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Learning Space, Teachers' Support, And Well-Being: Implications On Pupils' Academic Performance in Hinterland

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ABSTRACT

Learning environment, teacher support, and student well-being are widely recognized as important factors influencing academic achievement, particularly in basic education. However, empirical evidence remains limited on how these factors operate together in public elementary schools located in geographically challenged areas. This quantitative study examined the influence of learning space, teacher support, and student well-being on the academic performance of Grade 6 pupils in a public elementary school in the hinterlands of Cagayan de Oro City. Using a predictive–correlational research design, the study involved 120 Grade 6 pupils selected through simple random sampling. Data were gathered using standardized survey questionnaires that measured learning space in terms of lighting, spatial arrangement, and environmental comfort; teacher support; and students' physical, social, and emotional well-being. Academic performance was based on pupils' second-quarter general averages. Descriptive statistics and multiple regression analysis were used for data analysis. Findings revealed that learning space and teacher support were both rated high, while student well-being was rated very high, particularly in social and emotional dimensions. Academic performance was assessed as Very Satisfactory. Regression analysis showed that student well-being was the only significant predictor of academic performance, whereas learning space and teacher support did not show a direct influence. The study highlights the critical role of holistic student well-being, especially emotional and social aspects, in shaping academic success. It is therefore recommended that schools prioritize programs and interventions that strengthen learners' emotional security, social connectedness, and mental resilience alongside improvements in physical and instructional support.

Keywords: learning space, teacher support, student well-being, academic performance, Grade 6 pupils

1. Introduction

Academic performance is a widely recognized indicator of educational success and remains a major concern among schools, parents, and policymakers. Traditionally, students' academic achievement has been largely attributed to their cognitive abilities and the quality of instruction provided by teachers. However, contemporary educational research emphasizes that learning outcomes are shaped by the

interaction of multiple factors, including cognitive, emotional, social, and environmental conditions. Recent studies indicate that students tend to perform better academically when they are exposed to supportive and conducive learning environments that address both academic and personal needs. Beyond individual factors, classroom-related conditions such as the learning environment and teacher support also play a crucial role in shaping both student well-being and academic performance. The quality of the learning space, including classroom lighting, physical layout, and overall comfort, has been found to influence students' attention, motivation, and learning efficiency (Cruz-Garza et al., 2023). Similarly, teacher support—demonstrated through encouragement, clear explanations, and fair treatment—has been shown to enhance students' confidence, engagement, and academic resilience (Salar et al., 2023; Viloan et al., 2024). These factors directly affect pupils' daily learning experiences and academic behaviors.

Despite the growing body of literature on learning environments, teacher support, student well-being, and academic performance, many existing studies continue to examine these variables separately. As a result, limited empirical evidence exists on how the combined influence of learning space and teacher support affects student well-being and, in turn, academic performance. This research gap is particularly evident at the elementary level within the Philippine public school context (Estipona & Delos Santos, 2025; (Organization for Economic Cooperation and Development, 2020). The gap is more pronounced among upper elementary learners, such as Grade 6 pupils, who are undergoing important developmental changes while facing increasing academic demands.

Research Questions

This research investigated the influence of the learning space, teacher support, and Grade Six pupils' well-being on their academic performance.

Specifically, the study sought to answer the following research questions:

1. What is the participants' assessment of the quality of the learning space afforded to them in terms of:
    1.1. Lighting;
    1.2. Spatial arrangement, and
    1.3. Environmental comfort?
2. What is the participants' assessment of teachers' support?
3. What is the level of the participants' well-being considering:
    3.1. emotional;
    3.2. social; and
    3.3. physical?
4. What is the participants' academic performance in all subjects for the second quarter?
5. Do participants' assessments of the learning space, teacher support, and well-being significantly influence their academic performance?

Hypotheses

Problems 1, 2, 3, and 4 are hypothesis-free, except for Question 5, which has the null hypothesis:

H_{o1}: The participants' assessment of their learning space, teacher support, and well-being does not significantly influence their academic performance.

H_{o2}: The participants' assessment of their learning space does not significantly influence their academic performance.

H_{03}: The participants' teacher support does not significantly influence their academic performance.
H_{04}: The participants' well-being does not significantly influence their academic performance.

