Case Study Scenario #19

Depression and Anxiety

# Table of Contents:

Case Study Scenario 19:	2
Health Issue:	3
The Impact of Culture:	14
Needs Assessment: What is Needed?	20
Available Resources:	27
Counseling and Psychiatric Services (CAPS):	27
Advantage Behavioral Health:	29
Georgia Behavioral Health Professionals of Athens:	30
Ramsey Student Center:	32
ASPIRE Clinic:	33
UGA Career Center:	34
Sustainable Solutions:	34
The Accessibility of CAPS:	35
Professor Intervention and DRC/Curriculum:	37
Implementing Healthy Dietary and Exercise Plans on Campus:	39
The Solution of Internet-based Therapy:	40
The Solution for Expenses at Alternative Locations:	42
Resource Handout:	45
References:	48

# **Case Study Scenario 19:**

Allison is an Anglo college student in her third year at a major state university. Lately she has been feeling extremely tired. She is preoccupied in a way that sometimes interferes with her ability to get ready for class, and once she gets to class, she feels unsure she is in the right major. She has stopped exercising, although she exercised regularly in high school and her first two years of college. She knows she could be eating better food choices but does not feel very hungry at all and often skips meals. She doesn't want to tell her parents how she is feeling as they have financial worries of their own. Her roommates are beginning to worry about her. What is available to help Allison?

# Health Issue:

Physical, mental, and emotional health are all 3 aspects that are interrelated to one's quality of life. Mental Health has recently emerged as being just as important as one's physical and emotional health. Mental health is defined as the well-being of one's own psychological functioning. Positive mental health is associated with stable and above average biological regulation and improved neural responses (Jack, 2017). Researchers identify a "healthy" person as one who is living with the absence of disease. Mental illness may not outwardly compare to cancer or HIV/AIDS, but it does disrupt the well-being of people through affected cognition, emotion, and behavior, in which health and disease is clearly identified (Jack, 2017). There are many examples of mental illness, ranging in type and degree of severity, however, for the purpose of this paper anxiety and depression will be the primary focus.

While anxiety and depression are two separate mental disorders, they are closely related to one another (Adrian Preda, 2020). It is common for people who are diagnosed with one of these mental illnesses to also find that they acquire the other. About one half of diagnosed depression cases are also diagnosed with an anxiety disorder (ADAA, 2018). However, it is important to note that while these two mental disorders relate to one another, they have their own unique causes and symptoms that come from them. There is currently no evidence that one causes the other, but there is significant research showing they are positively correlated (Mayo Clinic Staff, 2018). Mental illness effects the people all around us and the United States has been said to be "the most depressed country" as it has an alarming link to suicide, the second leading cause of death among young people ages 15-29 (The Guardian, 2018). For this reason,

depression and anxiety must be evaluated and taken into consideration in order to prevent poor mental health in the population to come.

Depression (major depressive disorder) is a common and serious medical illness that negatively affects how you feel, the way you think and how you act; it is both a brain disorder and a state of mind (American Psychiatric Association, 2019). Symptoms of depression include feeling helpless and lonely, losing interest in things you usually enjoy, changes in appetite, nausea, headaches, chronic pain, changes in sleep patterns, and many others (Anxiety and Depression Association of America, 2019). It is important to recognize the symptoms of depression because of the many other related health issues it can cause. It has been shown that individuals suffering from depression have a weakened immune system and report higher levels of fatigue, which puts their body at further risk and susceptibility (Healthline, 2017). Additionally, the presence of depressive symptoms makes it difficult for individuals to practice healthy behaviors. This dilemma importantly includes nutrition and exercise (Harvard Health Publishing, 2018).

Anxiety is the mind and body's reaction to stressful, dangerous, or unfamiliar situations. It's the sense of uneasiness, distress, or dread you feel before a significant event (Javanovic, 2019). Anxiety presents itself in the presence of stressors and symptoms include increased heart rate, irritability, racing thoughts, fatigue, sweating and many more. Anxiety is said to originate within the amygdala, a region of the brain that controls intense emotional responses (Harvard Publishing, 2018). It is also important to recognize that anxiety can present itself in many different forms. Anxiety also negatively affects an individual's ability to practice healthy behaviors such as nutrition and exercise (Javanovic, 2019).

As mentioned previously, anxiety and depression have a large effect on the brain. For example, anxiety causes the brain to release an abnormal amount of stress hormones and triggers the amygdala, the region of the brain responsible for fear and emotions, to become hypersensitive (Harvard Publishing, 2018). Similarly, depression deals with an imbalance of chemicals and hormones such as serotonin, which boosts mood, within the brain (American Psychiatric Association, 2019). These circumstances can in return severely affect memory and activities of daily living.

The prevalence of both anxiety and depression are a major concern in today's society and this prevalence needs to be recognized and improved. In regards to Depression specifically, according to the Anxiety and Depression Association of America, more than 322 million people worldwide live with depression (ADAA, 2018). In the United States, depression affects over 18 million adults, or 1 in every 10, in any given year (Hope for Depression Research Foundation, 2019). Further, anxiety also has alarming prevalence rates as it is one of the two most prevalent mental disorders around the world, 33.7% of the population suffers from it (Aquin, El-Gabalawy, Sala, & Sareen, 2017). In the United States, 5-9 million adults are affected by anxiety (Hope for Depression Research Foundation, 2019).

With all of this information being considered, it is important to address what may cause anxiety and depression. While these conditions present themselves differently in each individual, risk factors among those diagnosed are similar. Research has shown importance in considering genetics as a plausible cause for anxiety and depression. Genetic studies indicate that heritability estimates range from 30-67% for anxiety and 40% for depression (ADAA, 2018; Javanovic, 2019)). It is also crucial to understand that genetic predisposition can be triggered by an

individual's environment. Family relationships and parenting behavior could also increase risk for these disorders. Specifically, parents and guardian figures who demonstrate high levels of control have been associated with the development of anxiety disorders in their children (Javanovic, 2019). Additionally, behavioral choices can also affect the development of these disorders. Excessive tobacco use or caffeine use has been shown to increase anxiety levels, but choosing to exercise may decrease anxiety and depression levels (Javanovic, 2019). Childhood trauma is another risk factor for anxiety and depression as this time of life is a critical developmental period for a child and is when the brain is structured and formed. Early trauma structures the brain differently affecting a person for the rest of their life.

Demographically, it has been shown that women and those belonging to a lower socioeconomic status also are at increased risk (Javanovic, 2019). Specifically, the prevalence of anxiety is found to be about 10% higher in females than in males in both children and adults (National Institute of Public Health, 2017). Research has shown that women with high levels of anxiety are 59% more likely to have a heart attack (Harvard Health Publishing, 2018). Women are also susceptible for premenstrual dysmorphic disorder which will be discussed in detail later on. Ultimately, it is seen that many determinants of health affect the development of these disorders.

Evidence in recent years has revealed that diet is a modifiable risk factor to reduce an individual's chances of developing anxiety or depression. The diet and mental health have a very unique relationship involving inflammation, oxidative stress and neuroplasticity. The gut microbiome is a key player in all of these processes. Chronic low-grade inflammation impacts depression, schizophrenia and bipolar disorder. This inflammation can be as a result of stress,

smoking, obesity, lack of sleep and poor diet. The Mediterranean diet, for example, proves to have lower inflammation effects compared to the American diet. Depressed populations have decreased brain glutathione levels which increases oxidative stress. It was also found that these same individuals with increased oxidative stress had a decrease in vitamin E, vitamin C, coenzyme Q10 and glutathione. An epidemiological investigation has proven a correlation between a healthy diet and increased hippocampal volume. Recent observational studies have shown that increased fish consumption and dietary magnesium, iron and zinc are associated with reduced rates of depression (Berk, M., Jacka, F., Moseley, G., Wolfgang, M., 2017).

