

## Original Research

## The Effects of Perceptions of School Environment and Parental Involvement on Students' Academic Achievement

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## Abstract

*The objective of this study was to evaluate how the school environment and parental engagement influenced kids' academic success. The study used a correlational research technique and a questionnaire to analyse how the school climate and parental engagement influenced students' academic success. To take part in the study, 384 secondary school teenagers were chosen at random. Percentage means, standard deviations, correlations, and multiple regressions were utilised to assess the data. The results indicated that although students' evaluations of the school environment and their overall academic achievement were modest, they had a favourable attitude towards parental engagement. Students' average academic achievement showed a strong positive correlation with their mean scores on the perception of the school environment and parental involvement. While both perceptions of the school environment and parental involvement significantly contributed to academic achievement, the contribution of the perception of the school environment outweighed that of perceptions of parental involvement. Therefore, to develop an educational environment that supports and enables each child to fulfil their full potential, educators, policymakers, and parents must be aware of the influence of the school environment and parental engagement on student academic success.*

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## INTRODUCTION

The significance of the school environment and family involvement in a student's education cannot be overstated. Extensive research has consistently shown that a pleasant and supportive school environment yields positive outcomes for student learning (Borman & Overman, 2004; Lee & Smith, 1999; Thapa et al., 2013). A pleasant school atmosphere encompasses strong connections

among students, teachers, and parents while also establishing explicit standards for behaviour and academic achievement (Epstein et al., 2002).

In line with this understanding, a study conducted by Lee and Burkam (2002) assessed the impact of school characteristics on students' achievements. Their findings demonstrated a clear relationship between a

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conducive school atmosphere, effective teaching techniques, high expectations from instructors, and improved academic outcomes. Additionally, Rumberger's (2011) longitudinal research underscored the crucial impact that school resources, such as qualified teachers, suitable facilities, and a welcoming learning atmosphere, have in enhancing young students' academic achievement.

The ability to teach is one essential component of the educational setting that affects students' academic advancement. Effective teaching practices, like presenting clear directions, utilising a diversity of instructional tactics, and delivering fast feedback, have been demonstrated to positively impact students' academic progress and development (Hattie, 2009). Additionally, data suggest that schools with exceptional instructors often provide superior levels of student achievement (Rivkin et al., 2005). Another essential component of the school environment is the facilities' and resources' accessibility. A positive learning environment is influenced by enough resources, including texts, technology, and well-kept facilities (Leithwood et al., 2004). Lack of these resources may make it harder for schools to give students a high-quality education. Similarly, parental participation is crucial to a child's academic performance. Students who feel engaged and connected to their school can perform better academically and have reduced absenteeism and dropout rates (Battistich et al., 2004; Cohen & Geier, 2010; Desimone, 1999; Fan & Chen, 2001).

According to research by Hill and Tyson (2009), parental monitoring and supervision are associated with greater academic achievement in both elementary and middle

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school children. It was discovered that high parental expectations and objectives for their children's education are favourably associated with students' academic progress (Davis-Kean, 2005; Fan & Chen, 2001). Additionally, an encouraging home learning environment, characterised by the availability of learning resources, parental involvement in learning activities, and a stimulating atmosphere, has been reported to have beneficial effects on students' academic achievement (Desforges & Abouchaar, 2003; Jeynes, 2005). Research by Jeynes (2007) indicated that parental engagement in school is substantially associated with improved academic performance, particularly for minority and low-income children. Furthermore, healthy parent-child interactions and emotional support have been demonstrated to contribute to improved academic performance (Pomerantz et al., 2007; Zarate, 2007).

Thus, the academic achievement of kids is significantly impacted by both the school environment and family interaction. The learning outcomes of students can be maximized in a good learning environment that is defined by efficient teaching methods and sufficient resources. In addition, parental participation increases academic achievement by facilitating communication between home and school, providing a pleasant learning environment at home, and establishing a sense of responsibility in children. Schools and parents alike must acknowledge the importance of these factors and collaborate to support students' achievements. Schools may maximise student performance by fostering a positive school environment and encouraging parental participation in education.

## Statement of the problem

Parental engagement, which entails obligations such as overseeing homework, creating open communication with instructors, and providing educational resources, consistently coincides with improved academic performance in students. Additionally, good school environments, competent teaching methods, and well-equipped educational settings all play significant roles in promoting academic success. While numerous studies have separately explored the effects of parental involvement or school environment on students' academic performance, only a few limited studies have investigated the combined influence of perceptions regarding parental involvement and school environment on academic achievement.

Besides, at the site of this study, a significant number of students faced difficulties in pursuing higher education due to their low academic achievement in a national examination conducted. To illustrate, in 2018, only 2,170 out of 4,224 students (51.37%) who took the national entrance examination for higher education fulfilled the requirements. This figure is alarming, especially considering that all of these students had attended the preparatory grades 11 and 12, which were deemed sufficient for admission into universities.

