Study on the Influence of Positive Learning Environment on Student Motivation and Achievement in Elementary Schools

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Abstract: A positive learning environment is an important factor in improving student motivation and achievement. This study aims to analyze the influence of the learning environment, both physical and social, on student motivation and achievement at SD GMIT Airnona 2 Kupang City. Using a quantitative approach with a census design, all 88 students in grades 4–6 were used as respondents. Data were collected through questionnaires and interviews. The results showed that a comfortable learning environment, positive social interactions, and teacher support contributed significantly to improving student motivation and achievement. These findings underline the need for improved facilities, teaching innovation, and parental involvement to create an optimal learning environment.

Keywords: Academic achievement; Learning environment; Motivation.

Introduction

The learning environment is everything around students that can influence the learning process, either directly or indirectly (Asriani et al., 2025). This environment includes all aspects that can support or hinder the learning process, including physical, social, and psychological factors (Latief, 2023). The learning environment plays a very important role in determining the level of student motivation and achievement. Elementary school, as an early level of education, is the main foundation in forming students' learning habits and academic enthusiasm. At this stage, the learning experience gained will greatly influence the development of their attitudes, interests, and academic achievements in the future. Therefore, creating a positive learning environment is one of the main factors in improving student learning outcomes and well-being. According to Cahyono et al. (2022) learning motivation is an internal or external drive that makes students enthusiastic about participating in the learning process. A good learning environment can increase students' intrinsic motivation, such as curiosity and the desire to

achieve better academic results. For example, a comfortable classroom, adequate lighting, and complete learning facilities can create a conducive atmosphere that allows students to focus more on learning. In addition, teachers who provide emotional support and create positive interactions with students also play a role in building their self-confidence and enthusiasm for learning. In addition to physical aspects, social interactions in the learning environment also affect student motivation.

Good relationships between students and teachers and peers can create a sense of security and comfort in learning (Che Ahmad et al., 2017; Hussain et al., 2022). Support from peers, such as cooperation in group assignments and class discussions, helps students feel more involved in the learning process. When students feel supported and accepted in the school environment, they tend to be more courageous in expressing their opinions and are more motivated in achieving better academic achievement (Blegur et al., 2023). Furthermore, a positive learning environment also contributes to improving student achievement.

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Academic achievement is not only determined by cognitive abilities, but also by external factors such as the quality of the learning environment (AlAli & Al-Barakat, 2024; Wang & Kao, 2022). Schools that have clear policies, rules that support positive discipline, and innovative learning strategies can help students understand the material better (Pramono et al., 2024; Sukariasih et al., 2024). The availability of teaching aids, educational technology, and interactive learning methods make the learning process more interesting and effective, so that students can achieve optimal learning outcomes. Conversely, a less conducive learning environment, such as noisy classrooms, lack of supporting facilities, or less harmonious interactions between students and teachers, can hinder learning motivation.

Students who feel uncomfortable in learning tend to have difficulty understanding lessons and are at risk of experiencing a decline in academic achievement (Brew et al., 2021). Therefore, schools need to actively create a learning environment that supports students' academic and emotional development (Anita et al., 2024; Lestari & Lidyasari, 2024). Thus, a positive learning environment has a close relationship with student motivation and achievement in elementary school. Schools as early education institutions must ensure that every aspect of the learning environment, both physical, social, and emotional, can have a positive impact on student development (Andriani et al., 2025; Murni, 2024). By creating a comfortable and supportive learning atmosphere, it is hoped that students can grow into motivated, confident, and high-achieving individuals.

Method

This study uses a quantitative approach with a census design, quantitative was chosen because it allows researchers to measure and test relationships between variables and test hypotheses systematically. According to Creswell 2018 in the study (Subhaktiyasa, 2024), is a research method based on the philosophy of positivism, which is used to collect numerical data from the population or sample being studied.

Data collection was carried out using structured research instruments, and data analysis was quantitative with the main objective of testing previously established hypotheses involving all 88 students in grades 4, 5, and 6 of GMIT Airnona 2 Elementary School, Kupang City. Data collection was carried out through a structured questionnaire survey to measure aspects of the learning environment, motivation, and student achievement, as well as in-depth interviews with students and teachers to enrich qualitative data (Sugiyono, 2019).

Purposive sampling technique was used to ensure the representation of the upper class in this study (Purwanti et al., 2024). Data were analyzed through a series of prerequisite tests (normality, homogeneity of variance, linearity), as well as correlation and regression analysis to test the relationship between variables. The validity and reliability of the instrument were tested before use to ensure the reliability of the results.

