and how technology, particularly Smartphones, disturb sleep and add to anxious and depressed feelings. The third part focuses on the causes of stress and how stress is linked to

anxiety and depression. Next, the quality of attachment to parents and transition to college are explored. Lastly, various coping strategies are reviewed that have historically worked as interventions for anxiety and depression.

College Behaviors Affecting Anxiety and Depression

Social Anxiety and Drinking

Coping with the undergraduate college experience can be more difficult for some than others. People who have been clinically diagnosed with a social anxiety disorder (SAD) have a four times greater risk of drinking heavily in negative or personal/intimate situations than people not diagnosed with SAD (Terlecki & Buckner, 2015). Terlecki and Buckner (2015) explored the impact of drinking motives of social anxiety and drinking situations on an existing set of data where it was determined that socially anxious people took part in heavy drinking (Terlecki & Buckner, 2015).

After a detailed process, a sample of 232 participants were selected: 97 percent white and 69 percent female. It was determined that 116 students had high social anxiety (HSA) and 116 had low social anxiety (LSA). Approximately half of the group worked part-time, the majority of the other half was unemployed with only three percent working full-time. Of the chosen population, 89 percent reported lifetime alcohol use and 81 percent reported alcohol use during the past month. The measures taken were the Drinking Motives Questionnaire Revised (DMQR; Cooper, 1994) and the Drinking Context Scale-Revised (SCS-R). The Social Phobia Scale (SPS) and the Social Interaction Anxiety Scale (SAIC; Mattick & Clark, 1998) were given to the original participants to determine the HSA and LSA groups.

The DMQR measures four primary reasons to drink: coping motives, social motives, enhancement motives and conformity motives. The DCS-R assessed the typical quantity of drinking in both positive and negative circumstances. The findings of the study concluded that socially anxious drinkers were more likely to drink heavily in negative situations including peer pressure, perceived judgment from peers and intimate situations. Fear of intimacy and fitting in could play a role in socially anxious people drinking more than their less anxious counterparts. Although, there were no findings to support that socially anxious people drank to elevate positive experiences such as parties. Terlecki and Buckner (2015) concluded that socially anxious undergrads who drank heavily situationally due to perceived negative circumstances could benefit from therapeutic interventions.

Like Terlecki and Buckner (2015), Schry and White (2013) had conducted an earlier study and found students with social anxiety were likely to use alcohol as a coping mechanism to deal with negative emotions and peer pressure. Schry and White (2013) also concluded that socially anxious students did not use alcohol to enhance a mood or to have fun. Unlike Terlecki and Buckner (2015), Schry and White (2013) found through the meta-analysis of 50 studies that social motives such as drinking to feel more social were prevalent with socially anxious undergraduates.

An angle that neither Terlecki and Buckner (2015) nor Schry and White (2013) took was to measure the relationship between social anxiety and alcohol issues in college-age students relating to gender (Norberg, Norton, Olivier & Zvolensky, 2010). Norberg and colleagues found that women with high levels of social anxiety, although reporting similarly in quantity and frequency of alcohol use with men and women, seemed to have more alcohol-related problems due to drinking for negative reasons such as coping or fitting in. Whereas, men with high levels

of social anxiety tended to drink less overall. This was thought to be an avoidance issue. Men with low social anxiety tended to drink more quantity for positive reasons such as enhancement of fun situations but did not have as many alcohol-related problems. Norberg et al. (2010) conducted their research with 118 college-aged students that reported occasional experience with social anxiety who had the average age of 19.5. Of the participants, they were 61 percent women. Nearly half of the students were Asian, 44 percent, and 40 percent were Anglo Australian. This study took place in Australia where the drinking age is 18 rather than age 21 as in the United States of America. Norberg et al. (2010) found that 77 percent of the participants were in their first year of college and 42 percent were not atheist or agnostic. The study did not state what the religious beliefs were of the remaining 58 percent. Self-report measures were used to collect data. The Modified Timeline Follow back Interview (TLFB) is an instrument used for ninety days by the participants to provide alcohol consumption information. Social Interaction Anxiety Scale (SIAS) and the Social Phobia Scale (SPS) were used so participants could answer questions about feelings of anxiety. Drinking Motives Questionnaire-Revised (DMQ-R) provides questions for participants to answer regarding drinking. Lastly, the Inventory of Drug-Taking Situations- Alcohol Version (IDTS-A) was a self-report to measure drinking over the past ninety days over eight key situations. The study revealed it was true that socially anxious women were more likely to drink for negative reasons and rarely for fun. Socially anxious men were more likely to drink to enhance the fun.

Many studies have been done to examine social anxiety and drinking in college-aged students, but less has been done to quantify how social anxiety specifically aligns with alcohol use and alcohol problems thus being able to provide meaningful intervention. Terlecki, Ecker, and Buckner (2014) hypothesized that first, social anxiety would be positively correlated to

social, intimate and negative emotion drinking behaviors and secondly, these circumstances linked social anxiety to drinking problems in college-aged students. To run their study, they recruited 611 undergraduate students comprised of 68 percent females, were 95 percent non-Hispanic/Latino and had a mean age of just under 20 years old. More than half were employed part-time at 54 percent, and 39 percent were unemployed. Most of the participants claimed to have lifetime drinking or drank within the past month. Participants were given a Daily Drinking Questionnaire (DDQ) which measured the amount they drank as measured by relevant timelines. Next, they were asked to complete a Drinking Context Scale-Revised (DCS-R) which assessed drinking in multiple situations. Participants completed the Social Phobia Scale (SPS) and the Brief Young Adult Alcohol Consequences Questionnaire (B-YAACQ) which evaluates potential alcohol-related problems. The outcome of the study concluded, after controlled for employment and gender that participants with high social anxiety (HSA) had more drinking problems, but social anxiety was not directly linked to drinking amount, frequency or substantial social drinking. Terlecki et al. (2014) found that social anxiety could be correlated with drinking a lot in certain adverse situations or alone during a process referred to as post-event processing (PEP). Terlecki et al. (2014) hypothesized that socially anxious students would drink more in social, personal and negative situations. Researchers determined future research should be done to better understand the role drinking plays if any in increasing positive affect for socially anxious people.

Binge Drinking and Eating

Binge eating and drinking have often been associated with generalized anxiety. In this study, Kelly-Weeder (2009) searched to find a correlation between binge drinking, binge eating and other disordered eating behaviors in college-aged males and females. Kelly-Weeder (2009) described binge eating as eating much more in a two-hour period than most could. Binge

drinking was defined as drinking more than four drinks for females and more than five drinks for a male in one setting. The study included a self-report on a survey created by the researcher. There were 211 college-aged participants that volunteered to take part in the study. Most of the participants were Caucasian with the mean age of 20 years old. Kelly-Weeder (2009) found binge eating and binge drinking behaviors were predominately co-occurring with no substantial gender difference. Historically, studies on disordered eating had been mostly on a female population that did not include men. Additionally, disordered eating and weight loss was more prevalent in conjunction with binge drinking and eating. Males were more likely to use physical exercise after episodes of binge eating to control their weight but did not exercise after binge drinking. Females were more likely to use other types of weight loss behaviors like fasting and using diet pills. Laxative use existed but to a much smaller extent. Kelly-Weeder (2009) concluded future research is warranted to understand better the extent of these behaviors and how it could affect the college-age population.

The correlation between binge drinking and binge eating were examined in the previous study. In another study, the relationship between binge eating and anxiety is explored. Binge Eating Disorder (BED) is defined in the DSM-IV-TR as recurrent episodes of binge eating in the absence of compensatory behaviors like vomiting or exercise. Rosenbaum and White (2013) explored how binge eating and anxiety relate to each other in a comprehensive study. There are multiple theories behind binge eating. The Perfectionism Model includes people with perfectionistic tendencies to find short-term relief from underlying negative effect symptoms by binge eating. Rosenbaum and White (2013) described the Expectancy Theory as binge eating as a response to distress. Binge eating is a form of avoidance of feelings of anxiety or depression as defined by Cognitive Avoidance Theory. In further examination of binge eating, Rosenbaum

and White (2013) found binge eating and anxiety are 37 percent comorbid. Meaning, that 37 percent of people diagnosed with a generalized anxiety disorder are also diagnosed with binge eating disorder. In a college environment where so much is new and intimidating, it is not surprising that using food to control or mask underlying anxious feelings is common. Disordered eating on the college campus is not unusual and is understandable considering the frequently occurring negative emotions experienced by college-aged students.