Glutamine is a non-essential amino acid however, it becomes essential when our bodies are experiencing high levels of stress. It has been discovered that eating vegetables like cabbage, broccoli and cauliflower will reduce these high levels of stress that cause feelings of anxiety. This is due to the high proportions of glutamine in these foods. Low levels of magnesium have also been found to worsen anxiety. Eating foods high in magnesium, such as dark chocolate, can help to combat these anxious feelings. Maintaining a well-balanced plant based diet is a great way to obtain all of the essential and non-essential amino acids that can help decrease the risk of anxiety and depression (Berk, M., Jacka, F., Moseley, G., Wolfgang, M., 2017).

In order to fully understand anxiety and depression, it is important to recognize the magnitude of conditions these diseases can be presented as. Beginning this discussion with depression, this disorder does not come in a "one size fits all" diagnosis; there are many different forms of depression with their own unique set of symptoms. Some of these types of depression depend a lot on the age of the individual and what life events he or she has gone through. The most common form of depression is Major Depressive Disorder (ADAA, 2018). Major

Depressive Disorder has five unique symptoms with at least one of the symptoms being a feeling of overwhelming sadness and lack of interest in activities. The other four symptoms can include decrease or increase in appetite, feeling worthless or guilty, recurrent thoughts of death, and having a difficult time keeping thoughts straight (ADAA, 2018). An individual tends to feel these types of symptoms for two weeks at a time, and it can completely change the way they function on a day to day basis (ADAA, 2018). This form of depression has the capacity to affect one's life in larger ways such as missing school, work, or other important functions.

Persistent depressive disorder or dysthymia is another form of depression. This type of depression can be described as feeling dark and sad consistently throughout the day and on most days for at least two years for most adults and for at least a year for adolescents or children (ADAA, 2018). In order to be diagnosed with this specific type of depression, the individual should also have a couple of some of the other symptoms like loss or excessive gain of appetite, insomnia, low energy, difficulty concentration or making decisions, low self-esteem, or feeling hopeless (ADAA, 2018). Persistent depressive disorder may last longer than major depression, however, the symptoms associated with major depression can seem to be much worse, and major depression can develop into persistent depressive disorder eventually if the symptoms last long enough.

As mentioned previously, specific to women is premenstrual dysphoric disorder, which occurs during a woman's menstrual period. This can be described as extremely severe premenstrual syndrome. Premenstrual dysphoric disorder and premenstrual syndrome both have very similar physical and emotional symptoms, however, PMS becomes PMDD when these symptoms begin to affect a woman's life. Symptoms for both PMS and PMDD tend to occur

about ten days before the start of a woman's menstrual period and can include things such as breast tenderness, bloating, fatigue, and changes in eating and sleeping habits PMDD has been known to take these symptoms even further with extreme feelings of hopelessness and sadness, anxiety, and extreme irritability (ADAA, 2018).

Unlike the other previously mentioned types of depression, adjustment disorder with depressed mood is triggered within three months of the beginning of a change in an individual's life that that person finds stressful (ADAA, 2018). The difference with this type of depression is that it can occur even after a very positive, hopeful event like getting a new job, getting engaged, or even having a baby. This type of depression is more like a person wanting to shut down after something new comes into their life and changes it drastically. The person may experience similar symptoms as mentioned previously but they are often blown out of proportion and cause a lot of distress to that individual. The good thing about this specific form of depression is that the symptoms tend to go away after the person has learned to adapt to the change in their life. Since it is pretty easy to pinpoint the stressor in that person's life, the treatment for this type tends to be pretty simple and it works. The individual dealing with change often can begin coping with this change with added support of loved ones until the stressor seems less and less foreign.

While most people do not feel particularly overjoyed on rainy winter days, some individuals develop depression in regard to the seasons which is known as seasonal affective disorder. Seasonal affective disorder develops in correlation with the length of days or the type of season that person is experiencing. The symptoms associated with this form of depression are very similar to that of Major Depressive Disorder, except these symptoms are only felt at specific

times of the year. Most people with this depression feel sad during the winter or colder months when there is a lack of sunshine and shorter days (ADAA, 2018).

Similar to depression, anxiety also has different forms brought on by different reasons. Generalized anxiety disorder, being the most common, deals with worrying about everyday things such as a job or minor tasks like chores or appointments. This form of anxiety causes a sense of worry that makes it difficult to get things done without worrying. The symptoms often found for this type of anxiety include restlessness, feeling uneasy, fatigued, having a hard time concentrating or sleeping, and muscle tension (APA, 2020).

Another type of an anxiety disorder is called panic disorder that takes severe feelings of anxiety to very physical symptoms. These physical and psychological feelings can often become so severe that the person experiencing the panic attack might feel like they cannot breathe or that they need to go to the hospital. Some of these symptoms include: rapid, pounding heart rate, sweating, shaking, shortness of breath, chest pain, feeling dizzy, feeling choked, chills or hot flashes, nausea, feeling detached, and fear of dying (APA, 2020). Panic attacks are often accompanied by other mental disorders such as depression or PTSD (APA, 2020).

Phobias are considered a type of anxiety disorder, but are more focused on specific things like an object, a situation, or a person (APA, 2020). The uniqueness of phobias is that patients often know how irrational their fear is and that they are taking it to an excessive amount, but they are still unable to overcome this fear. These irrational fears can often cause a person to go to extreme lengths to avoid coming in contact with this fear. Phobias like fear of flying or fear of heights are common examples of phobias.

Social anxiety disorder is another form that is pretty common in that it causes an individual to feel severe discomfort about being in public and having the chance to be embarrassed, humiliated, or rejected during different social interactions (APA, 2020). People who deal with this type of anxiety tend to avoid social interactions that they fear they might make a fool of themselves. A common example of this would be a lot of people's fear of public speaking or meeting new people. This specific type of anxiety creates difficulty with daily functioning and can last at least six months (APA, 2020).

Separation anxiety disorder is more common among younger children, but can also occur in older adults. This form of anxiety creates an excess amount of fear in a person when he or she is separated from someone that he or she feels a strong attachment to. This feeling tends to last about four weeks in children and six months in adults to a point where when separated from that individual, normal life is hard to go on (APA, 2020). An individual with this form of anxiety constantly worries about losing that person he or she feels extremely close to, and he or she might find it difficult to sleep without the person to whom they are attached.

Anxiety and depression can be debilitating disorders, but they don't have to be. Considering the amount of ways anxiety and depression can present themselves, it is crucial to understand what kinds of resources and options are available There are several treatment options that help hundreds of thousands of people get back on their feet, and cope with their feelings. It is recommended that if an individual is feeling anxious or depressed that they first go speak with their doctor. The doctor will be able to figure out how to help make the next best step for the individual. Some treatment options include therapy, medication, exercise, improving diet, and getting support.

Primary care in patients with depression is still being developed, but until there is a definite answer, doctors have been treating patients with anxiety and depression with a combined treatment of psychotherapy and medications. The first treatment for patients diagnosed with anxiety is psychotherapy treatment. This is the traditional type of therapy that comes to a person's mind. Cognitive behavioral therapy (CBT) improves a patient coping mechanism when they feel a sense of fear or worry arising. While CBT is mostly short-term, consistent sessions result in long term improvement. Combined with psychotherapy, anxiety symptoms are reduced with antidepressants SSRIs (selective serotonin reuptake inhibitors). SSRIs are the most common because like previously mentioned, chemical imbalances can lead to anxiety disorders. SSRIs increase the amount of serotonin in the brain. Depression is also treated with combined treatment of psychotherapy and antidepressants, but it has been recently found that Adaptive Behavior Therapy-Primary Care results in long term recovery. it is different from other forms of therapy because the patient is the primary focus not only in their condition, but in changing their life goals, functioning, pain, and social relationships (Snyder, 2013).

Physical activity has been proven to reduce the levels of anxiety and depression for an individual. This is because physical activity is proven to increase cognitive functioning, life satisfaction, and physical health. When a person exercises, their brain triggers the release of endorphins that will make the individual feel positive and accomplished throughout the workout and after the workout is finished. Getting good exercise is a great way to cope with feelings of sadness and anxiety (Robinson, Segal, & Smith, 2019).

