The Effects of Mindfulness on Elementary Aged Children

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Abstract

In recent years, there have been a growing number of studies on the affects that mindfulness practice has had on children. Many of these studies have suggested a link between the practice of mindfulness and a number of potential benefits for the children who utilize it in the classroom. This literature review aims to highlight those benefits that appear to influence behavior, attention, academics, and the emotional well-being of a student. In addition, the review uncovered a theme of potential reciprocal benefits that teachers have experienced as a result of implementing the practice in their classrooms. Since the practice of mindfulness is a relatively new phenomenon, most research has concluded that more work needs to be done in exploring its impact, specifically the impact it has on elementary aged children. Overall, the findings have concluded that practicing mindfulness in schools has had a positive impact on the children who practice it.

Mindfulness is the act of focusing on the present, rather than the past or the future and placing all of your attention in your current situation (Foder & Hooker, 2008). Mindfulness is simply paying attention to the task at hand, while ignoring distractions that may cause a person to lose focus and concentration. Since this is a fairly new practice in the classroom, the "research is still in infancy" (Burke, 2010, p. 133). The research that has been done on this topic has occurred mostly over the past ten years. In reviewing articles, common themes have emerged. Much of the research has demonstrated that mindfulness can help promote emotional regulation in children (Durlak, J., Dymnicki, A., Taylor, R., Dymnicki, R., & Schellinger, K., 2011; Schonert-Reichl & Lawlor, 2010). This finding is further complimented by research that has linked better attention in elementary aged children who have adopted the practice (Black & Fernando, 2013; Semple, Reid, & Miller, 2005). Studies indicated that practicing mindfulness can also affect student behavior (Black & Fernando, 2013) and anxiety levels in students (Foder & Hooker, 2008; Semple et al., 2005). Mindfulness has the potential to help students regulate both their behaviors and emotions by calming their mind and focusing their attention on one thing at a time.

Perhaps most interestingly is that beyond behavior there could potentially be a link between mindfulness and academic success. Even though research on this topic was limited, studies show that mindfulness has had a positive impact on academic scores for elementary aged children (Durlak et al., 2011). This research is promising for administrators who are looking for new strategies to improve test scores within their school. Implementing mindfulness may also be of reciprocal benefit to the teachers who employ the practice both in teaching mindfulness and applying mindfulness teaching in their own lives (Meiklejohn et al., 2012). Implementing a mindfulness program offers a new opportunity to teachers who are looking for new ways to enable children to achieve higher performance, and fortunately it could be beneficial to the teachers as well.

Purpose

The purpose of this research paper is to discover how practicing mindfulness in the classroom affects elementary aged students. Specifically, the research paper focuses on how mindfulness affects academics, attention, and behavior in elementary aged students. The paper will at first review how the practice of mindfulness is currently being applied in the elementary classroom, followed by a review of the

impact that incorporating mindfulness has had in affecting students 'attention and academic skills. This research paper is intended to provide educators with some guidance on the appropriateness of adopting mindfulness practice in their own classroom by looking at the outcomes that have been observed in current research.

Research Questions

This research paper will address the following questions:

- 1. What does practicing mindfulness in the classroom look like?
- 2. How does practicing mindfulness in the classroom affect the attention, skills and emotional regulation of elementary aged students?
- 3. How does practicing mindfulness in the classroom affect academic scores of
- 4. elementary aged students?
- 5. How does practicing mindfulness in the classroom affect educators teaching the practice?

Significance of Study

This research paper is significant because of the potential benefits that have been observed in teaching mindfulness. For educators, this is an opportunity to review these benefits and determine whether to implement a mindfulness practice in their own classroom. The literature review will summarize research studies that have investigated the impact that mindfulness may have on students and teachers. Because of this focus, this research paper will be useful to multiple stakeholders including classroom teachers, resource room teachers, school administrators, and parents.

