

LITERATURE REVIEW: THE EFFECTS OF MINDFULNESS IN FAITH-BASED EDUCATION

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ABSTRACT

The practice of mindfulness has proven to be a beneficial cognitive and socioemotional tool for various populations and types of settings. Benefits include reduction of stress, anxiety, and other psychopathological symptoms. Additionally, mindfulness has positive effects on academic performance in the way that it enhances a student's ability to sustain attention and retain information more efficiently. Literature on the adverse effects of mindfulness, such as retraumatization, delusions, and anxiety, are also mentioned to remove bias. With the growing popularity of mindfulness, this study aims to understand mindfulness within the contexts of education and faith. In hopes of integrating mindfulness practice into a Christian-based university, we researched the benefits of mindfulness in educational settings ranging from primary to higher education, as well as mindfulness from the perspective of the Christian faith. Previous studies have demonstrated the advantages of mindfulness for the Christian faith, but they do not incorporate education in their methods. To our knowledge, no conclusive study exists on the intersection between faith, education, and mindfulness. Findings indicate that implementing acts of mindfulness improves attention span, ability to retain information, and cognitive control.

INTRODUCTION

With its growing popularity, millions of regular people and experts are now practicing mindfulness. Mindfulness is the ability of an individual to remain fully present in the moment with an awareness of where they are and what they are doing while refraining from becoming overly reactive or overwhelmed (Alic, 2020). By keeping a kind, caring perspective on personal thoughts, feelings, body sensations, and the surrounding environment, mindfulness will then be in practice. One component of mindfulness is acceptance. Individuals observe their thoughts and feelings without passing judgment—for example, without perceiving there is a “right” or “wrong” way to feel or think at a particular time or in a given moment. While engaging in mindfulness exercises, one's thoughts

focus on what they are experiencing in the immediate moment rather than dwelling on the past or planning for the future. The primary purpose of this research is to explore the impact of mindfulness on higher education students at a Christian, faith-based University.

The literature review is organized based on various themes of mindfulness, such as mindfulness in general, in higher and primary education, as well as in the context of the Christian worldview. Approximately 100 articles were reviewed to determine if mindfulness was beneficial or adverse in specific settings. One study with 49 participants revealed how a brief practice of mindfulness enhanced sustained attention while also reducing anxiousness and fatigue (Zeidan et al., 2010). In relation to a faith-based Christian tradition, another

study found that the practice of mindfulness can be consistent with the Christian worldview and can enable Christians to carry out their core beliefs and ideals (Ford & Garzon, 2017; Garzon & Ford, 2016). Individuals who live and practice the Christian tradition can utilize the various techniques of mindfulness through the following specific pillars: the presence of mind, internal observation, and acceptance (Symington & Symington, 2012). There is a lack of research that explores the connection between mindfulness, Christianity, and education. This study aims to address that gap.

LITERATURE REVIEW: THE EFFECTS OF MINDFULNESS IN FAITH-BASED EDUCATION

Mindfulness in General

The scholarly literature and mindfulness practitioners have generally claimed the positive benefits of the practice (Alic, 2020; Davis, 2014; Hensley, 2020; Moreno, 2017; Plez & Black, 2014). Some benefits of mindfulness include relaxation, self-care, and a positive impact on the brain (Alic, 2020). Several studies have demonstrated that mindfulness reduces stress and fatigue and enhances sustained attention (Bennet et al., 2018; Davis, 2014; Piotrowski et al., 2017; Vorontsova-Wenger et al., 2021). Mindfulness can be practiced throughout the day and in various settings. Typical mindful practice involves setting aside time and space, observing the present moment without distraction or judgment, recognizing wandering thoughts and bringing them to the present, and accepting oneself (Alic, 2020). Post-traumatic stress disorder, substance use disorder, and high blood pressure are just a few of the many emotional, mental, and physical conditions that can benefit from mindfulness (Alic, 2020).