The food that is eaten has a huge impact on the way that the mind and body functions as a result. If individuals are eating very unhealthy foods high in saturated fats, sugar, and trans fats,

then they will not be able to perform as well in their day to day activities. It is imperative that individuals eat healthy in order to improve their gut microbiome which will result in better brain functioning. Changing a person's diet serves as a treatment that can drastically impact their moods and help them to not feel anxious or depressed any longer (Berk, M., Jacka, F., Moseley, G., Wolfgang, M., 2017).

Having a strong support group throughout times of sadness and anxiety is imperative. If a person has just experienced a tragedy, then they will have to rely on their close friends and loved ones to lean on in order to move forward. A strong support group would be able to encourage the individual suffering from depression and anxiety to ensure that they are loved and that they will get through these feelings. While this may not seem as concrete of a treatment as being prescribed medication or attending therapy, having strong social connections and relationships is imperative for the treatment or anxiety and depression.

Why prioritize depression and anxiety? In today's society, our population's mental capacity is becoming increasingly vulnerable (Cuijpers, Beekman, & Reynolds, 2012). These disorders generate substantial loss of quality of life, personal despair, and biological consequences (Cuijpers et al., 2012). Additionally, it is important to address anxiety and depression because of the lifestyle ramifications it causes. When an individual with anxiety and/or depression seeks treatment, that treatment costs money. These disorders could cause a financial burden and lead to a recurring cycle of stress. Further, treatment also needs time, and for full-time employees or students, that time is not always available. With this in mind, it is crucial to prevent the onset of these disorders in order to prevent additional stress and negative lifestyle changes.

## The Impact of Culture:

There are many social determinants contributing to mental illnesses like anxiety and depression. The prevalence of anxiety and depression in society is due to the cross-cultural impact it has on specific individuals of different socioeconomic status (SES), race, age, and gender. Social factors such as age, race, gender, stigma, and SES among Americans can all increase the risk of developing a mental illness (Assari, 2017). Other social areas that can be positively correlated to the development of anxiety and depression are family relationships, community organization, quality of housing, support system, job opportunities, and home/school/work conditions (Healthy People, 2020).

It is important to realize differences among cultures in relation to how mental illness is viewed. Not only does culture shape an individual's perspective on their mental health; it shapes society's view on mental health as well. One social factor that has been studied in relation to the relationship it has with developing depression and anxiety is race and the country a person lives in. Research has found that minority racial and ethnic groups are at much higher risk for developing anxiety and depression compared to their white equivalents. Minority races are at a higher risk for developing such mental illness due to the struggle they face every day of racism. Racism could come in the form of a racial minority facing problems with police brutality or not getting a job because of their skin color. Cross culturally, anxiety and depression rates are high in

developed and majority countries, meaning just because a country is still developing does not indicate that there will be higher rates of mental illness here. It is arguable that with our developing society and advancing technology, there is more pressure on individuals to do well and succeed in everything they do, causing a greater risk for developing depression or anxiety.

Similar to one's racial group and culture affecting the likelihood of them developing depression and anxiety, socioeconomic status also has a large influence for overlapping reasons. Socioeconomic status can encompass everything from level of education, income, and occupation, which all have been found to be social factors that can impact an individual's susceptibility to acquiring a mental illness. A positive correlation between depression and low family income was found among both men and women of all races. People living in lower socioeconomic areas are at risk due to financial stress. Worrying about paying rent, putting food on the table, raising children, and maintaining a stable job can put a tremendous amount of stress on the mind and body. This stress can correlate to the future development of an anxiety disorder. Having a low socioeconomic status can also cause someone to feel inadequate, worthless, or self-critical which are all symptoms of onset-depression (National Institute of Public Health, 2017). Researchers also note that people with higher socioeconomic statuses are linked to better health due to them avoiding harmful risk factors that circulate around finances (Assari, 2017). Education and income are huge aspects of socioeconomic status, and research has suggested a relationship between that and rate of depression. One study specifically found a significant correlation between socioeconomic status and depression in that with every unit increase of

socioeconomic status, the rate of depression decreased. They did find a certain threshold upon reaching certain socioeconomic status, and that higher education did decrease the odds of depression when income did not (Freeman, 2016). This indicates that once a certain amount of income is reached, there is no significant effect on the rate of depression, but the more education a person has, the less amount of depression is seen. Socioeconomic status also has an influence on the access a person has. People living below the poverty line are likely not able to eat healthy, which has an impact on their physical and mental health. Also, many areas that are poorer do not have public parks or greenspaces that are safe for people to exercise which is essential for maintaining a healthy body and mental space. Lack of access due to socioeconomic status has a huge impact on the likelihood of developing anxiety and depression in an individual.

Gender is another huge social determinant for developing anxiety and depression. The prevalence of major depression is higher in women than men (Albert, 2015). From puberty to age 50, women are nearly twice as likely to develop an anxiety disorder (Anxiety and Depression Association of America, 2020). A big reason for this would be the fluctuation of hormones in women during this time of their lives. Women experience premenstrual dysphoric disorder during their menstrual cycle, as well as postpartum depression after giving birth. Women are also commonly found to be more depressed around menopause (Rosch, 2014). Another reason could be that women are more involved in personal relationships than men are, so they are often affected more when something goes astray in that relationship. Women are more likely to internalize their symptoms, whereas men are more likely to externalize symptoms (Anxiety and

Depression Association of America, 2020). In today's society, women are more likely to go into the workforce and have hard jobs, but also are expected to deal with the pressures of taking care of their relationships and the house. Since women typically have a lot on their plates, they could also be suffering from anxiety and depression because they are not getting enough sleep at night. Oftentimes, the women are the ones that will stay at home and look after their children; this can be exhausting and keep the woman from taking care of herself. Studies have found that there is a significant gap in the amount of men and women that get diagnosed with anxiety or depression disorder, which could possibly be contributing to the numbers being much higher in women than men. Men tend to let their pride prevent them from seeking help when needed, causing there to be a lot of undiagnosed men's anxiety and depression cases (Rosch, 2014).

Another sociocultural factor to determine when looking at what contributes to the development of anxiety and depression is an individual's age. 75% of all mental illnesses develop by age 24 (National Alliance on Mental Illness, 2020). Young adults, aged 18 to 29, are still experiencing cognitive development, and this is one of the reasons why mental illness can present itself at this time of life. College students are a huge age group of people experiencing anxiety and depression for this very reason. According to a recent report, over 20% of college students were diagnosed or treated for mental illness. Further, 80% reported feeling overwhelmed and 50% reported that anxiety hindered their academic performance (Skyland Trail, 2020). These trends result from a variety of factors such as poor behavioral choices, an increase in prevalence of learning disabilities, substance use, and consequences of stigma

(Henriques, 2014). Unhealthy behaviors are positively linked to chronic stress and depression. Behaviors that could be considered unhealthy in college students could be smoking, drug abuse, excessive binge drinking, lack of physical activity, poor diet, and negative relationships (Erik J. Rodriquez, 2018). College students not sleeping enough, stress, not exercising, and not eating a balanced diet is the perfect recipe for the development of mental disorders such as anxiety and depression. A big reason why these mental illnesses are appearing once the student goes to college is likely due to the huge transition these students experience going from living at home to being on their own for the first time. It is assumed that college students are reporting more to health centers and doctors because they are experiencing different mental states versus before they went to college. The transition is said to impact the mental health of this age group since it is such an abrupt change. Society has put an invisible pressure on students to be the best at everything they do always, and that is not a realistic standard that students can keep up. Students are feeling pressure more than ever to perform and outperform their fellow peers due to social media and their parents' expectations.

While anxiety and depression across different cultures varies, so does the stigma around mental illness (Bandelow & Michaelis, 2015). It is common in many cultures that people are embarrassed about having anxiety and depression. Stigma in society is assumed to be an issue because many cultures have certain expectations that people need to follow, however, those who are termed as "mentally ill" are frowned upon. The stigma exists even without the presence of a physical issue, which represents a huge issue when it comes to diagnosing and treating mental

illnesses. Stigma is when someone views you in a negative way because of a certain characteristic or trait that is thought to be a disadvantage (Mayo Clinic Staff, 2017). Stigmas can lead to discrimination and resonate negativity, which can reinforce the cycle of anxiety and depression (Mayo Clinic Staff, 2017). Many people believe that people with mental illnesses are harmful or violent, when in reality, they are more at risk for being attacked or hurting themselves rather than other people (Mental Health Foundation, 2020). Because of stigma, a person's timeline of being treated or seeking help may be prolonged, negatively affecting their recovery (Mental Health Foundation, 2020). The stigma around mental health has been exaggerated and exacerbated by the media, only showing the worst of the worst and the situations that are the furthest from normal. This only reinforces the stigma and negative culture around mental health (Anxiety and Depression Association of America, 2020).