Classroom Teachers

This study may be of significance to classroom teachers because it explores the impact that practicing mindfulness may have on elementary aged students. The study will focus on the following topics: academics, behavior, attention, anxiety, and emotional regulation in relation to the effects mindfulness has on children. This study will provide classroom teachers with research based evidence that mindfulness has the potential to impact students in a positive way. The secondary benefit of this study is observing what research has concluded on the reciprocal benefits for the educators delivering the lessons.

Resource Room Teachers

Resource room teachers may want to educate themselves in the practice of mindfulness to use in their own resource rooms with students. They may also want to provide professional development to the classroom teachers they work with in their schools. Mindfulness may align well with other strategies and practices that resource room teachers are already using such as development of social skills, self-regulation, and body breaks.

School Administrators

Administrators looking to decrease disruptive behaviors and increase academic scores of students will be interested in the data that has been collected in the studies included in this literature review. Mindfulness may also increase the well-being of the teachers in the school. Teachers who practice mindfulness will be able to manage stress better, and focus more on their teaching as well as be more positive in their daily interactions with students, parents and colleagues. Teaching and practicing mindfulness has the potential to create a positive work environment.

Parents

Parents of students who have difficulty focusing on tasks may find value in mindfulness as a new approach to helping their children. Parents will find the positive results encouraging, and may wish

to try and use some of the strategies at home with their children. If they are interested in practicing mindfulness at home, parents may ask teachers, health care professionals or other professionals trained in mindfulness for strategies to use at home. There are many examples of mindfulness programs that parents can easily begin to use at home with their children.

Methods

The method that was used to conduct this research paper consisted of a literature review. Peer reviewed articles were vetted through search engines such as Proquest, ERIC, and Google Scholar. These search engines generated lists of scholarly journal articles on the topic of Mindfulness that could potentially answer the research questions addressed earlier in this proposal. Journal articles were read thoroughly and themes emerged that were connected to the purpose of the research paper and the research questions. These peer reviewed articles provided sufficient evidence to answer the research questions and provided proof that further research is needed in the area.

Content

What is Mindfulness?

We often do not pay attention to many of the things we do in our daily routine. We wake up, eat breakfast, shower, brush our teeth, and then head off to work. Many of us do all of this without focusing on the task at hand but rather focusing on what is next on our agenda. The same thing can be said about today's children. Ask a child what they learned today in school and a common response is "I do not know." This response is common since students often do not remember what they did during the day because their minds were not present while completing the task (Foder & Hooker, 2008). Mindfulness is important to students because it allows them to focus on their task and helps them to remain present in the current situation. Napoli, Krech, and Holley (2005) stated that "mindfulness is the cognitive propensity to be aware of what is happening in the moment" (p. 99). Being present in the moment creates awareness of one's surroundings and allows students to focus on their situation. Foder and Hooker (2008) believed that mindfulness meditation was a practice of children "focusing on the present moment while being aware of their internal sensations, thoughts, and feelings" (p. 88). By being more aware of these thoughts, sensations, and feelings, children will have learned a skill that may potentially help them regulate their emotions as well as improve their academic success in school. Mindfulness is a practice that allows students to take ownership of their actions and enables them to thrive in the school setting.

Mindfulness and Academic Success

Mindfulness and how it relates to academic success is an area of great interest for many people in the education field. This field of research is still fairly new and there are few studies that have included research on how using mindfulness in the classroom can affect academic scores for students. When Durlak et al. (2011) did a meta-analysis of 344 studies that focused on mindfulness in children, "only 16% of the studies collected information on academic achievement at post evaluation" (p. 419). It is uncertain why there are such few studies that focus on academic achievement. One significant reason for the lack of research in this area could be due to the fact that it is difficult to determine what variables are responsible for the change in academic scores in these studies. Some researchers may have found it difficult to determine whether using mindfulness is the actual cause for this change, or whether the relationship is correlational.