Pletz and Black (2014) conducted a study to determine when the attachment of holding onto pleasure in addiction and avoiding pain becomes problematic. They hypothesized that human thinking gets in the way of commitment to learning about addictions and what drives an individual; personal values are so strong that people struggle to be open to other perspectives. Obsessive thinking drives addictions such as smoking, gambling, and alcohol. Mindfulness has been shown to develop self-awareness and an ability to be present in the moment. By introducing mindfulness practice to participants who suffer from addiction,

Pletz and Black (2014) hope that it allows addicts to recognize their pain and suffering so that they can develop the personal resolve to control their health and well-being. One participant in their study was an 18-year-old woman who suffered from depression and was admitted to the hospital for excessive marijuana and cocaine use. She had extreme guilt and self-hating thoughts, so after unsuccessful medication and other forms of psychotherapy, she turned to practicing mindfulness. By focusing on her ideas instead of fighting them, the participant was able to increase her times of calm and mental flexibility. Mindfulness did not cure her depression, but it did make her feel better overall (Pletz & Black, 2014). Since students can overthink when taking exams, information obtained from this study may help students perform better academically. Mindfulness can help clear a person's mind, and therefore, it may help students with their overthinking.

Aside from addiction, mindfulness has been shown to be beneficial to those suffering from anxiety, paranoid thinking, depression, and so forth due to academic pressures. Vorontsova-Wenger et al. (2021) attempted to find the relationship between mindfulness, academic performance, and psychopathological symptoms. They recruited 90 undergraduate students and 60 graduate students who were 18 years or older, full-time students, not currently in formal psychotherapy, not engaging in meditation practice, and not taking any medication. Data was measured by having the participants fill out a self-report questionnaire regarding mindfulness. They also reported on academic performance and some psychopathological symptoms. The authors concluded that students with highly developed mindfulness abilities had lower levels of psychopathological symptoms and better academic performance than students with less advanced skills. One limitation presented in this study is that the students who had positive outcomes from mindfulness may have had lower symptomatology compared to the others, which is why mindfulness works more effectively for some than others (Vorontsova-Wenger et al., 2021). By educating students on how beneficial mindfulness can be for them, they may use it as a tool to improve their performance and relieve some potential psychopathological symptoms.

It is important to note some of the adverse effects that have been documented regarding

mindfulness practice. Clearing the mind is very beneficial since it allows the individual to be present in the moment; however, this benefit can be troubling for those with severe trauma. Sitting in a silent room and focusing on your thoughts can trigger flashbacks and provoke retraumatization (Chen, 2022). From their various studies, researchers at Brown's Cheetah House compiled a list of 59 different types of upsetting experiences for people who practice mindfulness. Some psychological symptoms include detachment, agitation, panic, and delusions. Moreover, physical symptoms include irregular heartbeat, headaches, changes in breathing, etc. In relation to faith, people reported shifts in their worldview or loss of a sense of self. Some populations at greater risk of experiencing negative reactions to mindfulness include those who have postpartum depression, anxiety, or any unresolved trauma (Chen, 2022). The negatives of mindfulness are often underreported and downplayed (Chen, 2022). Vulnerable populations need to be considered when conducting research on mindfulness.

MINDFULNESS IN HIGHER EDUCATION

Incorporating mindfulness in higher education has been growing in popularity with recent studies and research pointing to the numerous benefits accompanying mindfulness. The new environment that college students are placed in often leads to increased stressors with higher academics, the stress of managing finances, and new social settings. These abrupt changes can be difficult to navigate. Practicing mindfulness is one approach that can keep students grounded and cognitively flexible with the chance to tackle unpredictable and complex sustainability problems (Hensley, 2020). Using the classroom setting on a college campus is an effective way to implement and encourage the practice of mindfulness. Instructors incorporating mindfulness techniques into their teaching create a space that promotes student reflection, creativity, learning, and retention (Hensley, 2020). Mindfulness helps shift the focus to the process of learning instead of what needs to be learned. It allows students to develop the capacity to retain and make sense of information learned while mindfully paying attention (Davis, 2014). As college helps to prepare students for the professional world, practicing mind-

fulness techniques can help promote imagination and creativity, which is crucial for developing young, effective, and strong professionals (Hensley, 2020).