2. Methodology

This study employed a quantitative predictive–correlational research design to examine the relationships among learning space, teacher support, and student well-being and their influence on the academic performance of Grade 6 pupils. This design is appropriate for identifying the degree and direction of relationships among variables without manipulating them and is consistent with the approaches used by Viloan et al. (2024), Salar et al. (2023), and Francisco (2021). The study determined whether the identified classroom and psychosocial factors independently or jointly influenced pupils' academic outcomes. Data were gathered using Likert-scale questionnaires, observation-based academic records, and performance checklists, allowing for systematic measurement and comparison of variables. The participants of the study were 120 Grade 6 pupils selected from approximately 240 enrolled students in selected public elementary schools in Cagayan de Oro City. The sample size was determined using Slovin's formula to ensure statistical reliability while maintaining a manageable number of respondents. Simple random sampling was employed to ensure fair representation across different classes and student backgrounds and to minimize sampling bias. The study utilized structured research instruments to collect quantitative data. A student questionnaire was developed to measure perceptions of learning space, teacher support, and student well-being. The instrument consisted of 5-point Likert-scale items designed to assess the frequency and extent of students' experiences related to the study variables. A teacher support survey containing Likert-scale and frequency-based items was administered to assess emotional, instructional, and academic support provided by teachers. Items for student well-being focused on pupils' emotional state, peer relationships, and physical health.

Reliability was established using Cronbach's alpha, with all instruments meeting the acceptable threshold of $\alpha \geq 0.70$. Test–retest reliability was also conducted, yielding stability coefficients ranging from 0.78 to 0.85, indicating consistent results over time. Descriptive statistics, including mean, standard deviation, frequency, and percentage**,** were used to describe the quality of learning space, level of teacher support, and student well-being. Academic performance was analyzed using pupils' general averages. To determine the influence of learning space, teacher support, and well-being on academic performance, multiple regression analysis was employed. Data processing and analysis were conducted using SPSS, following systematic procedures for data screening, coding, reliability testing, and assumption checking to ensure accuracy, transparency, and reproducibility of results.

3. Results and Discussion

Problem 1. What is the participants' assessment of the quality of the learning space afforded to them in terms of:

1.1 Lighting;
1.2 Spatial arrangement, and
1.3 Environmental comfort?

Table 4

Summary Table of Quality of the Learning Space

Dimensions	Mean	Interpretation	SD
Lighting	4.02	High	0.85
Spatial Arrangement	4.44	High	0.65
Environmental Comfort	4.38	High	0.63
Overall Quality of the Learning Space	**4.28**	**High**	**0.57**

The results in Table 4 indicate that respondents rated the overall quality of their learning spaces as high (M = 4.28), suggesting that classrooms are generally perceived as conducive to learning. Among the dimensions assessed, Spatial Arrangement (M = 4.44) and Environmental Comfort (M = 4.38) obtained the highest mean scores, implying that students experience well-organized classroom layouts, appropriate seating arrangements, and comfortable physical conditions that support both collaborative and individual learning activities. These findings are consistent with Viloan et al. (2024), who reported that flexible spatial arrangements and adequate classroom organization positively influence student engagement and academic outcomes. Similarly, Salar et al. (2023) emphasized that environmental comfort—such as proper ventilation, temperature, and noise control—plays a crucial role in sustaining students' concentration and overall well-being in basic education settings.

Lighting received a slightly lower, though still high, mean rating (M = 4.02), indicating that while classrooms are generally adequately lit, lighting conditions may not be optimal across all learning spaces. This result aligns with the findings of Quiles-Rodríguez and Palau (2024), who noted that insufficient or poorly balanced lighting can affect students' visual comfort, attention, and learning efficiency, even in otherwise well-designed classrooms. Cruz-Garza et al. (2023) likewise stressed that lighting quality is a critical but often overlooked component of classroom design, requiring intentional planning to support sustained cognitive performance. Overall, the results echo existing literature emphasizing that balanced environmental design—integrating spatial organization, comfort, and appropriate lighting—is essential in creating effective learning spaces, while also highlighting lighting as an area for continuous improvement to further enhance the learning environment.

Problem 2: What is the participants' assessment of teachers' support?

