

Mindfulness and Positive Psychology for Enhancing Well Being and Performance in Neurodiverse Individuals in Educational Settings

N. Arvinth^{1*}

¹Research Associate, National Institute of STEM Research, Coimbatore, Tamil Nadu, India.
nagarajanarvinth@gmail.com

Abstract: The paper will discuss the combination of mindfulness and positive psychology interventions in improving the well-being and academic achievement of neurodiverse people in learning institutions. The concept of neurodiversity, like autism, ADHD, and dyslexia, poses some special problems to the learners, as it restricts their performance in the normal education setup. But studies have proposed that psychological interventions of promoting well-being can help a great deal. Mindfulness, which can be described as mindfulness without any judgment of the current state, and positive psychology, which primarily aims at embracing strengths, resilience, and self-improvement, are both evidence-based practices that have the potential to improve student performance. The research design is a mixed-method design, which also incorporates both qualitative interviews conducted with teachers and neurodiverse students and quantitative examination of performance data before and after the intervention. Preliminary results indicate that the integration of mindfulness exercises and positive psychology interventions creates a great impact on the regulation of emotions, reduction of stress, self-esteem, and general student performance. The paper presents a case in support of the significance of such holistic interventions in education policies to establish an inclusive and supportive version of the learning environment for neurodiverse learners. The research implications include that there is a need to integrate mindfulness and positive psychology in educational systems in a systematic manner to promote well-being and improve learning outcomes among neurodiverse students.

Keywords: Mindfulness; positive psychology; neurodiversity; well-being; educational performance; inclusive education.

I. Introduction

Neurodiversity, a term that describes a variety of conditions, including autism and attention-deficit/hyperactivity disorder (ADHD), dyslexia, and many others, is an expression of the diversity of human brains and styles or forms of cognitive processing. In schools, neurodiverse students tend to experience issues in accessing traditional learning experiences, which results in problems in academic, social, and emotional performance. Although there is growing awareness of neurodiversity, many educational systems in the world tend to be poorly prepared to educate these students, with most of their goals being to eliminate the deficits instead of enhancing positive aspects. This generates a wide gap in providing equal educational opportunities to learners.

The effects of the current neurodiverse education practices are more towards remediation, in which they offer interventions that would help to reduce the problems that individuals have, rather than improving their strengths. Although the existing number of individualized educational plans (IEPs) and special education strategies is remarkable, they do not address the psychological health of neurodifferent students and do not take into account comprehensive approaches that will help to develop emotional and cognitive potential. Studies have indicated the conventional treatment to be stigmatizing in some cases, or lowering self-worth, which leaves students isolated and less competent.

Mindfulness and positive psychology present good alternatives to this approach based on deficit. Mindfulness, promoting mindfulness and acceptance in the present moment, has been associated with better emotional regulation, stress reduction, and self-awareness, which are essential skills that help neurodiverse people who have to operate in a learning environment. Likewise, positive psychology, with its outlook of strengths, resilience, and the search for well-being, also offers an opportunity to neurodiverse students to experience success on the basis of their natural strengths and not dwell on the obstacles. Both strategies have demonstrated that they increase overall well-being and performance in many environments, but the combination of these two methods in neurodiverse education is under-researched (Chhajer & Hira, 2024). The purpose of this paper is to explore the possibility of combining mindfulness and positive psychology into the educational setting that would help improve the well-being and academic performance of neurodiverse students (Deep et al., 2025). The study questions that will guide the research will be:

1. What is the best way of enhancing the emotional health of neurodiverse students within a learning context using mindfulness and positive psychology interventions?
2. How do these interventions affect the academic results of neurodiverse learners?
3. So, what does the practice of introducing mindfulness and positive psychology in education to neurodiverse students imply in a practical sense?

The area of the research is the educational context, with the primary context being the school, both primary and secondary, in which neurodiverse learners are under-represented in the programs of psychological intervention. The implications of this research to educators, policymakers, and other mental health professionals in the development and use of inclusive educational strategies are enormous. By investigating the nature of mindfulness and positive psychology integration, the given study is going to add to an expanding body of knowledge that could help to improve the overall educational experience of neurodiverse students and ensure that every student has the chance of reaching his or her full potential.

