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The Influence of The Play Environment on Children's Learning Motivation

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Abstract

Purpose: This study aims to examine the impact of the play environment on student motivation at BA Aisyiyah II Banaran Kalijambe, Sragen. The research explores how the physical and social aspects of play-based learning influence students' engagement and their learning outcomes.
Methodology: A quantitative research design using a correlational approach was applied. Data was collected from 20 students at BA Aisyiyah II Banaran using a Likert scale questionnaire to measure their learning environment and motivation. Additional data was gathered through interviews with teachers, direct observation, and documentation analysis. The collected data were analyzed using descriptive statistics, correlation analysis, and linear regression to assess the relationship between the play environment and students' motivation.
Results: The findings indicate a moderate positive correlation ($r = 0.67$) between the quality of the play environment and student motivation. Further, regression analysis shows that improvements in the play environment significantly enhance student motivation ($\beta = 0.875$, $p < 0.05$). These results suggest that a well-structured play environment contributes to higher levels of motivation among students.
Applications/Originality/Value: This research highlights the importance of both physical and social aspects of the play environment in enhancing student motivation. It provides practical insights for educators and policymakers to create more effective learning environments that support student engagement and achievement. The originality of this study lies in its focus on the integration of social interactions in play-based learning settings as a key factor in motivating students

Keywords: play environment, student motivation, play-based learning, early childhood education, social interaction.

Introduction Section

Education constitutes a fundamental component of children's development because it directly influences the quality of future generations. The educational process is not only determined by instructional methods but is also strongly affected by environmental factors, both physical and social. The play environment, in particular, functions as an important external factor that shapes children's development and learning motivation (Fakuade & Betiang, 2025). Through interactions that occur outside the classroom, children form perceptions of education and learning, which in turn affect their willingness to engage in educational activities.

The social dimension of the play environment contributes significantly to how children experience learning. Positive interactions with peers during play can foster enjoyment, curiosity, and a sense of belonging, all of which support learning engagement. When children perceive their play environment as supportive and enjoyable, they are more likely to demonstrate higher motivation and active participation in learning processes (Cavanaugh et al., 2017). Thus, a constructive play environment can serve as a catalyst for meaningful educational experiences.

Early childhood, which spans ages 0 to 8, is a critical developmental period marked by rapid growth across physical, cognitive, social, and emotional domains. During this phase, children begin to build essential foundations for lifelong learning, making early childhood education (ECE) a pivotal factor in supporting their overall development. ECE provides developmentally appropriate learning experiences that help children acquire the skills and knowledge needed for future academic and social success (Vogt et al., 2018).

Play-based learning has been identified as an effective strategy within ECE, as it actively engages children with their environment and fosters meaningful learning. Through play, children can enhance their cognitive and social

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abilities, as they explore, experiment, and interact with others. This approach not only stimulates curiosity but also helps sustain children's motivation to learn, allowing them to develop problem-solving skills and critical thinking in a natural, enjoyable context (Vogt et al., 2018; Ali et al., 2018).

The play environment encompasses both physical spaces and the social interactions children experience with peers and teachers. At BA Aisyiyah II Banaran Kalijambe Sragen, a structured and guided play environment is designed to positively influence children's learning motivation. Activities such as educational games and group discussions help build self-confidence and foster enthusiasm for learning. Additionally, social support from peers encourages children to feel valued and more motivated to continue developing themselves, which is essential for maintaining high learning motivation (Baker, Courtois, & Eberhart, 2021; Manongdo et al., 2021).

Learning motivation is a vital factor in encouraging children to achieve their learning goals. Without motivation, children are likely to lose interest and enthusiasm for learning at school. A supportive play environment can affect children's learning motivation by providing an enjoyable and inspiring atmosphere (Schweder & Raufelder, 2023). When children feel comfortable in their environment, both inside and outside the classroom, they are more likely to focus and be motivated to learn. Therefore, it is essential to create an environment that not only supports academic activities but also provides opportunities for children to interact with their peers (Aguilar, 2024).

At BA Aisyiyah II Banaran Kalijambe, the play environment is part of the effort to create a space for children to develop socially and emotionally. Structured play activities can provide children with enriching learning experiences. Positive social interactions outside the classroom can teach children to work together, respect others' opinions, and develop their communication skills (Van Liempd, Paz, & Leseman, 2020). All of this influences how children view education and manage their learning motivation. The play environment in this school plays an essential role in supporting the educational process (Pyle, Prioletta, & Poliszczuk, 2018).