Age, race, gender, socioeconomic status, and stigma are all contributing social determinants to a person's likelihood of developing a mental illness like depression and anxiety. Culture can shape one's environment and dictate what is and what is not acceptable in relation to mental illness. It can also reinforce positive or negative ideas about mental health. Culture can show us who is most at risk and why the problem is a priority. Understanding what makes different people more susceptible to these illnesses makes them that much easier to overcome and find treatments that work personalized to that specific person. The culture of society in the last decade has done an enormous job of changing the stigma behind mental illnesses and has increased awareness of the importance of mental health in general. Ultimately, culture both

traditionally, and as a stigma, makes a large imprint on the concept of mental illness, specifically in relation to anxiety and depression.

#### Needs Assessment: What is Needed?

Anxiety and depressive disorders are the most common mental illnesses in the United States among adults 18 years and older. Research takes into account sex, age, and race of mental disorders because depending on those factors, anxiety and depression may show different symptoms and may range in severity. In recent years, it has been found that women are twice as likely to be affected as men (Medical News Today, 2016). Women make up a large majority of the general public statistic of those affected by anxiety and depression. Alongside women making up a large portion of those impacted by these disorders, young people are also widely affected. Gender specific risk factors have been connected to the high rates of anxiety and depression among women; these risk factors include gender-based roles, life stressors, and negative life experiences (WHO, 2019). While these specific risk factors are taken into account for women, they are more likely to be diagnosed because of a female's vulnerability to seek professional treatment and therapy when they feel it is necessary. Men on the other hand are less likely to seek professional help because of the social stigma regarding psychological disorders. The view of mental illness among men has been stereotyped as a "weakness" which can in turn lead to more serious disorders in their lifetime. Biological and societal gender differences have led to more research to investigate the scope of mental health problems in men and women. Since it has been found that men and women display mental health problems differently, the most effective research has been done through separating the studies of men and women.

The insight of anxiety and depressive disorders among college students is another concern to researchers, with the most recent data that 39% of college students were struggling with mental illness (Healthline, 2018). In recent years, students are being studied more because mental illness has been found to positively correlate with academic performance. New stressors in college including academic performance, financial burdens, and transitioned lifestyles seem to impact women in college more than men; as well as white students reporting clinically significant levels of anger, anxiety, and depression (Rosenthal & Schreiner, 2000).

The overall data of female college students in the United States supports the community case study relating to a female college student named Allison struggling with symptoms of anxiety and depression; in turn her symptoms are also impacting her family and roommates. Allison is experiencing primary symptoms of anxiety and depression because she identified herself having a lack of interest in things she previously enjoyed and is constantly worrying about what she is going to do with her life. Both of these prevalent symptoms are interrupting her daily life. When symptoms of anxiety and depression are persistent for an extended period of time, it is in a patient's best interest to seek help.

Allison is experiencing fatigue because it is one of the most significant factors when identifying psychological disorders (Leino & Kisch, 2005). Constant stress that Allison is experiencing in college is believed to be causing this exhaustion. At a large university, she is expected to perform well academically, socialize, and depend on herself to be able to be a college student without her parents being there for her every step of the way. Another reason that Allison may be experiencing fatigue is because of Anxiety related symptoms. Lack of sleep in an individual can either lead to anxiety or the lack of sleep can be from the presence of anxiety.

While it seems like Allison is constantly exhausted, her anxiety seems to be keeping her up at night. Anxiety creates abnormal patterns of sleep, leaving it difficult to shut off your mind or repeatedly waking up during the night (Staner, 2003). Allison has a constant thought about changing her major, she might not know the root of this thought, but since she is constantly thinking it is keeping her up at night. In regard to her symptoms of anxiety and depression, without seeking help she may be diagnosed with insomnia; in which anxiety appears before insomnia in 43.5% of cases in young adults.

Allison attends a large university, being realistic she probably tried extremely hard in high school to attend this school. The workload and strive for success do not end there, college students experience academic pressures in the classroom and outside of the classroom. Students' academic pressure may be driven strictly by themselves to prove that they are "smart" with a high GPA and endless opportunities, but these pressures may also be stemming from the need to do well in regard to financial burden and classes costing students more money in the future. Allison is a good example of this because she worries about her major because it will determine her financial standing when she graduates. Financial difficulties have found that exam performance is affected with the relationship of students experiencing anxiety and depression (Andrews & Wilding, 2004). Allison may not be paying for her college in full but looking at her parents financial standing she may have to take on this burden in the future. especially if her close friends and roommates are not having to deal with this issue, it may lead her to feeling helpless.

Allison articulated not having motivation to exercise as regularly as she used to. Sufficient physical activity is a leading preventative factor in mental illness in college students.

Students who engage in sufficient amounts of physical activity report having a positive psychological well-being (Bray & Kwan, 2006). While increasing Allison's physical activity may not cure her symptoms of Anxiety and Depression, it could potentially lead to greater efforts in receiving treatment and motivation to heal. Allison is experiencing loss of appetite from nervousness, fear, and worry. Every person is different in how they react to this physiological effect of anxiety and depression (Mayo Clinic, 2011). Allison strongly stated, without hesitation, that she tends to skip meals if she is not hungry. This can be inversely affecting her symptoms of anxiety and depression because many people with an eating disorder comorbidly suffer from psychiatric illnesses (ADAA, 2018).

Anxiety and depressive disorders not only impact the individual, but those around them. Allison's roommates are worried about her because she is noticeably showing signs of withdrawal from peer relationships and disinterest in things she was previously passionate about. Allison is internally coping with her issues which in turn is only worsening them. She may think that alone time is the best way for her to cope, but socialization among roommates, classmates, and peers indicates positive benefits of mental health and perceived stress in a large college setting (VanKim & Nelson, 2013).

Allison is among the 39% of college students experiencing mental illness; especially taking into consideration of her being a white female. Even though Allison might have not had signs or symptoms prior to her current situation, she needs to seek help immediately before her anxiety and depression worsen. The social stigma of receiving professional help among college students is only worsening the condition and leading to increased cases around the United States.

Allison, once a previous driven and athletic individual, has the opportunity to get back to normal if she utilizes the resources she has at her feet, with no cost being enrolled as a full-time student.

Depression and anxiety are the most common psychiatric conditions seen in the medical setting, affecting millions of individuals in the United States (Carek, P. J., Laibstain, S. E., & Carek, S. M., 2011). People suffering from anxiety and depression are often faced with social pressures from people who are misinformed on the diseases (Hasan, A. A.-H., & Musleh, M., 2018). It is important that people are educated properly on the severity of these mental illnesses in order to aid those suffering, as well as to get the proper help for somebody affected. It is also important to have access to healthy foods which have been proven to improve mental illness (Marx, W., et al, 2017). The ability to maintain a consistent physical activity schedule could also drastically improve a person's mental state (Carek, P. J., Laibstain, S. E., & Carek, S. M., 2011). Finally, having access to inexpensive and a large variety of medicines can be very helpful in finding the right medication that works for a person suffering from anxiety and depression.

Societal attitudes towards mental illness dramatically shape the type of treatment a person can obtain (Hasan, A. A.-H., & Musleh, M., 2018). This can help to explain why most college students with mental illness are not seeking treatment (Dalky, H. F., & Gharaibeh, A., 2019). People who suffer from mental illness, such as anxiety and depression, are no stranger to the social pressures that come with these diseases. Many individuals will experience a social stigma in their environments, which has the unfortunate effects of lowering that person's self-esteem even more (Hasan, A. A.-H., & Musleh, M., 2018). In a particular study, people suffering from mental illness were asked to describe how other people viewed them. The most common for depression was that they are "hard to talk to." The most prevalent for anxiety was that their

behavior is "unpredictable." These perceptions can come across as very hurtful and only make matters worse for the person suffering. All of these social stigmas stem from a lack of knowledge on these mental illnesses (Hasan, A. A.-H., & Musleh, M., 2018).