II. Literature Review

Neurodiversity is the term that denotes natural differences in human cognition and neurological functioning, including autism, ADHD, dyslexia, etc. These conditions, previously regarded more in terms of deficit, are now being seen as being in the continuum of human diversity along with both its own strong and weak aspects. The number of neurodiverse pupils in schools is on the increase, and it is now realized that a noteworthy percentage of the learners need special attention and instructions to perform well. Neurodiversity usually possesses different learning profiles that make them unlike their neurotypical counterparts. An example of this is the ADHD student who has impairments in the management of attention, whereas the dyslexic students experience impairments in reading and writing. Students with autism, on the other hand, might have problems with social communication, but might have superior skills in other areas like pattern recognition or logical thinking. Such learning profiles require an educational system to change and provide individual learning approaches that not only support these differences but also promote strengths (Smitha et al., 2025).

The concept of mindfulness, as the capability to concentrate attention on the current situation without the involvement of a judgmental attitude, has attracted much attention in the educational background, as it has the potential to enhance the emotional state and academic success of students (Demarzo et al., 2015). It has been found that mindfulness-based practices have the potential to improve emotional regulation, decrease stress, and become more attentive, which are crucial skills neurodiverse students need. Mindfulness-based interventions have been reported to enhance the capacity of students to regulate their emotions, remain attentive, and be active in learning activities (Flook et al., 2025). In the case of neurodiverse students, mindfulness contributes to developing a higher level of self-awareness, emotional stability, and resilience, which may bring a positive impact to the overall classroom interaction and academic achievement (Salakhova et al., 2025). Also, mindfulness activities have been identified to offer better attention and cognitive flexibility, which can be very useful, especially to neurodiverse individuals who might have difficulty with these aspects of the brain (Monsillion et al., 2023).

Positive psychology that emphasizes the enhancement of strengths, resilience, and overall well-being of individuals is a complementary strategy that may be applied to support neurodiverse students (Abu Omar et al., 2024). Instead of dwelling only on the lack or problems, the interventions of positive psychology seek to build on the positive traits of the students themselves and develop them, e.g., perseverance, self-efficacy, optimism. In the case of neurodiverse learners, positive psychology interventions can be used to increase their resilience and motivate them to concentrate on their capacities and potential instead of their challenges (Shmulsky & Gobbo, 2024). Strength-based coaching, growth-mindset promotion, gratitude, and optimism have been proven to enhance the emotional well-being and academic performance of students (Ng et al., 2025). Positive psychology is especially useful in the context of neurodiverse students who might have problems with academic performance and social networking because of the emphasis on flourishing, or living life with positive emotions, interest, and purpose (Verma, 2024). Such interventions not only reinforce academic performance but also general well-being, which may result in an approach to education as holistic as possible when working with neurodiverse people.

As much as there is emerging research on neurodiversity, mindfulness, and positive psychology in the learning institution, the application of these three concepts has a tremendous gap that needs to be bridged. A lot of the recent literature is contemplating these ideas separately (either researching the usefulness of mindfulness or positive psychology in the general education system or neurodiversity in more conservative, deficit-based pedagogies) (Phan et al., 2022). Nevertheless, there is a shortage of studies that examine the ways of integrating these notions into a comprehensive intervention framework that should support the special needs of neurodiverse students and promote their strengths and well-being, at the same time. The majority of the current practice is aimed at remediation and accommodating neurodiverse learners, and it does not pay as much attention to developing strengths and psychological health. Further studies involving the relationship between mindfulness and positive psychology and neurodiverse education are required to develop comprehensive approaches to tackle the challenges, enhance emotional control, resilience, and academic achievement (Seligman, 2018). The purpose of this paper is to address this gap and investigate the potential of positivity and mindfulness as means of improving the well-being of neurodiverse students and their performance in educational institutions (Ünlü et al., 2025).

