

## REFEREED ARTICLE

### Benefits of Mindfulness Training in Schools

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#### **Abstract**

*Mindfulness training contributes to greater well-being in students who encounter challenges that cause stress. Ongoing stress can be detrimental and have negative impacts on the brain, which results in academic and social difficulties. Mindfulness training can help protect the developing brain from the negative effects of excessive stress, increase focus and attention, improve self-regulation, and develop positive social skills.*

In recent years, it has been recognized that teachers should not only provide formal education but also be responsible for the social-emotional needs of students. Students experience challenges that affect their ability to focus, regulate difficult emotions, and build resiliency. Ongoing stress can be detrimental and have negative impacts on the brain, resulting in academic and social difficulties. Mindfulness training can reverse these negative effects and change the structure of the brain for the better. Mindfulness is defined as paying attention to the present moment in a non-judgment manner (Lo et al., 2018). There is a growing body of research that finds mindfulness training in schools increases students' focus and attention, improves self-regulation of difficult emotions, and develops positive social skills. Implementing mindfulness training in schools is therefore vital in supporting individuals with academic and social success as well as enhancing well-being.

Mindfulness is defined as a mental state and being aware of our thoughts and emotions in the present moment without judgment. The practice of being in the present moment provides an opportunity to observe and accept whatever experiences and emotions an individual may be feeling (Huppert & Johnson, 2010). Bringing awareness to daily activities such as breathing or eating are examples of mindfulness practices. By taking the time to pause, individuals can move out of automatic pilot mode and to bring their attention to the present moment (Snel, 2013).

Over the last decade, mindfulness in schools has taken a dominant role in education around the world (Albrecht, 2019). The expansion of mindfulness training in schools has been driven by the high levels of stress that students encounter. Occasional stress is a normal part of life. It also helps people to develop resiliency and supports our immune system. However, two types of stress can have negative impacts on people: acute and chronic stress. Acute stress is experienced after exposure to a traumatic experience such as witnessing a death, abuse, or violence. Chronic stress refers to high stress over long periods of time. These types of stress have negative effects on children's psychological, emotional, and cognitive functioning, which directly affect brain development, academic success, and social competence (Jensen, 2013).

The brain changes when it is stressed. The hippocampus and the prefrontal cortex are the areas of the brain that are most affected by cortisol, also known as the stress hormone. When the brain is exposed to chronic or acute stress, the neurons in the brain's frontal lobes shrink. This is an area that is responsible for making decisions, planning, and regulating emotions. Stress also impairs the hippocampus in ways that reduce learning capacity and working memory. The amygdala is activated when it detects stress and reacts to emotions. If the amygdala perceives the stress or emotion to be a threat, it prompts the brain to go into a fight, flight, or freeze mode. When the brain adapts to negative life experiences and acute or chronic stress, it becomes hyper-responsive or hypo-responsive (Jensen, 2013). Stress has serious consequences that teachers must consider.

Just as the brain is susceptible to change when it encounters stress, it can also change for the better with the right intervention. Recent research has revealed benefits of mindfulness practice and how it can protect the developing brain from negative stress. Following mindfulness training, individuals are better equipped to respond to stress by creating a calm mindset for thoughtful decision making, which is led by the pre-frontal cortex (Hawn, 2011). Schools are an ideal environment to introduce mindfulness training since students' brains are rapidly developing. The skills students acquire may also help them cope with future life stress and challenges.

Mindfulness training is effective in increasing attention and focus which results in more on-task behaviour. Attention problems in school are frequently interrelated with behavioural difficulties such as high activity levels, off-task behaviour, and disorganization (Carboni et al., 2013). These behaviours can result in poor academic success and social difficulties. Numerous studies have examined and supported the relationship between mindfulness and attention. One particular study investigated the use of mindfulness for students diagnosed with attention-deficit/hyperactivity disorder (Carboni et al., 2013). Analysis of collected data and observations indicate that mindfulness training was effective with increasing on-task behaviour. Another study was completed but the participants in this study were children with intellectual disabilities (Kim & Kwon, 2016). Intellectual disability (ID) is a chronic condition marked by significant limitations in cognitive functioning and adaptive behaviour. Children with ID display challenging behaviour that affects their educational progress. The aim of this study was to determine if mindfulness training could increase their on-task behaviour. Mindfulness training consisted of 25 sessions (twice a week) for 45 minutes per session for the three participants in this study. The training was composed of lessons that focused on self-awareness of their bodies and minds. Observers collected data every five days for a month to track on-task behaviour. The results not only demonstrated an increase in on-task behaviour, but also improvement in accuracy to complete tasks, and a decrease in task-avoidance behaviours (Kim & Kwon).

The benefits of mindfulness are not limited to academic success but also contribute to overall well-being by learning how to self-regulate. An aspect of mindfulness practice is learning how to respond rather than react when difficult emotions arise. Choosing to respond with intention rather than reacting in an automatic way may reduce negative behaviours, such as anger or aggression (Huppert & Johnson, 2010). A study, using the MindUP program, wanted to examine if mindfulness practice involving social and emotional learning would enhance positive school outcomes, promote well-being, and reduce stress for students (Schonert-Reichl et al., 2015). MindUP is a mindfulness-based education program that consists of 15 lessons taught approximately once a week for 40-50 minutes. The curriculum includes lessons that promote self-regulation and awareness to the present moment (mindful smelling, mindful tasting). This program also incorporates social-emotional exercises that teach students skills for empathy, compassion, and promotes positive thinking. Four classes of combined 4<sup>th</sup> and 5<sup>th</sup> graders (a total of 99 students) were randomly assigned to receive the MindUP program versus a regular social responsibility program. MindUP students, in contrast to students in a regular social responsibility program, showed significant increases in not only cognitive skills, but social and emotional competences as well (Schonert-Reichl et al., 2015).

Positive social skills such as empathy and compassion are another benefit to practising mindfulness. Learning to be kinder and accepting of oneself through mindfulness practice leads to greater kindness, acceptance, and empathy toward others (Huppert & Johnson). Research shows that actions of empathy and compassion can boost the production of dopamine, a neurotransmitter that revs up the high-powered thinking in the pre-frontal cortex (The Hawn Foundation, 2011). By having opportunities to practice empathy and compassion, students will be able to build the social and emotional competence they need in order to be resilient and confident (The Hawn Foundation, 2011). A study assessing new curriculum that promotes social, emotional, and academic skills through mindfulness practices was conducted in Madison Metropolitan School district (TeachThoughtStaff, 2019). This study took place over the course of

12 weeks, twice a week with 30 students. The results indicated that in addition to improved academics, these students demonstrated less selfish behaviour over time and more mental flexibility. This can result be in a positive classroom environment conducive to learning. A study by Albrecht (2019) found that teachers felt that learning about mindfulness also encouraged students to develop into global citizens with compassion for others.

In conclusion, mindfulness training contributes to greater well-being in students. Mindfulness is the practice of being in the present moment and paying attention on purpose in a nonjudgmental way. Mindfulness training can help protect the developing brain from the negative effects of excessive stress, increase focus and attention, improve self-regulation, and develop positive social skills. These benefits result in reduced stress, increased awareness of self and others, and compassion. Incorporating mindfulness training into schools would equip individual students with strategies that they can carry with them throughout their lives.

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## About the Author

Hoanglan Cardinal is a Learning Support Teacher and Reading Recovery Teacher at a K-6 school in Winnipeg, Manitoba. She is in the Master of Education program at Brandon University, specializing in inclusive education. In her spare time, she enjoys spending time with her family and friends, and travelling.