Distress Tolerance and Negative Urgency

Depression and anxiety, also known as negative affect, are thought to increase the risk of substance abuse (Kaiser, Milich, Lynam, & Charnigo, 2012). Kaiser et al. (2012) explored how distress tolerance and negative urgency/impulse control impact substance abuse. Distress tolerance, as measured by the Distress Tolerance Scale (DTS), attempts to evaluate how individuals cope with negative affect. This is primarily a cognitive response. People with low levels of distress tolerance are more likely to have substance abuse problems since they lack the skills to handle distress. Another variable considered was negative urgency. Kaiser et al. (2012) described negative urgency primarily as a behavioral response to feelings of distress. Negative urgency can be described as impulsive behavior like excessive gambling, risky sexual activity, and aggressive behavior. Kaiser et al. (2012) chose 525 first-year college students. They were on average 19 years old and the majority comprised of 81 percent Caucasian and 12 percent Black. Participants were selected from an introductory psychology course via a screening questionnaire. The questionnaire was structured, so high-risk students could be detected thereby creating necessary variability at just under 25 percent of the participants being high risk. The participants were drug tested and then answered questions related to substance use via a computer questionnaire. Kaiser et al. (2012) selected the Impulsive Behavior Scale (UPPS-P),

the Distress Tolerance Scale (DTS), Five Factor Model Rating Form (FFMRF), the Alcohol Use Disorders Identification Test and a Life History Calendar. The results Kaiser et al. (2012) found matched their prediction that substance abuse has a relationship with negative urgency and distress tolerance. Negative Urgency was the personality variable that could be used as a predictor of all substance abuse issues (Kaiser et al., 2012).

Sleep Disturbance and Screen Time

A Smartphone is essentially a hand-held computer. First generation Smartphones were brought to market about a decade ago, or about half the lifetime of today's college-aged students. Studies are now being conducted to explore how addictive the devices have become, especially for younger people with depression and anxiety. Boumosieh and Jaalouk (2017) set out to explore how far-reaching habitual use of Smartphones has become. Also, they wanted to understand what the correlation between habitual Smartphone usage and depression and anxiety was. The sample was comprised of 688 anonymous participants, 53 percent male with an average age of 20 years old. Boumosieh and Jaalouk (2017) created three models to give them the ability to control for variants like personality type, age, class, the age of initial Smartphone use and daily use. Researchers measured first using a survey that asked personal questions like GPA, income and personality type. Next, participants answered the Smartphone Addiction Inventory (SPAI), a lifestyle habit questionnaire, the Patient Health Questionnaire (PHQ-9) and the Generalized Anxiety Disorder-7 (GAD-7). The latter two are predominant questionnaires used to diagnose depression and anxiety in the DSM. Boumosieh and Jaaslouk (2017) found smartphones to have a substantial negative effect on college-age students. Thirty-six percent of the sample felt tired because of night-time use, and 38 percent reported less quality sleep overall.

Boumosieh and Jaaslouk (2017) found depression and anxiety were predictors of smartphone addiction with depression being a more prominent predictor than anxiety.

As stated before, research regarding cell phone use and how it affects college-aged students has become much more prevalent. Lepp, Barkley, and Karpinski (2013) investigated how cell phone use (CPUse) in this age group related to Satisfaction with Life (SWL) (overall well-being), anxiety and academic performance. Again, when the cell phone with similar capabilities as they have today was made available ten years ago, current college students were about ten years old. Before the cell phone, it was not a common sight to see people staring at a screen in public. Cell phones could be seen as a convenience, not a necessity as they are today. The researchers of this study attempted to measure smartphone use against anxiety, academic performance, and Satisfaction with Life of college students. The thought was the adjustment to college life was difficult enough without the smartphone, so the researchers measured how high and low-level cell phone use impacted college students by the three ways above. The Data was collected from 536 students consisting of 166 males and 370 females. Participants answered a general questionnaire, the Satisfaction with Life Scale (SWLS), the Beck Anxiety Inventory (BAI), and questions about cell phone and texting use. Also, academic performance was measured using each of the participant's actual GPA assessed through official university records. The findings of the study were that students with high cell phone use had higher levels of anxiety, and lower academic performance and overall well-being compared to their peers who used the devices less.

In this study, Fend, Zhang, Du, Ye, and He (2014) explored how sleep quality, depression, and anxiety were affected by physical activity (PA) and screen time (ST) among Chinese college first-year students. Physical activity was addressed due to previous studies

stating that physical activity had no bearing on mental health. Feng et al. (2014) found that previous studies had not examined the sedentary lifestyle of college students, which they also believe, is primarily caused by screen time. In addition to a lack of physical activity, screen time is thought to cause obesity, physical pain, and poor grades. Feng et al. (2014), examined how physical activity and screen time affect mental health and sleep quality. The method used included 1,077 students of which 42 percent were females; 58 percent were male with a mean age of 19 years old. They were given a questionnaire that asked for general information including height and weight, socio-demographic, physical activity level (expressed as time per day/week), screen time per day (defined as computer use, TV, video games but did specifically include cell phone use), sleep quality, depression and anxiety status. Sleep quality was measured using the Pittsburgh Sleep Quality Index (PSQI), the Standard Depression Scale (SDS) and Standard Anxiety Scale (SAS) were given to measure mental health. Results relating to mental health included subjects within the low physical activity group with low screen time were 38 percent less likely to self-report mental health disturbance than their peers. Participants in the high physical activity group with low screen time were 49 percent less likely to experience poor sleep quality (Feng et al., 2014). In conclusion, screen time had negative effects on both mental health and sleep quality in college-age students whereas physical activity did not improve mental health as it did sleep quality.

As referenced before, college-aged students can struggle to get quality sleep. Adams and Kisler (2013) found that students struggled to create cell phone use boundaries which was likely due to the portability of cell phones. Also, a significant number of college-age students have more than four technological devices in their rooms, which the researchers found significantly delayed sleep. Furthermore, most devices give off some form of light, which suppressed

melatonin production, which aids in sleep onset. Per Adams and Kisler (2013), over 20 percent of teenagers are awakened by their phones after they have gone to sleep and only 29 percent reported getting at least eight hours of sleep.

Jenaro, Flores, Gmes-Vela, Gonzalez and Caballo (2007) reported that anxiety is linked to significant cell phone use. Significant cell phone usage is related to poor sleep, and anxiety and insomnia are correlated. Adams and Kisler (2013) examined how technology use after falling asleep affects sleep quality and mental health. The researchers selected 236 students who were mostly white females with an average age of 22. The participants completed a demographic questionnaire, the Pittsburgh Sleep Quality Index (PSQI), a week-long sleep diary, the Beck Depression Inventory – II (BDI-II) to assess depression and the Adult Manifest Anxiety Scale (AMAS) – College to evaluate anxiety. After controlling for age and gender, Adams and Kisler (2013) found poor sleep quality could predict anxiety and depression for nearly a third of college-age students.

Thomee, Harenstam and Hagberg (2011) had previously studied college students and information and communication technology (ICT) as it relates to mental health. In the current study, they opened their research to young adults aged 20 to 24 but not necessarily university students. In other studies, stress, disturbed sleep, the stress of not being available and guilt associated with not being available, mental overload, depression, anxiety and feeling an overall lack of freedom have been connected to cell phone use. There have also been positive correlations found to cell phone use such as a feeling of social connectedness, support and access to others when in need. These are very positive aspects when considering that low social support can be a significant factor regarding depression and anxiety. In the current study, Thomee et al. (2011) aimed to investigate the psychosocial characteristics of cell phone use and mental health

symptoms in young adults ranging in age from 20 to 24. This was designed to be a cohort study in which the cohort would be followed up within a year. The cohort began with 7,125 participants, 2,778 males, and 4,347 females. One year later, the cohort numbers decreased to 5,734. Two years later, only 4,156 participants remained. Participants were asked by the researchers to complete a questionnaire asking about mobile phone use on a per day basis including more specific questions like, “how often the respondent was awakened at night by the mobile phone, how he or she perceived demands on availability, and whether he or she perceived the accessibility via mobile phones to be stressful, as well as perceptions regarding personal overuse of the mobile phone.” Mental health information was collected by a questionnaire and sleep disturbance information was collected by a questionnaire adapted from the Karolinska Sleep Questionnaire. The results found that men nor women considered their mobile phone to provide access to social support. Overall, women were affected more than men by availability demands, being awakened at night, overuse and accessibility stress although men showed symptoms of stress, sleep disturbance and depression as well. Considering this study was published in 2011, soon after cell phones were a regular part of society, it might be that people have adapted to some of those stressors since then like accessibility stress and availability demands.

