

**ADDIS ABABA UNIVERSITY COLLEGE OF EDUCATION AND
LANGUAGE STUDIES SCHOOL OF PSYCHOLOGY**



**Parental Involvement, Classroom Environment, and Academic
Performance: The Case of Selected Private and Government Secondary
Schools in Addis Ababa**

By
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November 2025 G.C
Addis Ababa

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Parental Involvement, Classroom Environment, and Academic Performance: The Case of
Selected Private and Government Secondary Schools in Addis Ababa

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the Degree of Master of Arts in Social Psychology

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DECLARATION

I, the undersigned, declare that this thesis is my original work and has not been presented for a degree in any university and that all sources of materials (published and unpublished) used for the thesis have been dually acknowledged in the text as well as reference lists.

Name Ribka Deribe

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Date _____

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ABSTRACT

A sequential explanatory mixed-methods research design was adopted for the study to explore the relationship between classroom environment, parental involvement, and academic performance of Grade 11 students in private and government schools in Addis Ketema sub-city. Using stratified random sampling, 214 students were selected: 107 from government schools and 107 from private schools. Quantitative data from questionnaires and academic records were analyzed using descriptive statistics, t-tests, correlation, multiple regression, and Mann-Whitney U tests. Qualitative data from semi-structured interviews were analyzed thematically. Findings presented a complex disparity. Quantitatively, private school students reported significantly higher levels in resource-sensitive dimensions: parental monitoring, expectations, and academic support, and teacher support and student involvement. Relational aspects, however, such as parental emotional support, autonomy support, and peer cohesion, did not present significant difference by school type. The thematic analysis of these patterns made sense, revealing qualitative contrasts in the nature of these experiences: private school students described "High Achievement Pressure" and "Resource-Based Support," whereas government school students reported "Practical Achievement Pressure" and "Encouragement-Oriented Support." Academic performance correlated moderately with both parental involvement ($r = 0.398$, $p = 0.019$) and classroom environment ($r = 0.498$, $p = 0.002$). Regression analysis, however, showed that together they account for only 21.6% of the variance in academic performance, with a slight lead of classroom environment ($\beta = 0.30$) as compared to the contribution of parental involvement ($\beta = 0.26$) as a predictor. It follows then that a great proportion of other factors exert influence. The study concludes that school type creates structural advantages in resource-dependent areas but that the core relational elements of a supportive educational setting can be cultivated within both systems. It offers recommendations for putting emphasis on quality teacher-student relationships and autonomy-supportive parenting practices irrespective of school contexts.

Keywords: Academic Performance; Parental Involvement; Classroom Environment; School Type; Socioeconomic Status; Mixed-Methods Research

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List of Abbreviations

α	Cronbach's Alpha
β	Standardized regression coefficient
d	Cohen's d (Measure of Effect Size)
GPA	Grade Point Average
HDS	Hoove-Dempsey and Sandler Scale
LE	Learning Environment
M	Mean (Average)
ΔM	Mean Difference
MANOVA	Multivariate Analysis of Variance
MoE	Ministry of Education
n	Sample Size
OECD	Organization for Economic Co-operation and Development
p	p-value (Statistical Significance)
PASS	Parental Autonomy Support Scale
PBI	Parental Behavior Inventory
PBS	Parental Behavior Scale
PI	Parental Involvement
PIS	Parental Involvement Scale
r	Correlation Coefficient
R^2	coefficient of determination
SD	Standard Deviation
SES	Socioeconomic Status
SPSS	Statistical Package for the Social Sciences
UNESCO	United Nations Educational, Scientific, and Cultural Organization
WIHIC	What Is Happening In this Class? (Questionnaire)

CHAPTER ONE

INTRODUCTION

1.1. Background of the Study

Education is one of the most important sectors contributing to economic, social, and political growth in the nation. In light of education's importance, countries like Ethiopia have made immense investments in constructing new schools to expand access to education. Despite the investment being worthwhile, attending school does not necessarily equate to learning. Thus, alongside the expansion of schooling, studying variables that enhance the educational attainment and engagement of the students will be key to increased educational performance.

Educational performance is a complex construct and, therefore, impossible to define with accuracy. For this research, 'educational performance' refers to grades on national standardized tests, which are one of the main determiners of student achievement and university readiness in Ethiopia. Various variables impact a student's performance. Waters and Marzano (2006) enumerate the variables under school, student, or parental factors. There are several sub-factors in each of the categories. Thus, in a bid to identify the most meaningful and conclusive variables to impact a student's performance, a researcher must assess the effect of an array of variables. This adds complexity and a time-consuming process to the research.

Although several factors might prevent students from doing well academically, studying the psychology of learning enables us to identify the areas that need more scrutiny. Learning, Walberg's (1982) Theory of Educational Productivity stipulates, comprises three diverse groups of skills, namely affective, cognitive, and behavioral. Given the high probability that the student will acquire these skills in these two settings, the parent and the classroom play a significant role in shaping the three skills of the student. In light of this, examining the impact of parental involvement and the classroom seems to be vital in addressing the problem of that issue to student performance.

Regarding parental involvement, as much as it may seem sensible, there is no consensus regarding the definition that constructs of academic parental involvement (Wilder, 2023). It has been given a more inclusive and global definition by Grolnick and Slowiacek (1994), which states that it is the investment of resources by the parent towards the child in a specific area, that

is, education. Parent involvement entails both home and school activities, as the Epstein model suggests (Epstein & Salinas, 2004).

An overview by A. M. Ryan and Patrick (2001) indicates that parent involvement with students has varied impacts on student academic achievement, from enhanced literacy, reducing school dropout, and setting household rules to regulate student behavior. Also, the review has confirmed that parental involvement has a significant role in the emotional well-being of pupils, like reducing depression and improving students' attitude towards learning. Wilder (2023) conducted a meta-analysis and discovered that there is a positive connection between parental involvement and academic performance regardless of parental socioeconomic status, ethnicity, students' age, and grade.

Parent involvement was, according to Wang and Sheikh-Khalil (2014), from their research with 10th and 11th-grade high school students, identified as increasing behavioral and emotional engagement with schoolwork, with direct and indirect impacts on students' academic achievement and mental health. Parental motivational beliefs are a key component of intervention plans for children exhibiting disruptive behavior (Wang & Sheikh-Khalil, 2014).

Ross (2016) shows that parental aspirations, school engagement, and parent-school communication have a significant impact on high school and postsecondary school persistence among students. Similarly, Barnard's (2004) work shows that parent-school engagement significantly reduces high school dropouts, increases on-time graduation, and leads to the highest grade completed. Johnston and Fogelman (1998) found that children of committed couples possess higher levels of education and career goals, are more likely to enroll in advanced classes, and are more invested in learning for life. This study also highlights that the more invested the parents are in the education of their children, the less crime, drug and alcohol abuse, and other anti-social behaviors exist among teenagers.

As Gonzalez-DeHass et al. (2005) review states, parental involvement conveys the message to children that they are important to their parents. This provides a source of motivation as children meet the academic, social, and personal challenges each new day brings. This is especially significant to adolescents who are most prone to relying on peers excessively, thus experiencing unhealthy effects like improper social attitudes and behaviors, truancy, use of

drugs, depression, poor grades, absenteeism, school discipline problems, and school dropout. Involvement gives the impression that parents are valued and committed to the importance of a good education; this enhances the motivation of the student in school.

While there is a positive relationship between student accomplishments across all ages and grade levels, the quality of parental involvement and its effect can be enormously different. Wilder's (2023) meta-analysis research reveals that in the case of teenage students, parental involvement made a critical difference when it came in the form of parental expectation over their child's performance. On the other hand, parental involvement in homework assistance among teenage students was negatively or weakly associated with their performance at school. The explanation offered in this research was that most parents are not professionally qualified to teach some rules, regardless of the level of difficulty, or might not be familiar with effective teaching procedures. Additionally, becoming an adolescent, most often in middle school, is also the period when kids attempt to break free from their parents.

Although there is evidence in all racial/ethnic groups that parental involvement has an impact (Wilder, 2023). Some hypothesize that the impact of parental involvement may vary between ethnic groups. For example, Huntsinger and Jose (2009) in their research found European and Chinese parents' differences in behavior and belief regarding parent involvement. Chinese parents' beliefs regarding education are outcome-oriented and involve more systematic home monitoring while participating in children's learning (establishing a home learning environment, imposing specific rules for media/modern technology use, and arranging after-school activities for children). On the other hand, European parents appreciate more of the educational process; hence, they are more involved in the entire education (accompanying children to other social experiences, in children's outdoor activities).

A meta-analysis in Jeynes (2007) established that African Americans are being helped more with parental involvement than Latinos, while Asian Americans are being helped the least. This is because there is cultural encouragement of parental involvement and because Asian American children are less likely to be from single-parent families. Conversely, African American children are from single-parent households than others, and that may make it more difficult for that single parent to be as invested in a parent and in an advocate for their child's schooling because they are subject to financial constraints, scheduling problems, and attempting

to balance work and being a parent. Yet, when a parent who is single is working on his/her child's education, it assists in delivering the educational and emotional support that can be missing. (Jeynes, 2007).

Overall, different studies have confirmed that there is a positive correlation between parental involvement and academic performance. However, the relationship is influenced by numerous factors, including the socioeconomic status, educational levels of parents, grade level of children, past academic performance, gender, and age (W. Fan et al., 2012). This will be discussed in depth in this thesis as well.

In addition to the mentioned factors, the education policies of countries, school practices, and programs also have a great impact on parental involvement in their child's schooling. According to this research, Mapp and Kuttner (2013), policy designs focusing on parental empowerment and capacity building can assist disadvantaged families, too, to acquire knowledge and skills that enable them to engage with the educational system. This focus on families alone does not achieve the intended impact if the school fails to create an open and welcoming atmosphere to enable increased parental participation. Hence, education policy needs to consider staff training in schools too.

Mekonnen (2017) further notes that Ethiopian education policy aims to enhance parental involvement in the management of elementary schools with the aim of enhancing the quality of education at the grassroots level and through improved family-school governance interactions. School principals and parent-teacher association chairs did not seem to appreciate the potential value that could emanate from total parental involvement in the management of elementary schools.

Other than parental participation, research indicates that the classroom environment significantly impacts the academic performance of a student. According to Moos and Trickett (1974), the psychosocial classroom environment in which this study mainly focused has three dimensions that is, relationship, personal development, and system maintenance and change. The relationship dimension considers the interpersonal relationships among the teachers and students and among the students. The personal growth dimension emphasizes the way the class assists in the development of the learner as an individual, both academically and socially. System redesign and upkeep dimension assess class customs and guidelines.

In a positive social classroom, students feel at liberty to ask teachers questions about any topic they are confused about without fear of receiving scathing criticism. Respect among themselves builds a climate within the classroom where students feel they can come up with thoughts and reflect on their options, particularly during adolescence. It can also affect adaptive and emotional functioning since adolescents are more sensitive to social comparison, self-conscious, and insightful.

A study by Patrick et al. (2007) on teacher-student relationships illustrates that students are more motivated in their schoolwork, place a high premium on effort, and are more attentive if they are cared for by their teachers. Another study by De Lisi and Golbeck (2014) determines that respectful interactions between teachers and students enrich the cognitive and affective components of the students, how they feel they achieve, and comprehend the subject matter. Tao, Y., et al. (2022) demonstrated that the student's capacity to learn is strongly positively correlated with the extent and frequency of employing praise during class time and the level of attention given to individuals or groups.

Besides care, support, and courtesy, teacher-student and student-student interaction in the form of task-related interaction also plays a part in motivating and performing students. Fraser and Fisher (1982) identified that students' perception of their teachers' encouragement of being actively involved in lessons and class discussions was associated with their school and subject interest and preference. Webb, N. M., et al. (2019) identified that teaching styles that promote positive task-focused social interaction among students boost critical thinking, problem-solving, and diversity of perspectives.

School type also influences classroom factors. On a general level, private schools are better off than the government in terms of better school buildings and infrastructure, smaller class size, better academic achievement, and better-qualified staff. There is actually limited research existing in the case of the change in social interaction while transitioning from private classes to government classes. Despite its inconsistency, the existing research indicates that family socioeconomic status and student demographic differences have their own share in the difference in classroom environment between government and private schools.

The extent and impact of the classroom environment vary according to the type of school (private or public) and age. Though all ages of students are apt to benefit from the social

environment in the classroom in terms of motivation and engagement, early adolescents may find it specifically applicable. There may be many reasons for this; compared to children, early adolescents decrease their effort on school work, doubt their ability to do well at school, and doubt the significance of getting their work done (Wang, M. T., & Sheikh-Khalil, S, 2014). Studies also indicate that student success and academic performance affect one another in various ways, which contribute to student success and overall academic achievement.

For instance, the parents' motivational beliefs are a key element in intervention for children with disruptive behavior (Wang, M. T., & Sheikh-Khalil, S, 2014). And adolescents were also more inclined towards alcohol and drug use when the parents' monitoring was less (Wang & Sheikh-Khalil, 2014). Decreasing it may be a part of creating a more positive and inclusive learning climate. School and classroom environment also influence parental involvement, in turn. Epstein (2001) highlights that schools with an inviting climate, where communication is frequent and open, witness high parental involvement. Teachers who share information regarding student progress and classroom activities as a frequent practice create an environment in which parents feel they can participate. In summary, research has shown that the academic success of students, mental health, behavior, motivation, and school attendance are highly influenced by classroom environment and parental support.

Although the importance of classroom environments and parental involvement is well documented in international literature, specific manifestations and their synergistic effects are shaped profoundly by local context. In Ethiopia, there is a chasm evident between policy intent and what happens in practice. Notwithstanding the national policies championing community engagement, the empirical studies conducted show that parental involvement often remains restricted to financial contributions and infrequent attendance at school meetings. Its translation into daily learning practices and tangible impacts on student achievements remain poorly understood (Mekonnen, 2017).

The complexity of this is further heightened by the sharply stratified educational system in the country. There has been a well-documented division between private and government schools based on resource distribution, class size, and students' socioeconomic background (Wondimu, 2019). This structural divide hints that the mechanisms through which school and

classroom environments and parental involvement are linked to academic outcomes are unlikely to be the same across the two sectors.

The need for a nuanced understanding is particularly high at the secondary level. Adolescents face unique hurdles such as waning academic interest, heightened sensitivity to social rejection, and complexities involved in navigating course content. During this critical period, the interplay between parental socioeconomic status, classroom environment, and school type becomes especially pivotal. However, prior Ethiopian educational studies are generally fragmented. Past studies have tended to explore either the classroom environment *or* parental involvement in isolation, rather than in combination. Particularly, few studies have considered how these variables interact, which particular dimensions are most influential, and how their effects are moderated by the critical contextual factors of school type (private vs. government) and parental SES.

Consequently, the study will seek to bridge this gap. This research work will investigate how parental involvement, classroom environment, and academic performance interact across private and government schools to identify the strongest predictors of student success. The findings shall therefore provide the evidence base that will be useful in formulating targeted remedial strategies to address the challenges of Ethiopia's academic performance and add meaningfully to the broader discourse on educational equity.

1.2. Statement of the Problem

Ethiopia has achieved notable success in expanding educational access in recent years (Goshu & Woldeamanuel, 2019). However, this increased enrollment has not consistently translated into quality learning. A stark indicator of this crisis is revealed by Molla and Tiruneh (2023), who found that nearly 97% of secondary school leavers fail to meet the minimum proficiency standard on national exams. This alarming statistic is compounded by further evidence of systemic challenges, including widespread low academic motivation (Ayele, 2020), a 14% annual dropout rate, and low completion rates (Sileshi et al., 2024). These issues, alongside high rates of student absenteeism and youth substance use (Birhanu et al., 2014), clearly indicate that the central challenge facing Ethiopian education is no longer access, but rather the quality of learning and student engagement. While curriculum reforms have been

initiated, the fundamental drivers of student motivation and performance remain inadequately addressed.

Extensive global research underscores that classroom environment and parental engagement are pivotal factors influencing academic performance, motivation, and persistence, particularly during adolescence (Hill & Wigfield, 1984). Yet, within the Ethiopian context, research on the cumulative effects of these variables remains limited. Existing local studies, such as those by Abraha (2022) and A. Assefa and Sintayehu (2019), have established preliminary correlations but often fail to dissect the nuanced ways in which specific dimensions of parental involvement (e.g., emotional support versus academic guidance) interact with classroom dynamics. Furthermore, prior investigations into the classroom environment have predominantly focused on physical infrastructure, neglecting the critical socio-emotional and instructional dimensions that define student interaction and experience.