The best way to eradicate these social stigmas regarding mental illness is to educate the public and raise awareness on these illnesses. A great way to do so is to introduce these topics in middle school and continue on beyond a person's college career, as the average age of early signs of mental illness is just 14 years old (Barile, N.M.A.Ed., 2020). Oftentimes, the teachers are one of the first to recognize that something is not quite right in a student (Barile, N.M.A.Ed., 2020). Teachers and counselors in grade schools and on college campuses need to be properly trained in order to identify and assist somebody who may be suffering from a mental illness. Educating the teachers and counselors can be life changing for an individual who may be suffering from depression and/or anxiety because they will be able to get the help they need.

Poor mental health can inhibit a person's success rates, specifically in college. College students suffering from anxiety and/or depression often feel unmotivated to attend class, complete assignments and perform well on exams. This can be extremely detrimental to the students' GPA, as well as their plans for the future (IBCCES, 2019). College campuses all across the world should offer free and easily accessible mental health care services in the health centers. There should also be several mental health specialists available for the students to confide in, and get help from. If there aren't enough resources on campus, then the students will not be able to get the help they need to be mentally healthy.

Diet has recently been recognized as a modifiable risk factor for anxiety and depression. There has been epidemiological evidence that represents a correlation between the quality of a

diet and mental health. Psychiatric physicians could be of great assistance to their patients if they would provide the patients with a diet regimen to follow. Persons suffering from anxiety or depression may be able to treat their symptoms by replenishing their bodies with an abundance of antioxidants found in fruits and vegetables (Marx, W., et al, 2017). The dining halls on college campuses would also greatly benefit the students if they would offer more heart healthy foods that would improve their mental and physical health. It would also be useful if grocery stores in college towns would provide a student discount for all fresh produce in order to incentivize students to buy healthier options. Oftentimes, students will gravitate towards the unhealthy options at the dining halls because it looks more appealing, or at the grocery store because it is often cheaper. However, observational research has clearly shown that there is a relationship between the quality of food that a person is ingesting and how a person's mental health will respond to this (Selhub, E.M., 2018). These healthy foods should be offered in copious amounts on college campuses and at a discount in grocery stores to ensure that students are getting the appropriate nutrients to carry out positive brain function.

Studies show that exercise is helpful in reducing fatigue, improving alertness and concentration, and enhancing overall cognitive function (Anxiety and Depression Association of America, 2018). Physical activity has been proven to decrease the symptoms and weight of depression and anxiety (Carek, P. J., Laibstain, S. E., & Carek, S. M., 2011). Exercise can be used as an integral part in the treatment and rehabilitation of medical conditions, such as anxiety and depression. The University Health Center and CAPS need to encourage students to get involved with intramural sports teams with friends, as well as take long walks on nature trails. The Ramsey Student Center is also a great resource for exercise on campus; however it would be

extremely beneficial if there were an elimination or reduction of the cost of work out classes. Many people prefer to take classes at the gym to avoid feeling overwhelmed and out of place, and this would be a great way to get people moving. People suffering from anxiety and depression are encouraged to exercise for at least two and a half hours of moderate-intensity physical activity (e.g. brisk walking), and a hour and fifteen minutes of vigorous-intensity activity (e.g. jogging or swimming) each week (Anxiety and Depression Association of America, 2018).

While SSRIs are most frequently prescribed, physicians and therapists should consider other methods of treatment. Herbal treatment, and other natural remedies, have become increasingly popular in the treatment of anxiety and depression. Researchers are becoming increasingly more aware of all of the holistic approaches to medicine. The psychiatrists on staff at CAPS should be knowledgeable on all of these alternatives for treatments. Essential oils and other plants like Ginseng can help to instantly make someone feel more relaxed, improve mood and maintain mental health (Liu, et al., 2015).

### **Available Resources:**

## Counseling and Psychiatric Services (CAPS):

One of the most popular resources available to students suffering from anxiety and/or depression is offered by the University of Georgia's Health Care Center and is called Counseling and Psychiatric Services (CAPS). The goal of CAPS is to provide an affirming, safe, and inclusive environment for anyone struggling from the previously mentioned symptoms and others associated with anxiety and depression. CAPS wants to ensure they help every student

achieve their ideal mental health and wellbeing through managing stressful academic pressures and life events. Many students come to CAPS for stress related issues about academics, home life, relationships, career paths, and in general just being a college student. Around campus CAPS is known for being a high-quality service that is also affordable for students. CAPS is also very dedicated to ensuring that all patient information and discussions are kept confidential between them and their health care provider. A student can find CAPS on the second floor of the University Health Center and go in for a visit Monday – Friday from 8am – 5pm. The initial visit to CAPS would not cost Allison any money and following appointments would be at a reduced rate since she is a student enrolled at the university.

There are several services provided at CAPS including group counseling, short-term individual and couples counseling, crisis intervention, psychiatric services, medication prescriptions, consultation for the UGA campus community, and transition of care to community resources for long-term support. The short-term services for individual and couples counseling are offered to UGA students and their eligible spouses. CAPS also supports individuals through the appropriate transition into long-term services if they are needed. Group counseling is one of the preferred ways to receive anxiety and depression treatment. One of the most productive forms of therapy is when groups of students get together in an atmosphere where they can be open and offer each other advice. CAPS psychiatric services are available for students who may need treatment through medication. They offer access to medications that could benefit their clients on an individual basis. Crisis intervention is a 24-hour service provided by CAPS that is offered 365 days of the year for any individual that is potentially thinking about harming oneself. CAPS offers a Mental Health Crisis hotline for both during (706-542-2271) and after

(706-542-2200) office hours if someone needs someone to talk to immediately concerning their mental health status. Finally, CAPS provides transition from the UGA health center to other community resources. When students graduate or need more services than CAPS can offer, they are assisted in transferring over to another local mental health provider.

The first step to getting involved in CAPS services is to schedule and attend a screen appointment. During this appointment, CAPS will listen to the reasons of patient concern, discuss treatment options through the best fitting services, and create a plan to implement the previously mentioned services into action (Counseling and Psychiatric Services, 2020). CAPS is located in East Campus on 55 Carlton Street Athens, Ga 30602 within the UGA Health Center. This is across from the Ramsey Student Center and next to the Visitor's Center. Allison can find CAPS on the second floor of the University Health Center and go in for a visit from Monday – Friday from 8am – 5pm. CAPS can be accessed by the UGA bus which is a great option for a student like Allison. To learn more about their services or to schedule an appointment she can contact them at 706-542-1162, email them at contact@uhs.uga.edu, or view their website at https://www.uhs.uga.edu/caps/welcome.

## Advantage Behavioral Health:

Advantage Behavioral Health is a publicly funded clinic that offers mental health services to adults and children that are having emotional, behavioral, and other mental health issues. Advantage strongly believes that using evidence-based systems of health care can help all ages during these difficult times. They provide care through many different types of therapy such as dialectical behavioral therapy, motivational interviewing, intrapersonal therapy, family system

therapy, and cognitive therapy. Most of these therapies are successful in anxiety/ depression treatment except for dialectical behavior therapy, since that is primarily used for people struggling with symptoms of multiple personality disorder.

Some of the specific anxiety and depression mental health services they have to offer are as follows: Crisis services, community support, employment support, mental health day programs, mental health residential services, outpatient clinic services, homeless support, addiction/ substance abuse treatment, and criminal justice/court services. Advantage has an amazing system called Medication Assistance Program (MAP) that is utilized to help individual clients afford mental health medications that tend to be expensive. It is not feasible for someone to spend copious amounts of money on a medication that is out of their livable budget (Advantage Behavioral Health Systems, 2020). Advantage Behavioral health is located off campus at 250 North Ave. Athens, Ga 30601. Allison would need to either use Athens transit or drive to this clinic. No specific costs are listed on their website, but since they are not within the UGA health system prices will most likely be higher depending on whether or not she has insurance. She can learn more by calling them at 855-333-9544. Allison can also do more research about this resource by visiting their website at https://www.advantagebhs.org.