Table 5

Frequency, Percentage, and Mean Distribution of the Participants' Assessment of Teacher Support

Range	Description	Interpretation	Frequency	Percentage
4.51-5.00	Always	Very High	50	41.67
3.51-4.50	Often	High	64	53.33
2.51-3.50	Sometimes	Moderate	5	4.17
1.51-2.50	Rarely	Low	1	0.83
1.00-1.50	Never	Very Low	0	0.00
		Total	**120**	**100.0**
		Overall Mean	**4.42**	
		Interpretation	**High**	
		SD	**0.55**	

Table 5 shows that the highest-rated aspects of teacher support were teachers treating all pupils fairly (M = 4.51, Always), providing feedback to help improve pupils' work (M = 4.47, Often), and praising or recognizing pupils' efforts (M = 4.45, Often). These findings indicate that respondents perceive their teachers as equitable, supportive, and encouraging—qualities that are fundamental in establishing a positive, inclusive, and motivating classroom climate. Fair treatment and constructive feedback reflect learner-centered instructional practices that promote inclusivity, formative assessment, and continuous improvement, as emphasized by Hattie (2023), who found that perceived teacher fairness and feedback significantly enhance students' academic motivation and trust in the learning process.

Other indicators received slightly lower, though still high, mean ratings, including teachers showing concern for pupils' feelings and well-being (M = 4.29), providing assistance when lessons are difficult (M = 4.39), and being approachable for extra help (M = 4.40). While these indicators remain positively rated, the comparatively lower mean scores suggest that some pupils may have experienced occasional limitations in individualized academic or emotional support. Similar patterns were observed by Spilt et al. (2022), who noted that although teachers generally strive to provide emotional and instructional support, contextual factors such as class size, workload, and time constraints may affect the consistency of personalized assistance.

Overall, the consistently high ratings across all indicators underscore the strong presence of teacher support in the classroom. This finding is supported by recent studies demonstrating that teacher support—expressed through emotional care, academic guidance, fairness, and positive reinforcement—plays a crucial role in strengthening students' motivation, engagement, well-being, and school adjustment (Chen et al., 2025).These results reinforce the view that teachers function not only as facilitators of academic

learning but also as key emotional anchors who foster learners' confidence, resilience, and readiness to learn. Collectively, the data affirm that teacher support is a major strength of the learning environment and a critical factor in sustaining positive learner outcomes.

Problem 3. What is the level of the participants' well-being, considering:

3.1 Emotional;
3.2 Social, and
3.3 Physical?

Table 9

Summary Table of Participants' Well-Being

Dimensions of Participants' Well-Being	Mean	Interpretation	SD
Emotional	4.09	High	0.48
Social	4.12	High	0.50
Physical	4.07	High	0.52
Overall Participants' Well-Being	**4.09**	**High**	**0.45**

Table 9 summarizes the three dimensions of respondents' well-being—emotional, social, and physical—and indicates consistently high levels across all areas, with an overall mean of 4.09 (SD = 0.45). Among the domains, social well-being obtained the highest mean (M = 4.12, SD = 0.50), suggesting that students experience a strong sense of belonging and positive peer relationships, which are known to enhance motivation, engagement, and emotional security (Allen et al., 2021; Wentzel, 2019). Emotional well-being also rated highly (M = 4.09, SD = 0.48), indicating that learners generally feel safe, valued, and confident in expressing their emotions—conditions linked to resilience, self-regulation, and academic persistence (Lester & Cross, 2018; Chen et al., 2025). Physical well-being similarly received a high mean score (M = 4.07, SD = 0.52), implying that most students perceive themselves as physically healthy and able to participate actively in school activities, which supports attentiveness and sustained learning effort (Singh et al., 2019; World Health Organization [WHO], 2022).

The minimal variation in standard deviations across the three domains suggests that positive well-being is consistently experienced by most learners, reflecting a generally safe, inclusive, and supportive school environment. This finding aligns with research emphasizing that schools which intentionally promote emotional support, healthy lifestyles, and inclusive peer interactions contribute significantly to students' engagement, learning behavior, and social-emotional development (OECD, 2023; Martinez & Chen, 2024). Overall, the results affirm that the school effectively fosters balanced student well-being, which, when integrated with academic and social support systems, plays a crucial role in sustaining positive learner outcomes and long-term academic success.