Therefore, this study seeks to analyse how perceptions of parental participation and the school environment impact students' academic progress. Thus, the present study seeks to assess the consequences of parental support and the school environment on

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students' academic growth. This inquiry tries to answer the following research inquiries:

## Research questions

1. *Does the perception of the school environment positively influence students' academic achievement in secondary schools?*
2. *Does the perception of parental involvement in education positively influence the academic achievement of students in secondary schools?*
3. *To what degree do students' perceptions of the school environment and parental involvement jointly influence their academic achievement in secondary school?*

## REVIEW OF LITERATURE

### Students' Perception of School

The improvement and transformation of education quality are significantly influenced by students' perceptions of the learning environment (Mayya & Roff, 2004). The way students perceive the educational environment considerably determines their learning outcomes (Pimparyon et al., 2009). According to Loukas and Murphy (2007), the climate of a school is not consistently perceived by all people; rather, there is variety in how individuals perceive the school's environment. Factors such as personal experiences, viewpoints, and responsibilities within the school system contribute to these subjective evaluations of the environment (Booren et al., 2011). These subjective views have a direct impact on individual outcomes and behaviours. Additionally, individual qualities can also alter these views. Those with an optimistic mindset tend to evaluate the climate

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more favourably, whereas people who are pessimistic or aggressive may regard their school environment more adversely.

The school atmosphere has a major impact on determining pupils' academic achievement. Extensive research suggests that a favourable school atmosphere, competent teaching techniques, and a supportive social milieu are key elements (Borman & Overman, 2004; Lee & Smith, 1999). Borman and Overman (2004) conducted a meta-analysis of studies examining the relationship between school climate and academic achievement, revealing that a positive school climate characterised by supportive relationships, high expectations, and a safe learning environment is associated with improved academic outcomes.

Furthermore, Lee and Smith (1999) assessed the effect of teacher-student interactions on student success and identified a considerable link between pleasant and supportive teacher-student relationships and increased academic performance. Effective teaching approaches, including clear instruction, active student engagement, and differentiated instruction, were also found to boost students' academic achievements (Hattie, 2009; Marzano, 2003).

The study by Harinarayanan and Pazhanivelu (2018) evaluated the impact of the school atmosphere on the academic success of high school trainees. This quantitative study technique comprises obtaining data from a sample of 400 secondary school students using a standardised questionnaire. The questionnaire investigated several elements of the school environment, such as infrastructure, the teaching-learning process, teacher-student interactions, and extracurricular activities.

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Academic achievement was graded based on the student's average grades obtained in the prior academic year. The study's principal findings demonstrate that the school environment considerably affects the academic success of secondary school pupils. Specifically, elements such as infrastructure, the teaching-learning process, and teacher-student interactions were found to favourably affect academic attainment. Furthermore, the study found that children who actively participated in extracurricular activities displayed improved academic achievement.

In summation, the impact of the school environment on students' academic achievement cannot be overemphasized. Research continually underlines the relevance of characteristics such as a healthy school atmosphere, effective teaching techniques, and a supportive social milieu (Borman & Overman, 2004; Lee & Smith, 1999).

### **Perceptions of parental involvement and academic performance**

Parental participation is the term used to describe the active involvement of parents or legal guardians in their children's academic endeavours (Desforges & Abouchaar, 2003; Epstein et al., 2002). The degree of parents' involvement in their children's education, as seen by the students, is referred to as parental involvement (Fan & Chen, 2001; Henderson & Mapp, 2002). Students' perceptions of their parents' participation in school have a significant influence on their academic success. Academic performance improves when students feel that their parents are interested in and supportive of their education. Such students frequently experience greater

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motivation and dedication to their academics (Epstein et al., 2001; Fan & Chen, 2001).

The relationship between students' perceptions of parental participation and academic success has been the subject of several studies. For instance, a longitudinal study on high school students by Johnson and Pontius (1989) found a link between students' perceptions of parental participation and grade point average (GPA). According to Smith & Johnson (2019), who conducted a meta-analysis of 25 studies, students' perceptions of parental involvement had a significant positive impact on academic success as measured by test results.

Parental participation is vital for teenagers' academic achievement, according to various studies (Davis-Kean, 2005; Fan & Chen, 2001; Hill & Tyson, 2009). Higher academic accomplishment is reliably connected with parental engagement, which includes supplying academic resources, overseeing assignments, and participating in educational talks (Desimone, 1999; Jeynes, 2003). Parental engagement remained a positive predictor of adolescents' math and reading abilities throughout middle and high school, according to longitudinal research by Davis-Kean (2005). A large sample of high school students was examined by Fan and Chen (2001), who discovered a considerable association between parental support and higher grade point averages.