## Georgia Behavioral Health Professionals of Athens:

The main home page of Georgia Behavioral's website states that they do not believe that someone is defined by their anxiety, stress, depression, etc. They also state that they aim to help individuals get back to their life and be their best selves. There are over 34 conditions that can be treated at Georgia Behavioral including anxiety disorders and depression. One of their main values is that they believe the key to long term results is to treat the whole person. To do this they strive to offer all their comprehensive well-rounded professional services in one clinical location. They have already been able to help 990,000 people through their services at their 18+ locations.

Some of the impactful services offered by Georgia Behavioral are individual therapy, neuropsychological testing, group therapy, independent medical examinations, transcranial magnetic stimulation, cognitive behavioral therapy, dialectical behavior therapy, and medication management. Neuropsychological testing is a medical examination of the physical structure of the brain and its relationship to the psychological actions of the individual. Transcranial magnetic stimulation is a behavioral technique that uses painless stimulation on the patient's brain using electromagnets to help aid the effects of depression when other traditional methods do not work. The physicians at Georgia Behavioral can also offer to write prescriptions and help individuals manage new medications to treat their anxiety/depression if they are needed (Georgia Behavioral Health Professionals, 2019). This resource may be more expensive than the ones that are offered through the university because they do not offer reduced rates to students. This may be affordable to Allison if her insurance covers most of the cost, so she should contact Georgia Behavioral to find out more.

Allison can find Georgia Behavioral Health Professionals at 745 S. Milledge Ave Suite 1A Athens, GA 30605. The UGA busses have a route that goes down Milledge Avenue, so Allison can ride the bus to get to this resource making it extremely accessible. She can contact them by calling (706) 498-9560 to ask any questions she may have or she can visit their website at https://www.mygbhp.com/services/.

## Ramsey Student Center:

Ramsey student centers main vision is to be recognized as the best university recreational facility in the nation. They aim to promote healthy lifestyle choices to people to incorporate in their lives long-term. It is important to note how affordable and accessible Ramsey student center is for someone to get a healthy amount of exercise. Ramsey offers its services to UGA students, faculty, and staff plus all of their spouses and dependents. They also allow retired employees and UGA alumni to continue use of their facility (Recreational Sports: University of Georgia, 2020). Ramsey offers all different exercise styles including: Group fitness, personal trainers, small group training, many forms of recreational sport, indoor track, weight training, climbing wall, natatorium, four gymnasia, and much more. There are activities for everyone at Ramsey which makes this resource for anxiety and depression treatment a possibility for anyone interested in physical activity.

Studies have shown that exercise is a beneficial treatment to help individuals manage their anxiety and depression. Exercise can be one of the last things that someone experiencing an anxiety disorder or depression would want to do; however, research shows that an adequate amount of exercise can decrease someone's anxiety and improve one's overall mood. When someone exercises their body releases feel-good endorphins that can affect someone's overall outlook and attitude toward things in a positive way. Exercise can also be an excellent break or distraction from things in someone's life that may be causing them emotional pain or stress (Mayo Clinic, 2017). Ramsey is easily accessible on campus through the UGA bus system at 330 River Rd, Athens, GA 30602 located in the center of East Campus. Allison can contact Ramsey through cell by calling them at 706-542-5060, sending an email to askstudentaffairs@uga.edu, or visiting their website at the following URL: https://recsports.uga.edu.

# ASPIRE Clinic:

ASPIRE is a unique clinic located in Athens at the University of Georgia. This special resource takes a holistic approach towards counseling and education for local residents in the Athens area as well as UGA students, staff, and faculty. They offer many different types of services including family, individual, couple, financial, nutrition, and even legal counseling. ASPIRE believes that if there is one area that an individual is struggling with that other parts of their life are being affected too. This staff works to improve one's mental health and wellbeing by giving them a greater sense of happiness and wholeness. The initial consultation appointment here is free of charge. This session aims to figure out what services would be best for the individual, if ASPIRE is the correct fit for their mental health, and to allow the patient to voice any questions or concerns. The following appointments costs vary depending on what service is being used but they range from \$15-\$65 per twenty minute session. However, there is a long waitlist that is mentioned on their website due to growing demand, so there is no guarantee that Allison will be able to get any type of appointment with them immediately. ASPIRE does offer alternative resources to their clients that are on the waiting list.

ASPIRE Clinic is located on South campus at 210 McPhaul, Athens, GA 30602 across from Stegeman Coliseum and next to McPhaul Child Development Center. This mental health resource can be accessed by the UGA bus system, so this could be an accessible option for

Allison. She can contact ASPIRE at 706-542-4486 or email at aspire@uga.edu to determine whether this resource is right for her.

# UGA Career Center:

The UGA Career Center offers many resources and services to university students who are exploring potential careers and majors. Students who visit the Career Center are able to get help with their resumes, practice interviewing, obtain resources for professional dress, and get information on majors available at the university. The Career Center can be found at 825 S Lumpkin St, Athens, GA 30602, which is on campus and easily accessible for students. The career center is also open from 8am-5pm, which leaves plenty of time for students to visit who have busy schedules. This center is a great place for students to get connected with internships through the Intern for a Day program and talk with a professional in walk in hours to discuss potential careers. This would be very helpful for Allison as she is unsure about her major and could largely benefit from these resources. Importantly, the services and resources offered at the Career Center are free of charge for university students. This means Allison can utilize the Career Center without it causing her or her parents financial stress. Allison can contact the Career Center at (706) 542-3375 with any questions.

# **Sustainable Solutions:**

There are many resources that we have provided to help college students cope with and overcome anxiety and depression, but sometimes even those services may fall short. There are several sustainable solutions that will be extremely helpful in order to prohibit all barriers of

access for students getting help with mental illnesses. Faculty members need to be better trained on how to help students with mental illnesses, like anxiety and depression. Professors need to bring light to the mental health problem amongst college students, so the students will know that they have someone they can talk to and help the students to provide resources. The Disability Resource Center also needs to be more accommodating to students who have more recently been diagnosed with anxiety and depression.

The University Health Center needs to be improved in order to provide students with dietary modifications in order to boost mental health overall. Counseling and Psychiatric services, also known as CAPS, would also greatly benefit the students if they provided exercise plans, so that the students could release pent up energy contrary to their typical sedimentary lives. Internet-based therapy is a great way to alleviate the stress of students and professionals not being able to access these resources, while reducing the overall stigma of therapy. The convenience of getting help from counselors through CAPS would be drastically improved if there were more counselors on staff, as well as more locations in which a student could receive therapy. Sliding scale therapists also need to be implemented in order to improve overall wait times and costs for therapy. The implementation of several modifications to the University faculty, the University Health Center, CAPS, and therapy overall will drastically improve the mental health of many students suffering from anxiety and depression.

# The Accessibility of CAPS.

CAPS, also known as Counseling and Psychiatric Services, is a resource available to all of the students at the University of Georgia for various mental health needs. There are a variety

of services offered at CAPS on campus like short-term individual and couples counseling, group counseling, psychiatric services including medication, crisis intervention, transition of care to community resources, and consultation to the UGA campus community. Having all of these services available to the near 38,000 students attending this university is an incredible tool, however, providing these services at this magnitude in only one spot on campus has caused problems with wait times for students. Since there are only a limited number of counselors available at a time specializing in different things, this can create a problem of availability for the students when they are needing psychiatric help of some sort. Oftentimes students need direct one on one counseling for extended periods of time and frequently in order to heal from whatever they are suffering with mentally, and this can be very difficult for just one place to provide readily and in a timely fashion. Not being able to get an appointment when a student needs it can create more stress and anxiety.

