

The Effects of Mindfulness Practices in the Classroom

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Abstract: This study aimed to investigate the potential effects of integrating mindfulness exercises on improving students' focus and work engagement. The current study utilized respiratory techniques and mental imagery practises on a tri-weekly schedule. The study involved 44 children, aged 9 to 12 years, observed for a duration of 5 weeks. The data collection process involved daily recording of tallies for on-task and off-task behaviour, as well as daily observation of work engagement. In addition, the children were asked to complete pre and post questionnaires to assess their level of mindfulness. Individualized discussions were also held with each participant. The study revealed an increase in the number of students displaying focused behaviour and a higher percentage of students engaging in academic tasks over time. The findings from both the pre and post questionnaire revealed a significant increase in the percentage of students who exhibited a favourable attitude towards mindfulness exercises and perceived them as advantageous. However, the participants exhibited diverse viewpoints regarding statements related to concentration and diversion. The majority of students, specifically 82%, reported perceiving mindfulness exercises as beneficial. 36% of participants reported using the terms "focus" or "concentrate" when explaining the positive effects of practicing mindfulness exercises. The majority of participants, specifically 80%, expressed their intention to independently utilize mindfulness techniques. The study's data showed a significant positive correlation between the use of mindfulness exercises and the level of focus in children aged 9 to 12 years. Possible future research areas may include exploring strategies for promoting students' engagement in autonomous mindfulness practises and extending the duration of the research period.

Keywords: Mindfulness, Meditation, Focus, Attention, Work Engagement

1. INTRODUCTION

1.1 Background:

Students that are able to concentrate and focus on their work may experience increased academic success. Students need to focus on the material at hand in order to succeed academically. Recent years have seen a rise in the number of studies conducted in academic settings on the topics of mindfulness and children's attention. Research conducted in

recent years on the topic of mindfulness in education has looked at the efficacy of mindfulness-based classes in increasing overall academic performance. The success of a student was measured by their grades and test results. According to research by Jarutawai et al. (2014), practising mindfulness may make one more focused and productive. Given the constant stimulation that is present in society, it should not come as much of a surprise that students struggle to concentrate on their studies. It's easy to be distracted by things like screens, conversations, movement, and anticipation. In the modern world, it may be challenging to stay in the here and now. According to the findings of the observer, pupils have difficulty maintaining their focus and remaining engaged in academic work (Baer et al., 2006).

The researcher has observed that her students had difficulty focusing on their work throughout the day. In the Montessori classroom, students get practise with their teachings. It also necessitates doing one's own investigations. Some tasks have not been completed because students have been distracted. The ability of students to concentrate is directly proportional to the level of their knowledge and ability to study. The researcher looked at methods that students' focus and attention may be improved as a response to reported difficulties with these skills (Connor-Smith et al., 2000). Breathing and visualisation exercises are used in mindfulness training to help participants relax and concentrate on the here and now. Training oneself in mindfulness may increase one's ability to focus, as well as working memory and cognitive control. In their research on mindfulness, Van de Weijer-Bergsma, Formsma, de Bruin, and Bogels (2012) found that those with ADHD had improved attention management and less automatic responses. Academic achievement, according to Black and Fernando (2014), requires a study environment that is free from distractions. The practise of mindfulness has been shown to reduce levels of psychological stress, as well as difficulties with self-regulation and concentration.