Sleep disturbance and negative effect. Nyer et al. (2013) explored the relationship between sleep disturbance and anxiety, depression and overall functioning in college-aged students. The students selected for the study scored a 13 or greater on the Beck Depression Inventory (BDI), a mental health questionnaire. This provided a baseline for students that already exhibited depressive symptoms. Students were divided into two groups based on number 16 on the Beck Depression Inventory. Question 16 asked students about their sleep on a scale

from 0 – 3. 0 = I can sleep as well as usual; 1 = I do not sleep as I used to; 2 = I wake up several hours earlier than I used to and find it hard to get back to sleep; and 3 = I wake up several hours before I used to and cannot get back to sleep. Group one was made of students with no sleep disturbance and Group two was comprised of students who answered 1 through 3 on question number 16 which showed some sleep disturbance. The researchers selected 287 students from a larger study. Students included in the study that had significant depression symptoms on the Beck Depression Inventory (scoring 13 or higher) were given a demographic questionnaire, Anxiety Symptoms Questionnaire – intensity and frequency (ASQ), Beck Hopelessness Scale (BHS), Beck Anxiety Inventory (BAI), Quality of Life Enjoyment and Satisfaction Questionnaire (QLESQ) and the Massachusetts General Hospital Cognitive and Physical Functioning Questionnaire (CPFQ). The study found students that exhibited both sleep disturbance and had depression symptoms in general experienced greater feelings of anxiety, depression, and functionality. Nyer et al. (2013) concluded that sleep disturbance is often overlooked even though it can exacerbate depression and anxiety, especially for this population. Based on this study, the importance of uninterrupted, quality sleep cannot be emphasized enough to college-age students.

Sleep disturbance was found to be a symptom of depression. Studies were done around the world on college-age students regarding the existence of depression and associated disorders. Major Depressive Disorders are usually diagnosed around college age which can be a lifelong disorder according to Field, Diego, Pelaez, Deeds and Delgado (2009). Field et al. (2009) determined that depression is often comorbid with anxiety citing an example that 47 percent of students diagnosed with depression also suffered from anxiety. Field et al. (2009) examined the relationship between depression and other disorders including anxiety, intrusive thoughts,

controlling intrusive thoughts and sleep disturbance. Field et al. (2009) explained the circular relationship between sleep disturbance and its associated disorders. Sleep disorders are often caused by intrusive thoughts. Attempts are made to control the intrusive thoughts which can then lead to depression and depression can lead to more sleep disturbance. To learn more about the relationship between these disorders, the researchers recruited 283 students from psychology classes at a Florida University. The participants were 78 percent female, 22 percent male, and 70 percent Hispanic. The sample was divided into a low and high depression group by using a cutoff score of 16 on the CES-D scale. Participants were asked to complete a demographic questionnaire, the Center for Epidemiological Studies- Depression Scale, the State Anxiety Inventory (STAI), a scale created by Field et al (2009) called the Intrusive Thoughts Scale (ITS), a scale created by Field et al (2009) called the Difficulty Controlling Intrusive Thoughts Scale (DCITS) which was adapted from the Thought Control Questionnaire (TCQ) and the Sleep Disturbance Scale (SDS) again created by Field et al. (2009). The results showed 52 percent of their participants were depressed which the researchers thought such a high percentage could be due to the students being substantially Hispanic and female. The researchers cited Spanish females have a high rate of depression. Field et al. (2009) found that all the disorders they studied added to depression. The researchers expressed a concern that universities have essentially ignored the effect of depression and its related disorders on school performance and that further studies should be done to explore specifically how these disorders affect student's performance.

Sleep disturbance could be exacerbated by energy drink use on college campuses. Energy drinks contain many ingredients, but caffeine has been the most studied in relationship with sleep and anxiety according to Stasio, Curry, Wagner, and Glassman (2011). Caffeine

intake in moderate doses and daily caffeine intake can be beneficial, but higher doses can create anxiety and in turn sleep disturbance. Stasio et al. (2011) reported caffeine intake near bedtime could cause substantial interference with sleep. It can delay falling asleep, staying asleep, sleep time and quality of sleep. It was reported in 2008 by National College Health Assessment survey that students considered stress and sleep disorder as two of their greatest concerns as relates to academic performance. Energy drinks usually contain a substantial amount of caffeine and other stimulants. In a recent study conducted by Malinauskas, Aeby, Overton, Carpenter-Aeby, and Barber-Heidal (2007) students reported drinking one energy drink minimally per month and reported drinking it due to fatigue because they had not slept well. Some students reported anxiety-like symptoms and a crash experience when the energy drink wore off. Stasio et al. (2011) hypothesized that college students in ROTC, due to the athletic and overall demanding nature of their responsibilities, and college athletes would drink energy drinks more often than others. Also, they predicted that higher consumption of energy drinks would be positively related to anxiety and sleep disturbance. The researchers created three groups. The first group was comprised of athletes, 21 males, and 23 females. The second group was 18 male ROTC candidates. Lastly, the control group was comprised of 21 males and 24 females. Participants were given the Beck Anxiety Inventory (BAI), the Pittsburg Sleep Quality Index (PSQI), and a seven-day paper and pencil calendar reporting caffeinated beverage use. The researchers confirmed their hypothesis that “as the frequency of energy drink use increased, experiences of anxiety and sleep disturbances also increased (Stasio et al., 2001, p.744).” The three groups, ROTC, athletes and the control group (excluding females) had no difference in the frequency of energy drink consumption. Researchers thought future study would be important because energy drinks can cause anxiety and sleep disturbance.

Poor sleep quality. Loneliness, rumination, anxiety, and depression all play a part in sleep disturbance. Loneliness is the perception that one has not had enough social interaction. Rumination is oscillating or deep thought that is usually negative. Anxiety is a fearful or nervous state of being and depression is the experience of low mood. Zawadzki, Graham and Gerin (2013) created four related studies to find the relationship between these psychological factors since they covary but how they do has been only minimally studied. Sleep disturbance in young adults can carry through adulthood and can cause significant health problems. According to Jensen (2003), only about 11 percent of college-age adults get proper sleep. It would be ideal to understand the causation of sleep disturbance so early interventions could be appropriately addressed.

As stated previously, Zawadzki et al. (2013) tested these psychological factors about sleep disturbance in four related studies. For the purposes of this research, study four will be the focus as it specifically studied sleep disturbance over a three-month period. A time was established near the beginning of the semester and follow-up time was established near the end. There were 344 students comprised of 258 women and 76 men with an average age of 21. The participants completed the UCLA Loneliness Scale (ULS), the Ruminative Response Scale (RRS), the Spielberger Trait Anxiety Scale (STAS), the Interpersonal Support Evaluation List (ISEL), the Beck Depression Inventory (BDI) and the Pittsburgh Sleep Quality Index (PSQI). These materials were completed in both early and late semester online. Researchers found rumination, anxiety, and depression to be a cause of poor sleep quality. Overall, Zawadzki et al. (2013) concluded, “greater loneliness was associated strongly with higher rumination, and that this tendency toward rumination accounted for the effect of loneliness on both depressed mood

and sleep disturbance (p.219).” The researchers added that rumination could be a good place to begin to teach coping strategies to help students who have psychological concerns.