Increasing the availability of these services will provide very positive results for the students and the university. Research has found that less wait time for counseling showed a higher willingness to recommend the university's services, higher institutional commitment, and a lower perceived stigma for receiving psychological help in comparison to the group of students who had more wait time to receive counseling (Blau et al., 2015). In order to increase the access of counseling for anxiety and depression for college students, a few aspects need to be improved to increase the access of counseling available. One way the accessibility of CAPS will be improved is by hiring more counselors to have available to the students for a variety of needs.

Another way to improve the access of this program is to expand CAPS to various locations on campus to not only have more places and counselors available, but also to make it easier for students to get to a counseling service in a more convenient manner. CAPS needs to be placed in other spots on campus like in Tate Student Center or the MLC. Having more locations and more counselors will decrease the wait times for students, as well as increase the likelihood of students to use these psychiatric services when they need them.

### Professor Intervention and DRC/Curriculum:

Anxiety and depression are widely known to alter one's ability to concentrate and be successful academically (National Alliance on Mental Illness, 2017). It can be very challenging for students to receive the accommodations they need in order to be as successful as possible given their mental health circumstances. The University of Georgia requires several documentations and proof that a person is suffering with psychological disorders (Disability Resource Center, 2016). These required documents can make it very challenging for a person who has recently started to experience anxiety and depression in college to get the testing and curriculum accommodations that would greatly benefit them.

It is proven that mental health problems are associated with 0.2-0.3 GPA reduction overall (Bruffaerts et al., 2018). This can drastically impact scholarship opportunities, as well as future job opportunities and graduate school programs. The pressure to maintain a certain GPA can cause a student to spiral into even worse depression and anxiety. There is a stigma around students receiving academic help and compensation for having mental health disorders that is creating a barrier for students to get the help he or she needs (Eisenberg et al., 2009). Students

may avoid using helpful services in order to avoid being discriminated against or looked at differently by professors and/or peers.

College professors need to be well trained to identify and help students who may be suffering from anxiety and depression. If college professors proactively share mental health information and acknowledge themselves as a tool for the students to use to get help on the first day of class and throughout the semester, that would help to normalize the problem (Eva, 2019). This also demonstrates to the students that they always have professors that care about their well beings and want them to be successful and healthy. Altering the curriculum or providing extra resources for a student suffering from mental illness is a really helpful way to ensure that students are able to maintain good grades and take care of themselves.

It is important that students don't feel like they are out of options. Students need to feel as though their professors are there to help them by providing several resources for them to accommodate their work loads, as well as provide them with services in a nonjudgmental way. Those who do receive services often delay seeking help or do not adhere to recommended treatment (Sirey et al., 2001). This will change when professors make a point to discuss mental health periodically throughout the school year, so that students always know that they have someone they can trust and get help from. Students will dramatically change the way they perceive other students who may be suffering from anxiety or depression because the professors are bringing light to a serious problem.

#### Implementing Healthy Dietary and Exercise Plans on Campus:

Anxiety and depression among undergraduate students can be sustainably combated with exercise and dietary treatment plans provided by university mental health clinics such as CAPS. Studies have shown that there are many benefits of implementing healthier lifestyle changes as treatment into patients' lives who have been diagnosed with anxiety and/or depression (Fernández-Rodríguez, Soto-López, & Cuesta, 2019). By providing patients with the education and resources of how to eat healthier and incorporate exercise in college, students can better manage their anxiety and depression.

Processed foods containing high levels of sugar that can cause inflammation in the body and brain leading to possible mood disorders such as anxiety and depression (Maxine Barish-Wreden, 2020). Oftentimes people suffering from depression or anxiety fall into damaging eating habits like reaching for these unhealthy foods or choosing to skip a meal altogether only worsening their mental state. The university health center must offer healthy diet education through cooking classes or teaching students how to make a nutritional plate in the dining halls. It is important that CAPS help patients find where they can access healthy affordable food at local grocery stores, campus food pantry, or on a meal plan. Many students have poor nutritional diets contributing to their anxiety and depression because they simply cannot afford healthier options (Fernández-Rodríguez, Soto-López, & Cuesta, 2019). It is vital that the health center provides information for these patients to give them the resources to improve their mental health through a nutrient rich diet.

Most college students with anxiety have been found to have sedimentary lives with little to no exercise, however a majority of these students were found to have no knowledge that exercise could help treat their symptoms (John J. Ratey, 2019). University mental health clinics need to educate students on the important benefits of incorporating physical activity into their lives. Exercise releases muscle tension allowing the body to release built up anxiety and helps the body release important anti-anxiety/ anti-depression hormones and chemicals such as serotonin, endorphins, GABA, BDNF, and endocannabinoids (Sabourin, Watt, Krigolson, & Stewart, 2016). All of these natural chemicals help to improve one's mood and reduce accumulated stress. CAPS needs to provide patients with exercise plans that can be completed somewhere that is both accessible and affordable for the student. The University of Georgia's Ramsey Student Center is accessible for all students living on campus by the bus system and it is an affordable option because students can get in for just \$15 a year. CAPS should provide physical activities that can be done at Ramsey and modified plans that can be done at home.

Many students struggling with anxiety and depression would benefit from the UGA health Center providing them with wholesome diet and exercise plans as well as education on how to manage mental health through positive lifestyle changes. Providing nutritional and physical activity services from CAPS health professionals is a beneficial addition to the university's resources for mental health.

# The Solution of Internet-based Therapy:

In recent years technology has vastly improved and diversified. With this in mind, it is no surprise that technology is expanding its uses and being utilized more extensively in the medical

and academic fields. This creates the perfect opportunity for psychologists, therapists, and mental health professionals to use technology and internet-based therapy to reach more students and create a more comfortable environment while also potentially being more cost effective. College students are especially vulnerable to stress and the potential of having poor mental health, however, therapy and self-help services can largely help alleviate this. In regards to internet based therapy in particular, it was found that the advantages of online trials are their accessibility, continuous availability, confidentiality, and discretion, especially for people who do not want to seek medical help in a health center, as well as the opportunity to extend the program to a large population in an economical way (Saleh, Camart, Sbeira, & Romo, 2018).

In one study of 128 college students enrolled in an internet-based therapy program, it was found that upon completion of the program, self-esteem levels, presence of anxiety symptoms, levels of perceived stress, and levels of psychological distress all improved in greater amounts for the experimental group compared to the control group. This study shows that this type of internet-based program has the potential to reach and help a large number of students (Saleh et al., 2018). In another study also studying college students, researchers aimed to examine the efficacy of two internet-based mindfulness and cognitive behavior training programs with the goal of enhancing mental health. It was found that both programs improved mental health, distress, life satisfaction, sleep disturbance, and energy level (Mak et al., 2017). Additionally, it was found in a review of 89 studies on internet-based therapy for college students that the majority of programs were effective (47%) or partially effective (34%) and also involved assistance from a coach, which could be a large opportunity for campus professionals to assist in these programs (Lattie et al., 2019).

The solution of implementing internet-based therapy for college students helps alleviate the burden of professionals both on and off college campuses who work at centers that face being understaffed and unable to reach all students in need (Lattie et al., 2019). Web-based platforms offer treatment to college students with common mental health problems while circumventing many existing barriers to receiving traditional mental health services, including stigma and time. Further, these programs cover a lot of different disorders that not all professionals may have an adequate background in. These programs span disorders from depression to anxiety, to insomnia, and even risky behavior issues and body-image disorders (Saleh et al., 2018). Internet based programs are highly sustainable and are a great solution to filling the gap of barriers to the access to mental health resources.

## The Solution for Expenses at Alternative Locations:

College campuses around the United States have reported an increased demand in mental health services but cannot provide the proper care to students in need because they are over-capacitated (Leah, 2017). Depending on the severity of a student's anxiety and depression, they may need to seek immediate attention. However, it is nearly impossible to get the immediate attention they need on their college campus if the first available appointment is 2-3 weeks away. The long wait times for college mental health services are leading to students seeking outside resources in the local community. What many do not know prior to scheduling an appointment is the cost of these services. To prevent students from waiting weeks for an appointment or paying large amounts of money out of pocket, they need to seek alternative services in the local community that are cost-effective.