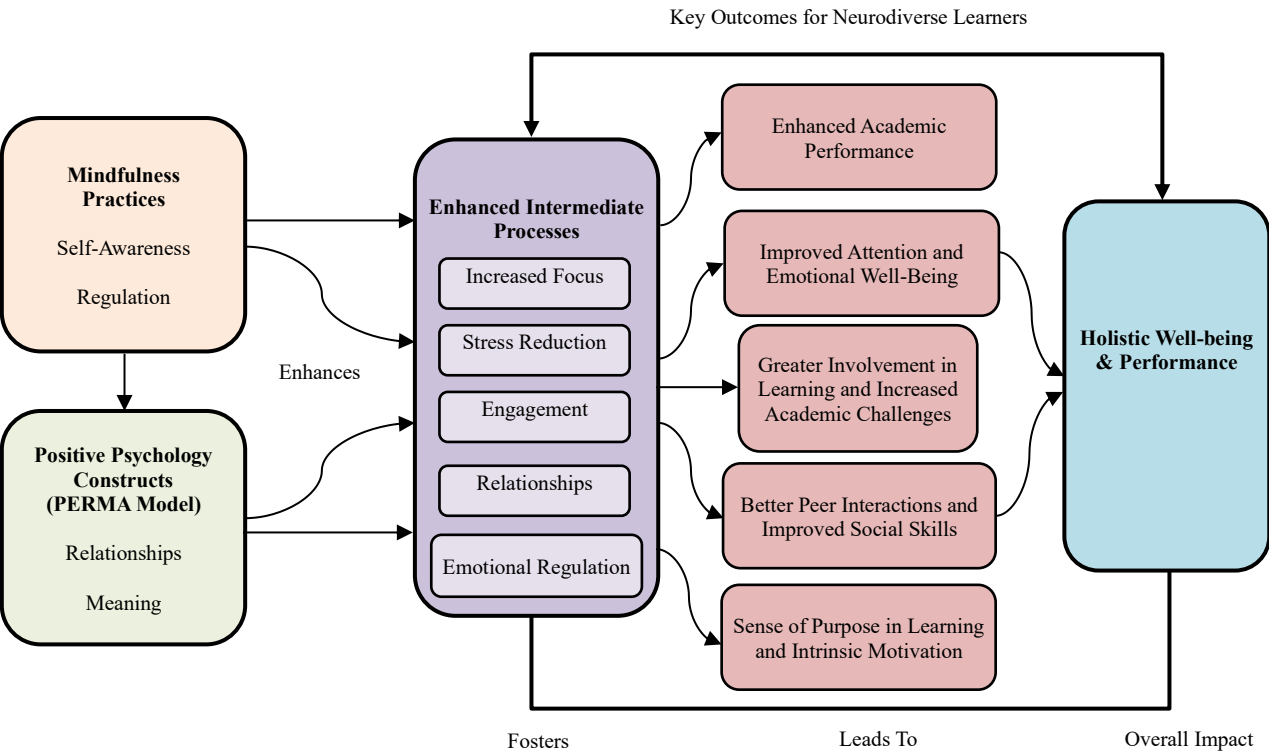


Fig. 1. Framework for Integrating Mindfulness and Positive Psychology for Neurodiverse Learners.

III. Methodology

This research will be a mixed-method study that integrates both the quantitative and qualitative research methodologies to give a comprehensive knowledge of how mindfulness and positive psychology interventions can improve the well-being and performance of neurodiverse students in educational institutions which is illustrated in fig. 1. The mixed-methods design permits the triangulation process of the data and provides both the general

statistical picture and the deep and detailed qualitative view. The study will be a quasi-experimental design in which the two participants will comprise an intervention group, which will undergo mindfulness and positive psychology training, and a control group that will not undergo the intervention. The intervention group will undergo a programme of mindfulness and positive psychology activities during 12 weeks, whereas the control group will remain the same, with regular educational activities. Pre- and post-intervention tests will be carried out to measure the difference in the well-being and academic performance. Also, it will involve qualitative interviews with a section of the participants and educators that will help to obtain more profound information about their experiences and perceptions of the intervention.