Result and Discussion

This study was conducted to analyze how the learning environment affects student motivation and achievement. Based on the results of observations, interviews, and analysis of academic data, it was found that environmental factors, both physical and social, play an important role in shaping students' enthusiasm and learning outcomes (Febrina & Setiawan, 2024; Nadrah, 2025). The physical environment of the school, such as classroom conditions, lighting, ventilation, and the availability of supporting facilities, are factors that greatly influence students' comfort in learning. Likewise, research Pepilina et al. (2024) states that a good learning environment has a significant influence on increasing students' learning motivation. The results of observations show that classrooms at SD GMIT Airnona 2 have good lighting and adequate ventilation, thus creating a comfortable atmosphere for students.

The neat layout of chairs and tables also supports interaction between teachers and students during the learning process. However, there are limitations in the use of educational technology, such as lack of access to computers and projectors, which makes learning still dominated by conventional methods (Anggono & Setiawan, 2025). However, teachers still try to present simple visual media, such as posters and teaching aids, to help students better understand the subject matter. In addition to physical factors, social interaction in the school environment also plays a role in shaping students' learning motivation (Cahyaningtyas & Hidayati, 2023). The results of the interview showed that they were more motivated to learn when they received emotional support from the teacher (Fidan, 2023).

The teacher's approach, such as giving praise and encouragement to students who were having difficulties, was proven to increase students' self-confidence in following the lesson (Suari et al., 2022). In addition, the relationship between students also contributed to their motivation. Students who have study groups or friends who are active in class discussions tend to be more enthusiastic and more involved in academic activities (Handayani et al., 2025). Conversely, students who lack good social interaction in

class tend to be less motivated and have difficulty understanding the lesson.

In terms of academic achievement, a conducive learning environment also has a positive impact on student learning outcomes (Wijayanti & Wulandari, 2024). Based on the analysis of academic scores, students who feel comfortable with the school environment and receive support from teachers and peers show better learning outcomes compared to those who feel they receive less support. Teachers at SD GMIT Airnona 2 are known to have an active role in guiding students, especially for those who have difficulty understanding the material.

The approaches used, such as providing additional exercises, group discussions, and re-explanations, have been shown to help improve students' understanding of the lessons (Nurhuda et al., 2024). In addition, more interactive learning methods, such as discussions and group work, also contribute to improving student achievement. However, this study also found several challenges in the learning environment at SD GMIT Airnona 2. One of the main obstacles is the limited technological facilities that can support learning. Teachers still rely heavily on conventional methods, such as lectures and writing on the board, which makes some students quickly lose interest in learning.

In addition, parental involvement in supporting the learning process at home also varies. Some parents are active in guiding their children in doing schoolwork, while others are less involved due to being busy or limited knowledge in supporting their children's learning. This causes a gap in academic achievement between students who receive learning support at home and those who do not. From these findings, it can be concluded that the learning environment has a close relationship with student motivation and achievement at SD GMIT Airnona 2. A comfortable physical environment and positive social interactions can increase students' motivation in learning, which ultimately has an impact on improving their academic achievement. To optimize the learning environment, schools need to take strategic steps, such as improving learning facilities, introducing educational technology, and involving parents in the child's education process (Anderson-Butcher et al., 2022). By creating a more supportive learning environment, it effective make students can achieve their academic potential more optimally.

Conclusion

This study shows that a positive learning environment, both physical and social, has a significant effect on student motivation and achievement at SD GMIT Airnona 2. Comfortable facilities and good social interactions increase students' enthusiasm for learning and academic achievement. However, there are still challenges related to limited technology and lack of parental involvement. Therefore, it is recommended that schools improve learning facilities, use innovative methods, and strengthen communication with parents. Creating a healthy social environment among students is also important to increase students' motivation and academic achievement.

Author Contributions
This article was written by three authors, namely C. F., H., and A. D. All authors worked together in carrying out the research and writing this article at every stage.

Conflicts of Interest
The authors declare that there are no conflicts of interest regarding the publication of this article. No financial support or personal relationships have influenced the research design, analysis, or conclusions presented in this study.