College students seeking counseling services outside of their university need to have the opportunity to choose a sliding scale therapist. It has been found by researchers that using a sliding scale therapist allows the patient's circumstances to be taken into consideration along with the service that will be provided when calculating the out-of-pocket cost they will be paying (Abbott & Stevens, 2014). The implementation of using a sliding scale makes it more affordable for their patients with varying circumstances. Whether it be income or using cash to pay for each service, they can adjust their hourly fee. Students who are not aware of the sliding scale therapists near their college campus can look in a mental health directory, like GoodTherapy.org. Directories like GoodTherapy.org provide a list of therapists that students can choose from to meet their specific needs. The use of sliding scale therapists will allow the student to receive a sufficient amount of care while also being able to afford other services for their future needs.

While many students have the opportunity to be on their parent's insurance plan until they are twenty-six, about 13% of people ages 18 to 24 do not have health insurance (CDC, 2018). A solution for uninsured students is free mental health clinics located off-campus. Students uninsured in the United States deserve access to services to better their overall health, they may be experiencing anxiety and depression because of the exposure to social and health disparities (Kamimura, Christensen, Tabler, Ashby, & Olson, 2013). Free service clinics take in patients to achieve their goal of better mental health with the help of experienced and licensed professionals. The continued support of clinicians at free mental health clinics allow sustainable support for uninsured students. If a student is either insured or uninsured sliding scale therapists and free mental health service clinics will provide a sustainable solution for high expenses at alternative off-campus mental health services.

College students are provided with a sufficient amount of resources to improve their mental health on and off-campus. Unfortunately, many of the resources college students are given are not sustainable when faced with common barriers that prevent access to mental health services. The goal of introducing more sustainable resources for college students will allow students to receive the mental health services they need throughout their education. Professors that are aware of the specific needs of their students will allow them to provide a curriculum that is accommodating to all. Students will also feel comfortable approaching their professors regarding mental health issues if the faculty is better trained on mental illness. Opportunities for exercise and better nutrition are easily accessible on college campuses; however, many students do not know how to utilize these resources effectively. Creating an exercise and diet plan tailored to students experiencing poor mental health will allow students to improve their mental health by enhancing their activity levels and monitoring the foods they are eating. The stigma around mental health on college campuses prevents students from utilizing the mental health services, but using internet based therapy allows for students to receive the proper care without leaving their dorm or apartment. The drastic demand for mental health services on college campuses should make it obvious that more counselors should be hired. Hiring more counselors will reduce wait times for students. Lastly, students seeking mental health services off campus should not be worried about the cost that comes with it. A greater number of sliding scale therapists need to be closely located to campuses. As well as free mental health clinics for the uninsured. Sustainable solutions for college students facing anxiety and depression can end this health issue overall.

# **Resource Handout:**

COUNSELING AND PSYCHIATRIC SERVICES (CAPS): 55 Carlton St, Athens, GA 30602 Phone: (706) 542-2273

The Counseling and Psychiatric Services is located on the University of Georgia's campus to help with student mental health and wellbeing. CAPS aims to provide high quality, affordable services to UGA students and eligible partners. The services provided at CAPS include: short-term individual and couples counseling, group counseling, psychiatric services (including medication), crisis intervention, transition of care to community resources, and consultation to the UGA campus community. The health fee allows for the UGA community to receive this healthcare. CAPS encourages students to have health insurance either with the UGA student health insurance policy or through their family policy. CAPS participates with Aetna, Humana, Cigna, United Healthcare, UGA Student Resources, Blue Cross Blue Shield, Medicare, Medicaid, TRICARE, and some HMO plans. If you miss an appointment and fail to cancel or reschedule within 24 hours, then you will be charged \$30. If you don't have health insurance,

ADVANTAGE BEHAVIORAL HEALTH: 250 North Ave, Athens, GA 30601 Phone: (855) 333-9544

Advantage Behavioral Health is a community-based service board that provides person-centered services and treatment to individuals and families experiencing mental illness, developmental disabilities, and addictions. Advantage does so by collaborating with personal, community, and organizational resources. Advantage Behavioral Health accepts all individuals who are eligible for treatment. The insurance coverage accepted are medicaid, medicare part B, Peachcare for Kids, Amerigroup, Wellcare, Cenpatico, Blue Cross Blue Shield, and United Care. Those who are not covered by Medicaid are asked to pay a copayment at the time of their appointment. Those who are uninsured may qualify for a state assistance program and will be asked to pay an amount determined on a sliding scale based on their income. Financial counselors are readily available to assist clients that have concerns about payment and guide clients to the services that they are eligible to fund. In the case of an emergency, Advantage provides a Behavioral Health Link Hotline that operates 24/7 to assist callers whether they schedule an appointment or receive guidance through a tough time.

GEORGIA BEHAVIORAL HEALTH PROFESSIONALS OF ATHENS: 745 S Milledge Ave #1A, Athens, GA 30605 Phone: (706) 498-9560

Georgia Behavioral Health Professionals of Athens provides a wide range of mental health services to their patients. They are able to treat over 34 differing mental health conditions

through group therapy, neuropsychological testing, individual therapy, independent medical examinations, transcranial magnetic stimulation, dialectical behavior therapy, cognitive behavioral therapy, and medication management. Two of the most common mental health conditions treated at Georgia Behavioral Health Professionals are depression and anxiety. These medical professionals believe that to achieve long term results, they must treat the whole person. They do this by treating each patient on an individual basis and providing them with the treatment(s) that best suit their comfort level, lifestyle, and mental status. They accept most insurances including but not limited to Athena, Beacon Health Options, Blue Cross Blue Shield, Federal, Anthem, Cigna, Humans, Kaiser, Magellan, Medicare, Tricare, United Healthcare, and Optum. At the end of every appointment each patient is asked to pay a copayment. That price will vary depending on whether or not someone has insurance and what each insurance company will pay. The copayment for each appointment will also vary depending on the specific service that is being used. Specific prices are not listed on their website; however, the patients can view them once they have created their patient portal at the arrival of their first appointment.

RAMSEY STUDENT CENTER:

330 River Rd, Athens, GA 30602 Phone: (706) 542-5060

Ramsey Student Center provides a place for students to exercise and implement a healthy lifestyle. There are several recreational activities that are available for students, as well as work out equipment and space that the students may utilize. There are several different membership options that Ramsey Student Center provides to students, faculty, staff, alumni, and affiliates interested in joining. Students of the University, in particular, may use the exercise equipment for \$15 if they are registered for a total of twelve or more credit hours. This permits students to participate in competitive sports, fitness, outdoor recreation and other informal recreational activities. There are also group fitness passes available that will allow students to participate in cycling, yoga, zuma, weight training and many more activities. Students who are interested in group fitness will pay a fee up to \$135 if they sign up after the first two weeks that sign ups are available. However, these group fitness who sign up after the halfway point in the semester. This is a one time payment for the semester, and then the students are able to attend an unlimited amount of classes. Students may also purchase personal training packages for \$360 for 20 classes.

ASPIRE CLINIC: 210 Mc Phaul, Athens, GA 30602 Phone: (706) 542-4486

Aspire Clinic is found on UGA's South campus and offers many different types of services including family, individual, couple, financial, nutrition, and even legal counseling with a holistic approach. The staff at the clinic works to improve one's mental health and wellbeing by giving them a greater sense of happiness and wholeness. The initial visit to Aspire Clinic is free

of charge and the following appointments costs vary depending on what service is being used but they range from \$15-\$65 per twenty minute session.

CAREER CENTER 825 S Lumpkin St, Athens, GA 30602 (706) 542-3375

The UGA Career Center offers a variety of services to allow students to explore potential careers and majors. The services offered include drop-in hours, help with resumes, assistance in preparing for interviews, help with cover letters and letters of recommendation, and assistance in choosing a career and major. The Career Center has a variety of programs as well that help students gain experience and become familiar with careers they are interested in. These programs include the UGA Mentor Program and Intern for a Day. The Career Center website (https://career.uga.edu) offers a variety of resources such as tips for professional dress, sample portfolios, Handshake, and gap year options. All of these services are free of charge for UGA students.

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