Parental engagement is vital for enhancing children's motivation, self-esteem, and overall educational achievements, according to Assefa and Sintayehu (2019). Their findings show that active parental participation in their students' education produces a favourable learning environment

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and enhances academic success among learners. Similar findings were reached by DePlanty et al. (2007), who discovered a substantial positive correlation between parental engagement and students' academic achievement. They discovered that parents who actively participate in their children's education have superior academic performance, as did students, parents, and teachers.

### **The Influence of Parental Support and School Environment on the Academic Performance**

Students' academic progress is highly impacted by their opinions of the school environment and parental engagement (Hill & Tyson, 2009; Jeynes, 2005). A supportive learning environment, a safe and inviting setting, and active student engagement all contribute to a healthy school climate that supports academic achievement. Similar to this, parental involvement has frequently been connected to improved academic achievements, including active participation in school events, open interaction with instructors, and regular assistance at home. Students are more likely to feel supported and encouraged when they perceive a nice school culture and have active parental participation, which results in improved levels of engagement, performance, and overall academic success (Fan & Chen, 2001; Hill & Tyson, 2009).

According to research by Nokali et al. (2010), for instance, students who considered their school environment excellent and had high levels of parental engagement fared better academically than those who did not or

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who perceived their school climate as unfavourable. A sense of school environment and parental participation were shown to interact strongly with predicting children's math and reading success in the Lopez et al. (2015) study. Last but not least, although it has been proven that both parental participation and students' opinions of the school climate have a substantial impact on their academic achievement, the combined effect of these two factors has attracted less attention in the study. As a result, this study will contribute a valuable reference to the area.

## **MATERIALS AND METHODS**

The impact of the school environment and parental involvement on a student's academic performance was examined through a correlational study approach. Correlational research involves exploring potential connections between variables without manipulating them (Best & Kahn, 2006). This study utilised both primary and secondary data sources. Primary data was obtained from secondary school students, while secondary data was sourced from their academic records at their respective schools.

### **Participants**

The study was conducted in the secondary schools of the North Shoa Zone, with a specific focus on students in grades 10, 11, and 12. Grade nine students were excluded from the study due to the unavailability of their academic records at the time of data collection. The zone consisted of 47 secondary schools and had a total student population of

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26,667 during the study period. To ensure convenient access to various secondary schools in the area, seven schools located along the main route were chosen. The selection of these schools was primarily motivated by security considerations. Among these seven schools, the total number of enrolled students was 7,753. A stratified random sampling approach was used to recruit 384 students for the study. This approach guaranteed adequate representation of students from different schools, as Yemane's 1967 sample size determination was employed.

### **Measure**

The Delaware School Survey of Students (George et al., 2014) was adapted and used to obtain information regarding the school environment from the perspective of the students. The survey consists of 34 items and is scored on a five-point Likert scale using the responses "strongly disagree" (1) and "strongly agree" (5). Higher scores represent a more positive perception, whereas lower numbers represent a more negative one. The total score ranges between 34 and 170. The instrument's reliability coefficient was 0.92 Cronbach's alpha. For this study, we measured the perception of parental involvement in children's education using the Dohner-Chávez (2005) evaluation. To indicate their degree of agreement or disagreement, respondents utilised a five-point Likert scale with options ranging from "strongly disagree" (point 1) to "strongly agree" (point 5). This survey consists of a total of 16 items, and the scoring range is from 15 to 80, corresponding to the lowest and greatest levels of parental involvement. With a reliable estimate of 0.83

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based on Cronbach's alpha, this instrument validates its stability and dependability as an effective measurement tool. Information about academic achievement was gathered from the student's academic records, and it was measured by their average scores on different subjects as indicated in the Roster of School Records.

Before being employed for data collection, the devices were adjusted to address local concerns. The devices were evaluated by three instructors from the Department of Education and Behavioral Sciences at Wollega University. Subsequently, the instruments were given to 120 pupils as part of a pilot study. The internal reliabilities for the Delaware surveys and parental engagement were computed and found to be 0.85 and 0.82, respectively, suggesting adequacy for further study.

### **Procedures for Data Collection**

The study used a questionnaire to collect data from secondary school students. A letter was written by the School of Graduate Studies at Wollega University to establish contact with the selected sample schools. Subsequently, permissions were obtained, and meetings were scheduled with school administrators to determine a suitable timeframe for data collection. With the consent of the teachers, we interacted with the students in their respective classrooms. Before starting to fill out the questionnaire, the students were given an overview of the study objectives and informed that they had the option to decline to answer if they felt uncomfortable. The data collection process occurred during class time, with the cooperation of the teachers. The

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completed questionnaires were collected anonymously. Generally, it took approximately 25 minutes to complete the questionnaire.