In recent years, there has been an increase in the research between the connection of practicing mindfulness and academic success. The MindUP curriculum is one program that has used this research to develop lessons that incorporates mindfulness techniques in different subject areas. Researchers have found a positive correlation between teaching mindfulness in the classroom and academic achievement. Schonert-Reichl et al. (2015) found that when teachers used the MindUP program there was a 15% gain in math achievement. The same study found that compared to the control group, "MindUP children in

the study outperformed comparison children on the most difficult executive functioning tasks requiring response inhibition, working memory, and cognitive flexibility" (Schonert-Reichl et al., 2015, p. 61). These skills are crucial to reading, problem solving and memory retrieval, which could have aided in the increase in academic scores. Durlak et al. (2011) also saw an "11-percentile gain in academic performance achieved in these programs" which "is noteworthy, especially for educational policy and practice" (p. 417). These studies demonstrate that mindfulness has a direct correlation with increasing academic success in the classroom.

Mindfulness is believed to increase test scores and academic achievement due to the fact that it allows students to calm themselves down and focus on the task at hand. Greenberg et al. (2003) stated that mindfulness can provide a foundation for improved social and emotional adjustment and academic performance as demonstrated by more positive social behaviors, fewer conduct problems, less emotional distress, and improved test scores and grades. Mendelson et al. (2013) said that "practicing mindfulness techniques, such as yoga, during school may promote improved academic learning and student behavior during the rest of the day" (p. 285). Introducing mindfulness into the classroom provides students with the necessary tools to help them refocus their attention when they become distracted and calm themselves when they become overwhelmed. If students choose to use these techniques, there is a good probability their academic scores will increase.

Though not all studies officially researched the link between using mindfulness in the classroom and academic success, many studies made note of the fact that teachers have noticed an improvement with student achievement since introducing mindfulness in the classroom. One study showed that "teachers reported improvements in academic functioning" (Semple et al., 2005, p. 387). These findings are important because it outlines that the benefits of mindfulness are not contained to just one area, but rather they help the overall well-being of children.

Mindfulness and Behavior

In many elementary schools today, we are seeing a rise in behavioral concerns. The reason for changing patterns are speculative, but regardless of the cause, teachers are looking for ways to help decrease disruptive behaviors in the classroom. Behavior issues have been shown to increase when students have difficulty academically; therefore, increasing academic skills in students may help to address behavioral issues in the classroom. Semple, Lee, Rosa, and Miller (2010) found that "reductions in behavior problems were significantly associated with reductions in attention problems" (p. 227). Using mindfulness in the classroom has proven to increase both attention skills and academic skills. Mindfulness practice may have implications for enhancing the classroom learning environment in schools as well as decreasing disruptive behaviors (Black & Fernando, 2013). The improvement in academics can have a subsequent effect of reducing behavioral issues as students are more focused on academic work.

Research indicates that the use of mindfulness practice may decrease behavior issues in the classroom. In a study conducted by Black and Fernando (2013), findings showed that "teachers reported improved classroom behavior of their students (i.e., paying attention, self-control, participation in activities, and caring/respect for others) that lasted up to 7 weeks post-intervention" (p. 1242). Not only did the mindfulness training help students while the study was occurring, the results lasted seven weeks after the study was concluded. This finding is particularly important for teachers because the results are long-lasting, indicating that it is an effective strategy to use with students who are having behavioral difficulties.

Mindfulness and Attention

Adopting mindfulness is sometimes known as building the "attention muscle", this refers to when a person practices mindfulness, they are exercising their ability to pay attention for a certain duration (Snel, 2013). The hope is that over time, this skill will improve and practicing mindfulness will become part of a person's daily routine. Mindfulness training with children trains attention by focusing on body movements, sensations, and perceptions. This includes practicing mindfulness while breathing, eating, and walking, etc. (Randye, et al., 2005). Incorporating mindfulness into everyday routines makes the practice more automatic for students and less of a chore. Black and Fernando (2013) believed that

"mindful awareness is the trainable skill of intentionally remembering to pay attention in the present moment without habitual reaction (i.e., needless emotional, cognitive, or behavioral reactivity) or conceptual exaggeration (i.e., needless elaboration of thought)" (p. 1242). Mindfulness is a skill that has the potential to have long lasting, beneficial effects for a student's life.