A more significant limitation emerges from the literature's general failure to contextualize these relationships within Ethiopia's stratified educational system. While the structural, resource-based, and pedagogical disparities between private and government schools are well-documented in comparative education research (Chubb & Moe, 1990), and the stratifying effect of parental SES is a cornerstone of educational sociology (Sirin, 2005), their function as potential moderators of key educational processes is unexamined. The specific question of whether the influence of parental involvement and classroom environment on academic performance is conditional upon school type and family socioeconomic status remains a critical, unanswered empirical question in the Ethiopian context.

Therefore, to address these interconnected gaps, this study aims to systematically investigate the relationships between parental involvement, classroom environment, and academic performance in Ethiopian high schools. Specifically, it will (1) assess the levels and interrelationships of these variables, (2) determine the unique and joint variance they account for in academic performance, and (3) examine the differences in these variables as a function of school type and parental socioeconomic status (SES). The findings are expected to provide evidence-based insights to help educators and policymakers enhance student outcomes through targeted improvements in parental engagement and classroom climate.

1.3. Research Question

The following research questions guide this study:

1. What are the levels of parental involvement, classroom environment, and academic performance among private and government schools?
2. What is the nature of the relationship (i.e., direction, strength, and statistical significance) among parental involvement, class environment, and academic performance?
3. What proportion of variance do parental involvement and class environment contribute to academic performance independently and jointly?
4. Are there statistically significant differences in parental involvement, Class Environment, and academic performance with respect to school type and parent socioeconomic status?

1.4 Objective of this study

1.4.1 General objective

The primary objective of this study is to investigate the relationship among classroom environment, parental involvement, and academic performance in selected schools.

1.4.2 Specific Objective

- ✓ Identify the levels of Parental Involvement and social class environment among high school students
- ✓ To examine the relationship between the classroom social environment and student academic achievement.
- ✓ To examine the relationship between parental involvement and student academic achievement.
- ✓ Identify if there are statistically significant differences in the influence of parental involvement with respect to parental educational level and socioeconomic status.
- ✓ Identify if there are statistically significant differences in the influence of classroom environment with respect to school type, sex, and grade level.

1.5 Significance of the Study

Examining the impact of classroom environment and parental involvement on the academic performance of students is of importance to policymakers, parents, school

administrators, and teachers. The findings are expected to raise parents' awareness, perception, interest, competence, and responsibility for their children's learning. Encourage parents and school collaboration in establishing a caring community that values student achievement. Give school administrators and educators an understanding of how to improve the classroom setting so that students are engaged and devoted to learning. It also exposes students' issues in the classroom, providing policymakers with an understanding of developing policies that mitigate these issues.

1.6 Definitions of Important Terms

Parent: In this study, parents are defined as any adult with parenting duties who contacts the school on behalf of the child, not simply the biological parents.

Parental Involvement refers to the active engagement of parents at home and in school in their children's educational process (Wilder, 2023). As measured by school involvement, homework assistance, aspiration and expectation, and behavior reinforcement and encouragement.

Academic performance refers to the extent to which a student has achieved their educational goals (knowledge gained) over a specified period of time. It is typically measured by grades, test scores, completion of assignments, and other indicators of learning and knowledge acquisition (Narad & Abdullah, 2016).

Classroom Social environment: the interpersonal interactions between teacher and students as well as among students, the atmosphere that facilitates social and academic development of students, and the rules and routines that govern the environment (Moos & Trickett, 1974).

1.7 Scope of the Study

The study specifies the impacts of parent and classroom involvement on academic achievement, and it focuses on some private and government high schools in Addis Ababa. Government vs. private schools assist one in assessing the impacts of a hybrid environment of education on students' academic achievement. The study will be based on the questionnaire and interview responses of students. A student's performance will be measured by his/her year-end grade from the previous year. For ease and feasibility of data collection through interviews and surveys, the two sites have been limited to Addis Ketema.

Although classroom environment and the impact of parental engagement have been documented in the systematic reviews by Jaiswal and Choudhuri (2017) and Strelan et al. (2020) in high school students, there is not much evidence on this topic for Ethiopian contexts; thus, this study considers secondary schools (9-12), grade 11 students specifically. This is so because (1) all students took the same class during grade 10; such equivalence controls for prior knowledge differences, facilitating analysis of the impact of family/classroom variables on achievement under equivalent starting conditions. (2) Adolescence is a critical period of transition between parental and classroom control over instruction, and (3) such transition is central to addressing Ethiopia's university preparation gaps (low Grade 12 passing rates).

Further, high school students are also less motivated, and academic life is more pronounced in high school compared to primary school. Additionally, in contrast to primary school students, adolescents' autonomy needs, fear of rejection by others, and the intrinsically complicated nature of the content itself would have to be a threat to the student academy (N. E. Hill & Tyson, 2009). Therefore, all this has to be kept in mind.

CHAPTER TWO

LITERATURE REVIEW

2.1. Academic Performance: Concepts, Assessment, and Theories

2.1.1. Concept of Academic Performance

Academic performance is a complex and multifaceted phenomenon, making it challenging to describe. The researchers disagree on what academic performance is (York et al., 2019). Wilder, (2023), and Yusuf et al. (2016) define academic performance as the aggregate of a student's test scores, e.g., final examinations, midterms, and class tests. Likewise, academic success, as Caballero summarized by Lamas (2015) puts it, is fulfilling the goals, achievements, and objectives laid out in the course or program one is pursuing. Academic success, as York et al. (2019) dictate, is students' ability to sustain seeking a degree despite institutional constraints and challenges, and they try to incorporate emotional elements as well.

Others attempt to define academic achievement in terms of cognitive and non-cognitive skills. For example, Duckworth and Seligman (2005) define academic achievement not only in terms of test scores and grades but also the student's active participation in learning processes, their cognitive and emotional growth, and social competence. Dennis et al. (2005) also explain that two things are responsible for academic achievement: the internal student (e.g., motivation and aptitude) and the external environment to which the student is exposed.

Astin (1993) believes there are environmental and input variables that influence academic performance. A characteristic an individual student brings to a learning setting in an attempt to achieve academic performance is referred to as an input. This includes the student's socioeconomic status, motivation, values, aptitudes, past academic success, and demographic characteristics (age, gender, and race). The student's social and educational history, however, is shaped by the environment. It comprises the classroom environment, the type of instruction, and the school climate.

2.1.2. Assessment of Academic Performance

Despite the definition, there exists no consensus in studies on what one would use to measure the academic performance of the student (York et al., 2019). Student academic performance must be measured by competencies acquired in the learning process, states Pascarella and Terenzini (1980). Others (Yusuf et al., 2016) used the student's total score as a measure of the student academic performance. To York et al. (2019), academic achievement is measured by considering numerous dimensions, including grade (GPA), satisfaction, learning skills, career attainment, persistence, and attainment of learning goals. The result of Sadipour et al., (2017) study showed that emotional intelligence and goal achievement drives are more predictive of students' academic performance than the ability of students to think critically. As indicated by Pritchard and Wilson (2003), the effective accomplishment of students in degree courses despite social and emotional predictors used in assessing academic performance. Despite multiple measures for assessing academic performance, solidity, complexity, and resources also are difficult in application.

For instance, relative to the other parameters (emotional intelligence, skill learned, motivation, or satisfaction level), grades or examination results are typically used as a method or measure of assessing students' academic performance since they are the most readily available measures for the institutions, as reported by York et al. (2019). But it is conceivable that with this approach, there is the possibility of obtaining a weaker measurement of students' performance in academics.

2.2. Classroom Environment: Concepts, Assessment, and Theories

2.2.1. Concept of Classroom Environment

Moos and Trickett (1974) developed a comprehensive framework to define classroom environments along three psychosocial dimensions: the relationship dimension, personal development dimension, and system maintenance and change dimension. The relationship dimension focuses on interpersonal relationships between students and teachers and among students, including teacher support, student involvement, peer cohesion, and affiliation.

Teacher support measures that students perceive their teachers treat them as valued contributors and respect their physical and emotional health, while peer cohesion measures the

closeness students feel to their peers. The personal development area tests how well the classroom facilitates students' growth as individuals both in terms of academics and social skills, using critical thinking, creative expression, and acceptance of multiple learning styles and needs. Finally, the system maintenance and change dimension assesses the organizational system of the classroom, i.e., rules, expectations, routines, and capacity for innovation and adaptation (Moos & Trickett, 1974). All of these dimensions create a psychosocial environment that contributes significantly to influencing student outcomes. Classrooms with positive social environments tend to foster students' interest, belonging, enjoyment, and respect for one another (Wentzel et al., 2010), thus having direct impacts on their behavior, motivation, and academic performances (A. M. Ryan & Patrick, 2001).

While positive classroom environments benefit students of all ages, adolescents are especially susceptible to them because they are more sensitive to social comparisons and more receptive to peer influence (Burnett et al., 2014). This developmental susceptibility makes the quality of classroom environments especially relevant at the secondary level since adolescents require supportive contexts to assist them to deal with their emerging social awareness and emotional requirements along with academic curiosity.

2.2.2. Measuring Classroom Environment

Fraser's (1998) WIHIC scale is a powerful measure of classroom environment based on Moos' theoretical model. WIHIC measures seven broad dimensions: teacher support (teachers' demonstration of concern and equity); student engagement (positive involvement in the learning process); student bonding (quality of relationships with peers); task orientation (academic emphasis and objectives' clearness); inquiry (emphasis on critical thinking and problem-solving); rule clarity (extent to which expectations and discipline are clear); and equity (treatment of students in an equitable way). It has been extensively tested across diverse cultural contexts and is particularly well-adapted to evaluate high school contexts. Research using the WIHIC has demonstrated some dimensions to be more strongly associated with academic performance than others. Teacher support, student cooperation, and task orientation are common predictors of student success (Fraser & Fisher, 1982), while factors such as clear rules and equity are major contributors to productive learning environments, especially in challenging environments.

Initial evidence in the schools of Ethiopia suggests that factors like investigation and student involvement may require particular attention because traditional teacher-centered practices mostly dominate teaching routines (Ayele, 2020). The strength of WIHIC is that it captures the social-emotional climate (relationship dimension) and quality of teaching (personal development dimension) while holding constant structural variables (system maintenance dimension). However, as for any self-report tool, the WIHIC is imperfect. Its application of student self-reporting makes it possible for findings to be colored with individual prejudice, prior experience, or cultural assumptions. In addition, while the scale has been translated for use in most countries, application within Ethiopian schools might require careful contextualization to guarantee sensitivity to local norms and issues within education, such as excess class size or resource shortages.

2.2.3. Moos Model of Classroom Environment

Moos model is an effective tool for understanding how classroom settings influence students' achievement and behavior (Moos & Trickett, 1974). The dimension of relationship emphasizes the significance of positive student-teacher relations and peer relations in creating a positive learning environment.

Teachers who are approachable, respectful, and fair construct environments where students feel appreciated and inspired to learn. Similarly, classrooms that promote healthy peer relationships through collaborative tasks and one another's respect result in feelings of belongingness and involvement among students. The personal development component focuses on the aspect of promoting the intellectual and social growth of students. Independent thought, creativity, and self-expression classrooms that accommodate multiple learning needs allow students to grow both personally and intellectually. The component is most significant in secondary school where adolescents are creating their identities and stand to gain from being given opportunities to experiment with ideas and express themselves. The change and system maintenance dimension attempt to address the organizational characteristics of classroom environments. Effective classrooms balance explicit routines and structures with flexibility in accommodating student needs and implementing new approaches. Stated rules and expectations in an easy-to-understand way provide stability, and vulnerability to adaptability and innovation in instruction create the learning environment as dynamic and adaptive.

Together, these dimensions offer educators and schools an integrated model for creating maximum learning environments. With positive relationships, fostering personal growth, and maintaining effective systems, student engagement and achievement can be enhanced. The Moos model's emphasis on the social-emotional and structural dynamics of classrooms renders it particularly effective in addressing the multifaceted needs of secondary school students in diverse settings, like the evolving educational environment of Ethiopia.

2.3. Parental Involvement: Concepts, Measurement, and Theories

2.3.1. Concept of Parental Involvement

Despite the face value definition, the working definition of parental involvement is vague and inconsistent, from narrow to wide. Under the narrow category, parent involvement refers to a particular activity. This includes school activities attendance, talking with parents about current school experience, planning of the high school program, home rules, educational investment, or homework monitoring (Walberg, 1982). Parental behavioral, cognitive, and personal involvement are all under the second category, which covers all of these areas. Grolnick and Slowiaczek (1994) have come up with one integrated definition; it describes the parent's commitment of resources to the child in a particular arena, particularly in education.

This theoretical explanation has three domains: behavioral engagement (e.g., school attendance and participation in activities such as open houses), cognitive engagement (e.g., providing the child with introduction to materials and activities that tax the child's intellectual abilities, such as books and current events), and personal engagement (e.g., parents' interest in and concern for the child's education and emotional well-being, including the enhancement of a positive school attitude).

2.3.1.1. Parental involvement types

Two broad categories of parental engagement in their children's education were established by Epstein (1987): (1) parent-school collaboration and (2) parent-child collaboration at home. Both forms of parent engagement will be used throughout this thesis.

I. Parental school involvement

Parental school involvement, according to Wilder, S. (2023), is when parents visit school events, visit teachers at parent-teacher conferences, talk with teachers in regards to children's

school performance, and participate in school activities such as fundraising, volunteering, and voting on school councils, steering committees, and advisory councils.

II Parental home involvement

"Parental home involvement" is the term assigned to describe the efforts parents take to contribute to their children's education at home. This involves parents communicating with their children regarding school affairs, monitoring their academic performance, helping with homework or other learning tasks at home, and setting rules for the home, including not viewing television. Parental involvement in the home also involves parental expectations regarding their child's performance (Wilder, S, 2023).

2.3.2. Measurement of Parental Involvement

Parental involvement be quantified using multi-dimensional measurement tools that capture both home- and school-based involvement. The Parental Involvement Rating Scale (PIRS), originally developed by Gafoor and Naseema (2001) and revised for older teen populations, assesses five significant aspects of parental involvement consistent with current educational literature (Wang & Sheikh-Khalil, 2014). These aspects identify the evolving knowledge base concerning how parents influence students' academic trajectories, particularly at the secondary level.

Academic support is the first factor, ranging from direct assistance with homework to the offer of learning resources. Homework help shows diminishing returns throughout adolescence ($\beta = .18, p < .05$), yet strategic academic support, such as concept explanation and provision of resources, remains significant (Jeynes, 2007). This reinforces Vygotsky's zone of proximal development, as parent scaffolding can be adjusted according to the level of development of the child.

The emotional support factor evaluates parents' capacity to create motivation and resilience. Research confirms that emotional support, as measured through encouragement subscales and stress management subscales, correlates moderately with school engagement ($r = .34$) and mediates academic pressure effects (Pomerantz et al., 2007). This factor is of greatest significance in the Ethiopian context, where high-stakes testing increases the anxiety levels of students (Ayele, 2020).

Talk between parents and children on academic matters is a third factor, assessing the quality and frequency of parent-child discussion about school issues. These range from the daily school routine to distant educational planning. Academic talk of quality accounts for 29% of the variance in achievement goal orientation (N. E. Hill & Tyson, 2009), and metacognitive talk about learning strategies has stronger effects than superficial questions about grades.

Autonomy support has emerged as a vital fourth factor of adolescent study. In contradistinction to younger kids, secondary students are aided the most when parents achieve a balance between independence and guidance (Wilder, 2023). This includes providing rationales for educational standards and providing space for age-appropriate decision-making, which has been associated with 0.5 standard deviation increases in self-regulated learning (Pomerantz et al., 2007).

School-based involvement forms the fifth dimension, but its impact differs across cultural contexts. Although Western studies report moderate effects ($r = .22$ with attendance; Epstein, 1987), Ethiopian studies report that school participation can be limited by work schedules, i.e., working hours and school travel (Mekonnen, 2017). The PIRS adapts the above dimension to incorporate both formal (PTA meetings) and informal (teacher speeches) involvement.