Mindfulness is described by Kabat-Zinn (1994) as "paying one's full, unbiased attention to the experience unfolding in the present moment." Practising mindfulness is paying attention in the here and now with an open heart and curious mind. Mindfulness practises are used in meditative practises like yoga and religious practises like meditation (Trealeaven, 2018). This method is seldom used in classrooms and workplaces, despite the fact that it may be beneficial for both children and adults. Research on mindfulness has mostly been conducted on adults, students with ADHD, kids from low-income families, and students from urban settings. The initiative sought to increase the students' exam performance while simultaneously reducing their levels of stress and anxiety. Due to the fact that the individuals of this research did not fall into these categories, determining levels of achievement or reducing levels of anxiety was irrelevant. Test scores and grades are not often used in Montessori education. According to the findings of this research, kids do not exhibit any indications of anxiousness. It has been established that mindfulness treatments may boost attention and concentration, which is pertinent to the issue that the researcher is looking into. The practises of mindfulness help to hone one's attention and build a sense of being fully present in the here and now. Both a mood and a characteristic, mindfulness is multifaceted. According to Kabat-Zinn (1994), the practises of mindful awareness encourage intentional, non-evaluative, and present-centered awareness. This kind of awareness allows one to embrace every thought, emotion, and experience without placing value judgements on them. According to the findings of Jennings and colleagues (2013), conscious awareness activities increase both attention and self-awareness. According to Bakosh (2013), mindfulness may prepare the brain for the process of learning. Practising mindfulness often begins with the individual shutting their eyes, either sitting or laying down, and engaging in slow, peaceful breathing. Following the adoption of this posture, individuals will engage in exercises like as visualising a calm environment, concentrating on their belly breath as they inhale and exhale, and concentrating on certain areas of their bodies. Training oneself in mindfulness may increase one's ability to concentrate and pay attention. In 1994, Kabat-Zinn proposed that practising mindfulness should result in a state of consciousness characterised by

heightened awareness and attentiveness to the present moment.

1.2 Statement of Problem:

The aim of this study is to address the issue of a lack of information about the probable ramifications and the efficacy of mindfulness practises when they are introduced into an educational context. It is of the utmost importance to do research on the impact of mindfulness practises on a range of elements, including the students' health and happiness, their level of academic achievement, and their behaviour in the classroom. By gaining useful insights and guidance from this study, educators and policymakers will be able to enhance learning environments and the overall outcomes for students by introducing mindfulness practises. This will be accomplished in order to fulfil the goal of this research. This objective will be met by the conduct of research on the potential benefits as well as the potential challenges that are associated with such integration.

1.3 Justification

This study is required because there is an urgent need to understand the potential impacts that mindfulness practises may have within an educational setting. This research will investigate the effects that mindfulness practises may have. By exploring the effects of mindfulness on students' mental health, academic performance, and conduct in the classroom, this project hopes to make a positive contribution to the development of an atmosphere that is conducive to learning and encourages positive interactions among participants. In addition to this, it aims to bridge the gap in research that currently exists regarding the effectiveness of mindfulness practises that are more explicitly implemented in an educational setting. The findings of this study could be put to use to educate teachers and policymakers about the benefits and drawbacks of incorporating mindfulness into the curriculum, which could, in the long run, result in improved student outcomes and the development of educational practises that place a priority on the well-being and academic achievement of students.

1.4 Limitations

To begin, it should be mentioned that there is a possibility that the results of the investigation were affected by a variety of distinct external factors. These include individual differences among pupils, various approaches to implementation, and the one-

of-a-kind environment in which the practises are first taught for the first time. Both the duration of the inquiry and the size of the sample may have an impact on how broadly the results of the study may be applied, depending on the circumstances. Additionally, it is vital to take into consideration the likelihood of bias happening as a consequence of self-reported measures or the steady loss of participants over the course of the study's duration. In addition, it is probable that the study will not be able to take into account the long-term impacts of mindfulness practises or the potential connections with other forms of therapeutic approaches. It is crucial to identify these limits in order to accurately evaluate the research's results and obtain a sense of the relevance, breadth, and applicability of the findings. These can only be accomplished by acknowledging the limitations of the study.

2. OBJECTIVES

- To determine how mindfulness affects early childhood teachers' classroom atmosphere.
- To determine whether mindfulness reduces stress among early childhood instructors.