Mindfulness programs have a major focus on having students focus on their tasks which in return can lead to high levels of emotional well-being. Napoli, Krech, and Holley (2005) noted that mindfulness training was "designed and intended to help students learn to pay attention" (p. 99). By shifting their attention to their tasks, students are able to fight off distraction. Foder and Hooker (2008) believed "that training in mindfulness has the potential to enhance children's attention and focus and improve memory, self-acceptance, self-management skills and self-understanding" (p. 76). Incorporating mindfulness into the classroom can improve attention skills, which in turn may have additional positive effects on a student's emotional wellbeing. Napoli et al. (2005) proposed that mindfulness training "has the potential to assist students to alleviate the negative effects of environmental stressors by focusing their attention on the moment so that they can fully focus on classroom activities" (p. 106). By increasing a student's ability to ignore distractions, mindfulness assists students to focus on their current task allowing them to complete these assignments which in turn will give them a great sense of accomplishment. Attention is a skill that many educators feel is lacking with some students in the classroom and that by improving attention, academic achievement could also be improved, thus improving attention skills and emotional well-being.

Research has shown that mindfulness has a positive effect on the attention skills in relation to academic scores of students who use it. Napoli et al. (2005) believed if students "develop their attention skills, teaching and learning can become more meaningful" (p. 106). Meiklejohn et al. (2012) found that "regular practice of mindfulness exercises strengthens students' capacity to self-regulate attention, by developing attentional control through repeated and intentional focusing, sustaining and shifting of attention" (p. 296). Gaining this control has the potential to helps students with their emotions and help them persevere through times where behavioral challenges may occur. Black and Fernando (2013) contended that the "children reportedly improved at paying attention, calm and self-control, participation in activities, and caring/respect for others" (p. 1245). The changes that are seen in students practicing mindfulness "were maintained at three months following the intervention" (Semple et. al., 2010, p. 218). Mindfulness has the potential to improve overall student performance by developing the attention of students in the classroom. This enables students to have a higher capacity to absorb the material being instructed. The practice, when implemented well, has a lasting effect on students' habits when they are situated in a learning environment.

Mindfulness and Anxiety

A certain level of anxiety is known to keep students ready to learn and to help them do well on assignments. However, when this anxiety becomes too much it can hinder their ability to perform at school. Foder and Hooker (2008) and Randye et al. (2005) stated that mindfulness training may be used to treat high levels of anxiety and may be effective with treating internalized anxiety problems. Mindfulness provides a tool for students to utilize in regulating the negative effects of anxiety. However, as with most research that surrounds mindfulness and children, there is limited data to confirm the impact mindfulness has on anxiety in children specifically (Randye et al., 2005). The research conducted thus far has shown that students with high levels of anxiety can benefit from using mindfulness in their daily lives.

Studies show that children's anxiety levels are reduced when they are participating in mindfulness activities. Semple et al. (2010) conducted a study on Mindfulness-Based Cognitive Therapy for Children and found that, "significant reductions in anxiety symptoms were reported at the end of the program" (p. 227). By participating in this study and using the mindfulness techniques outlined in the therapy, students were able to control their anxiety and shift their focus to their school tasks. Randye et al. (2005) conducted a six week trail with children aged seven and eight and results from the study supported treating childhood anxiety with mindfulness. These studies show great promise in treating anxiety with mindfulness practice. The research also tells us that more studies need to be conducted on

this topic to give more concrete proof that practicing mindfulness in the classroom does in fact lessen anxiety symptoms.