The PIRS instrument, tailored for Ethiopian settings, possesses strong psychometric measures, with Cronbach's alpha = 0.79 to 0.86 on subscales in validation research ($N = 120$). Confirmatory factor analysis of the five-factor model confirms the measure ($CFI = .91$), although researchers note it predicts humanities achievement ($\beta = .21$) somewhat better than STEM achievement ($\beta = .12$) and may be suggestive of measurement bias in quantitative disciplines.

This multi-faceted approach goes beyond the over simplistic participation indicators, capturing the evolution of parental involvement throughout adolescence. It sheds light particularly on the Ethiopian education system, wherein an older type of involvement is being modified to accommodate the students in secondary education as they encounter more complicated academic trajectories.

2.4 Empirical Review of the Relations between Parental Involvement, Social Classroom Environment, and Academic Performance

2.4.1 Relations between Classroom Environment and Academic Performance

As it is rightly assumed, the classroom environment entails the interaction between students and between teachers and students. Such interaction affects students' performance in class directly or indirectly.

The relationship of classroom social interaction to student academic achievement is empirically examined on numerous dimensions. According to A. M. Ryan and Patrick (2001) the following are the elements: 1) support of teachers; 2) promoting mutual respect; 3) promoting student task-related engagement; and 4) promoting performance goals. This article explains the four dimensions and how they relate to students' academic progress

2.4.1.1. Teachers' Support and Academic Performance

Fraser and Fisher (1982) used the term teacher support to refer to students' perception that their teachers regard them with respect, care about them, and build a personal bond with them. Teacher support may be organizational, emotional, or instructional.

Emotional intimacy, compliments, and care about students' issues are aspects of emotional support (Hamre & Pianta, 2006). On the other hand, organizational support entails observing the classroom environment and student conduct, and developing an operational and ordered environment for students to accomplish their learning objectives (Creemers, 1994). According to Demaray and Malecki (2010), instructional support includes encouraging students, assisting them in finishing assignments, and providing feedback on work. A. M. Ryan and Patrick (2001), there is a positive correlation between teachers' support and students' academic achievement and motivation.

Specifically, teachers' emotional support was highly correlated with student academic achievement ($r = 0.84$). These are likely due to the fact that being well taken care of by a teacher increases students' investment in school and desire to please the teacher and diminishes school concerns that get in the way of thinking about work and learning. As per Chen's (2005) study among Hong Kong secondary students on English, mathematics, and Chinese subjects, the teacher-perceived support of adolescent students was found to have a high correlation with student achievement directly ($r = 0.35$) and indirectly with student motivation ($r = 0.14$). Total effect correlation was revealed as 0.49. It is much larger than adolescent perceived support of peers ($r = 0$) and parents ($r = -0.19$). This study asserts that the Teachers play a very influential role in the academic motivation and attainment of students, and have more mandatory knowledge

and skill than peers or parents to provide the kinds of assistance that would facilitate student success. Nevertheless, findings from this study are only generalizable to students with comparable backgrounds (i.e., low socioeconomic status, low attainment); this may undermine the contribution of parental engagement above teachers. Fraser and Fisher (1982) and Midgley et al. (1995) also depict that teachers' belief in students' support is positively linked with their adaptive motivational beliefs and with learning behavior. If students feel that their teacher supports them, they show greater interest, value, effort, and pleasure in their work (Fraser & Fisher, 1982; Midgley et al., 1995).

Though studies considered in this review establish the need for teacher support in affecting students' academic performance, most studies do not assess either directly or indirectly which form of teacher support matters in student achievement. Tao et al. (2022) establish that the extent of impact varies with the type of support that the students received from their lecturers (Tao et al., 2022).

2.4.1.2 Promoting Respect and Student Academic Performance

Promoting respect for each other involves creating an environment in which students are respected and valued by their peers and teachers. Such an environment will generate a climate in which students will be able to concentrate on comprehending assignments without fear of what others may say if they make a mistake or require help. Students will be emotionally and psychologically motivated by this, which will ultimately affect academic success (A. M. Ryan & Patrick, 2001).

Turner et al. (1998) describe how mutual respect in the class may lead to psychological comfort and safety on the part of the learners, e.g., low threat and low anxiety. The learners, thus, are expected to engage in their learning in a way that is hard work and strategic without fear of making mistakes as they interact with their instructors.

The research by Jones et al. (2022) indicates that respectful classrooms create a setting in which students engage in class activity in group and individual work willingly. It also creates a setting where a student freely asks questions without being embarrassed about making mistakes—this link between student engagement and academic performance.

Clark et al. (2003) assert and Rubin et al. (2009) established in their research that rejected or in the most severe cases, bullied adolescents are at risk for internalizing and externalizing disorders (such as aggression), while adolescents who are being neglected (not noticed) by their peers are at risk for dealing with the internalizing problems (such as loneliness and fearfulness). Lower academic motivation, school disengagement, and poorer academic achievement are all linked to these deleterious social-emotional outcomes (Bellmore, 2011).

Lastly, the studies summarized above indicate that a respectful classroom will contribute to emotional well-being, mental health, and academic performance. Therefore, encouraging mutual respect fosters a healthy environment that promotes student engagement, motivation, and achievement while minimizing emotional and social issues. Despite the generalizability of the studies (Jones et al., 2022; A. M. Ryan & Patrick, 2001). There is a limitation with respect to deciding if the effect of mutual respect might be different in different cultural, geographic, or socioeconomic settings and findings from one region or part may not be transferred with freedom to others. In addition, studies such as Bellmore (2011) and Juvonen and Graham (2014) examine the effect of mutual respect and social-emotional within a brief time frame. They didn't observe if the problem persists over the long term or changes depending on external conditions.

2.4.1.3 Promoting Task-Related Interaction and Academic Achievement

Students can interact with one another in various learning activities, such as sharing ideas, collaborating on group tasks, and assisting in help-seeking and help-providing in independent seatwork. However, the level of student involvement in task-centered interaction might vary based on the amount allowed by the teachers (A. M. Ryan & Patrick, 2001).

They are allowed to respond and inquire, offer suggestions, explain their process of thinking, make contributions towards discussions, and defend their position when they are accorded space to engage and make contributions while conducting academic work. Their academic achievement and performance go hand in hand with these interactions (E. G. Cohen, 1994).

Clark et al. (2003) argue that collaborative reasoning is a powerful pedagogy that profoundly influences the intellectual and social growth of learners. By conducting group discussions with a critical thinking, reasoning, and respectful conversation focus, instructors can empower learners to gain essential skills for academic success and learning for life.

De Lisi and Golbeck's (2014) article argues that peer learning can be an effective tool to support cognitive development if it provides conditions for cognitive conflict. Active engagement in problem-solving and scaffolding. Thus, this study concludes that having students work together is definitely not a magic solution. Opportunities for students to fail to participate in meaningful learning experiences and/or emotionally painful experiences exist even if peer learning is not used. Teachers thus need to structure the social-interactive aspects of peer learning efficiently so that they can be implemented smoothly by the participants. Not all peer learning, as suggested by Robert Slavin, promotes student achievement. Only those group assignments on which each member of the group is remunerated whenever the group is successful, and the case where the group's success relies on the sum of the individual learning performance.

In this case, each member of the group will likely watch each other's learning activity and reward one another for outstanding learning performance, and to socially disapprove gold blockers or clowns group members instead of learning. From the literature reviewed, it was implied that encouraging task-oriented interaction has a positive effect on students' academic performance. But this is just where the teacher gives assignments that promote critical thinking, reasoning, and respectful discussion, and individuals are rewarded when the group is able to do it. The critique does not reveal the implication of correlation; qualitative research has only been done. Second, literature is not revealed to display the effect of member differences. That is, the supposition of this study is the member students are equal in cognition level.

2.4.2 Parental Involvement and Academic Achievement Relationships

There were a number of studies that have explored the relationship between academic achievement and parental involvement among students. The results of the studies were varied. Although most of the studies indicated a small to medium positive relationship between academic achievement and parental involvement, other studies indicated no relationship or a negative relationship. The type of parental involvement activity undertaken will be what makes the difference. Parent involvement is a multifaceted construct that includes several factors like school involvement, assistance with homework, parental academic expectation of kids, parental behavior-reinforcing practices, and children's academic expectations. Student performance influenced by the aforementioned factors is explained under this heading.

2.4.2.1 Parent Expectation and Aspiration, and Student Academic Performance

Is the parents' belief that the child will be successful in school in the future as well as now? Some studies have established a positive relationship between students' academic achievement and their ambitions as well as engagement (X. Fan & Chen, 2005; Ma et al., 2018; Wilder, 2023). Based on X. Fan and Chen (2005), parental involvement, parents' hope and expectation for children's academic achievement, is the strongest student academic performance correlate ($r = 0.4$).

Similarly, findings of nine meta-analyses by Wilder (2023) illustrate that, regardless of a parent engagement definition, student ethnicity or grade level, the academic performance and parental involvement do have a positive correlation. The results also suggested that when parents' expectations for the academic success of their children were used to operationalize parental involvement, this was the most influential relationship. However, if only the parental involvement in helping children with schoolwork was considered, then this had the least effect on students' academic performance. Ma et al. (2018) have a study on 872 Hong Kong secondary school adolescents that reveals the direct impact of high parental expectations on academic performance was not statistically significant; the association between academic performance and high parental expectations was found to be completely mediated by the mediating variables, value of success and school support frequency. The less strong direct link between parental expectation and academic performance is explained by the cultural context.

Asian parents are less likely to provide direct help, for instance, by discussing their children's school lives or assisting them with homework, compared to other cultures. Additionally, Chinese parents make high expectations of the student in terms of academic performance but express their love and care less openly, so that their children feel less warmth from their parents than the parents actually feel.

2.4.2.2 Parental Homework Involvement and Student Academic Performance

There has been mixed evidence among some research findings on the correlation between parent involvement in helping the child with homework and student achievement. A comprehensive analysis by Wilder (2023), for example, indicates that assisting children with their homework has a minimal positive connection with their academic performance. The study further illustrates that the connections between children's achievement and parents' homework

involvement were confined to elementary school children, implying that middle school students may not gain from this type of parental engagement. This study considers that parents are incompetent in helping children. Although parental involvement in the form of supervising children at home (i.e., home rules regarding watching TV, regarding doing homework, etc.) has the lowest correlation with students' academic achievement, $r = .09$.

Another study (Tao, Y., et al, 2022) reveals that homework help and parental supervision have a detrimental effect on children's learning outcomes but does not present a specific explanation of the reasons behind this. Tam and Chan (2009), in turn, revealed a positive relationship between children's academic development and parents' activity in helping with homework ($r = .11$, $p < .01$). Also, homework assistance is strongly connected to positive attitudes toward math homework and arithmetical accomplishment when parents are instructed to assist their children with their homework. However, in the high school context, autonomy support alone is strongly connected. Students will be able to enjoy schoolwork better if their parents are involved, as states Katz et al. (2011) and Leone and Richards (1989), since they may listen more attentively and will be in a good mood. Achievement in school and parents' perceived homework involvement is moderately correlated in junior high and high school but not in elementary school ($r=.25$), states Núñez et al. (2015).

To some, the impact of parental assistance with homework is a direct influence on student output. For example, Irwin and Elley (2013) note that among young people, family emotional support is valuable and very important to teenagers in their comprehension of what it takes to cope in life. Therefore, student perceptions of parent involvement in schooling can change their attitude and behavior towards homework and academic achievement. Overall, research on the impact of parental involvement on homework success is conflicting, with some showing a positive effect and others showing no effect; some even showing a negative effect. Parental involvement benefits are contingent on the setting, elementary, secondary, or high school. For instance, at middle school and high school levels, parental control is not apparent and may work through positive orientations or emotional support for academics rather than direct provision of homework help. Parents' adolescent autonomy, ignorance, and support may account for a weaker link between parental homework involvement and student achievement.

2.1.2. Parental Involvement and Classroom Environment:

Both variables have the potential to influence one another in a variety of ways, resulting in the attainment of students and general educational performance. There have been numerous studies demonstrating the relationship between the variables; the discussion has been provided below. The most common hindrance in an effective classroom setting is student disruptive behavior, which can be a hindrance to the learning process, as stated by Emmer and Sabornie (2015). On this point, parental motivational beliefs are a key component of intervention treatments for students with disruptive behavior (Wang & Sheikh-Khalil, 2014). This could result in a more encouraging and welcoming learning environment. Teenagers would be more likely to drink and take drugs under parents with lesser supervision (Wang & Sheikh-Khalil, 2014). Such a student may display behaviors that are disruptive in nature like mood swings, irritability, or withdrawal. This may be challenging for the teachers to manage and may hamper other students' learning.

Some research indicates that parental involvement has a major impact on educational achievement, motivation, and engagement that in turn enhances the classroom environment (Wilder, 2023). On the other hand, when parents are less involved, students struggle with motivation and achievement (Henderson & Mapp, 2002). Successful students who are motivated and engaged towards studying can enhance the classroom environment by making it more active and interactive. On the other hand, school and classroom environments also have an effect on parental involvement. Epstein (2001) further indicates that schools with an open environment, where there is transparent and frequent communication, see increased parental involvement. Educators who issue regular reports regarding student performance and classroom life create an environment where parents feel comfortable contributing. According to a study by Roorda et al. (2011), if classroom environments facilitate active learning and students feel engaged and motivated, parents visit school events more frequently because they know that their child is doing well there. According to Jeynes (2007), parents get involved more in their child's educational process through volunteering, attending meetings, or helping with tasks pertaining to school if they see teachers' dedication to their students and effective class organization.

2.5 Variation in Parental Involvement as a Function of Student and Parent Demographic Variables

Research suggests that the type and extent of parental involvement differ based on the parents' age, gender, and socioeconomic status, parents' educational attainment, and occupations. The following provides an overview of the relationship of the context of parental involvement and the above variable.

2.5.1 Parental Involvement and Parents' Socioeconomic Status

As per Şengonul (2022) and Juan et al. (2023), socioeconomic status (SEC) refers to the economic, cultural, and social resources and the social and economic status, advantages, and social position deriving from these resources.

The SEC plays an important role in the link between children's educational advancement and parents' engagement with their education, as per various studies (Farooq et al., 2011). The impact is multifaceted. As noted by Volodina et al. (2021), for instance, more affluent households with higher SEC are able to give their kids better resources and study materials at home.

As noted from Tan et al. (2020), high-SEC parents are most likely to have higher educational attainment as well as a higher position in terms of their jobs because they want their kids to excel academically and therefore tend to be more involved. According to a related study by Ren et al. (2021), parents from prosperous families typically expect more out of their children's education and academic success. Thus, they invest more time and resources in their children's intellectual, cognitive, and scholastic development.

Parents' low socioeconomic status impacts the mood of children, as well as their wallets. Parental involvement is impacted, compromised, and thwarted by increased parent stress and tension from poverty and economic hardship. In addition to reducing positive parenting activities and behaviors aimed at teaching, socializing, and raising their children for their own betterment, economic hardship could create tension, stress, demoralization, and conflict among parents (Ren et al., 2021).

2.5.2. Parental Involvement and Parents' Education

The impact of SES on parental engagement is moderate, even though the majority of studies agree, some research asserts. Al-Matalka (2022) research reveals that parental engagement strategies are more affected by the level of education of the parents than by their income and profession. According to the same study done by Bauch and Goldring (1995), educated individuals are more apt to finance the education of their children and have the ability to communicate and relate well with them. However, some less-educated parents did not place education highly, and based on their beliefs and lower self-esteem, they left the education of their children to the experts, the teachers. But having a parent who is educated can be a problem too; Baeck (2010) found that parents who were university-educated were not engaged in the academic matters of children, with lack of time being the main reason they did not engage.

2.6. Classroom Environment Variation as a Function of Student Demographic Variables and Types of Schools

Experiments have established that the extent and impact of classroom environment vary depending on student age, gender, parental SEC and types of schools (public and private). Below is a presentation of the relationship between the social classroom environment and the school type and parental SEC.

2.6.2 Classroom Environment and School Type

There are additional advantages of private schools when compared to the government, including better school infrastructure and buildings, reduced class size, better educational standard, and higher qualification of teachers in education. However, very little current research exists when it comes to the change in social interaction while switching from a private classroom to a government classroom.

As inconsistent as it appears, the existing studies reveal that demographic differences among students and family socioeconomic status have their share of contribution to the inconsistency of classroom environments between government and private schools. To begin with, the social, economic, cultural, and racial origins tend to be more diverse in government schools. The mixing of students whose origins are from different neighborhoods, ethnic groups,

and socio-economic statuses can result in an extremely wide range of social contacts. Even though they become friends across different backgrounds and social classes, this could lead to social problems like bullying and discrimination at times. These issues negatively impact the mental health of students as well as their performance (Juvonen et al., 2006).