### **Data analysis**

After students completed the questionnaires, an optical scanning process was employed. If any questionnaires were found to be incomplete or exhibited patterns in their answers, they were promptly eliminated. The Statistical Package for the Social Sciences 25 (SPSS 25) was used for data entry and analysis. After a thorough evaluation of the data for statistical assumptions, specific entries were excluded. The significance level used for the analysis was set at  $\alpha = 0.05$ , and percentages, means, standard deviations, correlations, and regressions were calculated.

## **RESULTS AND DISCUSSION**

### **Results**

Data were collected using a questionnaire consisting of three parts. The first section provides background information. The second part concerned students' perceptions of their school environment, while the third assessed the perception of parental involvement in the education of children. Students' academic achievement data were obtained from their academic records in the form of the average of all the subjects that the students were learning.

### **Demographic and descriptive statistics**

The background characteristics of the study included the grade, sex, age, and family education level of the student respondents. Table 1 describes it.

**Table 1***Background information of respondents*

Variable	Categories	f	%
Grade	10	95	24.7
	11	197	51.3
	12	92	24.0
Sex	Male	220	57.3
	Female	164	42.7
Age	Less than 17	52	13.5
	17-18	179	46.6
	19-20	138	35.9
	Greater than 20	15	3.9
Parent's level of education	No formal education	196	51.0
	Primary level education	129	33.6
	Secondary level education	23	6.0
	Above secondary level educ.	36	9.4

Table 1 presents the participants' background information. While 197 (51.3%) respondents were from Grade 11, the remaining 95 (24.7%) and 92 (24.0%) were from Grades 10 and 12, respectively. These data can help obtain the necessary information from different grade levels. Regarding sex, 220 (57.3%) patients were male and 164 (42.7%) were female students. Data on gender may help obtain valuable information from male and female students concerning the variables of the study. The age distribution of the respondents showed that the overselling majority, 317 (82.5%), were between the ages of 17 and 20 years, and the remaining 52 (13.5%) and 15 (3.9%) were less than 16 years of age and greater than 20 years, respectively. The student respondents were sufficiently mature to vividly express their feelings.

**Table 2***Academic achievement average scores of the student respondents*

Average Score Scale	Evaluation criteria	f	%
90.00 -100.00	Excellent	0	0.0
80.00 - 89.99	Very good	10	2.6
60.00 - 79.99	Good	301	78.4
50.00 -59.99	Satisfactory	66	17.2
0.00 - 49.99	Failure	7	1.8
Total		384	100

( $M = 66.57$ ,  $SD = 7.66$ ). The average scale is presented according to the Ethiopian General Secondary Education Certificate



Table 2 presents the average academic achievements of the student respondents obtained from the academic records of the respective schools. The evaluation criteria were based on the Ethiopian General Secondary Education Certificate Grading System. No student (0%) scored in the range of 90.00–100.00 (excellent) average score category. Ten (2.6%) instances fell into the average score category of 80.00 to 89.99 (very good). For an average score of 60.00 to 79.99 (good), 306 (78.4%) instances fell into this category. In the satisfactory category, which ranges from 50.00

to 59.99, there were 66 (17.2%) occurrences. In the average score category of 0.00 to 49.00, 7 (1.8%) instances were observed. Overall, the average academic achievement of the respondents (M = 66.57, SD = 7.66) falls in the category of "good," suggesting that it was a moderate achievement. The information provided in the table indicates that the majority of the student respondents' average scores fell into the good category, whereas the excellent category had no instances suggesting a moderate level of academic achievement among student respondents.

**Table 3**

*Frequencies for students' perception of school environment*

Scale Value	Responses	f	%
1.00 - 1.79	Strongly negative perception	0	0.0
1.80 - 2.59	Negative perception	6	1.6
2.60 - 3.39	Neutral	94	24.5
3.40 - 4.19	Positive perception	284	74.0
4.20 - 5.00	Strongly positive perception	0	0.0
Total		384	100

*Source for scale value (Alkharusi, et al., 2012)*

Table 3 presents an analysis of the student's perceptions of the school environment. Overall, the students tended to have a healthier perception of the school environment (M = 3.76, SD = 0.52). A higher number of students 284(74.0%) reported a positive perception of their school environment. About 94(24.5%)

reported being neutral in their perception of the school environment, and six (1.6%) perceived themselves to have negative feelings towards their school climate. The results suggest that the majority of students had positive feelings toward the school environment.

**Table 4**

*Frequencies for students' perception of parental involvement*

Scale Value	Responses	f	%
1.00 -1.79	Strongly negative perception	0	0.0
1.80 -	Negative perception	15	3.9

2.59			
2.60	- Neutral	81	21.
3.39			1
3.40	- Positive perception	28	75.
4.19		8	0
4.20 -5.00	Strongly positive perception	0	0.0
Total		38	100
		4	

An analysis of students' perceptions of parental involvement in education is presented in Table 4. Overall, students tended to perceive parental involvement in their education as positive ( $M = 3.87$ ,  $SD = .65$ ). The majority of the students (288, or 75.0%) perceived parental involvement in their education to be positive or highly positive. About 81

(21.1%) participants considered their perception of parental involvement in education to be neutral, and 15 (3.9%) perceived it to be negative. The data obtained indicated that the majority of students had positive feelings towards parental support in their education.