Mindfulness and the Emotional state

Teaching mindfulness in the classroom is one way to help students regulate their emotions. Lawlor and Schonert-Reichl (2010) found that, "greater mindful attention awareness predicted self-regulation and positive emotional states" (p. 139). Helping students improve their emotional state allows them to have healthier relationships at school with their teachers and their peers. Current research shows that mindfulness programs "yielded significant positive effects on targeted social-emotional competencies and attitudes about self, others, and school" (Durlak et al., 2011, p. 417). Students who practice mindfulness are able to interact more positively with other students by thinking about situations rather than reacting to situations. This increase in positivity assists students to deal with difficult situations more rationally and it also helps them to take the time to problem solve and persevere through a difficult task.

Practicing mindfulness in school has proven to yield many benefits but the area where children see the greatest amount of growth is an increase in their social-emotional skills. Durlak et al. (2011) discovered that social-emotional skill performance had the largest effect size out of all the areas they studied. The effect size for this category was 0.69. Hattie (2012) stated that any strategy with an effect size over 0.4 is very effective. The skills that were targeted relating to social-emotional skills were emotional recognition, stress-management, empathy, problem solving, and decision-making skills (Durlak et al., 2011). With an effect size of 0.69, mindfulness is an effective way to increase students' social-emotional skills and to promote emotional regulation. Other studies have also had similar findings. Schonert-Reichl et al. (2015) reported that their study's data provided evidence that mindfulness helps students with their emotional well-being. Their study concluded that they saw a "24% gain in peer-nominated positive social behaviors from participation in the MindUP program, a gain of 20% in self-reported well-being and prosociality" (Schonert-Reich et al., 2015, p. 61). This study shows that using the MindUp curriculum in classroom has a positive impact by helping students with their social-emotional skills.

Additionally, practicing mindfulness has been shown to help students manage stress. Gould, Dariotis, Mendelson, and Greenberg (2012) showed that both males and female had a reduction in stress responses after practicing mindfulness compared to those of the control group which did not practice mindfulness. Mendelson et al. (2013) believed that "mindfulness based programs are one potentially promising approach to help buffer effects of chronic stress exposure and improve the interpersonal learning environments" (p. 277). These studies demonstrate the potential in helping students decrease their stress by practicing mindfulness in the classroom. Stress can be reduced by allowing students to focus their attention and calm their minds for a brief moment. This practice allows them to block out distractions and allow them to halt a never ending stream of unrelated thoughts.

Mindfulness helps students regulate their emotional state which benefits them in focusing on the tasks with which they are faced. Other social-emotional areas were positively affected when mindfulness was introduced into the classroom. Schonert-Reichl et al. (2015) reported an increase in empathy with students who practiced mindfulness. Schonert-Reichl and Lawlor (2010) saw an increase in students' optimism compared to the control group in their study. According to these studies, mindfulness is an effective way to teach social-emotional skills and to help student regulate their emotions in school.

Teaching Mindfulness

Mindfulness can be introduced into the classroom in a variety of ways. It can be introduced through formal lesson or by a less direct approach. As well there are a number of theories on how the timing can impact the teaching of mindfulness. Despite the variety, the research does agree that schools are the ideal place for introducing mindfulness techniques (Foder & Hooker, 2008). The research demonstrates that incorporating mindfulness teaching has had great success (Schonert-Reichl & Lawlor, 2010). Introducing mindfulness in the classroom, no matter how it is instructed, has great benefits for the students who practice it and is easy for teachers to implement.

Mindfulness may be taught in classrooms throughout the day in many different settings and with many different techniques. Mindfulness can be integrated into the classroom primarily using one of three approaches, the direct method, the indirect method, or a combination of both (Meiklejohn et al., 2012). The indirect method is where the teacher develops personal mindfulness practice and models mindfulness attitudes and behaviors throughout the school day. The direct method occurs when the teacher teaches formal mindfulness programs to students who then learn and practice mindfulness exercises and skills. The third way is a combination of both where the teacher can teach formal lessons and at the same time model mindfulness on a daily basis. Teachers have the opportunity to be creative with their delivery method, choosing the approach that best suits their need (Meiklejohn et al., 2012).