Meanwhile, private school students, particularly well-endowed or elite private schools, will be socioeconomically more homogeneous and are frequently middle- or upper-middle-class (or, in the case of notable private schools, are from higher-income families). Students can be with peers in a more elite context, as a result, identifying with a sense of privilege or ambition. In terms of interactions with teachers, this research by Nye et al. (2000) indicates that class sizes are generally larger in most public schools, especially among low-income school districts.

This can decrease the amount of time teachers have to interact with individual students. Contact between teachers and students may be strained, however, because of the more diverse classrooms that they usually work in and which contain a greater ability range and behavioral issues. Private schools tend to have better resources and class sizes that are smaller, so that teachers can provide each student more individualized attention.

With more students available to their teachers for academic or personal support, it can result in more effective teacher-student relationships. Students may be compelled to be more engaged in class discussions, extracurricular activities, and school functions in some private schools. Teachers may anticipate that their students will be very active and leadership-driven. Such a more engaged and more mentally challenging classroom atmosphere may result from this.

2.7. Summary and Implications of the Reviewed Literature

This chapter has shown a review of the literature from research that is relevant to this study. Since there was limited research on the subject in Ethiopia, most of the literature reviewed was on foreign research. The chapter begins the discussion with the definition and theory of this study-dependent variable, which is academic performance. The chapter also defines the two independent variables, which are social classroom and parental involvement. Relevant existing models and their consistency with the dependent variable are also provided. It also provides an empirical review of the variation of parental involvement as a function of parents' SEC, parents' education, child age, and sex. Similarly, empirical reviews of variations in social classroom

environments according to school type and student grade level are also considered. As a conclusion, the following has been implied from the chapter:

Academic performance is a multifaceted phenomenon incorporating cognitive, behavioral, and affective aspects; therefore, it's challenging to pin down with precision. Nevertheless, grades or test scores are most commonly used in assessing student academic success because they are the most readily available evaluations to the institutions.

❖ Generally, parental involvement has been positively correlated with the academic performance of the students. However, the level of significance is decided by the form of parental involvement. Parental involvement in the form of parental expectation and aspiration is significantly correlated with academic performance.

❖ Parental involvement in the academic affairs of the students is significantly correlated with the age, SCE, and education of the parents.

❖ Task-related, respectful, supportive interaction and objective promotion of performance-related goals in the classroom are seen to be linked to academic achievement, motivation, and student engagement.

❖ Although the social classroom environment is apt to be significant to engagement and motivation for students at all ages, it could be uniquely significant for young adolescent students.

❖ The influence of school-based parental involvement varied by the students' age. Among adolescents, school-based parental involvement (i.e., contacts and meetings with teachers) showed a non-significant or weak association with student achievement in reading. This signifies that older students gain more autonomy, and the effect of parental involvement becomes weaker. But their moderate correlation in the case of children

❖ Classroom environment and parent involvement influence each other. Parent intervention in problem behavior, motivation, and academic involvement has been found necessary for engaging and respectful classroom environments. On the other hand, schools receptive to parents positively influence the participation of parents in schools. Teachers'

approach and attitude towards the contribution of parent involvement allow parents to participate.

- ❖ It has been discussed that a respectful classroom will contribute to emotional well-being, mental health, and academic success. There is a need for the fact that the impact of mutual respect may vary in different cultural, geographical, or socioeconomic environments, and findings from one place or group may not be easily transferable to others.

- ❖ The majority of studies focus on short-term academic success and may not capture the long-term effects of parental involvement. Parental involvement may influence such factors as student attitudes, self-concept, and interest in learning, which are harder to measure but may have significant long-term effects on academic success.

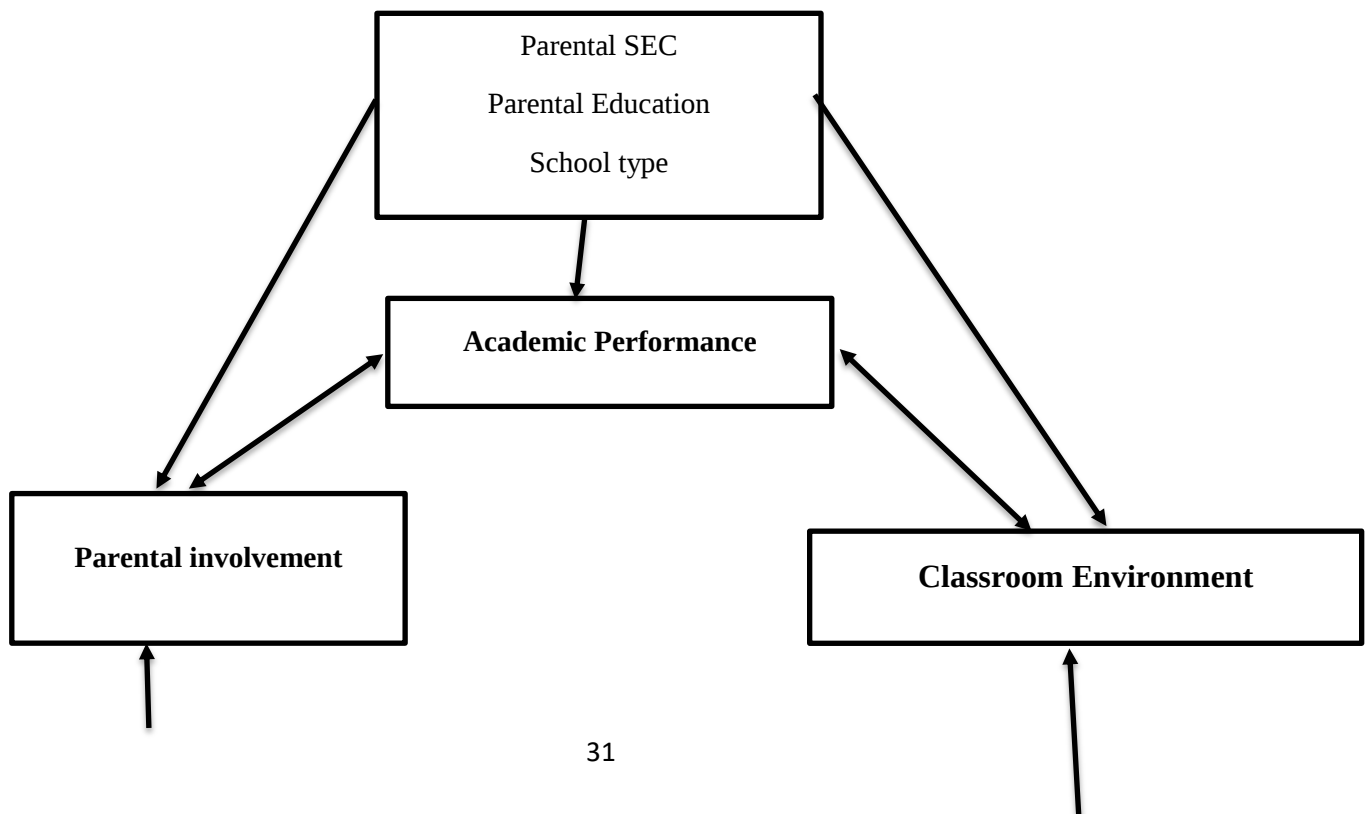
- ❖ The literature covered indicated that promoting task-related interaction has a positive impact on the academic performance of the student. However, the studies covered do not indicate the significance of the correlation; qualitative studies have been carried out only

2.7.1 Conceptual Framework

The social classroom environment is conceptualized as a multidimensional construct, entailing the socio-emotional and instructional climate of the classroom. From the literature, the critical dimensions of this construct include teacher support, student involvement, task orientation, and peer cohesion, all of which collectively nurture engagement and achievement. Parental involvement is similarly conceptualized as a multivariate variable, with different forms- parental expectations and aspirations, academic support at home, and school-based participation- exerting differential influences on school outcomes, especially for adolescent students.

One of the basic assumptions of this model is the interdependence between parental involvement and the classroom environment. It is suggested by the literature that these two factors reinforce one another; a positive, respectful classroom climate that invites parents can promote their involvement, while active parental involvement, in turn, can support and enhance the classroom learning environment. Most importantly, this framework incorporates school type- private versus government- and parental SES as the two most important moderating variables.

The literature reviewed indicates clearly that the relationships between the independent variables-classroom environment and parental involvement-and the dependent variable-academic performance-are not the same. Instead, these relationships are conditioned or shaped by the contextual



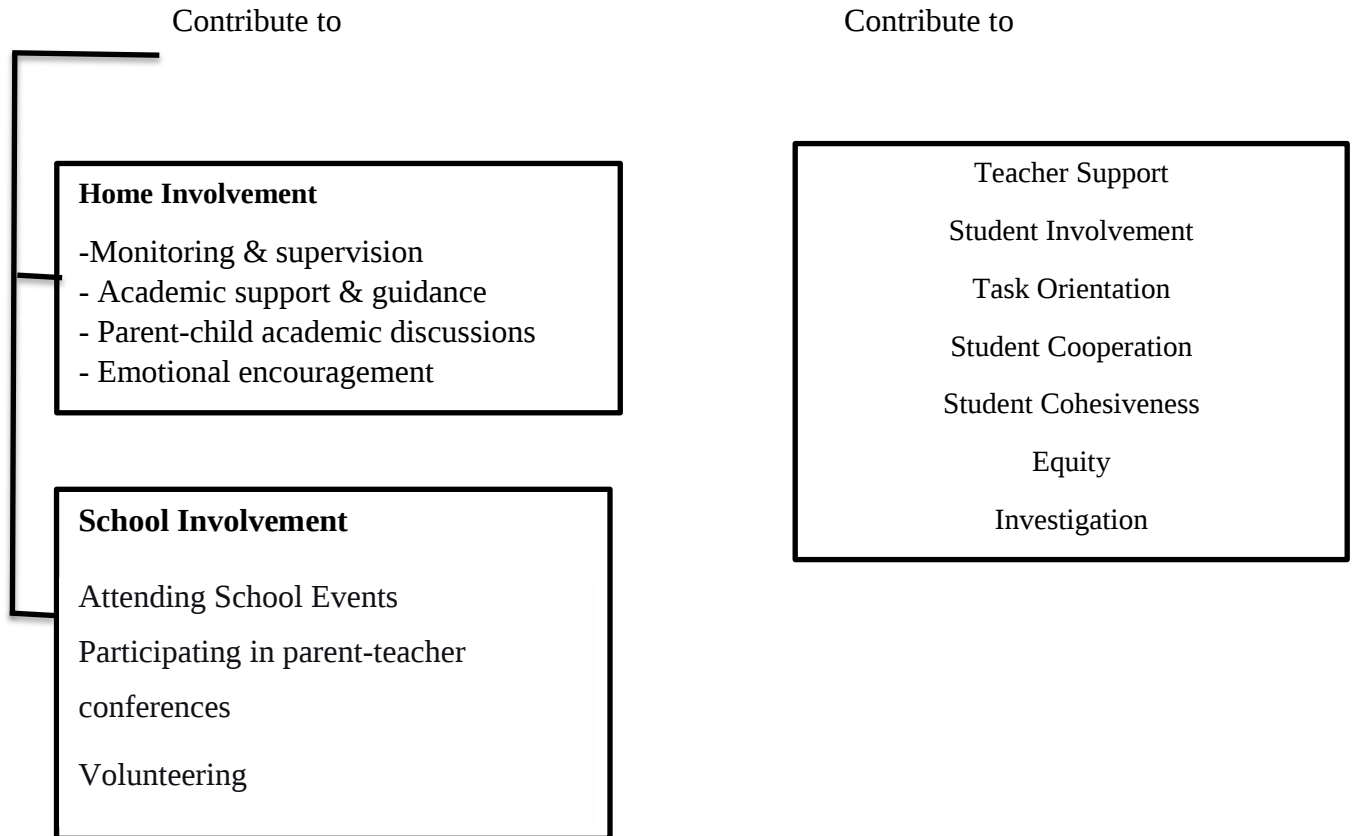


Figure 1: Conceptual framework relation among parental involvement, classroom environment and academic performance

CHAPTER THREE

METHODS

3.1 Research Design and Approach

This study employs a mixed sequential explanatory study design. This study design employs two distinct stages: the quantitative stage, whereby data is collected and analyzed first, and the qualitative stage, which follows and seeks to explain the quantitative stage findings. This study design is most appropriate where more depth and background are needed to clarify how and why the impact of the outcome of quantitative findings occurs (Creswell & Plano Clark, 2018).

In the context of the present study, it was aimed to determine the relationship between parental involvement, classroom environment, and academic achievement of secondary school

students. Quantitative phase of the study thus measures levels of parental involvement, classroom environment, and academic achievement. Test the relationships (correlations, regression) and compare differences between the private and government. The qualitative phase is utilized to explain why the quantitative phase findings did occur.

In the quantitative phase of the study, data have been collected from the sample students in the two schools via questionnaires with the aim of answering the research objectives. Descriptive analysis via indicators like mean, median, and standard deviations will be utilized in examining the level of parental involvement and classroom environment, which is the first objective of the study. Effect size and t-test are also utilized to know how large and significant the difference between the two schools is in order to answer the second research question. The correlational analysis utilizes statistical methods like Pearson's correlation coefficient or Spearman's rank correlation to measure the direction (negative or positive), magnitude (weak, moderate, or strong), and statistical significance of relationships between the student's academic performance and parental involvement and classroom atmosphere. Following thorough examination of the relationship, multiple regression is used to examine how class environment and parent involvement predict academic achievement individually and together, which is the third research objective of the study. Finally, the Mann–Whitney U test was used to examine whether there are significant differences in parent involvement, class environment, and academic achievement by demographic variables, which is the last research objective of the study.

The subsequent qualitative phase is strategically and deliberately focused on enriching the understanding of the study's first objective: to ascertain the **levels** of parental involvement, classroom environment, and academic performance. While the quantitative data effectively provides a numerical snapshot of *what* these levels are, the qualitative data is essential for understanding *what these levels mean in practice* and *how they are manifested and experienced* by the students themselves. This phase is not designed to explain correlational or predictive relationships, but to add descriptive depth and context to the initial quantitative profile.

In this phase, the semi-structured interviews were coded and analyzed through a thematic study, where themes were extracted from the feedback of the students. These themes will

subsequently be utilized to contextualize, explain, and deepen understanding of the findings of the quantitative stage.

For this study, the variables under consideration are academic achievement, classroom environment, and parent involvement. Dimensions considered under parent involvement include parental monitoring and supervision, parental hope and expectation, parental autonomy support, parental school involvement, and parental academic support. Whereas for a classroom environment, dimensions are

Teacher Support, Student Participation, Task Orientation, Student Helpfulness, Student Cohesion, Equity, and Inquiry. Student performance is measured against the current yearly average mark on all courses.

3.2. Study Location and Target Population

3.2.1 Description of the Study Site

The studies were conducted in Bashewam School (private school) and Millennium General Secondary School (government school) located in Addis Ketema sub-city. The selection of two schools was a strategic decision to facilitate an in-depth, mixed-methods investigation into the contrasting dynamics of private and government education. The two institutions were sampled using convenience sampling. This approach has been adopted, considering logistical constraints (time, access permissions) and the need for mutually consented school administrations in facilitating mixed-methods data collection. Further, it allows maintaining critical contrasts (private/government) coordinated with the comparative purposes of the study.

Bashewam School is private and selected for varied reasons. First, the school's robust sponsorship scheme (10% scholarship scheme) and comparatively low tuition fees (2000-2700 birr) allow children of a wide cross-section of socioeconomic statuses to come; this will make it easier for this study of parental involvement and classroom environment among a diverse population. Second, the school has a reputation for being a solid academic school based on observation and informal discussions with the teachers. Thirdly, the school has a smaller student enrollment (30 to 35) that enables it to examine how teacher-student and peer interaction influence academic performance. Millennium General Secondary School, a government school, was selected to achieve variation in the learning environment. The presence of a government

school will allow for studying variation in academic ability, socioeconomic status and parents' educational attainment, and class environments such as classroom size and teacher-pupil relationships. It also provides for contrast concerning school policy, e.g., parent-teacher participation and school support services provided such as counseling. Among the government schools in Addis Ketema sub-city, Millennium was selected for this study for several reasons.