**Table 5**

*Mean, standard deviations and correlations among the variables of the study N = 391*

Variables	M	SD	Academic achievement	Perception of the school environment	Perception of parental involvement
Academic achievement	66.57	7.66	1.000	0.891	0.836
Perception of the school environment	3.76	0.52		1.000	0.668
Perception of Parental involvement	3.87	0.65			1.000

*All are significant at  $p < 0.000$*

Table 5 presents the descriptive statistics and the correlation coefficients of the study variables. Accordingly, the mean of academic achievement, as measured by the average of marks obtained in different subjects, was ( $M = 66.57$ ,  $SD = 4.66$ ) out of 100. Based on the Ethiopian General Secondary Education Certificate, the mean belongs to the good group. The means of rating scores for impressions of the school environment and school involvement were measured using Likert scales of 5-point responses. Response frequencies were transformed into composite means for each participant. The rating means scores for the perception of school environment and parental participation in education were ( $M = 3.76$ ,  $SD = 0.52$ ) and ( $M = 3.87$ ,  $SD = 0.65$ ), respectively. Hence, the mean decline in positive impressions is evident in Tables 3 and 4. In addition, the inter-correlation among the variables indicated a positive correlation ( $r = 0.89$ ) between academic performance and

perceptions of the school environment. Similarly, there was a beneficial connection ( $r = 0.84$ ) between the perceived level of parental engagement and academic performance. The correlation between the two independent variables (perceptions of the school environment and parental participation in education) was 0.67, which was less than 0.70, suggesting no multicollinearity concerns.

### Regression analysis

Before presenting the regression analysis, we evaluate alternative assumptions. We translated the frequencies on the Likert scale into composite means to generate continuous data. We generated a normal probability plot and discovered that it was about a normal distribution. The Durbin-Watson value in the model summary table was 1.889, which fell between 1.5 and 2.5, indicating no relationship between the residual variable and the independent variable. The Shapiro-Wilk test results (0.062) indicate that all the variables

have a p-value greater than 0.05, indicating that the variables in the study follow a normal distribution. Therefore, we can conclude that the residual value is normally distributed and that the regression analysis procedures are fulfilled. According to Table 5, the correlation between the two independent variables is ( $r = 0.67$ ), which was less than ( $r = 0.70$ ), confirming that there was no multicollinearity problem. Similarly, the VIF test showed that

the values were  $< 10$ . The box plot test indicates that there are no circles or asterisks at either end of the graph, indicating that there are no outliers. Finally, the scatter plot shows that the plots are diffused and do not form a clear specific pattern, confirming that there is no problem of heteroscedasticity. Hence, the data fulfilled the assumptions required for the regression analysis.

**Table 6**

*Regression analysis summary*

Summary	Value	Standardized Coefficients beta	t	Sig.
R <sup>2</sup>	0.899			
R <sup>2</sup> change	0.898			
F	1690.533			0.000
df	(2, 383)			
(Constant)			14.477	0.000
Perception of the school environment		0.600	27.399	0.000
Perception Parental Involvement		0.435	19.860	0.000

Table 6 presents a summary of the results of multiple regression analyses of the study variables. The analysis was conducted at 95% confidence intervals (CIs). The analysis revealed a significant model summary fit:  $F(5, 383) = 1690.533$ ,  $p < 0.001$ ,  $Adj R^2 = 0.898$ ,  $R^2$  Change = 0.899. According to the research, perceptions of the school environment had a significantly favourable impact on students' academic achievement ( $\beta = 0.60$ ,  $t = 27.48$ ,  $p < 0.001$ ). Additionally, the research indicated that parental engagement in schooling had a statistically positive effect on kids' academic success ( $\beta = 0.44$ ,  $t = 19.860$ ,  $p < 0.001$ ). The data suggested that the impression of the school environment had a stronger influence on the academic achievement of kids than the sense of parental engagement. This may be tied to the educational background of the

parents; the majority of them had less than a secondary school-level education and were incapable of supporting their children in reading and writing. Finally, the study suggested that the two independent variables—perceptions of the school environment and parental participation in education—jointly accounted for 89.8% of the difference in kids' academic success, while the remaining 10.2% required additional analysis.

### Discussion

The degree of the relationship between students' appraisal of the school environment and their academic performance is the focus of the first research question in this study. The results coincide with past investigations, which have demonstrated a considerable association between students' assessment of the school environment and their academic progress.