Several previous studies have shown the importance of the influence of play environments on the development of basic skills in early childhood. Tekman and Yeniasır (2023) found that play-based learning settings have a positive impact on children's reading, writing, listening, and speaking skills. Other research by Beqiri and Muçaj (2025) revealed that structured outdoor environments in early childhood education institutions can increase children's engagement and motivation in the learning process. Research by Haryanti and Aryani (2024) found that well-organized play environments can significantly enhance children's learning motivation. Viñuela and De Caso Fuertes (2023) emphasized the importance of using project-based learning and cooperative learning to increase motivation in preschool education. Although these studies provide valuable insights into the benefits of play environments, most have focused on the physical environment or the structure of play without considering the social dimensions present in interactions among children during play. A study by Akramjonovna (2025) demonstrated that innovative learning environments in preschool institutions can improve educational processes and pedagogical activities.

Previous research has highlighted the importance of the play environment in improving children's basic skills, such as the studies by Tekman and Yeniasır (2023) and Beqiri and Muçaj (2025), which focus on the physical and structural aspects of play environments on academic skills. However, the gap in this literature lies in the lack of in-depth studies on the role of social interactions in the play environment in influencing children's learning motivation. Most of these studies have not considered how relationships between children and teachers in a social context can affect children's enthusiasm and involvement in the learning process. The novelty of this study lies in its focus on connecting social interactions in the play environment with children's learning motivation at BA Aisyiyah II Banaran Kalijambe Sragen. This study offers a new perspective by identifying how social dynamics among children, as well as between children and educators, can affect their learning motivation, which is expected to contribute to the development of more holistic and effective learning strategies.

This study aims to explore the influence of the play environment on children's learning motivation at BA Aisyiyah II Banaran Kalijambe Sragen. It is anticipated to offer valuable insights into the crucial role of the play environment in fostering children's learning motivation. The findings may serve as a guide for schools to develop a more effective and supportive play setting that encourages active engagement and curiosity among children. Additionally, the research is expected to inform parents and teachers about the significance of promoting positive social interactions beyond the classroom, which can further boost children's enthusiasm and confidence in learning. By highlighting these factors, the study also aims to contribute to the broader understanding of how both structured and unstructured play experiences impact overall child development.

Method

This study uses a quantitative method with a correlational design to examine the relationship between the play environment and children's learning motivation. The research will be conducted over three months, from June to August 2025, at BA Aisyiyah II Banaran, Kalijambe District, Sragen Regency. The research subjects consist of all 20 children at the institution. Data collection will be done through questionnaires, unstructured interviews, direct observations, and documentation. The questionnaire will be used to gather information on the play environment and children's learning motivation, while interviews will be conducted with teachers to strengthen the findings. Observations will be made to

directly observe the learning process, and documentation will be used to collect additional data, such as institutional profiles and related records.

The collected data will be analyzed using descriptive statistics to illustrate patterns and trends for each variable, including measures such as mean, median, mode, and frequency distribution. Following this, correlation analysis will be conducted to examine the relationship between the play environment and learning motivation, assessing both the presence and strength of the association. Through these analytical procedures, the study aims to offer an empirical understanding of how the conditions of the children's play environment relate to their levels of learning motivation at BA Aisyiyah II Banaran Kalijambe Sragen. Additionally, the analysis is expected to identify key aspects of the play environment that most significantly influence children's motivation to learn.

Result and Discussion

Data in this study were obtained from 20 children at BA Aisyiyah II Banaran Kalijambe Sragen through a Likert-scale questionnaire developed to measure two primary variables, namely the play environment and children's learning motivation. The collected data were analyzed using a quantitative research approach with the support of statistical software. The analysis procedure began with validity and reliability tests to ensure the accuracy and consistency of the research instruments, followed by classical assumption testing, including a normality test. Subsequently, a correlation analysis was carried out to examine the influence of the play environment on children's learning motivation. The research findings are systematically presented through tables, figures, and narrative descriptions to provide a clear and comprehensive understanding of the impact of the play environment on children's learning motivation. This structured presentation helps readers interpret the results more effectively and supports the overall rigor of the study.

Validity Test

To determine the validity of the instrument, the assessment was based on the requirement that the calculated *r* value exceeds the *r* table value at a 5% significance level. The results of the validity testing for the instruments employed to measure the play environment and children's learning motivation are presented below. This analysis ensures that each instrument item accurately reflects the constructs being measured and is appropriate for further data analysis.