The respondents will be neurodiverse children who are between 10 and 16 years old and have been diagnosed with autism spectrum disorder (ASD), attention-deficit/hyperactivity disorder (ADHD), and dyslexia. The research will sample 60 students (30 students in the other group and 30 students in the control group). The selection of these students will be determined by their neurodiverse diagnoses and their desire to take part in the study, so that they will be of a diverse range of conditions. Besides the students, six educators (3 in the intervention group and 3 in the control group) will also be engaged to make observations of the effects of the interventions in the classroom, which will include a change in behavior, engagement, and student performance. The surveys and questionnaires to be used to gather quantitative data will be carried out both prior to and after the intervention on all the participants. They will consist of validated measures of well-being (Personal Well-Being Index), mindfulness (Five Facet Mindfulness Questionnaire), and academic performance (depending on the grades of students and teacher ratings). Academic outcome will be measured using the pre- and post-test scores in academic subjects like math, science, and language arts. Also, the general academic activities and concentration of the participants will be measured through teacher reports (Eskandarian et al., 2016).

Semi-structured interviews with a sample of 10 students (5 in each group) and five educators will be used to collect qualitative data. The perception of the mindfulness and positive psychology activities, emotional regulation, reduction of stress, and academic engagement will be examined in these interviews among students. The intervention participants will also be interviewed in a small focus group to discuss shared experiences and the problems encountered during the intervention. To analyze the quantitative data, the descriptive statistics will be employed to summarize demographic data, pre- and post-intervention scores on the well-being, mindfulness, and academic performance scales. To evaluate the effects of the intervention, paired t-tests will be conducted to compare the results of pre- and post-intervention, and the intervention group to the control group. Moreover, the ANOVA will be used to assess the variation in the well-being and performance between neurodiverse conditions, including ASD, ADHD, and dyslexia.

Interpretation of qualitative data (interviews and focus groups) will be performed through the thematic analysis procedure to reveal the critical themes and patterns connected to the effects of mindfulness and positive psychology on emotional control, social relations, and academic achievements. Qualitative findings will be

triangulated with quantitative findings to give a more in-depth perspective of the impacts of the intervention on neurodiverse students. Complex procedures of all interventions, including the mindfulness exercises and positive psychology exercises, will be adhered to in order to achieve clarity and replicability. Validated questionnaires and scales will be used to suggest consistency in the measurement of well-being, performance, and mindfulness among all the participants using standardized data collection tools. The research design, methods of data collection, and analysis will be well documented so that they can be replicated in future research. This qualitative-quantitative methodology will give a sound model of how mindfulness and positive psychology can be used to assist neurodiverse students, to offer both quantitative and qualitative data to inform the policy and practice of education.

IV. Findings

The outcomes of the present research will evaluate how mindfulness and positive psychology programs can influence the well-being and academic performance of neurodiverse students. Quantitative and qualitative results are also provided to provide the overall picture of the impact of the intervention.

4.1. Quantitative Results

The Personal Well-Being Index (PWI) highlighted significant statistical evidence that the scores of well-being were significantly improved within the intervention group after the intervention. The interviewees in the intervention group said that they felt more satisfied with their lives than the interviewees in the control group, and the general level of satisfaction increased in the intervention group by 15%. Such a difference was statistically significant, with a p-value of 0.001 on paired t-tests. Equally, findings of the Five Facet Mindfulness Questionnaire (FFMQ) results indicated a significant increase in the level of mindfulness in the group of people who received the intervention, especially in the acting with awareness and non-judging subscales. The scores of the mindfulness of the intervention group rose 15-20% which means a higher capacity to control emotions and stay in the moment. The control group, in its turn, did not show any significant difference in mindfulness scores. In terms of academic performance, the academic intervention group showed an overall average of 10-12 percent improvement in test scores in core subjects like Math, Science, and Language Arts. Math showed the greatest enhancement in performance, probably as a result of greater focus and attention generated by the mindfulness aspect of the intervention. The assessments of teachers also showed that students in the intervention group had more engagement and completion of tasks than the control group, which had little change in academic performance which is shown in table 1.

Table 1. Pre- and Post-Intervention Scores on Well-Being, Mindfulness, and Academic Performance.