Being located near the working location of the researcher, it is easy for data collection, and its greater range of students academically makes it suitable for examining how parental involvement and classroom environment influence students with different academic competencies.

Despite the fact that Millennium has a lower academic ranking, particularly in national tests, this provides the possibility of exploring why the academics in the school are poor. A majority of the teachers at Millennium are also part-time employees who work for and with the researcher, hence more collaboration opportunities for this research.

3.2.2. Target Population

The population for this study is high school students (9-12) enrolled in the two schools. However, for this study, only grade 11 students were selected with consideration of methodological, developmental, and contextual aspects. Methodologically, all students took the same class during grade 10; this uniformity standardizes pre-knowledge differences in a way that it becomes easier to examine how family/classroom variables influence performance under comparable starting points. Developmentally, this stage is particularly significant; students aged 16-17 are in a period of late adolescence where parental influence typically evolves from direct supervision to nuanced motivational support, and the classroom environment becomes paramount in fostering the self-regulated learning skills essential for higher education. Contextually, assessing the performance of G-11 students helps to examine and bridge the gap of low ECLSE pass rate.

Despite Grade 12 class students were also adolescents and those who experienced a low national exam pass rate, studying these students poses a challenge in assessing the relation between parental involvement, academic performance, and classroom environment. In comparison with the stable, representative learning contexts of Grade 11, the Grade 12 school

experience is typically defined by the high-stakes university entrance exam (ECLCE). This context primes the entire year for a test-oriented approach, which produces irregular teaching schedules dominated by revision classes and exam prep, as students' focus is often directed toward independent, exam-centered personal study. Therefore, the enormous stress in this high-stakes testing environment is likely to overpower or bias away common parental support and normal classroom environment, and thus render invalid the measurement of such variables.

In the case of grade 9-10 students who are aged 15-17, they also face low academic performance. But in relevance to the study, which is assessing the low pass rate at ECLCE, Grade 11 is explicitly recognized as the critical preparatory stage immediately preceding the decisive Grade 12 year. Interventions derived from studying Grade 11 students are therefore more directly actionable and impactful for improving the ECLCE pass rates. The shift in parental influence from supervision to supportive guidance and the development of self-regulated learning skills are more pronounced and established in Grade 11. In Grade 9-10, these dynamics are still in a more formative and volatile state. Furthermore, student in 9-10 classes are in transition from elementary to high school; this period of adjustment can be a confounding variable, meaning that their academic performance and engagement might be more strongly influenced by the stress of transition than by the specific parental and classroom factors you are studying.

3.3 Sample and Sampling Technique

In order to achieve a correct representation of the population (grade 11 students) from each school, simple stratified sampling has been employed. Where Grade 11 students at the two schools have been divided into different subgroups (strata) according to gender and academic performance, and a random sample is obtained from each subgroup. Their agreement for the questionnaire was obtained to confirm their readiness. Scholarship stratification has been done into four sub-classifications: top achiever, high achiever, moderate achiever, and low achiever.

Top achiever (90–100 average score or 90th–100th percentile). High performer (75-89 average score or 75th to 89th percentile), average performer (60-74 average score or 60th to 74th percentile), and low achiever (50-59 or 50th to 59th percentile). This academic stratification allows us to explore if the research instruments are able to cover the whole spectrum of academic performance and to test their validity for different levels of students' performance (MOE,2015).

For the qualitative phase of the study, purposive sampling is employed to provide a deeper explanation for the quantitative findings regarding the interplay of parental involvement, classroom environment, and academic performance across private and government schools.

3.3.1. Sample Size

Sample Size The sample size in this study was calculated using an approximate formula (Cresswell, 2013) as follows.

$$n = \frac{N}{1 + Ne^2}$$

$$n = \frac{460}{1 + 480 * 0.05^2} = 214$$

Here n was the required sample, N represents the two schools' grade 11 population (293 from the government school and 170 from the private school), and e was the given precision level of 5%. Since the population is not large enough, enough samples can be achieved using this precision value.

When applied with the formula, we achieved a total size of the sample n=214, which can be described as well-representative. The sample of n=214 covers 46.52% of the population, which is greater than the 10–20% level for small populations (Krejcie & Morgan, 1970). However, although two schools have different sizes of populations, in the present research an equal number of sample students (n=100) from both groups has been utilized. This is accounting for a number of facts about the effective attainment of the research objectives. This can be articulated as (1) comparable samples make valid comparisons between this study's variables (parent involvement, classroom environment, and academic performance) of the two schools. Private schools are usually smaller in number; thus, proportional sampling will overestimate the government school (compliant with research question 4). (2) Through equalizing samples, variance that may be caused by population differences is controlled for by the research; hence, the true correlation between classroom environment, parental engagement, and academic performance can then be investigated. Finally, balancing groups make it possible to identify moderation effects, such as school type affecting the three dependent variables, which is, e.g., whether or not school type affects the dependent one of the studies (corresponds to research questions 2 and 3). (3) Comparable samples might unbalance skew government schools'

characteristics in regression estimates, the third objective of the present study. Equal sampling was likewise employed in the previous study; e.g., J. Cohen (1988) employed multiple regression/correlation analysis for the behavioral sciences. Having equal group sizes maximizes statistical power to identify interaction effects (e.g., school-type moderators) by precluding unequal inflation of variance. Supporting this, Bryman (2017) continues that when comparing various educational environments (e.g., public versus private schools), balanced sampling guarantees that neither group's features dominate the analysis.

The sample size for qualitative is limited to eight for strategic reasons. The number allows for ensuring a rich, nuanced, and manageable thematic analysis that directly serves to explain the quantitative finding while taking sufficient time (30-40 minutes). Two, this 8-participant structure (4 private and 4 government school students) creates a powerful, matched-pair design that allows for a deep, cross-case comparison. We can compare and contrast the experiences of high and low performers within the same school type, and then across school types (private and government schools). Third, limiting the sample to eight ensures the study remains methodologically rigorous and manageable within the constraints of time and resources. Hence, four students from each school (two top achievers and two low achievers) participated in the qualitative phase. When it comes to gender, four females and four males were selected to participate in the study. However, among the demographic variables, emphasis has been given to parental SEC and school type for their significant impact on the interplay among parental involvement, classroom environment, and academic performance (Sirin, 2005).

Among those who were promoted to the next grade level, the top/bottom 20% of academic achievers, with SES verified through parental occupation/education data provided by schools from both schools (private and government schools).

3.4. Data Gathering Tools

3.4.1 Questionnaires

To conduct the research, a five-point Likert scale self-reporting questionnaire was used as the data collection tool; this takes different factors into account. First, it allows standardized, cost-effective, and scalable assessment of significant constructs like classroom environment and

parental involvement. Second, using the same items for the number of respondents enables quantitative analysis to be undertaken, e.g., correlation and regression analysis between parental involvement, academic attainment, and classroom environment, and testing disparity with the demographic variable.

The third questionnaire ensures respondent anonymity and encourages honest responses to sensitive items such as parental status (SEC, education) and involvement, teacher support and style, and peer interaction.

3.4.1.1. Parental Involvement Questionnaires

For the measurement of various aspects of parental involvement comprehensively taking into consideration adolescence and implications on school performance, the primary study has taken up a validated hybrid parental involvement measure, which is modestly modified from the pilot study. The hybrid measures include seven subscales: parental academic support, emotional support, academic discussion, school involvement, and autonomy support. They are subscales taken from a previously validated instrument. Specifically, the Parental Involvement Scale (PIS) (Walker et al., 2005) was used for the parental monitoring and supervision subscale; the Hoover-Dempsey and Sandler Scale (HDS) (Hoover-Dempsey & Sandler, 2005) for the parental aspirations and expectations subscales; the Parental Behavior Inventory (PBI) (Lovejoy et al., 1999) for emotional support; and the Parental Autonomy Support Scale (PASS) (Soenens et al., 2007) for autonomy support. The need to use an updated tool in the primary study stems from a variety of reasons.

One of the lower reliability outcomes is that subscales like parental emotional support and parental educational discussion have not met the minimum Cobranchi ($\alpha=0.7$), and some of the other remaining subscales also were between 0.704-0.727. (2) Insufficiency: despite this, the study focuses on the adolescent. The original pilot study instrument does not include autonomy support. Yet, contrastingly, some evidence is present that states autonomy support in the case of adolescents is moderately related to achievement (R. M. Ryan & Deci, 2000). This is sufficient evidence for improving the current subscale items.

Following these modifications, the final questionnaire comprised 35 items, with each of the seven subscales containing five items. All items were measured on a 5-point Likert scale (1 =

'Strongly Disagree' to 5 = 'Strongly Agree'). To mitigate response bias, one item within each subscale was reverse-scored prior to analysis.

For scoring, a participant's average rating was first calculated for each subscale by averaging their responses to its five constituent items. This resulted in a mean subscale score for each participant, ranging from 1 to 5. These mean subscale scores were then used as continuous variables for all subsequent quantitative analyses, including descriptive statistics (mean, standard deviation), t-tests for group comparisons, correlation analysis, and multiple regression, allowing for a direct comparison of the perceived level of each parental involvement dimension across groups and its relationship with other variables.

These refinements resulted in a robust and psychometrically sound instrument, with all subscales in the main study demonstrating improved validity and internal consistency, as detailed in Table 1.

Table 5:

Reliability Comparisons: Parental Involvement Pilot Subscale vs. Refined Hybrid tool subscale

Subscale	Pilot α	Refined α	Source Instrument (modified for current context)
Emotional Support	0.654	0.78	PBI (Lovejoy et al., 1999)
Expectation and Aspiration	0.713	0.85	Hoover-Dempsey and Sandler Scale
Academic Discussions	0.651	0.81	HDS (Hoover-Dempsey & Sandler, 2005)
Academic support	0.767	0.83	Parental Involvement Scale (PIS; Walker et al., 2005)

Subscale	Pilot α	Refined α	Source Instrument (modified for current context)
School Involvement	0.716	0.79	Parental Involvement Scale (PIS; Walker et al., 2005)
Parental Monitoring and Supervision	0.729	0.83	Parental Involvement Scale (PIS; Walker et al., 2005)
Autonomy Support	–	0.83	Parental Autonomy Support Scale (PASS), (Soenens et al., 2007)
Number of items	6	7	
Overall Reliability	0.707	.84	

3.4.1. What Happens in This Classroom Scale

What happens in this classroom scale by Fraser (1998) has been adopted and modified in the study context and relevance to student academic performance. The tool comprises 7 subscales, including teacher support, student involvement, task orientation, cooperation, cohesiveness, equity, and investigation. However, not all subscales have been used in the pilot study; subscales like equity, cohesiveness, and investigation have been incorporated into preliminary findings such as, Organization for Economic Co-operation and Development (OECD), (OECD, 2018) to explore how the schools were fair enough to provide education as per the student demand (equity), assessing the level of initiative taken by teacher and student, exploring and thinking beyond the existing material (investigation), and assessing the degree to which students know, help, and are supportive of one another in the learning environment (cohesiveness).

Furthermore, the pilot study reliability test indicates that subscales like peer cooperation and task orientation fail to meet the minimum Cronbach's alpha requirement (and the others also have moderate reliability). Hence, items are reworded for better clarity, focus, and relevance, too. For example, I struggle to connect with others and frequently feel alone among my peers. Reworded to "I find it hard to work with other students in this class." Reworded before utilizing in the main study. The improvement in the reliability is indicated in Table 2.

In the main study, each of the seven subscales was measured with five items, resulting in a total of 35 items for the classroom environment scale. All items utilized a 5-point Likert scale, where student responses were converted to numerical values as follows: 1 = 'strongly disagree', 2 to 5 = 'strongly agree'. One item per subscale was reverse-scored to mitigate acquiescence bias.

For data analysis, as it had been discussed in parental involvement questionnaires' section, a participant's average rating was calculated for each subscale by computing the mean of their numerical responses to its five constituent items. This process yielded a mean subscale score for each student, ranging from 1 to 5. These mean subscale scores were then treated as continuous variables for all subsequent quantitative analyses. This included using them in descriptive statistics to determine the perceived levels of each dimension, independent samples t-tests to compare private and government schools, Pearson's correlation to examine relationships with academic performance, and multiple regression to determine their predictive power on student achievement.

In the main study (present study), each classroom environment subscale has five items with one reverse-scored item. A total of 35 items are used.

Table 6:

Reliability Comparisons: Classroom Environment Pilot Subscale vs. WIHIC Scale

Subscale	Pilot α	Refined α	Source Instrument (modified for current context)
Teacher support	0.792	0.792	WIHIC (Fraser, 2002)

Subscale	Pilot α	Refined α	Source Instrument (modified for current context)
Student involvement	0.747	0.82	WIHIC (Fraser, 2002)
Student Cooperation	0.649	0.79	WIHIC (Fraser, 2002)
Student Cohesiveness	0.68	0.77	WIHIC (Fraser, 2002)
Task Orientation	0.638	0.75	WIHIC (Fraser, 2002)
Equity	0.729	0.87	WIHIC (Fraser, 2002)
Investigation	—	0.84	WIHIC (Fraser, 2002)
Number of subscales	6	7	WIHIC (Fraser, 2002)
Overall reliability	0.705	0.83	WIHIC (Fraser, 2002)

3.4.2. Document Review

In the case of student academic performance measurement, data has been collected from academic records of the school, and stratification has been considered from the Ministry of Education (MOE, 2005). Academic performance was measured according to students' official two-semester grades, which were rated as Excellent (90–100%), Good (75–89%), Satisfactory (60–74%), Passable (50–59%), and Fail (<50%). For analysis purposes, Stratification is converted to a Likert scale ranging from 1 for fail to 5 for excellent. Failures are excluded from participating in the main study for theoretical as well as statistical reasons. Statistically, the fail group is so small and far away from the other students that it makes the distribution very

distorted, creating non-normal data that would make the results less reliable. Apart from the statistical issue, there are theoretical distinctions in their learning pathways (e.g., disengagement, dropout risk, remedial pathways) for which individual consideration is warranted (Smith et al., 2020). Excluding them maintained the analyses as representative of the general distribution of performance without being dominated by extreme cases.

3.4.3. Interview

For the qualitative stage, a semi-structured interview is conducted with eight grade 11 students in order to develop an in-depth contextual understanding of the relationships between parental involvement, classroom environment, and academic success revealed during the quantitative phase (as discussed in section 3.31). Semi-structured interviews were chosen as they provide a balance between structure and flexibility: they provide a list of pre-determined guiding questions that are aligned with the primary research objectives while simultaneously allowing the interviewer the latitude to pursue unexpected issues (e.g., cultural expectations, peer relationships) through open-ended probing questions. Compared to structured interviews, they enable greater exploration of student attitudes, and compared to unstructured interviews, they are easier to administer to eight students (four from each school in school settings and keep the discussions focused on the study objectives).

To protect the participant's identity, ethical processes included written consent and pseudonyms. Interviews (30–40 minutes each) were audio-taped, transcribed, and analyzed inductively for themes.

3.5. Data collection procedures

Before the questionnaire was administered, written approval, access permissions were secured from the administrations of both participating schools, as well as verbal agreement from the student respondents, and data collection was assisted by a male trained research assistant in collaboration with the main researcher. Before the questionnaire was administered, the students were given an orientation about the objectives of the study, as well as the promise of confidentiality. The same written and verbal instructions were used in the explanation of the 5-point Likert scale. After that, the questionnaire was administered in person during regular school hours and took approximately 30–40 minutes under supervision to ensure independent responding. Questionnaires with more than 50% missing data were excluded from the analysis

(Kline, 2015; Tabachnick & Fidell, 2018). This provided credible data for investigating parental involvement, classroom environment, and academic performance relationships.

After completing phase one, interview questions were formulated based on the results of the quantitative phase. Having obtained written consent, the study purpose and confidentiality procedures were restated. One-on-one interviews were held in private settings (school library) during school hours and lasted 30–40 minutes. Interviews were audio-taped and transcribed verbatim with the participants' permission, and pseudonyms were given to ensure anonymity. Braun and Clarke's (2006) six-phase guide was used for thematic analysis, and codes and themes were developed inductively.