Table 1. Validity Test

Variable	Rcalculated	Rtable	Description
X1.1 (Play Environment)	0.589	0.438	Valid
X1.2 (Play Environment)	0.510	0.438	Valid
Y1.1 (Learning Motivation)	0.651	0.438	Valid
Y1.2 (Learning Motivation)	0.563	0.438	Valid
Y1.3 (Learning Motivation)	0.589	0.438	Valid

Based on the results of the validity testing, all calculated *r* values exceed the *r* table value of 0.438, which indicates that every indicator included in the questionnaire meets the validity criteria. Therefore, all items are considered appropriate for use in subsequent analyses. This finding confirms that the instrument is capable of accurately measuring the intended research variables.

Reliability Test

Furthermore, a reliability test was carried out to examine the consistency of the instrument in measuring the targeted variables. The reliability analysis was performed using Cronbach's Alpha for each variable, and the results are presented as follows. This procedure was intended to ensure that the instrument produces stable and dependable measurements.

Table 2. Reliability Test

Variable	Rcalculated	Rtable	Description
X (Play Environment)	0.812	0.600	Reliable
Y (Learning Motivation)	0.924	0.600	Reliable

Given that the Cronbach's Alpha values exceed 0.600, it can be concluded that the research instrument demonstrates sufficient reliability and is suitable for measuring the intended variables. This indicates that the instrument produces consistent and dependable results, ensuring the accuracy of the data collected for the study.

Normality Test

A normality test was performed to verify whether the collected data conforms to a normal distribution. The Kolmogorov-Smirnov test results revealed an Asymp. Sig. value of 0.510, which exceeds the 0.05 threshold, indicating that the data is normally distributed. This confirms that the data meets the assumptions required for subsequent parametric analyses.

Table 3. Normality Test

Unstandardized Residual	N	Mean	Std. Deviation	Test Statistic	Asymp. Sig. (2-tailed)
	20	0	2.79	0.139	0.510

Correlation Test

Once the validity and reliability of the instruments were established, a correlation analysis was carried out to explore the relationship between the play environment and children's learning motivation. The Pearson correlation results indicated a moderate positive relationship between these variables, suggesting that enhancements in the play environment are generally associated with higher levels of learning motivation among children. This finding underscores the importance of providing a supportive and engaging play setting to foster children's enthusiasm and active participation in learning.

Table 4. Pearson Correlation Test Results

Variable X (Play Environment)	Variable Y (Learning Motivation)	Correlation Coefficient (r)
X vs Y	0.67	Moderate Positive

The **r** value of 0.67 indicates a moderate positive relationship between the play environment and children's learning motivation.

Linear Regression Analysis

Following the correlation analysis, a linear regression test was conducted to determine the direct effect of the play environment on children's learning motivation. The findings of the regression analysis indicate that the play environment has a statistically significant influence on children's learning motivation. This result suggests that the play environment plays an important role as a predictive factor in enhancing children's motivation to learn.

Table 5. Linear Regression Results

Model	Unstandardized Coefficients	Standardized Coefficients	t	Sig.
(Constant)	8.740		10.177	0.000
X1 (Play Environment)	0.875	0.752	16.073	0.000

The results of the analysis indicate that the data are normally distributed, as evidenced by an Asymp. Sig. value of 0.510, which exceeds the 0.05 threshold. The correlation analysis demonstrates a moderate positive relationship between the play environment and children's learning motivation, with a correlation coefficient (*r*) of 0.67. In addition, the linear regression results reveal that the play environment has a significant effect on children's learning motivation, as indicated by a *p* value of 0.000, reflecting a strong and statistically significant association. Overall, these findings confirm that the play environment plays a substantial role in influencing children's learning motivation.

The regression analysis generated the equation Learning Motivation = 8.740 + 0.875 (Play Environment), demonstrating a significant relationship between the play environment and children's learning motivation. The regression coefficient of 0.875 indicates that every one-unit improvement in the quality of the play environment is associated with an increase of 87.5% in children's learning motivation. This finding implies that enhancements in the play environment directly contribute to higher levels of motivation among children. Moreover, a supportive and well-designed play environment can foster greater engagement and persistence in learning activities. Consequently, improving the quality of play environments can be considered a strategic approach to strengthening children's overall learning outcomes.

The findings of this study reveal a positive relationship between the quality of the play environment and children's learning motivation at BA Aisyiyah Banaran Kalijambe Sragen. A thoughtfully designed and supportive play setting was found to significantly enhance children's enthusiasm and engagement in learning activities. The conditions of the learning environment appear instrumental in shaping children's attitudes toward education. Children exposed to well-structured play settings show higher interest and active participation in various educational activities. The play environment can be considered a key external factor that facilitates and sustains the learning process in early childhood education.