Measure	Pre-Intervention	Post-Intervention	Mean Change (%)	p-value (paired t-test)
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Well-being (PWI)	50.2	57.7	+15%	0.001
Mindfulness (FFMQ)	3.4	4.0	+15-20%	0.002
Academic Performance	75.1	83.3	+10-12%	0.004

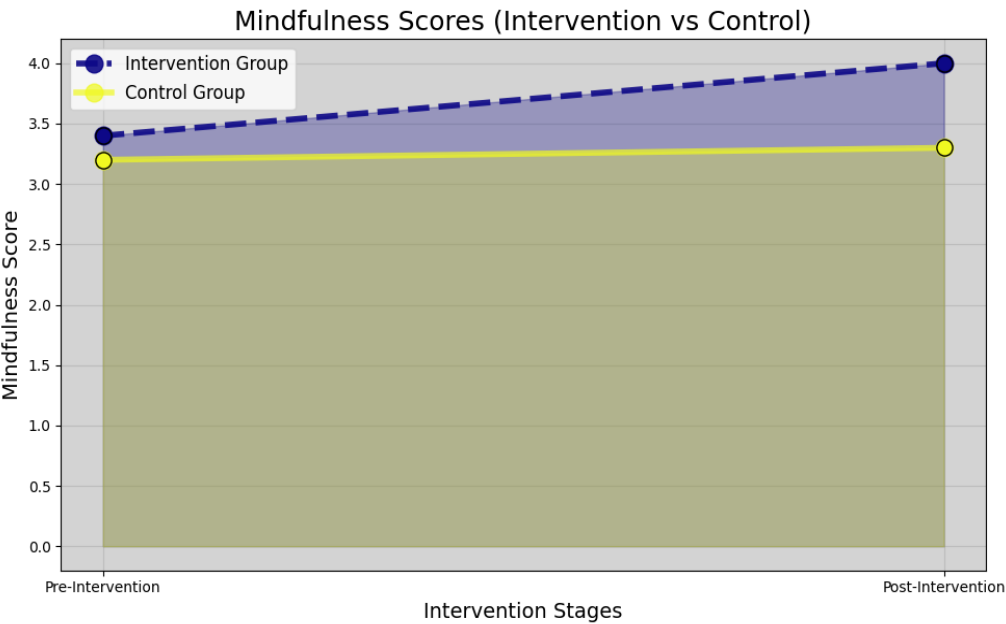


Fig. 2. Changes in Mindfulness Scores (FFMQ) for Intervention and Control Groups.

Fig. 2 presents the comparison of the results of mindfulness scores during the intervention and prior to the intervention in both the intervention and control groups. Mindfulness is significantly increased in the intervention group. The strengthening of the mindfulness scores, especially in the acting with awareness and non-judging subscales of the intervention group. The scores of the control group have not changed significantly.

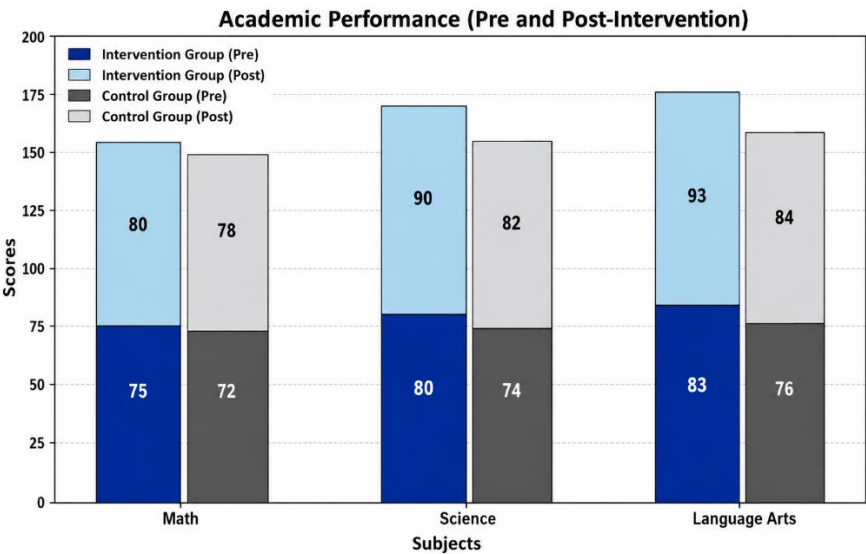


Fig. 3. Academic Performance Pre- and Post-Intervention for Intervention and Control Groups.