3. LITERATURE REVIEW

3.1 *The Benefits of Mindfulness Exercises:*

It has been shown that adults who regularly engage in the practise of mindfulness report lower levels of stress, sadness, suffering, and sickness. The objective of the study that was carried out by Van de Weijer-Bergsma, Formsma, de Bruin, and Bogels (2012) was to ascertain whether or not mindfulness training is successful in mitigating the behavioural difficulties that are associated with ADHD and in enhancing attention in adolescents who have the condition.

Black and Fernando (2014) emphasised the importance of having a peaceful place to study in order to facilitate academic learning that is focused. The results of the research indicate that engaging in mindful practises leads to improvements in a person's ability to self-regulate, become more focused, and better handle stress.

For a study that Wilson and Dixon carried out in 2010, they made use of a wide array of mindfulness practises. The first game that was played was referred to as "The Silent Game," and it consisted of a set of five rules that absolutely everyone was required to abide by.

Fifth graders were taught yoga postures, breathing methods, visual imagery, body scanning, children's moral tales, and mindful eating and walking routines as part of a research project that was carried out by Kanagy-Borofka (2013). Utilising a control group might help in the establishment of a standard. In the classroom where the therapy was being given, each of the five weeks' worth of mindfulness activities lasted for twenty minutes.

Jennings et al. (2013) conducted a study in which they introduced a group of educators to the Cultivating Awareness and Resilience in Education (CARE) course. The course material comprised lectures and activities pertaining to emotional intelligence, as well as mindfulness and exercises that build compassion.

According to Rechtschaffen (2014), the practise of mindfulness has the capacity to cultivate compassion and attentiveness in students without the need for direct instructions from teachers. It has been established that mindfulness practises are beneficial to learning on several levels, including the cognitive, emotional, physical, and relational levels.

According to the research done by Lillard (2011), there is a significant connection that can be made between Montessori education and the use of mindfulness strategies. Children who attend Montessori courses, which typically have a work cycle of three hours, have stronger executive function skills than their counterparts who attend standard schools, according to study. Montessori lessons often begin and conclude on the same day.

3.2 *Research Gaps Identified*

There are a number of research holes in the area of mindfulness practises in the classroom that need to be filled in order to gain a more in-depth knowledge of the benefits that they have. To begin, there is a need for research on the effects that mindfulness-based therapies have throughout the course of a person's whole lifetime. Even though a great number of studies have shown immediate advantages, it is of the utmost importance to determine whether or not these effects are maintained over time and whether or not there may be possible long-term ramifications for students' well-being, academic performance, and social-emotional growth. Second, further research is needed to investigate the role that teacher training and adherence play in the successful implementation of mindfulness practises. It is necessary, for the sake

of successful implementation in educational contexts, to have an understanding of how the results are impacted by the training that teachers get in mindfulness and their capacity to successfully administer these practises. It is essential to investigate the most effective training techniques and identify the minimum degree of fidelity necessary to obtain the desired outcomes. In addition, there is a need for emphasis to be paid to the individualization of mindfulness practises so that they may be tailored to meet the need of unique pupils. Students come from a variety of different backgrounds, and they each have their own unique learning methods and requirements, so it's possible that a cookie-cutter approach won't work for them.

Exploring the ways in which mindfulness practises may be adapted to meet the specific needs of individual students is one way to increase the benefits of these practises and improve overall results. In addition, there is a pressing need to investigate the underlying processes that are the source of the changes that may be seen as a result of practicing mindfulness. It is possible to shed light on the why and how these practises improve the attention, engagement, and well-being of students by gaining an understanding of the cognitive, emotional, and neurological processes that are involved in mindfulness. This insight may help influence the design of therapies that are more specifically focused and efficient. Another significant gap in the study is the investigation of how mindfulness practises may be used in a variety of educational contexts. Even though many research has focused on particular school environments or student demographics, it is very important to investigate the extent to which mindfulness treatments may be generalized across a variety of contexts, such as urban, rural, or schools that serve students from a variety of cultural backgrounds. Investigating the elements that affect the efficacy of mindfulness practises in a variety of contexts may yield very useful insights that can be incorporated into implementation techniques. Lastly, performing comparison research with other comparable therapies may assist establish the distinct advantages and benefits that mindfulness practises provide in educational contexts. These studies can be helpful in establishing these advantages and benefits. Researchers are able to evaluate the precise contributions of mindfulness and its possible additional value in enhancing student well-being and academic results by comparing it to other