Problem 4. What was the participants' academic performance in all subjects for the second quarter?

Table 10

Frequency, Percentage, and Mean Distribution of the Participants' Academic Performance in All Subjects for the Second Quarter

Range	Interpretation	Frequency	Percentage
90-100	Outstanding	59	49.17
85-89	Very Satisfactory	55	45.83
80-84	Satisfactory	4	3.33
75-79	Fairly Satisfactory	2	1.67
Below 75	Did Not Meet Expectations	0	0.00
	Total	**120**	**100.0**
	Overall Mean	**89.31**	
	Interpretation	**Very Satisfactory**	
	SD	**3.26**	

Table 10 presents the frequency, percentage, and mean distribution of the respondents' academic performance across all subjects during the second quarter. Overall, the respondents attained a Very Satisfactory level of performance, as reflected by an overall mean score of 89.31**.** This result suggests that learners generally demonstrated consistent academic achievement and mastery of the required competencies. Similar findings have been reported in studies indicating that supportive learning environments, effective instructional strategies, and consistent teacher guidance contribute significantly to improved academic performance among elementary learners (Hattie, 2023; OECD, 2023).

Further examination of the results shows that nearly half of the respondents (49.17%, n = 59) achieved an Outstanding level of performance, while a substantial proportion (45.83%, n = 55) were rated Very Satisfactory**.** Only a small percentage of learners fell under the Satisfactory (3.33%, n = 4) and Fairly Satisfactory (1.67%, n = 2) categories, and none were classified as Did Not Meet Expectations**,** indicating that all learners met the minimum academic standards. These findings align with prior research emphasizing that high academic performance is often associated with effective teaching practices, formative assessment, and adequate academic support systems that address learners' needs (Quin, 2017; Roorda et al., 2017). While the small number of students in the lower performance categories suggests that overall academic support is adequate, it also highlights the importance of targeted interventions to ensure that all learners progress toward higher achievement levels. Consistent with the literature, sustaining high-quality instruction and responsive support mechanisms is essential for maintaining and further enhancing students' academic outcomes (Hattie, 2023; Wentzel, 2019).Learning strategies to maintain and further improve academic outcomes.

Problem 5. Do participants' assessments of the learning space, teacher support, and well-being significantly influence their academic performance?

Table 11 presents the results of the regression analysis examining the influence of participants' learning space, teacher support, and well-being on their academic performance. The table displays the unstandardized and standardized coefficients, t-values, and significance levels for each predictor variable. The null hypothesis, **H_{o1}:** The participants' assessment of their learning space, teacher support, and well-being does not significantly influence their academic performance.

Table 11

Regression Analysis of the Influence of Participants' Learning Space, Teacher Support, and Well-Being on their Academic Performance

	Unstandardized Coefficients		Standardized Coefficients	t	Sig.
	B	Std. Error	Beta		
(Constant)	-.369	.310		-1.190	.237
Learning Space	.106	.093	.094	1.138	.257
Teacher Support	-.128	.081	-.109	-1.588	.115
Well-Being	1.199	.125	.834	9.582**	.000
Model Summary					
R = .841	R^2 = .707	Adjusted R^2 = .700	F(3,116) = 93.485**	p = .000	

** significant at 0.01 level;

Table 11 presents the regression analysis examining whether learning space, teacher support, and well-being significantly predict students' academic performance. The model is statistically significant, as indicated by an F-value of 93.485 (p = .000), and the R^2 value of .707 shows that 70.7% of the variance in academic performance is explained by the combined influence of the three predictors, indicating a strong model fit. Hence, the null hypothesis is rejected. These results align with prior research demonstrating that holistic models, integrating psychological, social, and environmental factors, provide a robust explanation of academic outcomes (Roorda et al., 2017; OECD, 2023).