If a teacher decides to teach mindfulness in a direct form, they may choose from many formal programs. These programs have unique ways on how lessons and exercises should be taught and what materials are to be used in each lesson. After reviewing a number of different studies, trends began to emerge on how to deliver direct mindfulness lessons in classrooms. Teaching mindfulness at the beginning and end of the school day as well as during transition points have positive effects on students (Foder & Hooker, 2008). Schonert-Reichl et al. (2015) also concluded that practicing mindfulness exercises three times a day could lead to improved emotional control in students. It is important for teachers to promote and model mindfulness throughout the day to encourage students to use it when it most beneficial for them in their day. Napoli, Krech, & Holley (2005) believed that "incorporating mindfulness training into the physical education curriculum as health education is an ideal way to begin teaching children at an early age how to deal with stress and anxiety and focus and pay attention" (p. 113). These three different ways of teaching mindfulness in the classroom are practical ways to integrate mindfulness into an already existing curriculum.

The practice of mindfulness is a tool for students to overcome impediments to their academic and social success. The goal of teaching mindfulness is to give students a set of techniques they can use whenever they need to calm themselves so that they can refocus their energy and attention (Foder & Hooker, 2008). Teachers can teach students these techniques by formally teaching lessons or by simply modelling mindfulness in the classroom. Remembering to incorporate formal teaching and informal modelling throughout the day will help create a culture of wellness in the classroom and help students to remember that mindfulness should be used throughout the school day, not just when mindfulness is being formally taught during a lesson by the classroom teacher.

A Mindfulness Lesson

Teaching mindfulness in the classroom will look different in every classroom. Teachers will use different techniques and strategies that are best suited for their teaching style. Gould et al. (2012) stated that mindfulness components may include "yoga-based physical activity, breathing techniques, and guided mindfulness practices" (p. 973). Teachers may incorporate a few minutes of quiet focused breathing at the start of the school day, before tests, and during the day to calm students who are restless. The use of visual aids, such as posters or flash cards around the room may prompt mindful behavior in students when they feel the need to focus or regroup (Mendelson et al., 2013). These components allow teachers to customize their own mindfulness program that best fits the needs of their students. Teaching mindfulness to children will be inherently different than teaching it to adults. This context will have to be considered when deciding on a method of teaching.

Focusing on one's attention is a key component to mindfulness training. Foder and Hooker (2008) and Randye, et al. (2005) believed that a successful way to introduce mindfulness is to have students direct their attention to things found in their environment. Paying attention to an item in a student's environment, for example, watching the bubbles of a lava lamp, allows them to direct their attention to single object and practice ignoring surrounding distractions. This skill is beneficial for students completing tasks in the classroom, as it enables them to ignore distractions around them.

When teaching mindfulness one must remember that children and adults are very different, especially when it comes to the amount of time spent on a lesson. Teachers must also be conscious of the amount of time spent on the exercise. In their study, Randye et al. (2005) found that it was challenging

for children to pay attention to their breath for more than three minutes at a time. They concluded that "children's mindfulness exercises need to be shorter than those typically offered to adults—gradually increasing the duration" (Randye et al., 2005, p. 389). The number of times mindfulness exercises are practiced throughout the day is also important. Lawlor and Schonert-Reichl (2010) reported that mindfulness should be formally practiced three times a day. Teachers should also encourage students to practice mindfulness informally throughout the day as needed.

Who Should Teach Mindfulness in Schools?