Effects of Stress on Anxiety and Depression

Perfectionism is connected to depression and anxiety. Zhou, Zhu, Zhang, and Cai (2013) examined if perfectionists with higher levels of perceived social support experienced less depression and anxiety than perfectionists with less perceived social support. This study used dual-process model perfectionism which included both adaptive perfectionists which the researchers of this study named positive perfectionists (PP) and maladaptive perfectionists which the researchers named negative perfectionists (NP). According to Zhou et al. (2013), positive perfectionists were more reasonable with goal setting, unlike negative perfectionists who tended to make unreachable goals. Also, positive perfectionists focused on achieving success rather than avoiding failure like their negative counterparts. Social support (SS) was defined by Zhou et al. (2013) as, “the existence or availability of people on whom we can rely, people who let us know that they care about, value and love us (p.1143).” The authors defined Perceived Social Support (PSS) as “the belief that help is available if needed (p. 1143).” Zhou et al. (2013) hypothesized that high amounts of PSS could reduce anxiety and depression as compared to perfectionists with less PSS. From two Chinese colleges, 426 students comprised of 46 percent men and 54 percent women with a mean age of 20 years old. Instruments used were the Positive and Negative Perfectionism Scale (PANPS), the Depression Anxiety Stress Scale-21, and the Multidimensional Scale of Perceived Social Support (MSPSS). Data was controlled for children with no siblings and gender due to significantly higher levels of anxiety and depression in only children and men. The findings of Zhou et al. (2013) were perceived social support could help perfectionists from negative effect whereas perfectionists with low social support were likely to

struggle with anxiety and depression. Researchers also found that positive perfectionists struggled with perceived social support due to experiencing it as added pressure on college-age students.

According to Wolfram (2010), nearly 10 percent of college-age students have been diagnosed or have received treatment in the past 12 months for depression and anxiety. Beiter, Nash, McCrady, Rhoades, Linscomb, Clarahan and Sammut (2014) investigated likely contributors to the anxiety, depression, and stress that many college students experience. They studied grade of students, off-campus living, transfer students, gender, overall stress causing sources of concern. Beiter et al. (2014) conducted a study using 374 students from a private college in California. The participants completed a demographic questionnaire, the DASS (Depression, Anxiety and Stress Scale), and a Stressor evaluation. The researchers found that upperclassmen were significantly more stressed than underclassmen. This was mostly due to the perceived pressure of finding a career once graduated and paying back debt. Students that scored the most anxious, depressed and stressed were students living off of campus. These students are stricken with finding a place to live, pay rent, make meals, and whatever other added pressures there are living off campus. Next, transfer students declared substantial anxiety, stress, and depression. Integration into a new environment even for college-aged students showed to be difficult. The transfer students must learn a new system and make new friends which are stressful in addition to the already existing stress of being a college student. Aside from the groups above, researchers found the greatest areas that produced stress for students were academics, the pressure to be successful, career planning, money and sleep disturbance. Beiter et al. (2014) suggested college programming could be used to help assist the students. For example, for off-campus students, programs could be put in place to assist students in budgeting

and how leases work. Overall, college programming apart from academics to assist students in becoming independent from their parents should be considered for this population.

Goal Setting

Goal setting has typically been encouraged by parents, teachers and other authority figures. But goals can come with unintended consequences. There are many kinds of goals; some goals are set to help self and others, and some are created to help just the goal setter. Crocker, Canevello, and Breines (2010) explored how different kinds of goals affected first-semester college students. Some types of goals can add a lot of stress and unease to the lives of college students, but others can alleviate negative feelings. For example, achieving goals can be very rewarding but contrarily, not achieving goals can be anxiety provoking and disappointing. Two of the kinds of goals researchers investigated were compassionate goals and self-image goals. Compassionate goals are considered those that benefit both the setter and those around the setter. For example, a college roommate could benefit from a compassionate goal and in return, set a goal that helps back. Whereas, a self-image goal is set to help the creator only. These goals are set to help the maker feel better about themselves and not to help anyone else. What's tricky about self-image goals is they tend to require others to support the maker achieve their goal because they want others to view them in specific ways. Self-image goals can be self-defeating because they need others to help meet them. Self-image goals can cause distress and dissatisfaction with self, especially over time. Self-image goal setting led to poorer relationships with others and more anxiety. On the other hand, compassionate goals are uplifting because they are made for the well-being of others as well as self. It was found in the study that people felt more satisfaction from giving than from receiving therefore compassionate goal setting enhanced their overall experience. Also, since compassion goals increase quality relationships and

satisfaction, people tend to continue to make this type of goal. Unfortunately, Crocker et al. (2010) reported compassionate goals are reduced when people feel anxious, and people tend to make more self-image goals which usually lead to disappointment and in turn, they make more self-image goals. Overall, students should be educated on the different ways goals can be set and the potential outcomes, good and bad.

Career Decisions

For many, going to college after high school is an expectation. Unfortunately, many students struggle to know what kind of career would be best for them, therefore, choosing a college becomes difficult. Also, when considering future employment, rarely is emotional wellbeing considered. Career counselors do recognize personality traits when assisting students in finding a career path but asking if the student has anxiety traits or has experienced other negative effect is most likely not part of the questioning to provide career guidance. Isik (2012) explored career self-efficacy, the emotional history of the students, which included negative and positive effect and trait and state anxiety. "Career decision self-efficacy, derived from Bandura's social cognitive theory, is conceived as the individuals' belief that they can successfully complete tasks necessary to making career decisions" (Isik, 2012, p. 805). Isik (2012) recruited 249 students from a university in Turkey comprised of 70 percent male with a mean age of 19.5. Participants were given The Career Decision Self-Efficacy Scale Short Form (CDSES-SF), which determines confidence levels in multiple situations. The Trait Anxiety Inventory (TAI) which tests anxiety. The Positive and Negative Affect Schedule (PANAS) which assesses positive and negative affect. The study found that career self-efficacy was associated with anxiety and how the person copes with their environment. The researches recommend focus

should be given to advising students to find careers that help them reduce their anxiety and negative affect and raise positive effect.

Effects of Parent Relationships When Starting College

When research has been conducted on insecure attachment as being a possible cause of adult anxiety and depression, there were two important conclusions. They were quality attachment and lack of quality attachment with parents which could predict emotional problems in the future. Koohsar and Bonab (2011) explored attachment styles as predictors of anxiety and depression using a sample of students from a major university in Iran. The researchers mentioned numerous similar studies, but the samples were from the United States of America and Europe and the researchers thought testing a sample from Iran would be filling a necessary gap. Koohsar and Bonab (2011) recruited 460 students between the ages of 18 and 25 years old and 53 percent were female. Participants were given the Anxiety and Depression Scales of Symptoms Checklist 90 – R (SCL90-R) and the Revised Adult Attachment Scale (RAAS). Findings were attachment styles could be predictors of adult anxiety and depression. Participants that had secure attachment had less anxiety and depression whereas participants that had insecure attachment had more anxiety and depression. This would be an important concept to understand before a student chooses a college since anxiety and depression can be the cause of so much hardship. It could be advised for students with insecure attachment that selecting a school closer to home or living at home while attending college could be a better choice than going a long distance.

Transitioning to college is a stressful time for first-year college students. Students live in close quarters with people they have likely not met before, and they no longer live with the safety of their parents. The skills necessary to make new friendships are essential for first-year

students not only because they make life more comfortable but also because friendships at this age are more important than at other ages (Ainsworth et al. 1978). A popular area of study has been to explore what helps students find success in making new friends and what hinders making new friends. The popularity of studying the transition of this age group is likely due to its importance because it is not only the transition to college but also the transition to adulthood. In addition, successful or unsuccessful transition into college can, “predict current and future well-being and achievement” (Parade et al., 2010, p.127). Parade, Leerkes, and Blankston (2010) explored how the relationship with parents influenced transition for first-year college students. Next, they studied how secure attachment was connected to forming new friendships for both minority and White students. Lastly, Parade et al. (2010) evaluated what part social anxiety played in transition for both minorities and Whites. Three-hundred eighty-five first-year college students were selected from a large university in the United States before their first semester. Only 199 students answered at the end of the first semester with only a small percentage of them being male so only 172 females who answered both times were used. There were 120 and 52 female minority students. The median age was 18 and less than half of the parents for both White and minority students had college educations. Students completed the Inventory of Parent and Peer Attachment, parent subscale (IPPA) which measured the quality of attachment to parents. Next, they answered the Interpersonal Competence Questionnaire, Initiation subscale (ICQ) which measured how a person forms a relationship. The Relationship Assessment Scale (RAS) was given to measure romantic relationships, and lastly, The Social Interaction Anxiety Scale (SIAS) was given to measure fear of social situations. The overall findings by Parade et al. (2010) were students with secure attachment to parents made friendships during their first semester of college. They also found social anxiety to be more prevalent for minority students

who could struggle to make new friends, but those with significant attachment security still made positive relationships. Attachment security predicted satisfaction with friendships for minority students but not for White students. For both groups, prior positive relationships with parents was associated with initiating new friendships with peers. This was an important study because it included minorities from a predominantly White university rather than considering them outliers due to smaller numbers. This provided necessary information to create interventions to help this group transition easier to college. Parade et al. (2010) also considered educating parents as to the stressful nature of transitioning into college and making new friends since parents play such an important role.