3.5.1. Pilot-Testing (Validation)

The pilot study was conducted in two schools on 34 students (17 from a private school and 17 from a government school): Progress Academy (private school) and Kolfe Comprehensive Secondary School (government school), both located in Addis Ketema sub-city. The two schools were sampled on the basis of convenience sampling that matched the target population's academic performance, academic reputation of the school, composition of the student body (along the dimensions of parent socioeconomic status), and class size. Participants completed the instrument in 30–40 minutes under supervised classroom settings. Initial Cronbach's α values were 0.707 (classroom environment) and 0.705 (parental involvement)

Considering that refinement has been in rewording, and additionally, new subscales are introduced as given in section 3.4.1. The final study instrument contained 35 items for measuring parental involvement, 35 items for measuring classroom environment, and 12 items for demographic data.

3.6 Data Analysis Techniques

3.6.1. Data Analysis Techniques for the Quantitative phase

3.6.1.1 Descriptive Statistics

To address Research Objective 1 (levels of academic performance, parental involvement, and classroom environment), descriptive statistics is computed for all subscales using SPSS v28. The analyses conducted were: Means, medians (for non-normal data distribution), and standard

deviations for 7 dimensions of classroom environment and 7 subscales of parental involvement. Likert scale means were interpreted as follows: 1-2.4 = Low engagement, 2.5-3.4 = Moderate engagement, 3.5-5 = High engagement. For the comparison of study variables in private and government schools on a group level, independent samples t-tests were also used. Assumptions are checked using the Shapiro-Wilk test of normality and Levene's test (homogeneity of variance)

3.6.1. Correlational Analyses

Bivariate Pearson correlations were computed to investigate the nature (direction and strength) of the relationship between all parental involvement subscales, classroom environment dimensions, and academic performance. This is aligned with the second objective of the present study. The resultant Pearson correlations were interpreted as weak (0.1 to 0.3), moderate (0.3 to 0.5), strong (0.5 to 1), and statistically significant ($p < 0.05$). Adopting J. Cohen (1988), the effect size r is also interpreted as .10-.29 (small), .30-.49 (medium), and $\geq .50$ (large)

3.6.2 Multiple Regression Analysis

A hierarchical multiple linear regression analysis was conducted to examine the individual and combined effects of parental involvement and classroom environment on academic performance, while controlling for potential demographic confounds (parent SEC and school type). This approach allows for assessing the combined and individual effects of classroom environment and parental involvement on academic performance. Three of the tests, that is, R-squared (R^2), the beta coefficient, and P-values, are relevant to this study.

R-squared value (R^2) used to report the proportion of variance in academic performance that is explained by predictor variables (classroom environment and parental involvement). Standardized beta coefficients (β) are used to examine the strength and direction of the unique contribution of each predictor to academic performance. Whilst the p-value of each variable would be used to ascertain if their individual contributions to explaining variance are statistically significant.

For the complete report unstandardized (B) and standardized (β) coefficients with 95% CIs. R^2 values were interpreted according to Ferguson (2009) as .01 (small), .09 (medium), and .25 (large). Covariates (school type, parental education) were included in subsequent models.

3.6.3 Kruskal-Wallis Test

Since there is more than one dependent variable academic performance, classroom environment, and parental involvement for which to compare these on more than one demographic variable (which is the fourth objective of the present study), two-way MANOVA was initially planned. This allows you to compare means after adjusting for the effect of other variables. However, the distribution of the data for the parental involvement, academic achievement, and classroom environment constructs is non-normal, as indicated by the Shapiro-Wilk test that provided $p < .05$. This violated two Way MANOVA assumption; hence, Kruskal-Wallis tests for >2 group comparisons were employed to compare the three study variables (academic performance, parental involvement, and classroom environment) across the demographic variables, which were school type, and socioeconomic status.

3.6.4 Thematic Analysis for the Qualitative Phase

The six-phase recursive model proposed by Braun and Clarke (2006) was followed in the analysis: Familiarizing with the Data: The researcher familiarized themselves with the data, reading and rereading transcripts and noting down initial ideas.

Generating Initial Codes: Systematic coding was conducted across the entire dataset, identifying salient features of the data of potential relevance to the research question.

Searching for Themes: Codes were sorted into potential themes, gathering all the data relating to each potential theme.

Reviewing Themes: Themes were checked back against the dataset to ensure they created a coherent pattern (Level 1 review) and that the thematic map offered a faithful representation of the meanings evident in the dataset as a whole (Level 2 review).

Defining and Naming Themes: The essence of each theme was boiled down and defined, and descriptive, evocative names were developed (e.g., "Resource-Dependent Support," "Silent Sacrifice as Emotional Care").

Producing the Report: Final analysis was written up in narrative form, selecting rich, evocative extract examples to outline themes and trace them back to the research question and quantitative results.

3.7. Ethical Standards

This research was performed with strict adherence to all ethical principles that pertain to human participant research and with particular attention to measures that ensure the protection of students' welfare and rights. Formal permission was first obtained at an institutional level from the school authorities concerned before embarking on any activity involving data collection. Subsequent to obtaining permission, the most salient ethical procedure involved gaining assent directly from all student participants. Specifically, the research purpose and the nature of participation, along with the important condition of being completely voluntary, were thoroughly explained in a way appropriate for the age of the children. Students were assured that their decision to participate or decline would not affect their academic standing or relationship with the school.

In order to further address potential issues in power dynamics and ensure the psychological safety of participants, several key measures were enforced. Students were clearly informed of their rights regarding withdrawal from the study at any time or refusal to answer any question without penalty. Throughout the study, the researcher adopted a neutral and supportive demeanor in all interactions, allowing students to feel at ease in giving candid responses. A core part of the ethical framework is the stringent protection of participant confidentiality. All data collected were anonymized during the analysis phase via the removal of personal identifiers, while pseudonyms are used throughout the reporting of all findings. Finally, the research instruments were carefully designed not to contain biased, leading, or sensitive questions, instead using general perceptions to minimize any risk of distress. The raw data will be kept on a password-protected device for five years and then destroyed securely.

CHAPTER FOUR

RESULT

This chapter presents the empirical findings of the study that examined the interrelation of parental involvement, classroom environment, and academic achievements of the high school students. This chapter begins with the presentation of the demographic details of the study participants. Specifically, this student is a student at a private and government school. The descriptive and inferential statistics results of parental involvement, classroom, and academic performance are presented as the first finding. The latter correlation analysis reveals the nature, direction, and strength of their relationship.

The finding of regression analysis reveals the degree to which academic performance variance is predicted by parental involvement and classroom, alone or combined. This helps to determine the relative importance of each factor in predicting the academic performance of the student. The study also explores the potential differences among the three across demographic variables such as type of school, gender, grade level, and parents' socioeconomic status, utilizing the appropriate statistical tests. All the key findings and analyses will lead to understanding the interaction between the three variables, leading into a critical assessment of the study results in the next chapter.

4.1. Response Rate

Data were collected from 214 Grade 11 students (107 private, 107 government). After exclusions (14 for incomplete responses), the study analysis was conducted based on the responses of 200 students (100 from each school), representing a 93.45% retention rate.

4.2 Demographical characteristics of Participants

The demographic profile of the 214 student participants across the two schools is presented in Table 3. Some of the demographic variables, Sex, age, academic status, living arrangements, and parental history were. As Table 3 demonstrates, the sample was nearly evenly split by gender, with a slightly greater number of females enrolled in private schools (52.3%). And government schools also had a marginally higher proportion of males (54.2%). The age distribution was identical across all types of schools, with 92.5% of the students between 16 and 17 years old, which is the mid-adolescent average age.

In comparison to age and gender, significant differences were found in family background information. Students in private schools were more likely to be from two-parent families (73.8%) compared to government school students (57.0%). Even the educational levels of parents were markedly different, with parents of private school students possessing much higher educational qualifications. 19.6% of mothers and 29.9% of fathers had university degrees, while only 11.2% and 13.1% in government schools possessed the same. These trends similarly applied to family income, with nearly half (46.7%) of government school children living in families with incomes of more than 20,000 Birr per month, compared to just 15.8% of students in government schools.

The socioeconomic profiles of the participants demonstrate extensive stratification between private and government school groups in Addis Ababa. Parental education level, family structure, and household income are the background variables that will consequently be susceptible to explain the difference in academic achievement between the two groups of schools.

Table 7:

Demographic Characteristics of Participants by School Type (N = 200)

Variable	Category	Private (n = 107)	Government (n = 107)
		f (%)	f (%)
Sex	Male	51 (47.7%)	58 (54.2%)
	Female	56 (52.3%)	49 (45.8%)
Age	15 years	47 (43.9%)	47 (43.9%)
	16 years	52 (48.6%)	52 (48.6%)
	17 years	47 (43.9%)	47 (43.9%)
	18+ years	9 (8.4%)	9 (8.4%)
Living Situation	With both parents	79 (73.8%)	61 (57.0%)
	Mother only	13 (12.1%)	24 (22.4%)
	Father only	6 (5.6%)	10 (9.3%)
	Friends/relatives	9 (8.4%)	13 (12.1%)

Mother's Education	Illiterate	9 (8.4%)	24 (22.4%)
	Primary	21 (19.6%)	36 (33.6%)
	Secondary	37 (34.6%)	24 (22.4%)
	Diploma	19 (17.8%)	11 (10.3%)
	Degree+	21 (19.6%)	12 (11.2%)
Father's Education	Illiterate	5 (4.7%)	22 (20.6%)
	Primary	13 (12.1%)	32 (29.9%)
	Secondary	33 (30.8%)	26 (24.3%)
	Diploma	24 (22.4%)	13 (12.1%)
	Degree+	32 (29.9%)	14 (13.1%)
Family Income (Birr/month)	<5,000	4 (3.7%)	27 (25.2%)
	5,000-10,000	14 (13.1%)	45 (42.1%)
	10,000-20,000	39 (36.4%)	22 (20.6%)
	20,000-50,000	33 (30.8%)	13 (12.1%)
	>50,000	17 (15.9%)	4 (3.7%)

4.2 Levels of Parental Involvement, Classroom Environment, and Academic Performance

The first research question of the present study raised queries regarding parental participation, classroom environment, and students' academic performance at the secondary school level. Here in this section of the present research, descriptive (M and SD) and inferential statistics (independent sample t-test) are presented.

Here, the t-test has been used to determine if the difference in academic performance, classroom environment, and parental involvement between private and government schools is statistically significant or by chance variation in the sample. Cohen's d (d) was also included to see if differences between private and government schools in the three variables are significant in the real world of schooling.

4.2.1. Level of Parental Involvement in Private and Government School

As indicated in Table 4, the outcome of the present study shows a moderate level of parental involvement in high schools, and private schools recorded a higher level of parental involvement ($M=3.681$, $SD=0.416$) than government schools ($M=3.483$, $SD=0.387$).

They differ statistically significantly with a medium effect size ($p<0.05$, $d=0.46$). Parent involvement is not implemented in all its aspects in the schools. Much higher parental involvement in private school was observed for expectation and aspiration (mean difference (ΔM) =0.19, $p=0.019$, $d=0.34$), monitoring and supervision ($\Delta M=0.19$, $p=0.028$, $d=0.31$), and academic support ($\Delta M=0.19$, $p=0.004$, $d=0.41$), with medium effect size in the former two subscales and large effect size in the latter instance. Suggesting that only academic support is significant in real life. On the other hand, no large and statistically significant disparity in parental school involvement ($\Delta M = 0.112$, $p = 0.0664$, $d = 0.17$), academic talk ($\Delta M = 0.21$, $p = 0.649$, $d = 0.32$), emotional support ($\Delta M = 0.112$, $p = 0.664$, $d = 0.17$), and autonomy support ($\Delta M = 0.24$, $p = 0.057$, $d = 0.27$) was observed, suggesting similar levels of participation.

Table 8:

Comparison of Parental Involvement Between Private and Government High Schools

Subscale	Private M (SD)	Government M (SD)	t	p	d
Expectations and Aspirations	4.07 (0.47)	3.86 (0.62)	.37	.019	.34
Monitoring and Supervision	3.80 (0.63)	3.61 (0.62)	.21	.028	.31
Academic Support	3.78 (0.61)	3.54 (0.57)	.90	.04	.41
Emotional Support	3.68 (0.57)	3.49 (0.63)	.82	.62	.43
Discussion	3.56 (0.64)	3.35 (0.66)	.29	.649	.32
School Involvement	3.50 (0.67)	3.38 (0.66)	.19	.664	.17
Autonomy Support	3.49 (0.66)	3.31 (0.67)	.92	0.57	..27
Overall	3.68 (0.42)	3.48 (0.39)	.49	.01	.32

Note. M = Mean; SD = Standard Deviation; d = Cohen's d effect size (0.20 = small, 0.50 = medium, 0.80 = large). Significant results ($p < .05$) are bolded

Thematic Analysis Findings of Parental Involvement Levels

The qualitative data from the interviews conducted with students provide a detailed explanation for the quantitative differences in parental involvement levels among private and government school students. The analysis showed distinct thematic patterns in the way parental involvement was expressed and experienced, which gave further meaning to the statistical findings. The themes that emerged from the discussion are presented below along with the key subscales of parental involvement.

I. Parental Expectations and Aspirations: High Achievement Pressure vs. Practical Achievement Pressure

Quantitatively, students from private schools reported significantly higher levels of parental expectations and aspirations than their government school counterparts ($M=4.07$; $M=3.86$, $p=.019$). Qualitative data reveals this difference as one of contrast in nature and focus of parental ambitions.

Private school expectations were described as High Achievement Pressure, often framed in terms of family status maintenance and elite future opportunities. The following quote captures it best: *It's all about 'being top of the class' and then attending a famous university. They say, We didn't pay all this money for you to be average.* The sentiment above at times was burdensome, especially for the lower-achieving participants, with one sharing, *Both of my parents are doctors; they always want me to follow in their footsteps.*

In contrast, for government schools, the expectations were framed as Practical Achievement Pressure, which focused on basic safety and simply finishing school. As one young male student indicated, *They just want me to pass. They say, 'Don't fail; get your diploma so you can get a decent job.* Another student reflected the socioeconomic element: *Beyond my academic goals, my parents hope to find a way to keep us afloat until economic fortunes improve.*

II. Monitoring and Supervision: Intensive Monitoring vs. Minimal Oversight

This quantitative finding of stricter monitoring in private schools was qualitatively explained by a theme of Intensive Monitoring versus Minimal Oversight at $M=3.80$ versus $M=3.61$, $p=.028$.

Private school students described a structured, system-driven approach to monitoring. One student described this ecosystem: *My school has strict rules, weekly tests, and constant parent-teacher meetings; hence, parents usually check my academic progress, test results, and assignment completion.* This suggests that monitoring is institutionalized and consistent.

At government schools, monitoring was more informal and trust-based. One of the top-achieving students related that *they'll ask, 'Did you do your homework?' but they usually don't check it. They just trust me to get it done.* A lower-achieving student's experience underlined the same hands-off approach: *I don't think my parents have paid much attention to my academic progress as long as I have passed the grade.*

III. Academic Support: Resource-Based Support vs. Encouragement-Oriented Support

The large quantitative difference in academic support Private: $M=3.78$, Government: $M=3.54$, $p=.004$ was qualitatively framed as a difference in the form of support provided.

Private school parents provided Resource-Based Support, frequently hiring tutors for academic support. A student captured this: *If I'm stuck, they just hire a tutor. It's like their solution for everything.* Government school parents, perhaps limited by their own education or resources, provided Encouragement-Oriented Support. As one student said, *They can't really help with the work, but they'll tell me I'm smart and to keep trying.* This points to a reliance on emotional and moral encouragement in lieu of direct academic support.