methods such as relaxation techniques or cognitive-behavioral therapies. This allows the researchers to determine the specific value of mindfulness. Addressing these research gaps will contribute to a more in-depth understanding of the long-term consequences of mindfulness practises in educational settings, efficient implementation strategies, adaptation for diverse student populations, underlying mechanisms of mindfulness effects, generalizability across settings, and comparative advantages of mindfulness practises in educational settings. In the end, this information may be used to influence evidence-based practises, policies, and interventions to promote the overall development of children and to build happy learning environments.

4. RESEARCH METHODOLOGY

4.1 Study Area and sample Size:

The study was conducted in a classroom located within a privately owned primary educational institution in Mumbai. The research consisted of a sample of 44 participants, all of whom were students in grades four through six. The study comprised a cohort of 23 female participants and 21 male participants. The age range of the volunteers spanned from nine to twelve years old.

4.2 Data Collection

Mondays, Wednesdays, and Fridays were the days when mindfulness was taught. Every Monday, Wednesday, and Friday after P.E., the students practise being mindful. Mindfulness started when we had P.E. on Mondays and Wednesdays. Mindfulness was taught to students twice a week for five weeks. Activities were done that involved sitting, breathing, visualizing, the index finger, a tree, and visualizing colours. Before and after each lesson, students filled out understanding and attention/concentration surveys. From 9AM to 11AM, both on-task and off-task activity was watched before and after the intervention. Daily observations between 9 a.m. and 10 a.m. may help teachers feel better about their jobs and find students who aren't paying attention.

4.3 Statistical Analysis

The participants of the study will be instructed to fill out a questionnaire before and after the intervention. These questionnaires will be analysed to determine if there are any changes in their responses. The respondents of the survey will be obligated to furnish their answers using a Likert scale consisting

of five points. The scale ranges from one, indicating the lowest degree of agreement, to five, indicating the highest degree of agreement. The survey will consist of a series of seven inquiries that focus on the concept of mindfulness.

5. FINDINGS

Before and after the intervention, the participants filled out a questionnaire to assess whether or not there were any changes in the way that they reacted to the situation. On a scale that spanned from one to five points, seven distinct claims about mindfulness were subjected to the rigours of an examination. The findings demonstrated that after the intervention was carried out, there was a significant rise in individuals' preference for participation in mindfulness activities. Some statements in the following questionnaire obtained significantly higher ratings than others. These statements included the practise of paying attention to one's breath and the use of mindfulness practises. In spite

of this, assessments of focus and attention revealed a declining tendency. The daily records of on-task and off-task behaviour indicated that the number of pupils engaged in activities that were not related to the work at hand significantly reduced as time went on. This was shown by the fact that a greater percentage of students engaged in conduct that was appropriate for their tasks. The vast majority of those who took part in the dialogues said that they had found the mindfulness exercises to be helpful, and they voiced their wish to voluntarily incorporate these techniques into their own personal practises. During the course of the training, there were several opportunities for debate.

The results of the post-questionnaire indicated that a greater proportion of students rated question one as either 4 or 5, which indicates that a greater percentage of students now enjoy practising mindfulness as a result of the intervention of five weeks (Figure 1); the results of the pre-questionnaire indicated that a smaller proportion of students rated question one as either 4 or 5.