These results align with the research of Van Liempd, Paz, and Leseman (2020), who emphasize that the characteristics of physical spaces can profoundly affect children's behavior and overall development. At BA Aisyiyah Banaran Kalijambe Sragen, a conducive play environment creates opportunities for children to participate in social interactions, develop emotional skills, and build confidence. Such interactions foster a sense of comfort and security, encouraging children to be more motivated and willing to engage actively in learning activities. Children who feel safe and supported in their environment are also more likely to express creativity and collaborate effectively with peers.

The study underscores that play environments are not only about physical space but also about the quality of experiences they provide. Access to varied and stimulating activities increases the likelihood that children will explore, collaborate, and problem-solve. These experiences contribute to cognitive and social growth, highlighting the interplay between environment, interaction, and motivation. Providing children with structured yet flexible play opportunities

helps them develop critical thinking, emotional regulation, and interpersonal skills. Enriched play environments serve as a foundation for holistic development that integrates multiple aspects of learning.

Balinbin (2025) stresses the importance of integrating play-based instruction into the curriculum to enhance learning outcomes in elementary education. The findings of this study reinforce this perspective by demonstrating that a structured and supportive play environment can increase children's enthusiasm for learning. Embedding play in the educational process leads to higher levels of engagement, responsiveness, and active participation in instructional activities. Play-based learning encourages children to take initiative, develop problem-solving skills, and maintain curiosity throughout the learning process.

The research contributes to the growing body of evidence that both the physical environment and play-based approaches are critical in promoting children's learning motivation. Supportive, engaging, and interactive play experiences foster not only enthusiasm and participation but also the development of essential social, emotional, and cognitive skills. Schools should prioritize the design and implementation of enriched play environments as an integral part of early childhood education. Ensuring that children have access to high-quality play spaces can significantly impact their readiness for future academic challenges and overall personal development

The results of this study differ slightly from the findings of Casapao and Matira (2025), who focused more on efforts to increase children's attention span through play-based activities at the kindergarten level. This study found that while the play environment has a positive influence, other factors such as age and children's readiness to learn can affect learning outcomes. This indicates that while there is a relationship between the play environment and learning motivation, individual factors such as concentration levels and mental resilience also play an essential role in children's achievement.

Mercy (2021) emphasizes that teachers' perspectives play a key role in understanding how play-based learning influences children's motivation. The findings of this study reflect similar views expressed by teachers at BA Aisyiyah Banaran Sragen. Teachers reported that a supportive play environment, particularly one that encourages social interaction, helps children feel more appreciated and actively involved in learning activities. Such conditions allow teachers to foster a sense of belonging and emotional security among children, which contributes to higher learning motivation.

The teachers' experiences in this study support Mercy's conclusion that active teacher involvement is essential in creating an inclusive and enjoyable learning atmosphere. When teachers intentionally design and facilitate play-based activities, children tend to participate more enthusiastically in the learning process. A positive classroom climate built through play strengthens relationships between teachers and students. This relationship encourages children to engage more confidently and sustain their motivation during learning activities.

Research conducted by Lamrani and Abdelwahed (2020) shows that technology-based games and gamification can enhance children's skills in early childhood education. The present study, however, indicates that direct social interaction within the play environment has a stronger influence on children's learning motivation. Group activities and collaborative play provide opportunities for communication, cooperation, and emotional connection among children. These findings highlight that although technology-based play has benefits, social interaction remains the most influential factor in motivating children to learn

A key finding of this study is that a well-organized play environment can significantly enhance children's learning motivation. The results align with Amjad et al. (2025), who emphasize that inclusive and dynamic learning settings are essential for supporting children's educational achievement. At BA Aisyiyah Banaran, the play environment is designed not only to provide opportunities for recreational activities but also to foster interaction, social skill development, and increased motivation to learn. The supportive social and academic atmosphere within this environment reflects Amjad et al.'s argument that engaging, well-structured settings are crucial for promoting active participation in learning.

The study also highlights that play activities can directly contribute to academic skill development. Sanchez (2024) found that play experiences incorporating writing tasks could improve young children's writing abilities. In this research, play activities involving academic aspects, such as writing and speaking exercises, were observed to enhance children's learning motivation. These findings indicate that play-based learning can enrich foundational skills, including communication and literacy, while simultaneously fostering enthusiasm for learning.