Parental involvement in children's lives is critical, but sometimes parental involvement at transitional ages can hinder children rather than strengthen them. Helicopter parenting is a parenting style that would have likely been acceptable for younger children including significant support and nurturing but not for older children or young adults who are trying to find their sense of self apart from their parents. As children grow up, there should be less intervention from parents, so children can learn to find their own way in life (Padilla-Walker and Nelson 2012). Generally, overbearing parents do not mean to hinder their child's well-being. Parents want their children to succeed and likely do not know what acceptable behavior is for them as their child gets older. Interventions to educate parents on appropriate parenting in middle school and high school could be warranted. Kouros, Pruitt, Ekas, Kiriaki and Sunderland (2016) explored how over-parenting affects college students. Kouros et al. (2016) studied how helicopter parenting and parenting styles that allow more autonomy affected well-being into adulthood and how it differed between gender and ethnicity. One-hundred eighteen students were recruited from two American universities. The mean age was just under 20 years old, with 83 percent being female.

Ethnicity was comprised of 57 percent White, 36 percent Hispanic with the remaining percent being African American, Asian and other. The majority or 86 percent reported living with both parents as children. Students completed the Helicopter Parenting Behaviors Questionnaire which assessed over-parenting and parents who encouraged individuality. Ethnicity was reported on a demographic questionnaire. The Inventory for Depression and Anxiety Symptoms (IDAS) assessed mental health. Kouros et al., (2016) helicopter parenting affected females more than males with reduced levels of well-being. Males had less occurrence of social anxiety and psychological unease with parents who supported individuality. There was no difference between Whites and other ethnicities. Kouros et al., (2016) found that parental involvement is essential in the lives of young adults. Parents must be aware of how much and what kinds of parenting are most beneficial for this age group, and those stages before it or they could unknowingly hurt their children.

Coping Strategies

Religious Connections.

Relationship with God. The transition to adulthood from adolescence can be a struggle. Research has been done to understand better how the relationship with God reduces and increases dysphoria and anxiety. Koohsar and Bonab (2011) were aware of research that found a punitive, negative or conflicting image of God correlated with many psychological disorders. Flannelly and associates (2010) researched adults on how psychological disorders related to the individual's relationship with God. They found the closer the individual perceived themselves to be to God, the fewer mental disorders presented. Because research about the image of God had been conducted in Europe and the United States, Koohsar and Bonab (2011) explored how the image of God affected college-age students in Iran. They recruited 227 students between the

ages of 18 and 25 with 53 percent being female. Participants were asked to complete the Anxiety and Depression Scales of Symptom Checklist-90R (SCL-90R) which measured feelings of anxiety and depression. Next, participants completed the Image of God Inventory (IOG) which measured the participant's view of God. In agreement with Flannelly and associates (2010) study of adults, Koohsar and Bonab (2011) found that a positive relationship with God was positively correlated with fewer anxious and depressive disorders. Likewise, students with a conflicted view of God experienced more anxious and depressive disorders.

Religion and social support. Another study looked at effects of religion and social support. Fife, Adegoke, McCoy, and Brewer (2011) explored what part of overall life satisfaction social support and religion play in African American and White college-aged students. Many similar studies had been conducted on older people but not many on this segment of the population. Fife et al., (2011) had a three-part hypothesis; part one assumed that satisfaction with life would be better for both African American and White students with religious commitment. Part two considered social support and life satisfaction for both ethnicities would be positively correlated and lastly, hypothesis three stated that social support and religious commitment would predict life satisfaction. The researchers recruited 253 students from two American universities – one predominantly African American and one mostly White. Participants were 74 percent African American, 26 percent White with 66 percent female and a mean age of just under 19. Participants were given the Salience in Religious Commitment Scale which measured religious commitment. Next, they were asked to complete the Satisfaction with Life Scale which assesses the perceived satisfaction with life. Lastly, participants completed the Social Support Survey which measured many types of social support. Overall, Fife et al., (2011)

were not able to connect life satisfaction to religious commitment but were able to prove that life satisfaction is improved by social support in college-aged African Americans and Whites.

Mindfulness and Yoga. Other interventions are also important to recognize since depression and anxiety are more prevalent in college-age students. It is important to find interventions that might help the population find comfort. Falsafi (2016) experimented with two primary interventions – mindfulness and yoga. The study consisted of 67 students that had a history of depression and anxiety. Participation lasted for 12 weeks. All participants completed the same questionnaires before the study, during the study, after the study and then again as a follow-up. The questionnaires were the Beck Depression Inventory which measured depressive symptoms. Next, students completed the Hamilton Anxiety Scale which measured anxious symptoms. The students completed the Student-Life Stress Inventory which measured their reaction to stress, and lastly, students completed the Self-compassion Scale which assessed their level of self-kindness. Then students were randomly split into a mindfulness group, yoga group, and a control group. The mindfulness group and yoga groups met for eight weeks each at 75 minutes per week. Participants were given tools necessary to complete their training thoroughly including training manuals, music, and tools to assist in yoga form. Participants were expected to write in a journal and practice an additional 20 minutes each day on their own. The control group did the questionnaires and recorded life events in their journals. Only the mindfulness group received self-compassion training. Falsafi (2016) described self-compassion as thinking more kindly of oneself rather than focusing on failure or inadequacy. Overall, all groups showed some level of improvement, but the mindfulness group showed the most. This was likely because of learning about self-compassion. Yoga and mindfulness were both successful interventions and were both cost-effective.

Mindfulness can be defined as being aware of feelings moment to moment and Yoga is the practice of five main senses and mind are quieted, and thinking is not active. These two practices can be used together or apart, and both can become a way of life. Both mindfulness and yoga require discipline, dedication, and focus. Falsafi (2006) included self-compassion instruction with mindfulness training. Self-compassion instruction can be generalized as positive self-talk. In a world where people tend to react more to their failures than successes, self-compassion redirects the negative self-talk into treating oneself in a kind manner. Yoga is not only good for the mind, but also for the body because it requires movement and builds strength. Groups or clubs could be created for support for both Yoga and mindfulness training. In fact, this would add a sense of belonging for students struggling to find a place on the college campus. Falsafi (2006) included journaling as part of the mindfulness and Yoga training. Journaling provides a safe place for self-expression and is an excellent therapeutic habit for young adults to adopt. Yoga, self-compassion, mindfulness and journaling and the communities formed around them would be excellent for some students to cope with anxious or down thoughts. Colleges could provide the template for students to facilitate this or better yet, organize and make this training available for their students. These interventions have repeatedly been proven to be successful with enough dedication and could be implemented at a low cost to the college.

Tai Chi Chuan and guided imagery. Another possible coping strategy for college-age students who struggle with anxiety and depression is tai chi chuan and guided imagery. Cai (2000) reported that exercise, in general, helps with anxiety and depression, but this study focused on tai chi chuan tied to guided imagery and self-defense. Imagery is considered one of the most effective ways to improve body and mental health, and when combined with movement, the positive outcome can be greater (Cai 2000). Seventy-one college students, 42 female, signed

up for general physical education and were a part of the study. The study consisted of three groups which met for eight weeks, three times per week with each class lasting 50 minutes. Group one was taught guided imagery and self-defense. Group two received lessons in tai chi chuan and self-defense and group three learned just self-defense. Group three was considered the control group. Students were directed not to practice relaxation techniques outside of the program. At the end of group one's class, they received 15 minutes of guided relaxing imagery. Group two practiced tai chi chuan at the end of their classes and group three just practiced self-defense. All participants completed the Profile of Mood States (POMS) questionnaire which is used for measuring mood as a pre and post-test. Cai (2000) found relaxation techniques had no short-term effect on mental health. The researcher thought this was likely due to learning new skills, so they were not experienced in the intended way. After eight weeks, anxiety and depression levels in groups one and two decreased with significant results. Tai chi chuan and guided imagery proved to be beneficial for college-age students. This would be a low-cost program to establish at a university and could become a lifelong skill.