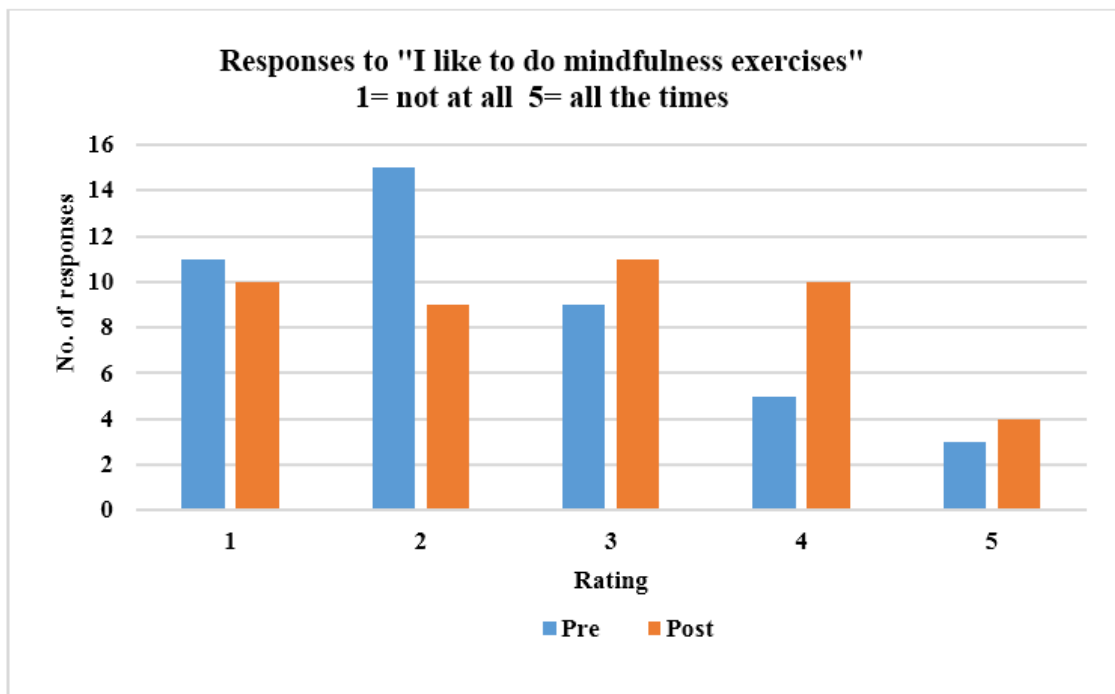


Figure 1: Responses to "I like to do mindfulness exercises"