Numerous studies have highlighted the significant relationship between the perception of the school environment and students' academic achievement (Ahmed et al., 2018; Borman & Overman, 2004; Loukas, 2007; Pimparyon et al., 2000). It has been found that a pleasant and supportive school environment yields positive outcomes in student learning (Thapa et al., 2013). But it's crucial to be cautious when interpreting this relationship. Upon closer examination, the moderate average academic achievement of students appears strongly correlated with a weak positive perception of the school environment. While we can assert that a positive perception of the school environment is associated with academic achievement, it is worth noting that the students' average academic achievement lies in the moderate range rather than being outstanding or excellent. In other words, both the students' average academic achievement and their assessment of the school atmosphere were not appreciably high.

Although students in this research had good opinions about their parents' engagement in their education, it was found that the involvement did not show up in the form of reading, writing, or completing projects. This discrepancy can be attributed to the fact that the majority of parents among the study participants had no formal education. Notably, the mere act of these parents, despite their low educational and economic backgrounds, managing to send their children to school and provide them with other supports was significant. It is well documented that parents with higher levels of education are more likely to create a supportive learning environment and actively engage in their children's education (Davis-Kean, 2005). Sirin (2005) also found a significant positive correlation between parental education and children's academic achievement. Parental

education level could affect students' academic performance more than academic support. Additionally, lower-income families often face financial constraints that limit educational opportunities for their children (Johnson & Smith, 2013; Reardon, 2011).

The extent to which the variance in academic achievement is explained by perceptions of the school environment and parental involvement is the focus of the third research question. Previous studies have acknowledged that perceptions of the school environment and parental involvement significantly influence students' academic achievement. Hill and Tyson (2009) conducted a study on the combined influence of school and family factors on student achievement. Their findings revealed that positive school factors, such as teacher support and high expectations, have a greater impact on student achievement when accompanied by high levels of parental involvement. The present findings support earlier reports, indicating that out of the 70.7% of variances explained by the joint effect of perceptions of school environment and parental involvement, 63.2% of the 70.7% is attributed to the perception of school climate when excluding the perception of parental involvement. Conversely, when the effect of school environment perception is removed, 33.2% of the variance out of the 70.7% is contributed by the perception of parental involvement.

## **CONCLUSIONS**

The ultimate purpose of this study was to evaluate the influence of the perception of the school environment and parental participation on students' academic progress. Significant positive connections were identified between the impression of the school environment and academic accomplishment, as well as between the perception of parental engagement and

students' academic performance. However, the influence of the perception of the school climate far outweighed that of parental involvement. Although parents without formal education (as shown in this study) cannot assist their children with reading and writing, which directly affects academic achievement, they can still have a profound impact on their children's education through love, guidance, values, and support. Parents without formal education can contribute significantly by creating a nurturing and supportive environment and providing love, encouragement, and emotional stability, much like educated parents do.

This study confirms that both the school environment and parental involvement play a crucial role in imparting values and skills necessary for success in school and later in life. Specifically, in economically disadvantaged countries such as Ethiopia, improving immediate academic achievement among students requires the creation of a conducive school environment, particularly focusing on classrooms and teacher conditions.

### **Recommendations**

The active engagement of parents, combined with a positive and inclusive school environment, has the potential to significantly improve student success and cultivate a love for learning that lasts a lifetime. Based on the findings of the study, the following recommendations are being put forth:

1. Secondary schools in the North Wollega Zone should make a concerted effort to connect with the parents of students. This outreach aims to improve the assistance parents give to their children.
2. Schools should make sure that every student has access to an appealing learning environment that is also supportive of academic advancement.
3. Relationships between students, teachers, administrators, and parents must be polite and constructive, according to school administration. Regular collaboration and communication can help with this.
4. Schools should create parent-teacher groups or advisory committees to actively include parents in decision-making. This inclusion makes it easier to value and take into account parents' viewpoints when formulating school regulations.
5. Giving parents the chance to volunteer, take part in school activities, or lend their expertise may significantly improve both parents' and kids' overall learning experiences.
6. Future studies are expected to include other variables, such as peer influence and personal factors, to better explain the factors affecting students' academic achievement.

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### **DECLARATION**

There is no conflict of interest in this study.

### **DATA AVAILABILITY STATEMENT**

All data are available from the corresponding author upon request.

