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# The Role of Outdoor Education in Shaping Student Success, Mental Health, and Teacher Wellness

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## **ABSTRACT**

Outdoor education programs have gained significant attention in recent years for their positive impact on students' academic performance, mental health, and overall well-being. This paper explores the various aspects of an outdoor education program with a particular focus on assessing student performance, understanding mental health benefits, and evaluating teacher well-being. Through a combination of fieldwork, interviews, and existing literature, the study aims to highlight the multidimensional effects of outdoor learning environments. The research demonstrates that such programs positively affect academic outcomes, foster improved mental health, and contribute to teacher satisfaction. Recommendations for implementing and evaluating outdoor education programs are provided to maximize these benefits.

**Keywords:** Outdoor education, student performance, mental health, teacher well-being, academic achievement, experiential learning, nature-based learning, emotional resilience, teacher job satisfaction, outdoor learning environments, physical activity and education, educational outcomes, student engagement, teacher stress reduction, holistic education, psychological benefits of nature.

## INTRODUCTION

Outdoor education is an educational approach that uses nature and outdoor activities to enhance learning experiences. Unlike traditional classroom settings, outdoor education emphasizes hands-on learning, physical activity, and immersion in natural environments. This approach has been associated with improved cognitive development, physical fitness, social skills, and emotional well-being for students. Moreover, it is increasingly seen as a way to combat mental health issues among young people, such as anxiety, depression, and stress.

Despite its benefits, the assessment of student performance, mental health outcomes, and the well-being of teachers involved in outdoor education programs remains underexplored. The purpose of this paper is to investigate the impact of outdoor education programs on student performance, mental health, and teacher well-being, offering insights into how these programs can be implemented effectively in schools.

#### Literature Review

Student Performance

Outdoor education programs have demonstrated potential in improving academic achievement. Research indicates that students who participate in outdoor education programs show increased engagement, motivation, and enhanced problem-solving skills (Beames, Higgins, & Nicol, 2012). A study conducted by Ernst and Theimer (2011) found that nature-based learning experiences were linked to higher academic performance in subjects such as mathematics and science. The physical environment of outdoor education programs often encourages experiential learning, which reinforces concepts in a real-world context, aiding student retention and understanding.

Mental Health Benefits

In recent years, there has been growing recognition of the

positive effects of outdoor education on students' mental health. Spending time outdoors has been shown to reduce symptoms of anxiety, depression, and stress. A study by Jordan and Hinds (2016) found that exposure to natural environments can improve mood and mental well-being, enhancing cognitive function and emotional resilience. Moreover, outdoor learning experiences provide students with a sense of accomplishment, fostering increased self-esteem and coping skills.

Outdoor education also promotes social interaction and cooperation, which are essential in the development of emotional intelligence and interpersonal relationships. These factors are crucial in addressing the mental health challenges that young people face in today's society.

# Teacher Well-Being

The benefits of outdoor education are not limited to students; teachers also experience improvements in their mental health and overall job satisfaction. Teacher wellbeing has a direct impact on the quality of education delivered, and outdoor education can help reduce the stress and burnout commonly faced by educators. Studies show that engaging in nature-based activities with students enhances teachers' sense of professional fulfillment and improves their mental well-being (Miller, 2016). Teachers involved in outdoor education programs report feeling more connected to their students, more inspired in their teaching practices, and more appreciative of their role as educators.

# **METHODS**

To investigate the effects of outdoor education programs on student performance, mental health, and teacher wellbeing, a mixed-methods approach was employed. Data was collected from multiple sources, including surveys, interviews, and academic records.

### **Participants**

The study involved 200 students and 15 teachers from six different schools that offered outdoor education programs. Students were aged between 12 and 16 years, representing a range of academic abilities and socioeconomic backgrounds. Teachers included those who had implemented outdoor education in their classrooms for at least one year.

### Data Collection

- 1. Student Performance Assessment: Academic records from participating students were analyzed before and after participation in the outdoor education program. Standardized tests in subjects such as mathematics, science, and language arts were used to assess any changes in performance. Additionally, a pre- and post-program self-assessment tool was developed to measure student engagement and motivation.
- 2. Mental Health Assessment: Students were asked to complete a mental health survey, which included standardized questionnaires for measuring anxiety, depression, and stress levels. The survey was administered at the beginning and end of the program. Qualitative data was also gathered through interviews with students, focusing on their perceptions of how the outdoor environment impacted their emotional well-being.
- 3. Teacher Well-Being Assessment: Teachers completed surveys on their overall job satisfaction, perceived stress levels, and sense of professional fulfillment. Interviews were also conducted to explore teachers' experiences with outdoor education programs and how they felt these programs affected their mental health and teaching practices.

#### **RESULTS**

## Student Performance

The analysis of academic records indicated a noticeable improvement in students' performance in the subjects covered by the outdoor education program. On average, students showed a 10% improvement in standardized test scores after participating in the program. The self-assessment tool revealed that students were more engaged and motivated to learn after outdoor education experiences. They expressed a greater sense of achievement and an increased interest in subjects that were taught through real-world applications.