Tai Chi Chuan is Chinese martial art that requires strong focus and quiet mind. Like yoga, because it needs both physical and mental attention, it quiets the mind and strengthens the body. Guided imagery or visualization is often conducted by someone trained in this work. The quiet mind is guided through a dreamlike journey, yet the brain is awake. This practice allows the mind to expand and work through problems at a subconscious level which has proven to be effective. Cai (2000) found that combining Tai Chi Chuan and guided imagery had a better outcome than doing just one or the other. Students could form a community around this practice and find a place of belonging beyond the practice of martial arts and visualization. When used as an intervention, this programming could be implemented by the college at a reasonable cost.

On Campus Mental Health Assistance

College campus mental health intervention. College campuses are a natural place for a focus on mental health assistance and intervention because mental health disorders are usually detected in late adolescence to young adulthood (Field et al., 2009). Eisenberg, Golberstein and Gollust (2007) examined overall student mental health awareness at a midwestern university.

Eisenberg et al., (2007) had four main research objectives:

- (1) To estimate the prevalence of perceiving a need for and using services in a student population; (2) to estimate the prevalence of apparent unmet needs for services; (3) to identify which factors (awareness, beliefs, financial or insurance constraints, and sociodemographic characteristics) are associated with the likelihood of perceiving a need for and using services; (4) to identify the most prominent factors that students report to be barriers to using services (p. 595).

The researchers randomly recruited 2,785 students from an undergraduate and graduate population. Forty-eight percent were female, 61 percent white, 20 percent Asian, 12 percent black and multiracial, 3.5 percent Hispanic and 3.5 percent unidentified. Thirty-four percent were graduate students, and 12 percent were exchange students. Participants were asked to complete the Patient Health Questionnaire – 9 (PHQ-9) which measured depression. Next, they were asked to complete the Patient Health Questionnaire – Anxiety (PHQ anxiety) which measured feelings of anxiety. Academic functioning, past year pharmaceutical use, past year therapy use and the likelihood of getting help or awareness of how to get help were assessed by answering questions derived from the Healthcare for Communities study. Eisenberg et al., (2007) found students who had experience with mental health struggles reported they would

continue to receive services, followed by medicated students, and students that had received counseling. Nearly half of the participants said they knew how to seek mental health help at the university or elsewhere and more than half of the participants were aware the university offered free services. Unfortunately, there was substantial skepticism from nearly half of non-mental health users reporting little belief that therapy nor medications were helpful for mental health. Most of the students had health insurance either through the university or their parents. Some students were concerned that parents would find out that they used mental health services because of being on their parents' insurance plans. This might have played a part in students not receiving care. Lastly, most lower-income families did not receive benefits despite the fact services were provided for free. This might have something to do with family value systems. Because only about half of the students surveyed were aware of the mental health services available on campus, educating the student body about the services would be a good idea. Also, teaching parents about available services on campus and the importance of using those services would be beneficial.

Alternative Therapies

CBT and EFT. Cognitive-Behavioral Therapy (CBT) and Emotional Freedom Technique (EFT) are therapies available to help people experiencing depression and anxiety. Cognitive-Behavioral Therapy (CBT) is an evidence-based therapy commonly used for both adults and children with negative effect. CBT has proven only to be 50 percent successful which means only half of the recipients receive relief from this type of therapy (Heyne et al., 2011). Emotional Freedom Technique (EFT) is the stimulation of acupoints performed by tapping them systematically with the fingertips. A mantra is used while tapping on acupoints is done. An example of a mantra would be, *Even though I am afraid to ride the bus, I deeply and completely*

accept myself. Gaesser and Karan (2017) compared Cognitive-Behavioral Therapy and Emotional Freedom Technique on 63 students with moderate and severe anxiety. The students ranged from ages ten to 18 years old. Students that received CBT and EFT therapies experienced some relief from negative effect, but only EFT had significantly reduced symptoms. Also, students could be taught to perform EFT at will whereas CBT is dependent on a professional. Using EFT as a coping strategy at the earliest sign of negative effect or anxiety would be advantageous and could be used to assist with negative effect in college and during the transition to college.

Emotional Freedom Technique involves stimulating pressure points around the head, face, and torso while repeating a therapeutic mantra. The stimulation is simply done by tapping the acupoints with fingertips. People can be trained to do this easily, and it can be done any time the individual feels anxious or down. It can also be used as a preventative tool and used on a routine schedule. This coping mechanism has been proven successful in all age groups and can be taught in childhood for children who exhibit anxious feelings. Colleges could educate students during their initiation period at a low cost. Many books and website are available to teach this concept as well.

Biofeedback. Another alternative form of treatment for depression, anxiety and stress is biofeedback. Over the years biofeedback has become a more popular form of therapy as devices that record data like heartbeat have become easier to use, portable (heart rate variability) and reasonable in price. According to the Biofeedback Certification International Alliance (2012), biofeedback enables the user to alter physiological activity to improve health and performance. Ratanasiripong, Sverduk, Prince, and Hayashino (2012) explored how biofeedback when used in conjunction with counseling, would reduce anxiety and stress in college-age students more

substantially than just with counseling. The participants for the study were racially diverse and were referred to the researchers by university counselors. All participants showed improvement in their anxiety and stress levels, but those who received both counseling and biofeedback showed a significant reduction in anxiety and stress. Also, participants reported biofeedback was easier than other alternative methods like meditation, breathing, and yoga. Biofeedback is readily available because portable devices can be used and should be addressed as an option to help students in college reduce anxiety and stress. Like other alternative therapies, biofeedback takes practice and would work better if used before transitioning to college.

Biofeedback used to be reserved for psychiatric professionals who had access to the equipment necessary to provide the therapy. Biofeedback is the electronic monitoring of normal body function to gain control of that function. This is done while the patient attempts to regulate their thoughts and breaths. Over time, the patient learns how to control thought patterns and breathing to slow the heartbeat at will. The reason slowing the heartbeat is essential is because it is not possible for a person to be anxious with a slow heartbeat. Companies like Heartmath have created handheld biofeedback devices and correlating software if desired. These devices are available to everybody at a reasonable cost and require little to no outside training. Biofeedback is an individual practice and should be done daily at least once, so the brain learns to control the heart. Colleges could educate students about biofeedback and make these devices available. It would be best to inform students about biofeedback during initiation.

Proposed College Programming

Recently, colleges have begun to institute programming to help students with varying special needs. Students diagnosed with anxiety and depression qualify for adaptive technology like smart pens that record what is written or heard, software that reads textbooks out loud and

more test-taking time to name a few. But for those students without diagnosed mental health, colleges could spend substantial time educating incoming students on their existing systems like health services, counseling services, student advising, financial aid, registration windows and exactly how they work, how to get mail from home, on-campus clubs, intramural sports, and on and on. Understanding these systems could reduce anxiety and involvement in activities outside of class could keep students from becoming lonely or depressed.

CHAPTER III: DISCUSSION AND SUMMARY

Summary of Literature

The reason for this research was to better understand why college-age students appear to be burdened by depression and anxiety. College campuses are a place where people are of similar age, a similar place in life, cafeterias are stocked with prepared food, working for pay is minimal, and classwork should be the primary focus, yet over one-third of the students experience anxiety and depression (Novotney, 2014). No matter what the actual cause of the negative effect is, it is important that educators find ways to assist college-bound emerging adults.