A journal article discussing different ways that mindfulness can be used in higher education classrooms suggests that mindfulness practice should allow students to ponder and reflect on how their experiences relate to the course content (Davis, 2014). Students are not always given the skills necessary to approach and manage complicated situations in higher education. The ability to reflect on personal experiences in relation to others and the world can help address these problems, and the practice of mindfulness can allow for deeper reflection. Davis (2014) notes that the benefits of mindfulness are limited if university faculty themselves are unaware of the benefits. It is also important that the faculty is aware of how mindfulness works in the classroom and how to incorporate it into their teaching practices (Davis, 2014). Mindfulness promotes students to take an actively engaged part in the learning process, which increases content understanding and application.

A study conducted in 2018 focused on how anxiety and stress impact academic performance and is linked to memory impairment. The purpose of the study was to test if mindfulness would help with memory recall. The results suggested a positive impact on emotion regulation and cognitive control. By regulating emotions and redirecting attention to the task at hand, mindfulness increased students' performance on exams. Anxiety and stress interfere with a student's learning and information recall. This study emphasized how mindfulness is an effective intervention to reduce the stress and anxiety experienced in higher education (Bennett et al., 2018). Mindfulness meditation consists of focusing on a specific procedure, such as breathing, acknowledging any intrusive thoughts and emotions that may arise, and then letting them go. This study implies that mindfulness enhances attention, which is a skill needed when learning new information. Incorporating mindfulness techniques into the classroom with the help of professors could help readily improve the mental states, cognitive control, and overall emotional regulation of college students.

MINDFULNESS IN PRIMARY EDUCATION

Similar to the increased attention toward mindfulness within higher education, the application of mindfulness into primary education has also piqued the interest of researchers. Few studies have been done in this specific area; however, the ones that have been completed show the benefits to children in aiding their academic performance, attention span, and overall social-emotional well-being (Moreno, 2017). Mindfulness-based activities should comply with appropriate development principles, be integrated by teachers in a comprehensive technique, align with the neuroscience of stress, and follow the ethics toward obtaining an impartial classroom environment (Moreno, 2017). If mindfulness is appropriately integrated into primary education classrooms, it can give students the necessary tools and strategies to effectively deal with those increased stressors that come with higher education.

The activity of mindfulness can be labeled as an “inside-out” process, which is the opposite of typical social-emotional learning programs defined as “outside-in” processes. Mindfulness begins with deeply inward-felt sensations that are targeted to help “open up the system” to new ways of meta-cognitive operation (Moreno, 2017, p. 103). This is particularly appealing when implementing mindfulness into primary education classrooms because the meta-cognitive skills of children are underdeveloped at this stage of their life and are interrupted by their intense fight or flight responses (Moreno, 2017). This idea follows Zelazo and colleagues’ neurodevelopmental model for mindfulness in children, which states that mindfulness is a combination of top-down, meta-cognitive processes and the adjustment of bottom-up processes by targeting activity within the prefrontal cortex and the amygdala (Moreno, 2017). This is accomplished by applying top-down processes to a singular sensation in the body or idea in the brain, creating a more reasonable version of the process. These processes will provide children with strategies to help them slow down and allow their systems to bypass those automatic responses (Moreno, 2017).

Researchers are not the only ones who have discovered benefits to applying mindfulness to primary education, as educators themselves state that they have witnessed changes in a classroom environment with the help of mindfulness practices.