References

AlAli, R. M., & Al-Barakat, A. A. (2024). Assessing the Effectiveness of Environmental Approach-Based Learning in Developing Science Process Skills and Cognitive Achievement in Young Children. *Education Sciences*, *14*(11). https://doi.org/10.3390/educsci14111269

Anderson-Butcher, D., Bates, S., Lawson, H. A., Childs, T. M., & Iachini, A. L. (2022). The community collaboration model for school improvement: A scoping review. *Education Sciences*, *12*(12), 918. https://doi.org/10.3390/educsci12120918

Andriani, N., Maison, & Nazarudin. (2025). Activities, Resources, and Learning Environment: A Case Study of Science Learning at Sekolah Alam. *Jurnal Penelitian Pendidikan IPA*, *11*(1), 1075–1091. https://doi.org/10.29303/jppipa.v11i1.9569

Anggono, W. A. S., & Setiawan, D. (2025). Development of a Heyzine Flipbook Media Integrated with Problem-Based Learning to Improve Natural and Social Learning Outcomes of Elementary School Students. *Jurnal Pendidikan MIPA*, *26*(1), 280–304. https://doi.org/10.23960/jpmipa.v26i1.pp280-304

Anita, Y., Kenedi, A. K., Putera, R. F., Ladiva, H. B., Qolbi, N., & Akmal, A. U. (2024). A Flipped

Classroom Learning Model Based on Social and Emotional Learning to Improve the Pancasila Student Profile Values in Science and Environment Learning. *Jurnal Penelitian Pendidikan IPA*, *10*(8), 4510–4518. https://doi.org/10.29303/jppipa.v10i8.8357

Asriani, C. I., Hidayati, N., & Suparmi. (2025). Lingkungan Sosial dalam Mendorong Motivasi Belajar Siswa Sekolah Dasar. *Jurnal Teknologi Dan Pendidikan Dasar*, *2*(1), 32–38. Retrieved from https://prospek.unram.ac.id/index.php/JTPD/article/view/1311

Blegur, J., Haq, A. H. B., & Barida, M. (2023). Assertiveness as a new strategy for physical education students to maintain academic performance. *The Qualitative Report*, *28*(3), 865–885. Retrieved from https://shorturl.asia/K3CXm

Brew, E. A., Nketiah, B., & Koranteng, R. (2021). A literature review of academic performance, an insight into factors and their influences on academic outcomes of students at senior high schools. *Open Access Library Journal*, *8*(6), 1–14. https://doi.org/10.4236/oalib.1107423

Cahyaningtyas, R., & Hidayati, Y. M. (2023). Utilization of Natural Environment-Based Media in Creating Motivation to Learn Science for Grade IV Elementary School Students. *International Conference on Learning and Advanced Education (ICOLAE 2022)*, 1957–1965. https://doi.org/10.2991/978-2-38476-086-2_157

Cahyono, D. D., Hamda, M. K., & Prahastiwi, E. D. (2022). Pemikiran Abraham Maslow Tentang Motivasi dalam Belajar. Tajdid: Jurnal Pemikiran Keislaman Dan Kemanusiaan, 6 (1), 39. *TAJDID: Jurnal Pemikiran Keislaman Dan Kemanusiaan*, *6*(1), 37–48. https://doi.org/10.52266/tadjid.v6i1.767

Che Ahmad, C. N., Shaharim, S. A., & Abdullah, M. F. N. L. (2017). Teacher-student interactions, learning commitment, learning environment and their relationship with student learning comfort. *Journal of Turkish Science Education*, *14*(1), 57–72. Retrieved from https://eric.ed.gov/?id=EJ1344285

Febrina, V., & Setiawan, D. (2024). Analysis of the Use of Learning Media on the Learning Interest of Learning Science Students and Environmental Themes. *Jurnal Penelitian Pendidikan IPA*, *10*(8), 5702–5709. https://doi.org/10.29303/jppipa.v10i8.7497

Fidan, M. (2023). The effects of microlearning-supported flipped classroom on pre-service teachers' learning performance, motivation and engagement. *Education and Information Technologies*, *28*(10), 12687–12714. https://doi.org/10.1007/s10639-023-11639-2

Handayani, A. K. D., Anita, A., & Nurussaniah, N. (2025). An Analysis of Students' Scientific Attitudes in Physics Learning. *JoPhRA: Journal of Physics Research and It's Application*, *1*(1), 14–22. Retrieved from https://jophra.uho.ac.id/index.php/journal/article/view/4

Hussain, S., Ahmad, M. S., Hussain, S., & others. (2022). Relationship of teacher-student interaction, learning commitment and student learning comfort at secondary level. *International Research Journal of Education and Innovation*, *3*(2), 156–169. https://doi.org/10.53575/irjei.v3.02(22)17.156-169