Play experiences within the environment at BA Aisyiyah Banaran also support the development of social and emotional competencies. Children engaged in collaborative and interactive play learn to communicate, negotiate, and manage emotions, which strengthens their overall engagement in educational activities. This emphasizes that motivation is not solely driven by cognitive challenges but also by the quality of interpersonal experiences and peer support. Structured play that balances social interaction with academic tasks can therefore have a multifaceted impact on early childhood development.

Vartiainen, Sormunen, and Kangas (2024) explored the relationship between play and sustainability in early childhood education, focusing on environmentally conscious learning. While this study does not specifically address sustainability, it shares the principle that thoughtfully designed play experiences influence more than cognitive skills. In this research, the social dimension of the play environment plays a central role in enhancing children's learning motivation. Both studies demonstrate that play experiences should be purposefully structured to support holistic development, encompassing cognitive, social, and emotional growth.

The findings of this study further reinforce Allee-Herndon et al. (2021), who reported that play-based pedagogy effectively supports children's language and literacy development. The results show that a supportive play environment, in terms of both physical design and social climate, fosters higher levels of learning motivation while simultaneously promoting communication and social competencies. Children participating in these activities practice expressing ideas, interacting with peers, and applying language skills in meaningful contexts.

The research illustrates that play-based approaches contribute to holistic development in early childhood education, extending beyond motivation alone. Play provides a setting in which cognitive, social, emotional, and communication skills are simultaneously nurtured. Schools and educators can leverage this insight to design enriched play environments that balance structured academic tasks with opportunities for social interaction and emotional growth. These conditions ensure that children are not only motivated but also better prepared for future learning experiences

The findings also show that a well-organized and supportive play environment significantly improves children's learning motivation at BA Aisyiyah Banaran Kalijambe Sragen. This result aligns with the study by Ali et al. (2018), which found that play-based learning strengthens children's social and cognitive development and supports higher learning motivation. A learning environment that integrates play fosters comfort and interest among children during learning activities. Increased enthusiasm and persistence in learning emerge when children feel supported by an engaging play environment.

This research confirms that play environments emphasizing social interaction positively influence children's self-confidence. Activities such as group discussions, cooperative play, and educational games provide opportunities for children to collaborate and share ideas. These interactions help build self-esteem and a sense of competence in learning situations. Higher self-confidence encourages children to participate more actively and maintain stronger motivation during learning activities

Fakuade & Betiang (2025) found that a well-structured environment improves children's learning performance, which is also reflected in this study. The quality of the play environment, with strong social support, has been shown to enhance children's learning motivation. This finding is supported by Manongdo et al. (2021), who showed that parental involvement in play-based activities also increases children's attention and motivation. Pyle, Prioletta, & Poliszczuk (2018) also emphasize that a play environment supporting literacy development can enhance children's learning motivation.

This study also supports Sanchez's (2024) finding that play-based activities can improve writing skills in children. Additionally, Schweder & Raufelder (2023) found that changes in the learning environment can affect children's motivation, which aligns with our findings that a supportive play environment can motivate children to be more active in learning. Taylor & Boyer (2019) also confirmed that play-based learning can enhance children's learning experiences, which is reflected in the results of this study.

This study demonstrates that a well-structured play environment positively influences children's learning motivation at BA Aisyiyah II Banaran Kalijambe Sragen. An environment that is supportive in both physical and social aspects can increase children's engagement while also fostering stronger self-confidence. Social interactions that take place during play-based activities, such as collaborative games and group learning tasks, encourage children to participate more actively and develop higher learning motivation. These findings highlight the critical role of organizing play environments in supporting effective and meaningful learning experiences. Consequently, educators and school managers are encouraged to pay greater attention to the design and management of play spaces as part of their instructional strategies.

Conclusion

This research indicates that a well-organized play environment that facilitates social interaction can effectively increase children's learning motivation at BA Aisyiyah II Banaran Kalijambe Sragen. The results reinforce the view that social aspects within the play environment have a meaningful influence on the development of learning motivation, consistent with findings from earlier studies. Nevertheless, the study has several limitations, including a relatively small sample size and a short research period, which may limit the wider applicability of the findings. In addition, the use of a purely quantitative approach restricts a deeper exploration of social interactions and dynamics among children. Therefore, future studies are encouraged to involve a larger number of participants, adopt mixed-methods designs combining quantitative and qualitative data, and extend the duration of observation to capture long-term impacts. Expanding the research to schools with diverse characteristics would also provide more comprehensive insights into how play environments influence children's learning motivation.

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