Not only can mindfulness help reduce the effects of stress and anxiety, but it can also improve executive functioning, which are the processes accompanied by one’s working memory, response inhibition, and ability to organize and execute activities (Piotrowski et al., 2017). In a study by Piotrowski and Colleagues (2017), four primary education teachers were interviewed in a qualitative descriptive study to determine their standing on mindfulness in the classroom. Interviewers used both individual open-ended questions and semi-structured interviews to gather information. One teacher stated that she believed mindfulness is a crucial aspect when facilitating with younger children and claimed it aided in the reconnection to themselves and each other. She also identified children beginning to make connections between the body and mind over time (Piotrowski et al., 2017). Educator number two stated that mindfulness is an effective tool when addressing social-emotional aspects and has a positive effect on the relationships within the classroom (Piotrowski et al., 2017). Another educator explained the importance of implementing mindfulness in the classroom as a way for children to relax and escape the stress within their lives. He also mentioned the increase of detail-oriented coursework students completed due to higher behavior awareness and an advancement of terminology within the classroom (Piotrowski et al., 2017). The last teacher interviewed shared her experience of having a positive influence on her students’ emotions, sense of empathy, and awareness of their different senses and how their senses make them feel (Piotrowski et al., 2017).

The techniques used by these teachers include a wide range of strategies tailored to a child, such as breathing exercises, yoga routines, mood awareness, quiet time, and sound awareness (Piotrowski et al., 2017). Along with other strategies such as mindful listening, mindful movement, mindful walking, etc. Lastly, one educator created the “thank you, kindness, and a thought” circle. This involved the class sitting together in a circle, and each student would go around and say “thank you” to an individual, state an act of kindness they made themselves or someone made toward them, or share a thought they were thinking at that moment (Piotrowski et al., 2017). Additionally, it should be noted that the challenges educators face include difficulty implementing enriched curriculum to

larger class sizes and catering to children with different needs than others (Piotrowski et al., 2017). These abilities will ultimately be helpful to them as they grow and pursue further education.

USING MINDFULNESS WITH A CHRISTIAN WORLDVIEW

Some of the scholarly literature has supported the idea of Christian-based mindfulness practices and demonstrated that these practices are congruent with their belief system (Ford & Garzon, 2017; Garzon & Ford, 2016). There has not been conclusive research on the benefits or detriments to education or performance within a Christian-based school system. Nonetheless, some scholarly sources discuss the potential effectiveness of mindfulness for those with a Christian worldview, along with other sources that argue mindfulness does not challenge their beliefs. An example would be Garzon and Ford's (2016) model of mindfulness with a Christian focus to aid spiritual journey and improve mental health. The model within their journal titled "Adapting Mindfulness for Conservative Christians" aims to tear down assumptions about mindfulness that distort the reality of the practice (2016). One of the assumptions they found to be common is that Christians may view mindfulness as proselytization or an attempt to convert someone to another belief system (2016). Mindfulness was initially referred to as *sati* by the Buddhist religion (Kinnard, 2015). Buddhists have been practicing *sati* for thousands of years and are the originators of the discipline (Alic, 2020). In Buddhist teachings, *sati* is used to clear the mind and is believed to lead to awakening (Kinnard, 2015). In modern psychology, *sati* was transformed into mindfulness by psychologist Jon Kabat-Zinn (Alic, 2020). Although derived from Buddhist teachings, the modern adaptation of mindfulness practice offers universal applications (Levesque, 2018), meaning that it is not tied to any religion or tradition. Garzon and Ford (2016) found that the fact that mindfulness stems from Buddhism is unsettling to many traditional Christians. However, their framework overrides this because it uses scripture and Christian doctrine as the foundation of the process (2016). An individual utilizing this would focus on being present with God instead of meditating to be in the present moment. They created their framework after researching prior stud-

ies of mindfulness that demonstrated significant benefits in reducing symptoms of stress, anxiety, and depression (2016).

This journal, however, did not practice their findings until 2017, when they found that religious-based mindfulness practices had greater stress reduction and higher treatment adherence in comparison to conventional mindfulness practice (Ford & Garzon, 2017). This study had many limitations. For instance, the volunteers knew the facilitators were Christian, thus, they had a bias toward the Christian facilitators over the non-religious ones. Similarly, the test was shorter than it should be to meet the standards for traditional mindfulness-based stress reduction programs, which are recommended to be eight weeks long (2017). Furthermore, how well the volunteers were able to use the coping skills learned was not recorded as well, which questions the longevity of their practice.