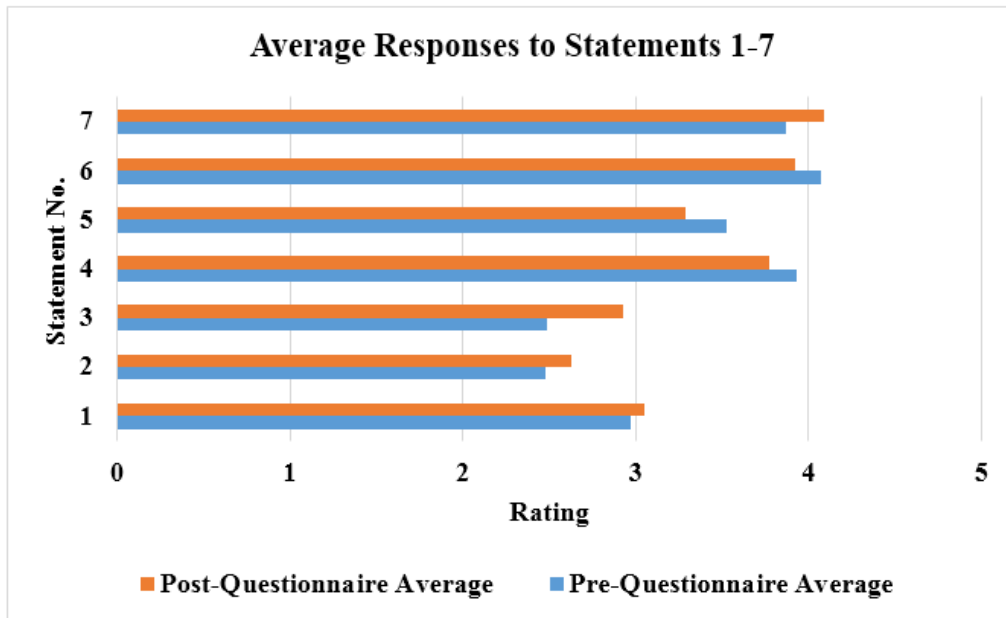


Figure 2: Average Responses to Statements 1-7

During the duration of the intervention, daily counts were taken to determine the proportion of students who were engaged in the activity vs those who were distracted from it. In addition, daily counts were taken throughout the week before to the intervention in order to compile the data shown in Figure 3. The first five observations were conducted before to the intervention, while the remaining observations were made over the course of the intervention, which lasted for a total of five weeks. The total number of pupils is plotted along the y-axis, and the evolution of the observation day, from the beginning of the day to its end, is shown along the x-axis.

When the researcher had a look at Figure 3, they saw that as the observations came to a close, there was a greater proportion of students who were engaged in the activity at hand, which is represented by the colour blue in the figure. It would seem that, as time progressed, a corresponding reduction occurred in the number of students who were preoccupied with anything other than the lesson being taught. The shape of the wave changes somewhat, which is an indication that there is some type of volatility in the market.

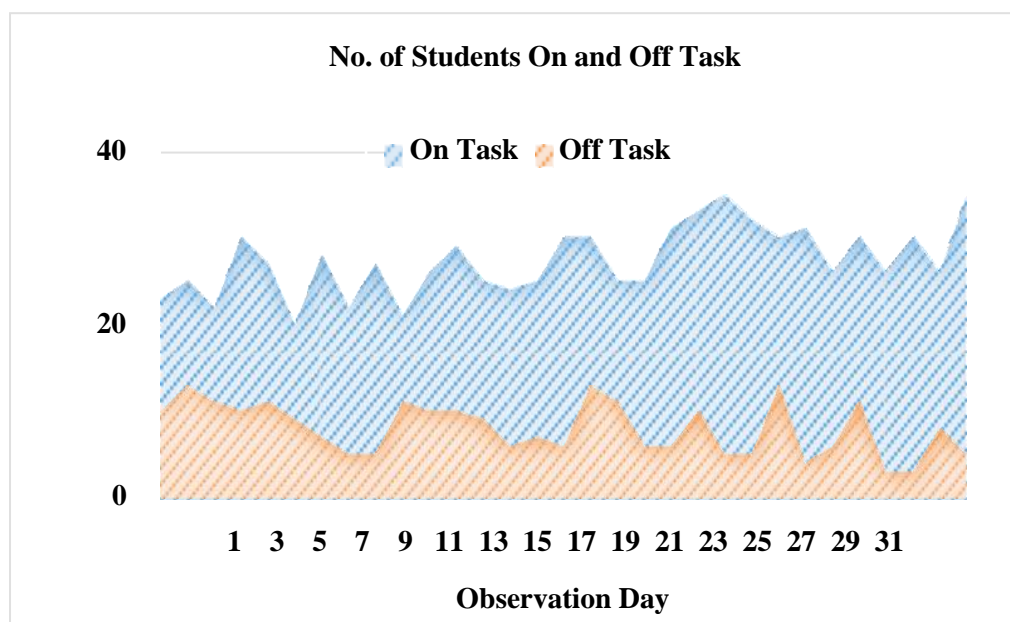


Figure 3: No. of Students On and Off Task

6. DISCUSSION

Through the use of mindfulness activities, the researchers hoped to determine whether or not they may help improve students' ability to concentrate and become more engaged in their work. The findings demonstrated that, as time went on, a greater proportion of students were more attentive to their assignments and actively engaged in the activities they were doing. The findings of the research also suggested that students thought the mindfulness exercises were helpful in boosting their capacity to focus on the academic activities they were doing. When the intervention time is extended, it's possible that the prospective benefits of taking part in these workouts may improve as a result.