IV. Parent-Child Discussion: Academic-Focused vs. General Life Discussions

Quantitatively, the differences in discussion were not significant for this analysis ($p=.065$), yet the qualitative data followed a strong thematic line in the content of the discussions between parents and children. In particular, students in private school mentioned Academic-Focused Discussions: Every conversation is about grades, tests, and my classmates' scores. It feels like a business report, suggesting a high instrumental orientation to academic performance. On the other hand, government school students identified General Life Discussions with a deeper

emphasis on well-being. A student reported, *We talk about whether my friends are nice or something funny happened. They care more about me being happy.*

V Autonomy Support: Guided Autonomy vs. Independent Autonomy

Similarly, for the non-significant difference in autonomy support ($p=.057$), the qualitative data revealed sharp contrasts in the way autonomy is granted. Private school students' autonomy was framed as Guided Autonomy, or freedom within well-defined boundaries. As one student explained, *I can choose my project topic, but only from a list they approve. I have freedom, but within their rules.* Government school students' autonomy was framed as Independent Autonomy, or freedom with less direct guidance. As one student reported, *I'm on my own. They tell me to study, but I have to figure everything out by myself..*

4.2.2. Level of Classroom Environment

As Table 5 reveals, the finding of the present study depicts a moderate classroom environment ($M=3.66$, $SD=0.3135$) in high schools, and a more positive classroom-level climate within private schools ($M=3.750$, $SD=0.243$) than government schools ($M=3.57$, $SD=0.384$). The difference between the two schools is statistically significant at a moderate effect size ($p<0.05$, $d=0.316$). Not all types of classroom features are utilized effectively, which indicates there is a lack of balance among the subscales. Significantly higher level of classroom environment in private schools were experienced in teacher support ($\Delta M=0.473$, $p<0.001$, $d=0.657$), student engagement ($\Delta M=0.158$, $p<0.001$, $d=0.31$) and task orientation ($\Delta M=0.12$, $p=0.0165$, $d=0.633$) with large effect size ($d>0.5$), which indicates the difference is practically significant except for binge statistically significant difference was seen in student cooperation. Cohesiveness, equity, and investigation, suggesting no difference between these two schools on these subscales, suggesting equal involvement levels.

Table 5:

Comparison of Classroom Environment Between Private and Government High Schools

Subscale	Private M (SD)	Government M (SD)	t*(df)	p*	d*
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Subscale	Private M (SD)	Government M (SD)	t*(df)	p*	d*
Teacher Support	4.07 (0.47)	3.76 (0.79)	3.41 (98)	.001	..65
Student Involvement	3.91 (0.37)	3.75 (0.78)	4.31 (98)	.001	.61
Task Orientation	3.80 (0.46)	3.68 (0.77)	1.39 (98)	.165	.63
Student Cooperation	3.77 (0.54)	3.60 (0.71)	1.85 (98)	.066	.63
Student Cohesiveness	3.57 (0.43)	3.48 (0.69)	1.19 (98)	.235	.58
Equity	3.66 (0.67)	3.51 (0.66)	1.16 (98)	.247	.66
Investigation	3.55 (0.70)	3.42 (0.65)	1.92 (98)	.188	.68
Overall	3.75 (0.24)	3.57 (0.38)	4.44 (98)	.01	.32

Note. N = 100 per group

Findings of Thematic Analysis: Classroom Environment Levels

These qualitative findings add depth and context to the quantitative results by showing why a difference in the classroom environment level existed between private and government schools. The emergent themes not only elaborate on significant disparities but also detail the nuances in experiences behind subscales where quantitative differences were not statistically significant. The findings are presented below, grouped around key subscales.

I. Teacher Support: Accessibility and Individualization vs. Overwhelm and Standardization

Quantitatively, private school students reported a significantly higher level of teacher support (M=4.07) compared to government school students (M=3.76, $p<.001$). This gap is clarified in the qualitative data with a sharp thematic divide.

In private schools, the theme of Accessibility and Individualization was in force. Students described an environment where teachers were available for personalized help. As a male student explained, *most of my teachers are available when I need their assistance. The school also offers the chance for one-on-one interaction.* This points to a system designed to support individual learning needs.

In sharp contrast, Overwhelm and Standardization defined the experience of the government school, fueled by large class sizes and a uniform pace of curriculum coverage. A female student captures this succinctly: *The teacher is rushing to finish the syllabus. There are 50 of us. If you don't get it, you just get left behind.* This shows a systemic constraint on providing individual support.

II. Task Orientation: Clarity of Purpose and Application vs. Rote Completion

Although there was not a significant quantitative difference in task orientation, $p = .165$, the qualitative data revealed a sharp contrast in quality and perception of academic tasks that explains the large effect size, $d = 0.63$.

Students in private schools experienced a climate of Clarity of Purpose and Application. A high-achieving boy illustrates the notion of a planned and meaningful procedure: *Most often, before every project, teachers explain the goal and the objective. along with the reference material.* This emphasizes the notion that activities are positioned as opportunities for applied learning. In contrast, Rote Completion was widely expressed as the dominant theme of government schools. One high-achieving girl described a sense of mechanical work: *We do a lot of worksheets and assignments from the textbook. It feels like we're just doing it to get it done, not to really learn.* This is indicative of an emphasis on volume and compliance rather than deep conceptual learning.

III. Equity: Institutionalized Fairness vs. Perceived Favoritism

For the equity subscale, the quantitative finding was not statistically significant ($p = .247$), but a large effect size ($d = 0.66$) was qualitatively explained by disparate student perception of fairness.

Private school narratives indicated an Institutionalized Fairness where fairness was ensured through a transparent process that created a feeling of objectivity: The rubric for grading is super clear for everyone; that means *I actually feel like I'm graded on my work, not on whether the teacher likes me*. The theme of government schools, on the other hand, was that of Perceived Favoritism, meaning that fairness was believed to lie at the discretion of the teacher. As shared by a male low-achieving student: *Sometimes it seems like teachers have favorite students who are given more attention or who receive better grades*. This might sometimes seem unfair. This perception, whether true or not, can remarkably influence student motivation and trust in the learning environment.

4.2.2. Level of Academic Performance

Students were stratified based on four levels of achievement: high achievers, high performers, mid-level performers, and low performers. The stratification cutoff point follows the Ethiopian Ministry of Education (MoE) (2015) adaptation. Based on this stratification criterion, high achievers were students who had a 90-100 average or in the 90th to 100th percentile, and high performers were students who had a 75-85 average or in the 75th to 89th percentile. Average performers are students who have an average 60-74 or in the 60th to 74th range. Low performers are those whose mean scores fall in the 50-59-mark category or within the 50th-59th percentile. The stratification of achievement enables us to quantify the level of achievement in the two schools so that comparative judgments may be made.

As is evident from Table 7, findings of this research in accordance with students' performances show that the majority of the students (54.5%) are average to poor performers, while 45.5% are high to top performers. This gives hints to areas of improvement for both schools. There also exists a large disparity (8 to 11%) between the academic achievement level of the two schools at the four student performance levels. Over half (57%) of the students in the private schools fall into the category of high to top performers, while in the government schools, only 36% are included in the category of high to top performers. In comparison, the opportunity is three times greater in a private school to get a top student compared to a government school, while there are nearly double the number of low-average students in government schools than in private schools. The top average of the private school is threefold greater compared to that of the government schools. The majority of the average ranks come from the government school

category (43% compared to 34%). The average performer category is frequent in government schools (43% vs. 34%), and that indicates systematic weaknesses.

Table 7:

Comparison of Academic Performance Between Private and Government High Schools (N = 100 for each group)

Academic Performance	Private (n =100)		Government (n = 100)	
	Frequency (f)	Percent (%)	Frequency (f)	Percent (%)
Top achiever	12	12%	4	4%
High performer	43	43%	32	32%
Average performer	34	34%	43	43%
Low achiever	11	11%	21	21%

4.3. The Relationship Between Parental Involvement, Class Environment, and Academic Performance

4.3.1. The Relationship Between Parental Involvement and Academic Performance

The second research question...The findings of the present study reveal that there is a moderate significant correlation between parental involvement and academic performance ($r = 0.402$, $*p < 0.05$, $R^2 = 0.16$). The small effect size (R^2) indicates that only 16% of the changes in academic performance are explained by parental involvement, indicating that there are other predictor variables that affect student academic performance.

Despite the reality that there is a modestly strong correlation between parental involvement and academic performance, not all forms of parental involvement are equal contributors to the aforementioned relation. While some forms of parental involvement have direct and substantial influences on it, others have indirect and weak impacts on academic performance. For instance, parental involvement as parental expectation and aspiration ($r=0.322$,

p < 0.05, R² = 0.104), parental academic support (r = 0.310, *p* < 0.05, R² = 0.096), and parental autonomy support (r = 0.304, *p* < 0.05, R² = 0.092). Expectation and aspiration both have moderately significant positive correlations. Even though the correlation is significant, the small effect size of the three subscales suggests that very little variance in academic performance can be explained by these subscales (R² < 0.3). On the contrary, parental involvement in terms of parental school involvement (r = 0.159, *p* < 0.05), parental academic discussion (r = 0.188, *p* < 0.05), parental emotional support (r = 0.186, *p* < 0.05), and parental monitoring and supervision (r = 0.19, *p* < 0.05) are weakly correlated with the academic performance. These may suggest they have a mediating/indirect effect on academic performance.

Table 8:

Correlation between Parental Involvement and Academic Performance

Variable

1. Academic Performance					
2. Expectation/Aspiration	322*				
3. Monitoring/Supervision	288*	326*			
4. Academic Support	310*	389*	359*		
5. Emotional Support	186*	393*	231*	365*	
6. Academic Discussion	188*	314*	309*	329*	362*

Variable

7. School Involvement	159*	357*	317*	363*	305*	338*		
8. Autonomy Support	304*	383*	286*	423*	343*	321*	374*	
9. Parental Involvement	373*	680*	610*	694*	638*	650*	664*	676*

* Indicate $p < .05$, $N = 200$ for all correlations

4.3.2. The Relationship Between Classroom Environment and Academic Performance

The finding of this research suggests that there is a moderately significant correlation between academic performance and classroom environment ($r = 0.398$, $p < 0.05$, $R = 0.16$). A small effect size (R) indicates that the classroom environment explains only 16% of the variation in academic performance, which indicates that, although the correlation is moderately significant, other factors also play an important role in impacting students' academic performance.

Among the subscales of classroom environment, teacher support ($r=0.382$, $p<0.05$, $R^2=0.146$), student involvement ($r=0.321$, $p<0.05$, $R^2=0.116$), and task orientation ($r=0.30$, $*p<0.05$, $R^2=0.09$) have the greatest direct influence on academic performance. Conversely, classroom environment subscales such as cohesiveness ($r=0.218$, $p<0.05$, $R=0.048$), cooperation ($r=0.192$, $p<0.05$, $R^2=0.037$), equity ($r=0.194$, $p<0.05$, $R^2 = 0.038$). and investigation ($r=0.19$, $p<0.05$, $R^2=0.36$) are weakly correlated, indicating these variables will exert indirect or mediating impacts and not direct influences.

Whereas the overall classroom is moderately related to learning, it is strongly related to teacher support ($r=.728$, $p<0.05$) and student participation ($r=0.686$, $p<0.05$). Maybe what it is saying is that although all of these subscales are significantly contributing to the climate of the classroom, in academics they really only have a moderate effect ($r = .382$ and $r = .321$,

respectively). This may imply the effect is less direct or their effectiveness lies in other variables such as student personal variables, parental variables, or socioeconomic or institution variables.

Table 9:

Bivariate Correlations Among Classroom Environment Subscales and Academic Performance (N = 200)

Variable	1	2	3	4	5	6	7
1. Academic Performance	-						
2. Teacher Support	.382**	-					
3. Student Involvement	.321**	.490**	-				
4. Task Orientation	.300**	.377**	.345**	-			
5. Cooperation	.192**	.328**	.284**	.203**	-		
6. Cohesiveness	.218**	.365**	.401**	.305**	.375**	-	
7. Equity	.194**	.367**	.240**	.235**	.194**	.337**	-
8. Investigation	.190**	.342**	.344**	.234**	.308**	.379**	.292**
9. Classroom Environment	.398**	.728**	.686**	.594**	.589**	.695	

** indicate significant for $p < .01$ (two-tailed).

4.3.3. The Relationship Between Parental Involvement and Classroom Environment

The finding of the present study indicates that there is a moderate positive correlation between classroom environment and parental involvement ($r=0.381$, $p<0.01$, $R=0.146$). This may suggest that a better classroom environment influences parental involvement, or higher Parental involvement enhances the classroom environment. Notably, while these variables are related, the directionality cannot be predicted from this analysis alone. The moderate effect size indicates that only 14.5% is shared significantly between these variables. Meaning 86.5% of parental involvement is influenced by other factors (e.g., socioeconomic status, school outreach programs) beyond the classroom environment, similarly for the classroom environment. 86.85 percent of the variance is explained by other factors beyond the classroom environment

Table 10:

Pearson Correlation Between Classroom Environment and Parental Involvement (N = 200)

Variable	1
1. Classroom Environment	-
2. Parental Involvement	381**

** significant for two-tailed

Table 11

Correlation among parental involvement, classroom environment, and academic performance

Variable	1	2	3
Academic performance	1	0.373**	0.398**

Parental Involvement	0.373**	1	0.38**
Classroom Environment	0.398**	0.38**	1

** indicate significant for two-tailed $p < .01$

4.4. Proportion of Variance in Academic Performance Explained by Parental Involvement and Classroom Environment

In order to examine the independent and combined effects of parental engagement and classroom environment to academic achievement, regression analysis was conducted. The results are discussed below.

The SPSS model summary of the outcome indicates there is a medium positive correlation ($r = 0.462$, $R^2=0.216$) between the independent variables (classroom environment and parental involvement) and the dependent variable (academic achievement). The R-squared outcome indicates that classroom environment and parental involvement explain only 21.6% of the variance in academic achievement. The remaining 78.4% of variance is accounted for by variables outside the model. Upon adjusting for the factors, the model explains 20.8% (adjusted R-squared value) of the variation in academic achievement.

To determine if the variance of performance in academics is well-explained by the predictors, the F-value and the p-value were investigated. The result shows an F-value of 27.08, with a significant relationship established. This shows that the predictors account for a significant proportion of the variation in academic performance. The calculated F statistic is highly significant ($p<0.01$); it indicates that a statistically significant association exists between the predictors and academic performance, i.e., the obtained results are not likely to occur due to chance. The result supports that the model accounts for a high proportion of variance in academic performance.

Table 12:***Regression Model Summary for Academic Performance Predictors (Academic performance and classroom environment, N = 200)***

Model	R	R²	Adj. R²	SE	ΔR^2	F	df	*p*
1	.464	.216	.208	.750	.216	27.08	2,197	< .001

To investigate the influence of parental involvement and classroom environment independently on student academic performance, the beta coefficients were analyzed. The beta coefficient for the classroom environment is 0.55, implying that while holding parental involvement constant, a one-unit change in the classroom environment leads to a 0.55-unit change in academic performance. This association is statistically significant, with a $p < 0.001$, demonstrating that the classroom environment has a strong beneficial impact on academic performance.

In comparison, the beta coefficient for parental involvement is 0.53. This shows that for each unit increase in parental involvement, academic performance is anticipated to increase by 0.53 units. However, this relationship is not statistically significant. The standardized beta results demonstrate that the classroom environment has a moderate, significant influence ($\beta = 0.3$, $p < 0.001$) on academic performance, compared to parental engagement ($\beta = 0.26$, $p < 0.001$).

Table 13:***Regression Coefficients for Predictors of Academic Performance (N = 200)***

Predictor	B	SE	β	t	p	95% CI for B	sr²
Constant	-1.52	0.54	-	-2.84	.005	[-2.58, -0.46]	-

Predictor	<i>B</i>	SE	β	<i>t</i>	<i>p</i>	95% CI for <i>B</i>	<i>sr</i> ²
Parental Involvement	0.53	0.14	.26	3.79	< .001	[0.25, 0.80]	.139
Classroom Environment	0.55	0.13	.30	4.39	< .001	[0.29, 0.80]	.097

Note: *B* = unstandardized coefficient; β = standardized coefficient; SE = standard error; *sr*² = squared semi-partial correlation (unique variance).

Dependent variable: Academic performance.

$R^2 = .216$, $F(2, 197) = 27.08$, $p < .001$ (two tailed)

4.5. Variations in Parental Involvement, Classroom Environment, and Academic Performance with respect to Demographic Variables

Among demographic variables, the influence of school type and parental SEC on classroom environment, academic performance, and parental involvement has been examined. These variables were selected for their established theoretical and empirical relevance in this study context. School type (e.g., public vs. private) was selected because it often reflects fundamental differences in school policy, resources, class size, and pedagogical approach, which impact parental involvement, classroom environment, and academic performance (Bryk et al., 1993). Whereas the Parental SES was selected as it is one of the most consistent predictors of academic achievement and parental involvement (Sirin, 2005).

For comparison, multiple dependent variables (classroom environment, academic performance, and parental involvement) across school type and parental SEE, two-way MANOVA is sought to be appropriate. Ahead of proceeding with this test, the Shapiro-Wilk test for normality has been conducted for the variables. The tests revealed significant departures from normality for all dependent variables: parental involvement ($W = .977$, $p = .002$), classroom environment ($W = .960$, $p < .001$), and academic performance ($W = .863$, $p < .001$). Hence, the analysis is preceded by the nonparametric test of the Mann-Whitney U test (for 2-group comparisons).