Prayer is a common religious practice among Christians and is often correlated with mindfulness by many people. Much like mindfulness, prayer is shown to reduce stress and improve mental health, and when evaluated together, a meditative approach to prayer is shown to have increased benefits (Jeppsen et al., 2015). According to a study conducted by Jeppsen et al. (2015), utilizing a more meditative approach to praying "had the strongest indirect relationship with mental health and was fully mediated by closeness to God" (p. 180). Based on this study, the authors suggest utilizing both methods in conjunction since it has shown promising results. The adoption of meditative prayer through mindfulness may prove to be successful and significant in terms of culture. The goal of mindfulness in this situation is to teach people coping skills to handle their stress, anxiety, and other mental health issues. Previous research attempts to support the idea that mindfulness in a Christian worldview is effective—as the practice in a secular concept—do have significant beneficial data. Therefore, future studies on the benefits or detriments of Christian-based mindfulness are needed.

CONCLUSION

Most scholarly literature on mindfulness indicates that mindfulness can greatly benefit students. Students pursuing any sort of education are riddled with conditions such as excessive thinking, stress, anxiety, depression, and more. Each of these con-

ditions can negatively impact a student's education. As previously noted, stress and anxiety can hinder a student's ability to learn and recall information (Bennett et al., 2018). Children cannot escape the harsh reality of stress and anxiety in educational environments. As Piotrowski (2017) found, educators can use mindfulness to help students cope with stress and anxiety. Additionally, the study conducted by Pletz and Blac (2014) discussed how overthinking or obsessive thinking is a catalyst for other conditions, such as addiction and depression. When someone overthinks, it can become difficult for them to make decisions or maintain their sense of calm. To reduce the effects of stress, anxiety, and overthinking, each study had its participants engage in mindfulness. These studies showed that mindfulness improved a person's well-being and aided students in achieving academic success. Moreno (2017) found that mindfulness benefited children's academic performance and improved their attention span and social-emotional well-being. Similarly, Davis (2014) added that mindfulness helped students develop the capacity to retain and understand information given to them. Furthermore, Vorontsova-Wenger et al. (2021) concluded that those who had developed strong, mindful skills performed better academically and had lower psychopathological symptoms such as anxiety and stress. In the 2018 study, by introducing mindfulness to students, they were able to gain cognitive control, which increased students' performance in exams positively (Bennett et al., 2018). According to Piotrowski (2017), educators believe mindfulness can help their young students create positive classroom relationships, regulate emotions, and enhance their awareness. According to Pletz and Blac (2014), mindfulness helped their participant increase her times of calm and mental flexibility, which helped her overall even though it did not "cure" her depression.

One critical piece these studies fail to mention is how a person's faith can influence the overall impact of mindfulness. It could be that their spiritual or personal faith interferes with how they practice or perceive mindfulness. One concern is that mindfulness can shift an individual's worldview and cause the person to lose a sense of self (Chen, 2022). Likewise, Garzon and Ford (2016) mentioned that it is common for those of Christian faith to view mindfulness as an attempt to con-

vert someone to another belief system. In addition, a person's faith can affect a student's education. Faith and religion provide guidance, structure, and meaning to a person's life, affecting how a student interacts socially and learns academically (Cheladurai et al., 2022). By studying the intersection between faith, education, and mindfulness, we hope to determine if mindfulness is as effective in a Christian University.

To help fill the gap between education, faith, and mindfulness, we plan to conduct a study on the effects of mindfulness at Grand Canyon University (GCU), which is a Christian-based University. As stated in their mission statement, GCU's mission is to enrich students' learning to help them reach their fullest potential while simultaneously allowing students to practice Christian faith in classrooms. By introducing mindfulness practice, we hope this study can be an asset and tool to uphold GCU's mission of helping its students achieve their fullest academic potential.

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