## Mental Health Outcomes

The mental health survey results showed a significant reduction in anxiety, depression, and stress among students who participated in outdoor education programs. On average, students reported a 25% decrease in anxiety and stress levels. Moreover, interviews with students revealed

that they felt more relaxed, confident, and capable after engaging in outdoor activities. Many students cited the positive effects of spending time in nature, highlighting the calming and restorative qualities of outdoor learning environments.

## Teacher Well-Being

Teachers reported an improvement in their overall wellbeing. On average, teachers indicated a 15% decrease in stress levels and a 20% increase in job satisfaction. Many teachers expressed that the outdoor setting provided a refreshing change from traditional classroom environments. allowing them to connect more meaningfully with students. Teachers also felt more fulfilled in their roles, citing the opportunity to foster a deeper connection with nature and with students. Some teachers noted that their own mental health had improved due to the physical activity involved in outdoor education, which helped them manage stress more effectively.

#### DISCUSSION

The findings from this study support the growing body of evidence suggesting that outdoor education programs have significant benefits for students, teachers, and overall educational outcomes. The improvement in student performance suggests that outdoor learning can be an effective way to enhance academic achievement, especially when it is integrated with hands-on, experiential learning.

The positive effects on mental health observed in students are particularly noteworthy, as they highlight the potential of outdoor education programs to address the mental health crisis among young people. By providing students with opportunities to engage with nature, outdoor education can foster resilience, reduce stress, and promote emotional well-being.

Equally important is the impact of outdoor education on teacher well-being. The results of this study suggest that outdoor education can play a role in reducing teacher stress, increasing job satisfaction, and enhancing the quality of teaching. Given the increasing demands placed on educators, integrating outdoor learning experiences into the curriculum can provide much-needed relief and improve overall job satisfaction.

# CONCLUSION

Outdoor education programs offer a unique and effective approach to improving student performance, promoting mental health, and enhancing teacher well-being. This study highlights the positive effects that such programs can have on academic outcomes, mental health, and teacher satisfaction. Future research should explore the long-term effects of outdoor education, as well as investigate how these programs can be implemented in diverse educational settings. By integrating outdoor education into curricula, schools can create a more holistic, engaging, and supportive learning environment for both students and teachers.

#### Recommendations

- For Schools: Schools should consider integrating outdoor education programs into their curricula to enhance student engagement and improve academic performance. Schools can create partnerships with local environmental organizations to provide resources and expertise for outdoor education initiatives.
- For Teachers: Teachers should be encouraged to incorporate outdoor activities into their teaching practices. Professional development opportunities focused on outdoor education can help teachers feel more confident in using outdoor settings for learning.
- For Policymakers: Policymakers should allocate funding and resources to support the development of outdoor education programs. This includes providing outdoor learning spaces and ensuring that teachers receive adequate training and support.

## REFERENCES

Ab Hamid, M. R., Sami, W., & Mohmad Sidek, M. H. (2017). Discriminant Validity Assessment: Use of Fornell & Larcker criterion versus HTMT Criterion. Journal of Physics: Conference Series, 890(1), 012163. https://doi.org/10.1088/1742-6596/890/1/012163

Abu, A. (2016). Educational Data Mining & Students' Performance Prediction. International Journal of Advanced Computer Science and Applications, 7(5), 212–220. https://doi.org/10.14569/ijacsa.2016.070531

Allen-craig, S. & McLeod, B. (2004). An evaluation of an experiential learning and outdoor education school program on the life effectiveness skills of middle school

- boys. In A. Brooks & P. Martin (Eds.), International outdoor education research conference proceedings (pp. 1-14). La Trobe University.
- Aslan, A., & Arabacı, D. (2023). The use of Thinglink Web 2.0 Tool in out-of-school learning environments in mathematics teaching: Pre-service teachers' experiences. Journal of Pedagogical Sociology and Psychology, 5(3), 263-282. https://doi.org/10.33902/jpsp.202323919
- Atkins, M. S., Hoagwood, K. E., Kutash, K., & Seidman, E. (2010). Toward the integration of education and mental health in schools. Administration and Policy in Mental Health and Mental Health Services Research, 37, 40–47. https://doi.org/10.1007/s10488-010-0299-7
- Babakus, E., & Mangold, W. G. (1992). Adapting the SERVQUAL scale to hospital services: An empirical investigation. Health Services Research, 26(6), 767-786.
- Bogner, F. X. (2002). The influence of a residential outdoor education programme to pupil's environmental perception. European Journal of Psychology of Education, 17, 19–34.
- Branand, B., & Nakamura, J. (2017). The well being of teachers and professors. In L. Oades, M. Steger, A. Delle Fave, & J. Passmore (Eds.), The Wiley Blackwell handbook of the psychology of positivity and strengths-based approaches at work (pp. 466–490). John Wiley and Sons.
- Braun, T., & Dierkes, P. (2016). Connecting students to nature how intensity of nature experience and student age influence the success of outdoor education programs. Environmental Education Research, 23(7), 937–949. https://doi.org/10.1080/13504622.2016.1214866
- Bullough, K. M. H. R. V, Lake, K., & Esther, M. (2014). Preschool teacher well-being: a review of the literature. Early Childhood Education Journal, 42, 153–162. https://doi.org/10.1007/s10643-013-0595-4
- Chauhan, R. (2019). Performance of innovative teaching strategies on students. International Journal on Integrated Education, 2(5), 247–251. https://doi.org/10.31149/ijie.v2i5.184
- Chong, W. H., Liem, G. A. D., Huan, V. S., Kit, P. L., & Ang, R. P. (2018). Student perceptions of self-efficacy and

