

### Abstract

The proposed study will examine the commonality of using mindfulness meditation practices as a treatment for anxiety and depression. While these practices are becoming more popular, especially in the younger population, they are still not as commonly used as a treatment option when compared to therapy and medication. The proposed survey will be distributed to subjects who self-report anxiety and/or depression. Fifty individuals ages 18 and over will be given a survey through Qualtrics. The survey will include questions asking whether subjects use mindfulness practices, whether these practices decrease their levels of anxiety or depression, and what other treatments they use. It is expected that patients ages 18-29 will have a higher usage of mindfulness meditation than patients ages 30 and over. It is also expected that mindfulness practices will be used less overall when compared to other treatment types.

### Introduction

Mental health is an increasing issue in today's world. Society is becoming more aware and accepting of individuals with mental health issues. Western society favors treatments using medications and therapy to improve one's mental health. While these treatment types are proven to be effective and have their place, it is important to note that there are other treatment options available. For example, studies have shown that mindfulness and meditation practices are effective in treating anxiety and depression (Wielgus et al., 2020; Hoge et al., 2018; Hwang et al., 2018). It is important for patients to be aware that a variety of treatment options are available to them. For this reason, meditation and mindfulness practices should be recommended and put to use more often as a treatment option for mental illnesses, especially anxiety and depression.

Mindfulness practice is described as focusing on the current moment, not dwelling on thoughts about the past or future. It is considered a method of emotional regulation that helps to understand and transform negative emotions (Wielgus et al., 2020). Meditation has been found to increase brain functionality, aiding regions of the brain involved with attention processes, perspective-taking, learning and memory processing, and self-referential processing (Wielgus et al., 2020). A study by Hwang et al. (2018) found that meditation practices decrease a person's negative mood, while other practices such as exercise serve to increase a positive mood.

Unfortunately, the current COVID-19 pandemic has caused a significant increase in mental health issues. The pandemic has also made it difficult for patients to see their doctors and therapists in person. Because of this, a study was conducted by Wielgus et al. (2020) to analyze the effectiveness of using mindfulness and meditation apps to relieve symptoms of anxiety and depression. It was found that apps generally have low to medium effects on stress and anxiety symptoms, and are good for alleviating mild stress (Wielgus et al., 2020). The study by Wielgus et al. (2020) concluded that mindfulness has a direct relationship with anxiety, and reduces levels of anxiety, depression, and emotional exhaustion in less resilient groups. Thus, these practices are especially useful in a time when levels of stress and mental health issues are unusually high.

Studies such as the one conducted by Hoge et al. (2018) have found that mindfulness-based stress reduction exercises are effective in treating patients with generalized anxiety disorder. This study compared participants enrolled in a Mindfulness Based Stress Reduction (MBSR) course to those in a Stress Management Education (SME) course. Subjects enrolled in the MBSR course had a greater drop in anxiety ratings according to patient self-reports and biomarkers in the blood used to measure acute and chronic stress (Hoge et al., 2018). In addition, it was found that mindfulness meditation practices not only reduce stress, but also increase resilience to future stress caused by psychological challenges (Hoge et al., 2018). Past research has found that mindfulness meditation practices decrease the risk of relapsing into depression, suggesting that these practices facilitate coping and resilience (Hoge et al., 2018). The finding that mindfulness practices reduce anxiety and depression, and also increase resilience to stressors is important in improving psychological health.

A study conducted by Hwang et al. (2018) compared the long- and short-term effects of meditation practices. It was observed that both meditation and relaxation practices increase mindfulness and resilience to stress (Hwang et al., 2018). It was found that the participants who underwent a short but intense meditation program portrayed improved levels of mindfulness and resilience up to three months after the three-day program was completed (Hwang et al., 2018). Reduction of stress could be achieved by practicing mindfulness meditation for just twenty-five minutes a day for three days (Hwang et al., 2018). While normal relaxation practices were found to reduce stress in the short term, they are significantly mediated by mindfulness techniques in reducing stress and treating anxiety and depression (Hwang et al., 2018). These results suggest these practices could be effective treatments for depression and anxiety disorders, as well as aid patients with other health conditions such as chronic pain.