Among the three predictors, well-being had a significant influence on academic performance (β = .834; t = 9.582; p = .000), indicating that students with higher emotional and social well-being tend to achieve significantly better academic outcomes. The unstandardized coefficient (B = 1.199) suggests that a one-unit increase in well-being corresponds to a 1.199 increase in academic performance. This supports the notion that psychological well-being strengthens motivation, engagement, persistence, and self-regulated learning, which are key drivers of academic success (Chen et al., 2025; Piui, 2025; Hattie, 2023). In contrast, learning space (β = .094; p = .257) and teacher support (β = –.109; p = .115) did not have a

significant direct effect on academic performance. While respondents rated these dimensions positively in the descriptive results, their effects appear to operate indirectly, shaping students' confidence, emotional readiness, and engagement rather than producing immediate measurable gains (Salar et al., 2023; Wentzel, 2019).

Overall, these findings highlight well-being as a key determinant of academic success. Students who feel safe, respected, socially connected, and physically healthy are more likely to engage meaningfully in learning tasks and achieve higher academic outcomes. This reinforces the importance of integrating school-based programs that strengthen emotional, social, and physical well-being alongside instructional and environmental improvements. Prior studies similarly emphasize that factors such as social support, life satisfaction, and opportunities for self-exploration positively influence academic engagement, which in turn contributes to better performance (Piui, 2025; Lester & Cross, 2018; Quin, 2017). Consequently, the results support rejecting Ho4 while failing to reject Ho2 and Ho3, underscoring that well-being exerts the most direct impact on student achievement compared to physical learning conditions or teacher support.

4. Conclusions

Based on the findings, the study concludes that academic achievement is most strongly shaped by learners' holistic well-being rather than by physical or instructional factors alone. While learning spaces and teacher support provide important foundations, their educational value becomes meaningful only when they contribute to students' emotional security, social connectedness, and physical readiness to learn. This perspective is consistent with Bronfenbrenner's ecological systems theory, which explains that environmental and social influences affect development most effectively when mediated through psychological well-being.

The results further suggest that schools should view learning environments and teacher practices not merely as structural or instructional supports, but as mechanisms that nurture students' overall wellness. Comfortable classrooms and supportive teachers help create conditions where learners feel safe, valued, and motivated, but these factors do not automatically translate into higher academic performance unless students' well-being is strengthened. This underscores the idea that academic success is closely linked to how learners feel, function, and interact within the school context.

Overall, the study highlights the importance of adopting a holistic and learner-centered approach to education. Efforts to improve academic outcomes should prioritize programs and practices that support emotional regulation, positive relationships, and physical health. When student well-being is treated as a core educational goal rather than a secondary concern, schools are better positioned to sustain meaningful learning, positive engagement, and long-term academic success.

5. Recommendations

Based on the conclusions, the following recommendations are offered:

1. **That School Administrators** may continue to strengthen and implement comprehensive student well-being programs that promote emotional resilience, social inclusion, and physical health through sustained support services, structured activities, and partnerships with community organizations to foster a positive school climate.

2. **That Teachers** may integrate well-being practices into daily instruction by embedding mindfulness, encouraging cooperative learning, sustaining supportive classroom environments, and providing constructive feedback that enhances learners' confidence and motivation.
3. **That Students** may actively engage in school-based well-being programs and maintain open communication with teachers and guidance personnel to address emotional, social, and physical needs that support sustained academic success.
4. **That The Department of Education and Local Government Units** may allocate adequate funding and resources to support the implementation of school well-being initiatives, teacher capacity-building, and improvements in learning environments that promote student wellness.
5. **That Future Researchers** may examine additional factors such as self-efficacy, motivation, resilience, family literacy involvement, and socio-economic conditions to further explain academic performance and inform more comprehensive educational interventions.

6. Compliance with Ethical Standards

The researcher adhered to established procedures and ethical protocols in gathering the data. Survey questionnaires were administered to both students and teachers. Prior to data collection, the researcher secured ethical clearance from the Lourdes College Research Ethics Committee. Upon approval, coordination with the School Principal was initiated to schedule the administration of the survey questionnaires. To minimize disruptions in regular classes, data collection was conducted during non-instructional periods such as break times, recess, or after-class hours, depending on participants' availability and the school's schedule. The researcher worked closely with the school administration to identify time slots that would not interfere with teaching and learning activities. When necessary, short sessions were arranged during homeroom or advisory periods with the consent of the teachers involved. Clear instructions were provided before participants completed the questionnaires, which were administered face-to-face in sessions lasting approximately 10 to 15 minutes. The researcher immediately collected completed questionnaires.

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