Latief, A. (2023). Peranan pentingnya lingkungan belajar bagi anak. *Jurnal Kependidikan*, *7*(2), 104–116. Retrieved from https://e-journallppmunsa.ac.id/index.php/kependidikan/article/view/1126

Lestari, D., & Lidyasari, A. T. (2024). The Influence of Family, School, and Community Environments on Students' Academic Achievement in Science Learning. *Jurnal Penelitian Pendidikan IPA*, *10*(11), 8531–8537. https://doi.org/10.29303/jppipa.v10i11.8929

Murni, H. N. C. (2024). Educational environment management in the perspective of climate change in indonesia. *Jurnal Penelitian Pendidikan IPA*, *10*(7), 3697–3705. https://doi.org/10.29303/jppipa.v10i7.7305

Nadrah, N. (2025). Science Laboratory Environment and Students' Motivation as Predictors on Attitudes Towards Physics Lesson. *Jurnal Penelitian Pendidikan IPA*, *11*(2), 845–854. https://doi.org/10.29303/jppipa.v11i2.9215

Nurhuda, A., Setyaningtyas, N. A., & Huda, A. A. S. (2024). Class-Based Assessment Concepts: A Comprehensive Study. *Advances in Humanities and Contemporary Studies*, *5*(2), 17–23. Retrieved from https://publisher.uthm.edu.my/periodicals/index.php/ahcs/article/view/13818

Pepilina, D., Puspitasari, T., Aliyah, H., & others. (2024). Analisis Progres Kognitif Anak-Anak Di Sekolah Dasar Dan Dampaknya Terhadap Proses Pembelajaran. *Sasana: Jurnal Pendidikan Sosial Budaya Dan Agama*, *1*(1), 23–36. Retrieved from https://ejournal.mediapenamandiri.com/index.php/jsoba/article/view/75

Pramono, T., Ardiansyah, A., Kurniasih, M., Putra, F., Novitasari, D., Asbari, M., Muhammad, Z., & Waruwu, H. (2024). The Role of Positive Discipline in The Digital Era: Fostering Inclusive Learning Environments. *Niswantara: Jurnal Pengabdian Kepada Masyarakat*, *1*(02), 1–7.

https://doi.org/10.70508/akagps39

Purwanti, P., Hayat, M. S., & Dewi, E. R. S. (2024). Students' Creative Thinking Skills with STEAM-SDGs Approach to Energy Concept: Rasch Model Analysis. *Jurnal Penelitian Pendidikan IPA*, *10*(12), 11152–11161. https://doi.org/10.29303/jppipa.v10i12.9532

Suari, N. W. A., Juniartini, P. P., & Devi, N. (2022). Analisis Faktor Yang Mempengaruhi Motivasi Belajar Siswa Terhadap Pembelajaran Ipa. *Jurnal Pendidikan Dan Pembelajaran IPA Indonesia*, *12*(2), 88–98. https://doi.org/10.23887/jppii.v12i2.56561

Subhaktiyasa, P. G. (2024). Menentukan Populasi dan Sampel: Pendekatan Metodologi Penelitian Kuantitatif dan Kualitatif. *Jurnal Ilmiah Profesi Pendidikan*, *9*(4), 2721–2731. https://doi.org/10.29303/jipp.v9i4.2657

Sugiyono. (2019). *Metode Penelitian Pendidikan Pendekatan Kuantitaif, Kualitatif, Dan R&D*. Bandung: Alfabeta.

Sukariasih, L., Erniwati, E., Ute, N., & Takda, A. (2024). Integrating Positive Discipline and Digital Learning to Improve the Effectiveness of the Indonesian Education Curriculum. *Jurnal Pendidikan Progresif*, *14*(3), 2112–2129. https://doi.org/10.23960/jpp.v14.i3.2024143

Wang, T.-H., & Kao, C.-H. (2022). Investigating factors affecting student academic achievement in mathematics and science: cognitive style, self-regulated learning and working memory. *Instructional Science*, *50*(5), 789–806. https://doi.org/10.1007/s11251-022-09594-5

Wijayanti, P., & Wulandari, D. (2024). The Relationship between Parenting Patterns and Learning Independence on Learning Outcomes of Elementary School Science Content. *Jurnal Penelitian Pendidikan IPA*, *10*(9), 7160–7170. https://doi.org/10.29303/jppipa.v10i9.8809