While meditation might seem like a simple and easy solution to treating anxiety and depression, it can cause negative side-effects in some people. One survey found that 25.4 percent of the participants surveyed reported unwanted effects (UEs) caused by meditation (Cebolla et al., 2017). These unwanted effects include a wide range of symptoms, such as anxiety, pain, depersonalization and derealization, depressive symptoms, emotional lability, visual focalization problems, loss of consciousness or dizziness (Cebolla et al., 2017). The most common symptoms experienced are anxiety and depersonalization.

Unwanted effects occur more frequently during long meditation sessions and when practicing individually instead of in a group (Cebolla et al., 2017). Therefore, unwanted effects can be mitigated by practicing group meditation sessions or shortening the amount of time spent in meditation. Unwanted effects can range in severity, but the large majority are mild and brief, and don't lead to the termination of meditation practices or the need for medical assistance (Cebolla et al., 2017). However, UEs are relatively common experiences so it is important for practitioners to be aware of the possible consequences and how to best avoid experiencing any unwanted effects.

While mindfulness meditation practices have proven to be beneficial in reducing anxiety and depression symptoms and increasing resilience, these techniques are not as commonly known as treatment options. In order to determine the best way to educate patients of this treatment option, it would be valuable to first identify how often these practices are currently used, and among what age group they are most popular. It is hypothesized that mindfulness practices will be used less than other treatment types, and that mindfulness practices will be more common in patients aged 18-29 than in patients 30 and over.



### Predicted Results

Two chi square statistical analyses will be used to analyze results of the survey. The first chi square test will determine if there is a significant relationship between age and mindfulness usage. Results of the survey are expected to indicate that patients ages 18-29 will have a higher frequency of mindfulness meditation usage than patients ages 30 and over. An insignificant chi square result would indicate that there is no relationship between age and the usage of mindfulness practices. The second chi square analysis will be used to compare the frequency of mindfulness practices to other treatment types. It is expected that mindfulness practices will be used less frequently overall when compared to other treatment types.



### Methods

#### **Participants**

The population will consist of approximately 50 individuals with depression and/or anxiety. Both college students and noncollege participants with depression and/or anxiety will be accepted. This will provide a wider range of age and lifestyles among participants. The results of participants ages 18-29 will be compared to those ages 30 and over. College students will be offered credit for participating. Participant's gender and age will be asked because these factors may influence results.

#### **Materials**

Subjects will be given a survey comprised of ten questions asking about the use of mindfulness practices. Questions will ask about information such as whether participants use mindfulness practices, if they think that the practices improve anxiety and depression symptoms, and whether they used these practices prior to developing anxiety or depression. For example, a sample question used in the survey could ask: "Have you ever used mindfulness practices such as meditation to treat symptoms of depression and/or anxiety?" Various question types will be used. The primary goal of the survey is to determine how often mindfulness practices are used to treat anxiety and depression in today's society, and in what age groups these practices are most common. Therefore, participants will be asked to state their age and questions in the survey will center around the use of mindfulness practices.

#### **Procedure**

Due to the current pandemic, the survey will be administered solely online using Qualtrics. Professors will be asked to promote participating in the survey to students, and a link to the survey will also be posted on social media platforms. Participants can have either or both depression and anxiety to participate. They will not be required to provide proof of diagnosis. A list of generalized anxiety disorder and major depressive disorder criteria from the DSM-5 will be provided prior to starting the survey for participants to review. Subjects will then take and complete the survey. Participating college students will receive course credit upon completing the survey. Non-college students will be entered into a raffle for the chance to win a gift card to a local restaurant. Otherwise, participants will not receive any compensation for completing the survey.

### Discussion

While the usage of mindfulness practices such as meditation are being increasingly used as treatments for mental health issues such as anxiety and depression, it is expected that they are still not as common as other forms of treatments. However, as stated by Wielgus et al. (2020), the number of mindfulness meditation apps are on the rise. This, along with the fact that the current pandemic has caused an increase in mental health issues while simultaneously limiting contact with doctors and therapists suggest that these practices could be on the rise. As availability of these practices has increased with the creation of mindfulness meditation apps point to the expectation that mindfulness practices will be more common among the younger generation, defined in this study as those between 18 and 29 years old. By researching how commonly these practices are used and what populations are most likely to use them, doctors and therapists will be better able to raise awareness of mindfulness practices as treatment options that anyone can use.

### References

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