## REFERENCES

- Ahmed, Y., Taha, M. H., Alene, S., & Gaffar, A. M. (2018). Students' perception of the learning environment and its relation to their study year and performance in Sudan. *International Journal of Medical Education*, 9, 145-150. DOI: 10.5116/ijme.5af0.1fee
- Alkharusi, H., Aldhafri, S., Alnabhani, H., & Alkalbani, M. (2012). Educational assessment attitudes, competence, knowledge, and practices: An Exploratory Study of Muscat Teachers. *Journal of Education and Learning*, 1 (2), 217-231. URL: <http://dx.doi.org/10.5539/jel.v1n2p217>
- Assefa, A., & Sintayehu, B. (2019). Relationship between Parental Involvement and Students' Academic Achievement in Model Primary and Secondary Schools of Haramaya University, East Hararghe Zone, Oromia Regional State, Ethiopia. *International Journal of Education and Literacy Studies*, 7(2), 46. <https://doi.org/10.7575/aiac.ijels.v.7n.2p.46>
- Battistich, V., Solomon, D., Watson, M., & Schaps, E. (2004). Caring school communities. *Educational Psychologist*, 39(3), 137-148.
- Best, J. W., & Kahn, J. V. (2006). *Research in Education* (10th Ed), Pearson Education Inc., Cape Town.
- Booren, L. M., Handy, D. J., & Power, T. G. (2011). Examining perceptions of school safety strategies, school climate, and violence. *Youth Violence and Juvenile Justice*, 9(2), 171-187. <https://doi.org/10.1177/1541204010374297>
- Borman, G. D., & Overman, L. T. (2004). Academic Resilience in Mathematics among Poor and Minority Students. *The Elementary School Journal*, 104(3), 177-195. <https://doi.org/10.1086/499748>
- Cohen, J., & Geier, V. (2010). *School climate research summary: August 2010*. National School Climate Center.
- Cohen, J., McCabe, L., Michelli, N. M., & Pickeral, T. (2009). School climate: Research, policy, practice, and teacher education. *Teachers College Record*, 111(1), 180-213.
- Davis, H., & Johnson, M. (2016). Classroom climate and student engagement: Exploring the linkages. *Journal of School Leadership*, 26(3), 366-388.
- Davis-Kean, P. E. (2005). The Influence of Parent Education and Family Income on Child Achievement: The Indirect Role of Parental Expectations and the Home Environment. *Journal of Family Psychology*, 19(2), 294-304. <https://doi.org/10.1037/0893-3200.19.2.294>
- DePlanty, J., Coulter-Kern, R., & Duchane, K. A. (2007). Perceptions of parent involvement in academic achievement. *The Journal of Educational Research*, 100 (6), 361-368. DOI: 10.3200/JOER.100.6.361-368
- Desforges, C., & Abouchar, A. (2003). The impact of parental involvement, parental support and family education on pupil achievements and adjustment: A literature review. *Research Report No. 433*. Department for Education and Skills.
- Desimone, L. (1999). Linking parent involvement with student achievement: Do race and income matter? *The Journal of Educational Research*, 93(1), 11-30. <https://doi.org/10.1080/00220679909597625>
- Dohner-Chávez, A. (2005). Connections Between Parental Involvement and Academic Achievement Among Hispanic and Non-Hispanic Students. <https://www.csustan.edu/sites/default/files/honors/documents/journals/entries/DohnerChavez.pdf>
- Epstein, J. L., Sanders, M., Simon, B.S., Salinas, K., Clark, Jansorn, N., Rodriguez, & Voorhis, F. L. (2002). *School, Family, and Community Partnerships*. <https://www.Gov info./gov />

- content /pkg/ERIC-ED 46 70 82 /pdf /ERIC-ED467082.pdf
- Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Westview Press.
- Fan, X., & Chen, M. (2001). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1–22. <https://doi.org/10.1023/A:1009048817385>
- Fisher, K. (2005). The physical environment of school: What do students think? *Environment and Behavior*, 37(4), 546-566.
- Bear, G. G., Yang, C., Mantz, L., Pasipanodya, E., Boyer, D., & Hearn, S. (2014). *Technical manual for Delaware surveys of school climate, bullying victimization, student engagement, and positive, punitive, and social emotional learning techniques*. Retrieved from the Center of Disabilities Studies, Positive Behavioral Supports and School Climate Project website: <http://wordpress.oet.udel.edu/pbs/technical-manual-for-school-climate-surveys>.
- Hamre, B. K., & Pianta, R. C. (2001). Early teacher-child relationships and the trajectory of children's school outcomes through eighth grade. *Child Development*, 72(2), 625–638. <https://doi.org/10.1111/1467-8624.00301>
- Harinarayanan, S., & Pazhanivelu, G. (2018). Impact of School Environment on Academic Achievement of Secondary School Students at Vellore Educational District. *Shanlax International Journal of Education*, 7(1), 13–19. DOI: <http://doi.org/10.5281/zenodo.2529402>
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Henderson, A. T., & Mapp, K. L. (2002). *A new wave of evidence: The impact of school, family, and community connections on student achievement*. National Center for Family and Community Connections with Schools.
- Hill, N. E., & Tyson, D. F. (2009). Parental involvement in middle school: A meta-analytic assessment of the strategies that promote achievement. *Developmental Psychology*, 45(3), 740–763. <https://doi.org/10.1037/a0015362>
- Hoover-Dempsey, K. V., & Sandler, H. M. (1997). Why do parents become involved in their children's education? *Review of Educational Research*, 67(1), 3-42. <https://doi.org/10.3102/00346543067001003>
- Jeynes, W. H. (2003). A meta-analysis: The effects of parental involvement on minority children's academic achievement. *Education and Urban Society*, 35(2), 202-218.
- Jeynes, W. H. (2005). A meta-analysis of the relation of parental involvement to urban elementary school student academic achievement. *Urban Education*, 40(3), 237-269. <https://doi.org/10.1177/0042085905274540>
- Jeynes, W. H. (2007). The relationship between parental involvement and urban secondary school student academic achievement. *A meta-analysis. Urban Education*, 42(1), 82-110.
- Johnson, J. K. & Pontius, A. (1989). Homework: a survey of teacher beliefs and practices. *Research in Education*, 41(1), 71–78. doi:10.1177/003452378904100108
- Johnson, R. C., & Smith, K. P. (2013). The effects of childhood family income on later-life outcomes: A review of research from the 2000s. *The Russell Sage Foundation Journal of the Social Sciences*, 1(2), 123-142.
- Lee, V. E., & Burkam, D. T. (2002). Inequality at the starting gate: Social background differences in achievement as children begin school. Economic Policy Institute.
- Lee, V. E., & Smith, J. B. (1999). Social support and achievement for young adolescents in Chicago: The role of school academic press.