College Behaviors Affecting Anxiety and Depression

Social anxiety and drinking. Terlecki and Buckner (2015) explored social anxiety and drinking since people diagnosed with social anxiety disorder (SAD) have a four times greater risk of drinking heavily in negative or personal/intimate situations than those without social anxiety disorder. Terlecki and Buckner (2015) explored drinking motives for socially anxious people. The researchers found that socially anxious people were more likely to drink heavily in negative situations such as trying to fit in or intimate situations. Terlecki and Buckner (2015) did not find that socially anxious people drank to elevate positive experience. Schry and White (2013) had similar findings to Terlecki and Buckner (2015). They found, like Terlecki and Buckner (2015), that socially anxious people did not drink to enhance fun situations. They also found through meta-analysis that some socially anxious drinkers did drink to feel more social. Norberg, Norton, Olivier and Zvolensky (2010) examined gender differences for socially anxious drinkers. Women with social anxiety reported more drinking problems than men, although men did report concerns. Women drank more in situations such as fitting in or coping

with difficult circumstances than men did. In another study, Terlecki, Eckner and Buckner (2014) examined that not only did socially anxious people drink more in adverse situations, but they also found that socially anxious people drank more alone during what they referred to as post-event processing (PEP). Because drinking can be a common past time for college students, socially anxious students should be aware of the additional drinking risks such as drinking for negative reasons or drinking alone.

Binge eating and drinking. Binge eating and binge drinking have been associated with generalized anxiety. Kelly-Weeder (2009) searched to find a correlation between binge drinking, binge eating, and other disordered eating behaviors. Binge eating and drinking were found to be correlated with minimal gender differences. Men were more likely to exercise to control weight after binge drinking and eating and women were likely to use other weight loss measures like diet pills or fasting (Kelly-Weeder, 2009). Rosenbaum and White (2013) explored binge eating disorder (BED) in relation to generalized anxiety disorder (GAD). It was found that 37 percent of people diagnosed with generalized anxiety disorder are also diagnosed with binge eating disorder. It is not surprising that using food to control or mask underlying anxious feelings is common.

Distress tolerance and impulse control. Kaiser, Milich, Lynam and Charnigo (2012) studied distress tolerance and impulse control and how they relate to substance abuse. Distress tolerance is how individuals cope with low feelings. People who cope poorly with distress are more likely to have substance abuse problems. Negative urgency/impulse control is a behavioral response to feelings of distress such as excessive gambling. Kaiser et al. (2012) concluded that negative urgency/impulse control was the personality variable that could be used as a predictor of substance abuse issues. People who struggle to deal with distress which could be feelings of

anxiety or depression are more likely to experience negative urgency/impulse control which in turn can lead to increased substance abuse.

Sleep Disturbance and Screen Time

Sleep disturbance and screen time. Many studies have been done to better understand the correlation between cell phone use and negative effect. Boumosieh and Jaalouk (2017) found depression and anxiety were predictors of cell phone addiction, with depression more likely to predict than anxiety. Lepp, Barkley and Karpinski (2013) investigated cell phone use in relation to satisfaction with life (SWL), anxiety and academic performance. Like Boumosieh and Jaalouk (2017), Lepp et al. (2013) found a correlation between anxiety and cell phone use. Lepp et al. (2013) found more cell phone use led to higher levels of anxiety, lower academic performance, and lower overall well-being. Fend, Zhang, Du, Ye, & He (2014) explored how sleep quality, depression, and anxiety were affected by screen time and physical exercise. Fend et al. (2014) found screen time negatively affected mental health and sleep quality. Physical activity did not improve mental health as sleep quality did. In another study, Adams and Kisler (2013) examined how cell phones could disrupt sleep without proper boundaries set by college-age students. Students reported sleep disruption due to their cell phones. Poor sleep quality predicted anxiety and depression in nearly one-third of college students (Adams & Kisler, 2013). Like Adams and Kisler (2013), Thomee, Harenstam and Hagberg (2011) researched the effects on mental health by cell phone use. Thomee et al. (2011) investigated psychosocial characteristics of cell phone use and mental health symptoms in young adults. Overall, women were affected more than men by availability demands, being awakened at night, overuse and accessibility stress although also presented symptoms of stress, sleep disturbance and depression.

Cell phones have become a normal part of society and for many, they make life much more convenient and efficient. But according to research, this convenience comes with a big price.

Sleep disturbance. Nyer et al. (2013) explored the relationship between sleep disturbance and anxiety, depression and overall functioning. Researchers found sleep disturbance is often overlooked even though it can exacerbate depression and anxiety, especially for the college-age population. Field, Diego, Pelaez, Deeds and Delgado (2009) examined the relationship between depression and other disorders including anxiety, intrusive thoughts, controlling intrusive thoughts and sleep disorder. This became a circular relationship. For example, intrusive thoughts create anxiety and trying to control intrusive thoughts can also create anxiety which in turn disturbs sleep. Field et al. (2009) found 47 percent of students diagnosed with depression also had anxiety. Also, findings suggested universities ignore the effects of depression and related disorders on school performance (Field et al., 2009). Stasio, Curry, Wagner and Glassman (2011) found energy drink consumption near bedtime could disrupt sleep and in turn, exacerbate anxiety. Zawadzski, Graham, and Gerin (2013) researched how poor sleep quality was affected by loneliness, rumination, anxiety, and depression. Overall, Zawadzski et al. (2013) concluded, “greater loneliness was associated strongly with higher rumination, and that this tendency toward rumination accounted for the effect of loneliness on both depressed mood and sleep disturbance (p.219). No matter what the cause of sleep disturbance, it is important that the college-age population understand how important quality sleep is for mental health, academic performance and the overall satisfaction of life.

Effects of Stress, Anxiety, and Depression

Perfectionism. Researchers studied various causes of stress, anxiety, and depression. Perfectionism is connected to anxiety and depression. Zhou, Zhu, Zhang and Cai (2013) studied

how perceived social support affected perfectionists. Perceived social support was defined by Zhou et al. (2013) as, “the belief that help is available if needed (p.1143).” Researchers found perfectionists that experienced perceived social support were less likely to experience anxiety and depression whereas perfectionists with low social support experienced more anxiety and depression.

Goals. Goal types were another stressor to the college-age population. Crocker, Canevello and Breines (2010) studied different types of goal setting. Some goals are set for improvement of self (self-image goals) and others are created to help others (compassionate goals). Crocker et al. (2010) determined that people felt more satisfaction from giving (compassionate goals) than from receiving (self-image goals). Compassionate goals also increased quality relationships with others. Unfortunately, Crocker et al. (2010) found that as people experience more anxiety, they tend to set more self-image goals which often lead to disappointment.

Causes of negative effect and career selection. Beiter, Nash, McCrady Rhoades, Linscomb, Clarahan and Sammut (2014) investigated some likely contributors to the anxiety, depression, and stress that many college students experience. Beiter et al. (2014) found upperclassmen were more stressed than underclassmen. This was due to the perceived pressure of finding a career and paying back debt. The most anxious population was found to be students living off campus because they had to find a place to live, pay rent, cook and other added pressures of living off campus. Transfer students also declared feeling anxiety, stress, and depression due to integrating into a new environment. Aside from the reasons mentioned, Beiter et al. (2014) found other contributors to stress for students were academics, the pressure to be successful, career planning, money and sleep disturbance. Beiter et al. (2014) found career

decisions added to upperclassmen stress. Isik (2012) studied career decisions as well but focused on ways students could find careers they could successfully achieve with minimal negative effect.

Transitioning and parental involvement. Transitioning to college is stressful for many first-year students. Parade, Leerkes, and Blankston (2010) studied how the relationship students have with their parents influenced their transition to college. Researchers found students with secure attachments to their parents were more likely to make friendships during their first semester of college. Parade et al. (2010) also found minority students experienced more social anxiety, but if the minority students had a strong attachment to parents, they still made positive relationships in college. Parade et al. (2010) considered educating parents as to the important role they play in their child's transition to college. Parental involvement can also be negative. Kouros, Pruitt, Ekas, Kiriaki and Sunderland (2016) explored how over-parenting (helicopter parenting) affects college students. Like Parade et al. (2010), Kouros et al. (2016) found that parental attachment is important for the successful transition to college, Kouros et al. (2016) found parental involvement is essential in the lives of young adults, but parents must be aware of what kinds of parenting are most beneficial for this age group. Parenting college-age students requires less intervention from parents, so children can learn to find their own way in life (Padilla-Walker and Nelson, 2012).