Mindfulness may be taught in schools by teachers, health care professionals, and mindfulness experts. This practice may be utilized to help students out with their academic abilities. As stated above, research suggests that mindfulness has benefits from being taught in the classroom. Different studies have had a variety of personnel deliver mindfulness lessons to students. Black and Fernando (2013) conducted a study where two mindfulness meditation teachers delivered the curriculum to students. Many of the other studies (e.g., Foder & Hooker, 2008; Gould et al., 2012) focused on the classroom teacher delivering mindfulness lessons. Durlak et al. (2011) conducted a meta-analysis that looked at studies comparing results of mindfulness taught by teachers to lessons taught by non-classroom teachers. Durlak et al. (2011) stated that in their study they "separated interventions conducted by regular school staff and those administered by non-school personnel (e.g., university researchers, outside consultants)" (p. 407). The purpose of this comparison was to see which adults were the most effective at delivering mindfulness curriculum. This study looked at six different categories to find evidence to support which personnel would be best suited to teach mindfulness to students. According to the Durlak et al.'s (2011) study, classroom teachers were the most effective at delivering classroom mindfulness programs. The researchers stated:

Teacher programs were effective in all six outcome categories, and Multicomponent programs (also conducted by school staff) were effective in four outcome categories. In contrast, classroom programs delivered by non-school personnel produced only three significant outcomes (i.e., improved SEL skills and prosocial attitudes, and reduced conduct problems). (Durlak et al., 2011, p. 413)

Mindfulness teaching was especially reliant on teacher instruction when it was being utilized to encourage academic achievement. Durlak et al. (2011) found that "student academic performance significantly improved only when school personnel conducted the intervention" (p. 413). Teachers are best suited to incorporate mindfulness teaching into the classroom setting to improve academics, even though the practice can be taught by a variety of professionals for different purposes. This information is important for teachers and administrators who are looking for ways to improve student outcomes by incorporating new practices into their schools and classrooms.

Mindfulness and Educators

Practicing mindfulness also may benefit the educators who instruct the practice. Meiklejohn et al. (2012) found that mindfulness training fosters optimal brain function in adults. It is no surprise that teachers who teach and participate in mindfulness in their classroom benefit alongside the students. Practicing mindfulness not only positively affects the teacher in their personal life, but it also helps in the way they instruct their students on a day to day basis. Meiklejohn et al. (2012) found that "teachers can benefit personally and professionally from the reflective discipline of mindfulness" (p. 293). These findings may help convince teachers who are unsure about adopting mindfulness exercises into their instruction. Mendelson et al. (2013) stated that "the involvement of teachers in mindfulness-based training has potential to make profound differences in the lives of both teachers and students" (p. 285). The act of practicing mindfulness has the potential to affect the lives of the teachers who instruct it in their classrooms.

Similarly, teachers who practice mindfulness in the classroom affect students in many positive ways. Jones, Bouffard, and Weissbourd (2013) said that a mindful teacher can influence students in three distinct ways. The first influence is through student teacher relationships. They proposed that teachers who practice mindfulness are calmer and more positive, making them better equipped to deal with changing situations. The second influence occurs through teachers modeling mindfulness practice. Students are

more likely to practice mindfulness themselves when they observe their teacher practicing mindfulness in their day to day life or when stressful events occur. The last influence is found in classroom management. Teachers who practice mindfulness may be calmer, more organized, and also may be able to provide a classroom that enhances attention and well-being resulting in less classroom management situations (Jones, Bouffard, & Weissbourd, 2013). The effects of teachers practicing mindfulness themselves goes beyond their personal benefits; it also benefits the students they teach.

Teachers who are wishing to learn about mindfulness before they start teaching it are able to participate in a number of mindfulness training programs. Jones et al. (2013) recommended two mindfulness programs that are beneficial for educators. These two programs are: CARE (Cultivating Awareness and Resilience in Education) and SMART (Stress Management and Resiliency Training). Jones et al. (2013) stated that "both programs aim to build educators' mindfulness, job satisfaction, feelings about students and efficacy for regulating emotions" (p. 64). It is especially important that the teacher feels comfortable with teaching mindfulness in the classroom. Foder and Hooker (2008) emphasized that the "person teaching should be comfortable with the exercises prior to the teaching, and have practiced mindfulness in general" (p. 83). Teachers who are engaged in mindfulness themselves allows them to guide students into the practice of mindfulness.