- teacher support for learning in fostering vouth of affective and cognitive competencies: Roles engagement. Journal of Adolescence. 1-11.68. https://doi.org/10.1016/j.adolescence.2018.07.002
- Cohen, J. (1992). Statistical power analysis. Current Directions in Psychological Science, 1(3), 98–101. https://doi.org/10.1111/1467-8721.ep10768783
- Cook, C. R., Miller, F. G., Fiat, A., Renshaw, T., Frye, M., Joseph, G., & Decano, P. (2017). Promoting secondary teachers' well-being and intentions to implement evidence-based practices: randomized evaluation of the achiever resilience curriculum. Psychology in the Schools, 54(1), 13–28. https://doi.org/10.1002/pits.21980
- Danielson, Samdal, A. G., O, O., J, H. J., & Wold, B. (2017). Students' perceived life satisfaction school-related social support. The Journal of Educational Research, 102(4), 303–318. https://doi.org/10.3200/JOER.102.4.303-320
- Dogan, U. (2017). Student engagement, academic self-efficacy, and academic motivation as predictors of academic performance. The Anthropologist, 20(3), 553–561. https://doi.org/10.1080/09720073.2015.11891759
- Dreer, B. (2021). Teachers' well-being and job satisfaction: the important role of positive emotions in the workplace of positive emotions in the workplace. Educational Studies, 50(1), 61–77. https://doi.org/10.1080/03055698.2021.1940872
- Edwards, S. H. (2003). Improving student performance by evaluating how well students test their own programs. ACM Journal on Educational Resources in Computing, 3(3), 1029995. https://doi.org/10.1145/1029994.1029995
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. Journal of Marketing Research, 18(1), 39. https://doi.org/10.2307/3151312
- Hair, J. F., Hult, G. T. M., Ringle, C. M., & Sarstedt, M. (2017). A primer on partial least squares structural equation modeling (PLS-SEM). Sage.
- Hijazi, S. T., & Naqvi, S. M. M. R. (2006). Factors affecting students' performance: A case of private colleges. Bangladesh e-Journal of Sociology, 3, 1-10.

Honicke, T., & Broadbent, J. (2016). The influence of academic self-efficacy on academic performance: A systematic review. Educational Research Review, 17, 63–84. https://doi.org/10.1016/j.edurev.2015.11.002

Insorio, A. O. (2021). From the perspective of the students: Reporting counselor educators' teaching practices. International Journal of Didactical Studies, 2(1), 101453. https://doi.org/10.33902/IJODS.2021266616

Jennings, P. A. (2015). Early childhood teachers' well-being, mindfulness, and self-compassion in relation to classroom quality and attitudes towards challenging students. Mindfulness, 6, 732–743. https://doi.org/10.1007/s12671-014-0312-4

Lei, H., Cui, Y., & Chiu, M. M. (2018). The relationship between teacher support and students' academic emotions: A meta-analysis. Frontiers in Psychology, 8, 2288. https://doi.org/10.3389/FPSYG.2017.02288/BIBTEX

Liu, X. xian, Gong, S. Y., Zhang, H. po, Yu, Q. lei, & Zhou, Z. jin. (2021). Perceived teacher support and creative self-efficacy: The mediating roles of autonomous motivation and achievement emotions in Chinese junior high school students. Thinking Skills and Creativity, 39, 100752. https://doi.org/10.1016/j.tsc.2020.100752

Martin, D. P., & Rimm-Kaufman, S. E. (2015). Do student self-efficacy and teacher-student interaction quality contribute to emotional and social engagement in fifth grade math? Journal of School Psychology, 53(5), 359–373. https://doi.org/10.1016/j.jsp.2015.07.001

Mcleod, B., & Allen-craig, S. (2007). What outcomes are we trying to achieve in our outdoor education programs? Journal of Outdoor and Environmental Education, 11(2), 41–49. https://doi.org/10.1007/BF03400856

Mindrescu, V., Simion, G., Turcu, I., Catuna, C., Paun, D. G., & Nechita, F. (2022). The multiplicative effect interaction between outdoor education activities based on the sensory system. Sustainability, 14(19), 11859. https://doi.org/10.3390/su141911859