Coping Strategies

Religious connections. In the past, research has been done to better understand how the relationship with God reduces and increases dysphoria and anxiety. Koohsar and Bonab (2011) explored how the image of God affected college-age students. Their findings were in line with what Flannelly and associates (2010) found. A positive relationship with God was positively

correlated with fewer anxious and depressive disorders. Students with a conflicted view of God experienced more anxious and depressive disorders. Another study looked at effects of religion and social support. Fife, Adegoke, McCoy and Brewer (2011) explored what part of overall life satisfaction social support and religion play in African American and White college-aged students. Fife et al. (2011) were not able to connect life satisfaction to religious commitment but were able to prove that life satisfaction is improved by social support in college-aged African Americans and Whites.

On Campus Mental Health Assistance

College campus mental health. Mental health awareness at a midwestern university was studied by Eisenberg, Golberstein and Gollust (2007). The researchers found students who had experience with mental health struggles reported they would continue to receive counseling, followed by students on medication for mental health and students who had received counseling in the past. Nearly half of participants said they knew how to seek mental health help at the university or elsewhere and more than half of the participants were aware the university offered free services. Unfortunately, Eisenberg et al. (2007) also reported there were mental health skeptics and students who would not be willing to receive mental health care for various reason. Overall, half of the students in the study were open-minded about mental health care.

Alternative Therapies

Mental health interventions are important to recognize for college-age students. Falsafi (2016) experimented with two primary interventions – mindfulness and yoga. Only the mindfulness group also included self-compassion training. Overall, mindfulness with self-compassion was more beneficial than yoga but students who did yoga also showed improvement

in mental health. In addition to mindfulness and yoga, Tai Chi Chuan and visualization could prove beneficial for college-age students. Cai (2000) found that combining Tai Chi Chuan with guided imagery, students had a better outcome than doing just one or the other. Biofeedback is another possible alternative therapy that could benefit college-age students. Ratanasiripong, Sverduk, Prince, and Hayashino (2012) proved biofeedback, when used in conjunction with counseling, reduced anxiety and stress in college-age students more substantially than just counseling. In addition, biofeedback could be performed with a portable device therefore negating the need of assistance from a professional. Gaesser and Karan (2017) compared The Emotional Freedom Technique (EFT) and Cognitive-Behavioral Therapy (CBT). They found that students who received CBT and EFT experienced some relief but that those who received only EFT had significantly reduced symptoms. Like biofeedback, EFT can be performed as needed by the individual whereas, CBT requires a professional.

Limitations of Research

There were many limitations to the research. Financial aid and incurred debt are a common cause of added college stress but was not included in this thesis. Also, not included was employment status and how that affected anxiety and depression. The research did not distinguish between types of colleges, such as public or private, large or small. This detail could have been important, but studies tend to be conducted at larger universities. Limited research was available for Emotional Freedom Technique (EFT) for this specific age group. The study used compared cognitive behavior therapy (CBT) and emotional freedom technique (EFT) on students between the ages of 10 and 18, not specifically college-age students (Gaesser and Karan, 2017). There is a significant amount of empirical research regarding anxiety and depression in college-

age students but to work within the confines of the project, chosen areas of study had to be limited.

Implications for Future Research

Although there has been a significant amount of research on anxiety and depression of college students, more studies should be conducted on ways to remedy anxiety and depression on the college campus. Some campuses allow pets to mitigate loneliness and comfort students. More research should be done in this area. More research should be done on alternative therapies such as emotional freedom technique and biofeedback specifically on college-age students. Studies should be conducted to understand what types of environments would be more conducive to certain personality types. For example, finding out precisely what kinds of people would find success at a large urban public campus versus the kind of person that would be more successful at a small, private, rural campus. The focus on personality type rather than focusing on academic programming could create a less stressful environment for some students. Also, understanding what types of schools are more inviting to people who have had a history of anxiety and depression in adolescence could be beneficial to the long-term success of those students. Overall, research should be conducted on potential anxiety and depression reducing programming. That type of programming would benefit the entire student body, not just those with a propensity to become anxious or depressed.

Professional Application

As stated in chapter two, more than half of the population in America will go to college after high school and more than one-third of students will experience anxiety and depression ((U.S. Bureau of Labor Statistics, 2018; Novotney, 2014). Myers (2016) said high

school staff work diligently to prepare potential college students academically, but I think educators should begin to prepare students as early as Kindergarten.

As a second-career teacher with special education training who has worked in general education for the past four years and as the parent of a child diagnosed with general anxiety disorder at age eight, I come from a different perspective than the general teaching population. I come with a lot of concern about the mental health of students in general education. There is substantial academic pressure placed on the students starting as early as Kindergarten. The academic standards move at a quick pace and students are expected to keep up. Many students achieve expectations, and many students even exceed them, but for those who fall short, school can become very difficult. I do not worry about the small percentage of students that qualify for special education as special education teachers work towards the individual needs of those students. It is the students that are not part of special education yet are gradually falling behind the standards in which I worry. School does not feel good for students who fall behind, and unfortunately, most general education teachers are not equipped with tools to differentiate for this population, and if they were, there probably would not be enough time to facilitate them.

The research for this thesis was focused on college students, but I think lower, middle and higher general education students are suffering similarly to college-age students. As educators, we need to spend time in K-12 focusing on mental health coping skills. I would begin focusing on the at-risk group of below average students and then move to average and above. Biofeedback, Emotional Freedom Technique (EFT), guided visualization, tai chi chuan, yoga, mindfulness, self-compassion, and journaling (in pictures for non-writing students) can be taught in lower elementary school. Although some of these techniques require specialized training, some are simple and straightforward. A first-grade teacher I know has a daily mantra that her

students recite each morning that is filled with *I AM* messages of self-compassion. The teacher presents it on a PowerPoint in colorful, bold font, and at the beginning of the year she has to read the messages to them but soon they are reading them independently, and by mid-year they have them memorized. It is a beautiful thing to listen to first-grade students recite such an empowering message each morning. Coping skills for anxiety could be brought into each classroom beginning in kindergarten and taught as preventative rather than reactionary, and it would not take much time before the students could use them independently as needed.

In primary education, it is not known what percentage of below average students are below average because of negative effect or limited academic ability. By confronting mental health in schools as early as Kindergarten, educators could pave the way for students to be mentally healthier throughout their education. This, in turn, could potentially reduce the statistic of more than one-third of college students experiencing depression and anxiety (Novotney, 2014).

Conclusion

When my son was three years old in the year 2000, he refused to wear his polyester school uniform. He would writhe, kick and cry each morning as though I was trying to hurt him when I would force him to wear the uniform. After a while he would calm down then I would get him to school where he would cry again when I dropped him off at his classroom. He went to a school that required testing for acceptance and started programming at age three. My son was willing to wear his soft, cotton gym uniform but not the stiff polyester school uniform and somehow none of us made the obvious connection that he had severe sensory issues. We took him to a therapist about the uniform issue thinking it was defiance and the therapist in the year 2000 did not make the sensory connection either. The therapist instituted all sorts of reward

systems to encourage him to wear the uniform which did not work. Finally, the principal of the school got word of our problem and suggested our son wear the gym uniform all day. That was the end of the struggle. The principal saw a problem and thought of a way to fix it rather than dismissing it and blaming the child for appearing to be defiant. It is likely the principal did not specifically know about sensory issues but could see the uniform had become a problem for whatever reason. The simple fix of wearing the gym uniform instead of the polyester one might have changed my son's feelings about school for years to come because one person was open-minded and tried something new.

Eighteen years ago, none of us, including a trained child therapist, considered a sensory issue to be the reason for my son's objection to his uniform. Little was understood about sensory issues 18 years ago which is hard to believe now. Mental health, especially anxiety and depressive disorders are much better understood now than they were nearly 20 years ago. This tells me that in the past two decades, as a culture, we have made significant progress in learning more about mental health. As this trajectory continues, I hope we equip educators with skills to help students cope with low feelings as early as Kindergarten through school and to college. If we begin to assume ALL students will feel anxious or down sometimes and prepare them accordingly, then hopefully the guiding question for this research of, "Why are depression and anxiety in college-age students so prevalent and what ways can we better help them?" will be irrelevant.

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