While researching the effects that mindfulness has on children, many researchers questioned if practicing mindfulness would also have positive effects on the educators instructing the practice. In researching the same question, Schonert-Reichl et al. (2015) studied the impact that implementing the MindUP program had on the teachers who were using it. The teachers in the Schonert-Reichl et al. study reported that they did participate in the breathing exercises along with the students. More follow up studies would need to be conducted to see whether participating in these mindfulness exercises helped with the teachers' emotional state. Other studies have shown that teachers do benefit from mindfulness practice in the classroom. Black and Fernando (2013) found that mindfulness-based programs improve, "the broader learning environment including school personnel who are also exposed to the program" (p. 1245). These studies show that mindfulness can make a positive impact on the lives of the teachers who implement the practice. This research may encourage school divisions to invest in mindfulness training by seeing the benefits it can not only provide for its students but also for its employees.

Application

Further Research

Mindfulness in children is a relatively new field of study for many researchers which provides great opportunities for future research. The field is receiving an increasing level of interest in recent years which will hopefully result in new studies to look at the potential benefits mindfulness has on children. The studies outlined in this literature review show that while there is evidence that supports the benefits of mindfulness in the classroom, more studies need to be conducted. Some specific areas of further research could include how mindfulness affects academic success, attention, and student behavior over time. Studies in these area could provide teachers with the knowledge that may help improve academic scores as well as behaviors in classrooms.

Theory Development

There is a need for future theory development on how mindfulness can benefit children in schools. Mindfulness has been studied by health professionals and psychologists for some time. Application in the field of education can use these prior studies to build upon and develop the particular place mindfulness can have in education. Researchers may also use the theories that are formed around mindfulness and adults to help develop similar theories on how mindfulness can benefit students in school.

Implications for Practice

According to the research, practicing mindfulness in the classroom has many potential benefits. With areas such as attention skills, behavior, academic success, and emotional regulation all benefiting

from mindfulness practice, teachers who have students that struggle with attention and behavioral issues may want to try this practice in their classrooms. Mindfulness may be incorporated into a teacher's daily routine as well as integrated directly into different curriculums.

Teachers may choose to teach mindfulness directly or indirectly depending on the needs of their students and their individual teaching styles. There are many useful programs that can assist teachers in building mindfulness into their classroom routine. The MindUP program is one tool that classroom teachers, resource room teachers, and administrators may find helpful if they are looking into implementing mindfulness into their school.

Conclusion

According to the research that was reviewed, there is much evidence to suggest that practicing mindfulness in the classroom has benefits for both students and teachers. The use of mindfulness may improve attentions skills, decrease negative student behavior, help decrease levels of high anxiety, and help students better regulate their emotions. This research is encouraging for teachers who are already using mindfulness in their classrooms and it is exciting for teachers and administrators who want to begin using it in their schools and classrooms.

Mindfulness can be an easy practice to implement into the classroom. Teachers who are looking for new strategies to benefit students should consider teaching mindfulness. Teachers who teach mindfulness also receive benefits from instructing it. The practice of mindfulness can have a positive impact on students who struggle with attention or behavior issues. Teachers who are looking at improving the lives of their students as well as decreasing the amount of stress in their school day should consider teaching mindfulness in their classrooms.

Despite the encouraging data that was revealed in the literature review, one common theme that appeared was that future research on mindfulness and the effects it has on children is needed. There has been extensive research done on mindfulness in adults. While we can assume that some parallels will undoubtedly exist, more specific children-based studies would be useful. This research will help educators gain an accurate picture of what the practice actually does for school aged children. With the popularity of mindfulness on the rise, increasing the number of research studies on mindfulness should be soon coming. The study of mindfulness with children is an exciting new area of research, an area that can have a dramatic positive effect on children.

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