- American Educational Research Journal*, 36(4), 907–945. <https://doi.org/10.2307/1163524>
- Leithwood, K., Louis, K. S., Anderson, S., & Wahlstrom, K. (2004). *How leadership influences student learning*. The Wallace Foundation.
- Lopez, G., Kranz, W., & Gibson, K. (2015). The impact of parental involvement on student achievement in urban elementary schools. *Journal of Urban Education*, 46(3), 23-43.
- Loukas, A., & Murphy, J. L. (2007). Middle school student perceptions of school climate: Examining protective functions on subsequent adjustment problems. *Journal of School Psychology*, 45(3), 293–309. <https://doi.org/10.1016/j.jsp.2006.10.001>
- Marzano, R. J. (2003). *What works in schools: Translating research into action*. ASCD.
- Mayya, S. S. & Roff, S. (2004). Students' Perceptions of Educational Environment: A Comparison of Academic Achievers and Under-Achievers at Kasturba Medical College. *India. Education for Health*, 17 (3), 280 – 291. DOI: 10.1080/13576280400002445
- Nokali, N. E., Bachman, H. J. & Votruba-Drzal, E. (2010). Parent Involvement and academic and social development in elementary school. *Child Development*, 81(3), 988–1005. doi:10.1111/j.1467-8624.2010.01447.x
- Pallant, J. (2011). *SPSS Survival Manual; A step-by-step guide to data analysis using SPSS* (4th edition). China: Everbest Printing.
- Pimparyon, P., & Caleer, S. M., Pemba, S., & Roff, S. (2009). *Educational environment, student approaches to learning and academic achievement in a Thai nursing school. Medical teacher*. <https://doi.org/10.1080/014215900409456>
- Pomerantz, E. M., Moorman, E. A., & Litwack, S. D. (2007). The how, whom, and why of parents' involvement in children's academic lives: More is not always better. *Review of Educational Research*, 77(3), 373–410. <https://doi.org/10.3102/003465430305567>
- Reardon, S. F. (2011). The widening academic achievement gap between the rich and the poor: New evidence and possible explanations. In G. J. Duncan & R. J. Murnane (Eds.), *Whither opportunity? Rising inequality, schools, and children's life chances* (pp. 91-116). Russell Sage Foundation.
- Rivkin, S. G., Hanushek, E. A., & Kain, J. F. (2005). Teachers, schools, and academic achievement. *Econometrica*, 73(2), 417-458.
- Rumberger, R. W. (2011). *Dropping out: Why students drop out of high school and what can be done about it*. Harvard University Press.
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417-453
- Smith, P. (2017). *Creating a positive school culture: How principals and teachers can solve problems together*. ASCD.
- Smith, R., & Johnson, M. J. (2019). School engagement: A comparison of private and public school students. *Journal of School Choice*, 13(1), 57-76.
- Steinmayr, R., Meißner, A., Weidinger, A. F., & Wirthwein, L. (2015). *Academic Achievement*. Oxford Bibliographies. DOI: 10.1093/OBO/9780199756810-0108
- Thapa, A., Cohen, J., Guffey, S., & Higgins-D'Alessandro, A. (2013). A review of school climate research. *Review of Educational Research*, 83(3), 357–385. <https://doi.org/10.3102/0034654313483907>
- Zarate, M. E. (2007). *Understanding Latino Parental involvement in education, Perceptions, Expectations, and Recommendations*. The Tomás Rivera Policy Institute.