In order to collect information at a variety of various times throughout the week, the researcher shifted the observation periods over the course of the study such that they fell anywhere between 9:00 and 11:00 in the morning. Setting up a certain period of time each day for observations is one strategy for improving the measuring process that might be used. In spite of this, the researcher's dual function in the classroom as both the instructor and the observer presented obstacles when attempting to put this strategy into practise. During the first half an hour of class in a normal setting, it is seen that students progressively adjust to the atmosphere of the classroom in order to prepare themselves for further instruction. After that, they participate in academic activities for about a quarter of an hour, and then they have a period of time when they seem to be exhausted. Nevertheless, it is important to point out that after completing easier academic tasks, pupils go on to more difficult ones before finally sitting down and taking a break for lunch. The implementation of two daily observations, one of which is carried out between 9 and 10 in the morning and the other of which is carried out between 10 and 11 in the morning, may boost the accuracy of recording work engagement and the behaviour of students in terms of their attention and distractions.

The participants were given a pre- and post-questionnaire that rated their replies to statements about attention and mindfulness. The scores were taken before and after the individuals completed the study. The participant evaluations were collected using a scale that ranged from 1 to 5, and the questionnaire offered respondents with the choice to do so. In following rounds of the survey, the

presence of a neutral rating of 3 on the scale will be removed. This will make it possible to differentiate participants' comments as either positive or negative in a more straightforward manner. It is of the utmost importance to improve the accuracy of the pre- and post-ratings of the pupils, categorising them as either positive or negative.

The current research was limited since it only had a sample size of 44 pupils, and there was no control group to compare them to. As a result, making the results applicable to a wider population would be difficult. The length of the intervention was limited to a period of no more than five weeks in total. It is highly recommended that the time of the intervention be extended. The person who was acting in the capacity of researcher was also responsible for teaching, being an observer, and leading mindfulness classes. In order to improve the accuracy of the measurements, it is strongly suggested that an objective observer be present throughout the process. The majority of students expressed an increased ability to focus throughout the work time that followed the administration of the mindfulness intervention. This finding is consistent with earlier study that was carried out by Kanagy-Borofka, Van de Weijer-Bergsma et al., and Wilson & Dixon.

The next step that should be taken is to go on with the mindfulness activities that have been going on, as well as to spread the word about how beneficial they are to both adults and children in various settings. The adult participants in the current research exhibited a favourable reception towards the mindfulness exercises. They expressed pleasure of the activities and perceived them to be valuable for getting their day started off on the right foot. In addition to that, the researcher will lead the students in some activities that focus on being conscious while moving their bodies. A phase of fast physical development occurs in children between the ages of 9 and 12, which may cause a decline in the fluidity of their motions. This era of rapid growth occurs in children. The researcher proposes to use walking meditations as an intervention approach for the students in order to achieve the goals of facilitating a decrease in the students' speed and enhancing the students' awareness of physical sensations and spatial mobility.

7. CONCLUSION

The presentations that were given by the students offered the largest degree of insight into the thoughts and ideas that the participants had towards mindfulness. The great majority of students thought that the mindfulness exercises were helpful, and many of them indicated interest in continuing to practise mindfulness in the future. The vast majority of responders said that they will carry out the plans on their own initiative. The fact that the kids provided such positive feedback suggests that the activities pertaining to mindfulness that were carried out were appropriate for them to participate in. The researchers hoped that by having the students participate in activities that promoted mindfulness, they would be able to notice an increase in the degree of participation and focus that they displayed in their work. The data from the daily tallies suggested that there was an increase in the number of students who were on-task, and the data from the daily observations revealed that there was an increase in the number of students who were work-engaged as time progressed. This offered evidence to support the assertion that this was the situation.

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