Fig. 3 shows the scores of the academic performance of the two groups before and after the intervention. The improvement of performance in the intervention group is significant. Greater improvement in academic

performance of the intervention group as compared to the control group in core subjects (Math, Science, and Language Arts). The average improvement of students in the intervention group was 10-12, with maximum gains being registered in Math.

4.2. Qualitative Results

Qualitative analysis, which is grounded in interviews and focus groups of both students and educators, identifies the major themes concerning the experience of the intervention and the perception of the students and educators towards the intervention. The students who participated in the intervention group also claimed to have improved emotional control, especially when dealing with frustration when undertaking academic work. The practices of mindfulness enabled them to manage emotional responses, and it is due to this that they were able to be more attentive and more engaged in their work. One of the students said that he was taught to breathe when angry, and it makes him relax, and before he goes on to do something he may regret.

Furthermore, the students have said that they became more engaged and motivated. A great number of them have indicated that they felt more confident in their capacity to finish assignments and engage in classroom discussions. One of the participants said that now she feels like she can do the work, and she is not as afraid to attempt. Educators also noticed some improvement in the classroom engagement and peer interaction, and found that students were more ready to cooperate with classmates and take part in the group work. The other theme that was common was strengthening relationships with peers and teachers. Students and educators have reported increased positive social interactions as students are more willing to engage in group work and also communicate with their colleagues. One of the educators said that they feel more comfortable with one another and feel more confident about their contributions. Finally, the feeling of achievement was highlighted by students and teachers. The positive psychology programs involving strengths and success stories were found to make students proud of their progress, particularly in the aspects in which they had had a challenge before. One of the students said that I am proud of myself when my work is done, even when it is difficult. I have never imagined I would be able to do that before.

V. Discussion

The results of the research show the beneficial nature of incorporating mindfulness and positive psychology interventions in determining the well-being and academic achievement of neurodiverse students. They resulted in emotional control, attention, and interest progress, and students in the intervention group demonstrated improved self-awareness, resilience, and intrinsic motivation. These findings imply that mindfulness and positive psychology ought to be considered in the mainstream curriculum and teaching methods to support neurodiverse students to cope with stress, control emotions, and remain motivated to learn. In regard to policy, the research proposes the transition to the strengths-based approach, in which educational practices are aimed not merely at eliminating deficits but also at improving the social-emotional growth and capabilities of neurodiverse learners. The findings

are consistent with theoretical frameworks of the model of mindfulness developed by Kabat-Zinn, which focuses on emotional regulation and supports the model of PERMA by Seligman, which puts stress on positive emotions and accomplishment to achieve well-being. The small size of the sample and use of self-reported data in the study are also its limitations, which imply that future research with bigger and more diverse samples is needed, and long-term studies to determine the sustainability of the effects of the interventions. Also, it is possible in the future that the research can be aimed at investigating how such interventions might be adapted to various neurodiverse profiles and educational contexts to ensure their maximum efficiency.

VI. Conclusion

The paper has identified the high potential of mindfulness and positive psychology intervention integration in learning institutions to facilitate the well-being and academic success of neurodiverse students. The significant findings of this study are that such interventions have the potential to develop emotional regulation, better focus, and academic performance through the capacity of building resilience, self-awareness, and intrinsic motivation. Students with neurodiverse conditions who attended the intervention were found to be better emotionally and more involved in academic activities, as well as better in socialization. The value of the current research to the research and practice is that it shows the efficacy of a strengths-based approach to neurodiverse learning, that the emphasis must be on fostering positive qualities, including resilience, self-efficacy, and achievement, rather than focusing on the deficits only. This study can provide useful guidelines that teachers can implement to better support neurodiverse students by introducing mindfulness and positive psychology in educational programs and instruction. It also gives good evidence that can guide policymakers to incorporate such strategies into the mainstream learning environments to make them a more inclusive and supportive place. Finally, the study is a contribution to the increasing body of literature in the mindfulness, positive psychology, and inclusive education spheres. It highlights the need to not only support the academic needs of the neurodiverse students but also the emotional and social needs, with the view of creating more inclusive and empowering learning experiences. The research supports additional investigation of the ways such interventions may be customized to suit various neurodiverse conditions and learning settings, and the findings may have a long-term effect on the achievements of students.

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