The Mann-Whitney U test results revealed statistically significant differences between private and government schools across all three measured variables: academic performance, parental involvement, and classroom environment (all $p = .004$). For academic performance, the test yielded $U = 3894.50$ and $z = -2.876$, indicating that private schools demonstrated significantly higher median scores than government schools. Similarly, parental involvement showed identical test statistics ($U = 3894.50$, $z = -2.876$), with private schools again outperforming their government counterparts. The same pattern emerged for classroom environment assessments, where private schools received significantly more favorable ratings ($U = 3894.50$, $z = -2.876$). The consistent z-scores across all three variables suggest comparable effect sizes, with $r \approx 0.20$ indicating small-to-medium effects. These findings strongly suggest that private schools in this sample outperformed government schools across multiple educational dimensions.

Table 14:

Mann-Whitney U Test Results Comparing Private and Government Schools

Variable	U	Z	p	r	Private Mdn (IQR)	Government Mdn (IQR)
Academic Performance	3894.50	2.88	.004	.20	78 (70-85)	75 (68-80)
Parental Involvement	3894.50	2.88	.004	.20	4.5 (3.8-5.2)	3.8 (3.0-4.5)
Classroom Environment	3894.50	2.88	.004	.20	4.2 (3.5-4.8)	3.9 (3.2-4.5)

Note: Mdn = Median; IQR = Interquartile Range; All tests showed significant differences ($p < .05$).

As it has been presented in Table 15, student parental SEC is stratified into five categories and scaled to one. Where I used ‘1’ for low parental monthly income (<5000birr) and ‘5’ for the highest parental income (>50,000 birr). The influence of parental SEC on parental involvement, classroom environment, and academic performance was examined using the Kruskal-Wallis test, best suited for cases the independent where it has many independent groups and the data distribution is non-normal.

In the case of academic performance, the Kruskal-Wallis test indicates that there is a significant difference in the academic performance across parental SEC groups at least in two of them. ($\chi^2(4) = 25.71$, $p < .00$). To assess the influence of each SEC group on the academic performance pairwise with reference to the lowest group, post-hoc pairwise comparisons with Bonferroni correction have been made. The result indicates that there is no statistically significant difference in the academic performance in SEC 2 as compared to the lowest. However, higher SEC (SEC (3) to SEC (5)) shows significantly higher performance as compared to the lowest one.

Table 15: *Kruskal-Wallis Test and Pairwise Comparisons of Academic Performance by Parental SEC Group*

SEC Group	Mean Rank	Comparison Group	Adj. p-value	Effect Size (r)	Interpretation
1.00	70.61	-	-	-	(Reference)
2.00	81.93	1.00	1.000	0.06	n.s.
3.00	110.41	1.00	.012*	0.23	Higher
4.00	114.14	1.00	.007*	0.24	Higher

SEC Group	Mean Rank	Comparison Group	Adj. p-value	Effect Size (r)	Interpretation
5.00	139.03	1.00	<.001*	0.31	Highest

In the case of parental involvement, the Kruskal-Wallis test indicates that there is a significant difference in the parental involvement across parental SEC groups, at least in two of them. ($\chi^2(4) = 25.418$, $p < .00$). To assess the influence of each SEC group on the academic performance pairwise with reference to the lowest group, post-hoc pairwise comparisons with Bonferroni correction have been made. The result indicates that there is no statistically significant difference in the academic performance in SEC 2 and SEC 3 as compared to the lowest. However, higher group such as SEC (4) and SEC (5) shows significantly higher performance as compared to the lowest one.

Table 16:

Post Hoc Pairwise Comparisons of Parental Involvement Across SES Groups Using Mann-Whitney U Tests with Bonferroni Correction

Comparison	Test Statistic	Std. Error	Z	p	Adj. p	Effect Size (r)
SEC 1.00-2.00	-9.013	13.129	-0.687	.492	1.000	.05
SEC 1.00-3.00	-13.995	13.037	-1.073	.283	1.000	.08
SEC 1.00-4.00	-39.416	13.632	-2.891	.004	.038	.20
SEC 1.00-5.00	-69.357	16.594	-4.180	<.001	<.001	.30
SEC 2.00-3.00	-4.982	11.241	-0.443	.658	1.000	.03

Comparison	Test Statistic	Std. Error	Z	p	Adj. p	Effect Size (r)
SEC 2.00-4.00	-30.403	11.926	-2.549	.011	.108	.18
SEC 2.00-5.00	-60.344	15.223	-3.964	<.001	.001	.28
SEC 3.00-4.00	-25.421	11.825	-2.150	.032	.316	.15
SEC 3.00-5.00	-55.362	15.145	-3.655	<.001	.003	.26
SEC 4.00-5.00	-29.941	15.660	-1.912	.056	.559	.14

Note: Z = standardized test statistic; Adj. p = Bonferroni-corrected significance level;

At last, as indicated in Table 18 for the case of classroom environment, the Kruskal-Wallis test indicates that there is a significant difference in the academic performance across parental SEC groups. ($\chi^2(4) = 49.18$, $p < .001$). The pairwise comparison also indicates that there is a statistically significant difference in the academic performance in SEC 2 as compared to the lowest. However, higher group such as SEC (3)-SEC (5) shows significantly higher performance as compared to the lowest one.

Table 17:

Post Hoc Pairwise Comparisons of Classroom Environment Across SES Groups

Comparison	Z	p	Adj. p	Effect Size (r)	Interpretation
SEC 1-2	-0.69	.492	1.000	.05	Not significant

Comparison	Z	p	Adj. p	Effect Size (r)	Interpretation
SEC 1-3	-1.07	.283	1.000	.08	Not significant
SEC 1-4	-2.89	.004	.038	.20	Significant
SEC 1-5	-4.18	<.001	<.001	.30	Significant, medium
SEC 2-3	-0.44	.658	1.000	.03	Not significant
SEC 2-4	-2.55	.011	.108	.18	Marginal
SEC 2-5	-3.96	<.001	.001	.28	Significant, medium
SEC 3-4	-2.15	.032	.316	.15	Not significant
SEC 3-5	-3.66	<.001	.003	.26	Significant, medium
SEC 4-5	-1.91	.056	.559	.14	Marginal

Note. Z = standardized test statistic; Adj. p = Bonferroni-corrected p-value; Effect size (r)

CHAPTER FIVE

DISCUSSION

This chapter describes the presentation of the discussion of findings derived in the quantitative and qualitative phases of analysis. This entails findings through both descriptive statistics (means and standard deviations) and inferential analysis (independent samples t-test), regression analysis, and non-parametric tests. Cohen's d effect size is used to determine the practical significance of differences determined between school types. Discussion on thematic analysis and the quantitative phase of the study is provided.

5.1. Level of Parental Involvement, Classroom Environment, and Academic Performance

The study's first research objective explored comparative rates of parental involvement, quality of classroom environment, and secondary school students' academic performance in government schools and private schools.

5.1.1 Level of Parental Involvement in Private and Government Schools

As can be seen from Table 4 (Chapter 4), the result of this study shows a moderate level of parental involvement in high schools where there is higher parental involvement ($M=3.681$, $SD=0.416$) in private schools compared to the government schools ($M=3.483$, $SD=0.387$). The two institutions differ significantly with a moderate effect size ($p<0.05$, $d=0.46$). All dimensions of parental involvement are not practiced equally in the institutions. Much more parental involvement in independent schools on expectation and aspiration ($\Delta M = 0.19$, $p = 0.019$, $d = 0.34$), monitoring and supervision ($\Delta M = 0.19$, $p = 0.028$, $d = 0.31$), and academic support ($\Delta M = 0.24$, $p = 0.004$, $d = 0.41$), medium effect size for the latter two subscales and large effect size on academic support. Suggesting that only educational support has any relevance in real life. On the other hand, there was no notable and salient disparity of parental school participation ($\Delta M = 0.112$, $p = 0.664$, $d = 0.17$), discussion of academics ($\Delta M = 0.21$, $p = 0.649$, $d = 0.32$), and autonomy support ($\Delta M = 0.24$, $p = 0.057$, $d = 0.27$), suggesting equal levels of participation.

But findings do raise some simple questions. Why are some forms of parental involvement more prevalent in private schools than they are in government schools? Why are there no statistical differences between the two categories of schools for the other forms of

involvement? Why are there differences in levels of participation between the different forms of parental involvement? And, lastly, why does response level differ for students within the same school? What do the trends indicate about us? This section delves into the entire spectrum of parental involvement in detail, and an explanation of why differences might happen and what it means for education as a whole.

I. Parental Monitoring Level in Private School and Government School

Parental monitoring is a general term where parents keep track of children's school life, daily life, and academic achievement. The findings of the present analysis show that there were considerably higher mean parental monitoring levels among private school students ($M = 3.80$, $SD = 0.63$) than among government school students ($M = 3.61$, $SD = 0.62$). Parental monitoring difference is significant statistically, as indicated by the t-test ($t = 2.21$, $p = 0.028$) and the result is not a chance or random sample fluctuation in this sample. Even though supervision is supposed to be outstanding in the environments of private schools, there is also moderate difference between the two groups' answers that may only suggest that there are some families with unique attitudes towards educational supervision or students view it differently.

The qualitative data provide a crucial dimension to these statistics, uncovering a thematic divide between Intensive, System-Driven Monitoring in private schools and Minimal, Trust-Based Oversight in government schools. A private school student described a comprehensive monitoring ecosystem: "My school has strict rules, weekly tests, and constant parent-teacher meetings; hence, parents usually check my academic progress, test results, and assignment completion." This illustrates how school policies actively facilitate and structure parental oversight.

In contrast, a government school student depicted a more informal approach: "*They'll ask, 'Did you do your homework?' but they usually don't check it. They just trust me to get it done.*" Another government student's comment, "*I don't think my parents have paid much attention to my academic progress as long as I have passed the grade,*" points to a lower baseline of structured oversight, often attributed to parents' demanding work schedules and minimal school contact (Bekele, 2021).

Globally, evidence still shows that students in private schools rate themselves as more supervised compared to students in government schools. According to Jeynes (2007), due to the vast economic investment their child's schooling commands from private school parents, private school parents enjoy higher parental expectations and more structured punitive behavior. The OECD (2021) discovered that private schools enforce signed homework logs, online reporting of grades, and frequent parent-teacher conferences, all of which contribute towards stricter parental monitoring than public schools.

Furthermore, United Nations Educational, Scientific and Cultural Organization (UNESCO) (2022) sees that poorer nation private secondary parents are three times more likely to monitor their child's after-school tests and extracurricular activities compared to government school parents. Parental education level and socioeconomic status among schools also have an impact on parental supervision. As Lareau (2011) states, high-SES parents (prevailing in private schools, Central Statistical Agency (CSA), 2022) will tend to enforce study habits. Jeynes (2007) also shows that parental education correlates significantly with parental monitoring ($p=0.47$).

These tendencies are also vindicated through local studies in Ethiopia. Y. Alemu's (2021) research shows that 62% of private school parents are called or sent SMS in the event of missing homework. While just 8% of government school parents receive SMS alerts (only on exam days). Private school parents are likely to monitor their child's studies. The research by the interview done by Bekele (2021) also confirmed public high school students constantly self-monitor due to tight parents' working schedules and minimal school contact with the school systems. Whereas structured monitoring can provide the necessary scholastic assistance, in adolescents, the monitoring has to be optimal, where clear structure and regulation are balanced with autonomy support.

If not, over-monitoring will destroy intrinsic motivation and is most likely to increase rebellion (Deci & Ryan, 2000). The moderate SD range of 0.62 in this research may measure variability in students' experience with monitoring (supportive vs. intrusive). Thus, future studies should study students' monitoring processes and their short- and long-term consequences.

Finally, the current difference between government and private schools in parental supervision reflects the difference in school programs to parental involvement, parents' socioeconomic characteristics, and the availability of school resources. Policy interventions to

facilitate active involvement by all parents, regardless of the type of school, in their children's education are required to mitigate such imbalances. Parents and the education sector also need to embrace programs that are aimed at educating parents on how to get involved in their child's schooling.

II. Level of Parental Academic Support in Private and Government Schools

refers to parents' actions, activities, and practices they undertake to support, encourage, and enable their child's schooling. Based on this measure, the findings of this study indicate that academic support ($M = 3.78$, $SD = 0.61$) has been indicated more by private school students than government school students ($M = 3.54$, $SD = 0.657$). While this difference is notable as supported by the independent sample test ($t = 2.90$, $p = 0.004$), the lesser spread for private school respondents signifies more consistent academic support patterns, whereas the greater range for government schools signifies more diversity in the degree of parental involvement. Testimony globally attributes private school excellence to parents providing greater resources and expectations within the school.

According to Bennett and Wolff (2003), private school parents' high financial investment in their child's education makes them more actively involved in education. Chudgar and Luschei (2009) also conclude that higher socioeconomic status (SES) enables private school parents to allocate more resources (time, money, educational resources) for learning support compared to government school parents. Local research also shows that the students in Ethiopian private schools receive more structured academic support at home (private tutoring, homework support) (Tiruneh, 2014). Desforges and Abouchaar's (2003) research also suggests that regulation in private schools keeps parents actively involved in the child's education. While private vs. government school differences in income level can be a product of the large difference in family support, parental education can buffer SES. Bradley and Corwyn's (2002) research revealed that highly educated but low-SES parents still provide high-quality educational assistance.

However, the qualitative data reveal that this quantitative gap is underpinned by a stark thematic contrast in the form of support. Private school parents were found to provide Resource-Based Support, often characterized by outsourcing academic help. As one private school student noted, *"If I'm stuck, they just hire a tutor. It's like their solution for everything."* This reflects the

high financial investment described by Bennett and Wolff (2003), but can sometimes represent a transactional, rather than engaged, form of assistance.

In contrast, government school parents provided Encouragement-Oriented Support. Lacking the financial means for tutors, their support was rooted in emotional and verbal encouragement. A government school student shared, *They can't really help with the work, but they'll tell me I'm smart and to keep trying*. This finding is crucial, as it demonstrates that support can manifest in different, yet valuable, ways. It also aligns with the concept that verbal praise and encouragement constitute a vital form of support when financial resources are limited.

The same research indicates, Tan & Peng, (2020) reports, that better-educated parents are more likely to apply high-quality learning strategies (e.g., active reading, problem-solving discussions). However, whether the level of parents' academic assistance is high or not, statistically speaking, the quality and nature of the assistance play a colossal role. For instance, guided or scaffolding instructional support (Vygotsky's Sociocultural Theory, 1978) rather than over-assistance on homework (Pomerantz & Eaton, 2001) enhances learner autonomy in problem-solving. Discussion with learners on learning strategies and what they would like to learn in the future had a greater effect compared to helping with assignments as a whole (N. E. Hill & Tyson, 2009). Both the quality and nature of parental academic support may be responsible for variation in the student experience of parental academic support and variation in the frequency of parental involvement. Finally, while this study implies that private school environments are more likely to provide more PAS (parent academic support), targeted interventions can augment support in all settings.

It is found through a study that verbal praise even constitutes support to the child when parents lack finances and time or the means to provide official support. Parents thus need to seek alternative avenues regardless of their socioeconomic status. Parents also need to gauge the quality of school support beyond the high level of involvement.

III. Level of Parental Emotional Support in Private and Government Schools

Parental emotional support examines the extent to which parents make adolescents feel secure, supported, and comfortable psychologically. The present Research examined the

differences in reported parental emotional support of adolescent students in private and government schools.

The results of the analysis showed that while government school teenagers were found to have a slightly higher level of emotional support ($M = 3.494$, $SD = 0.643$) than government school teenagers ($M = 3.78$, $SD = 0.566$), it was statistically not significant since the independent samples t-test (*) reported ($t = 2.82$, $p = 0.062$). The moderate standard deviations for both groups may suggest moderate variability in teens' emotional support reports regardless of school type.

This finding is powerfully contextualized by the qualitative data on parent-child discussions. While private school conversations were predominantly Academic-Focused, government school interactions were often characterized by General Life and Well-being Discussions. A government school student's comment, *they care more about me being happy*, directly illustrates the qualitative nature of the emotional support present in these homes. This suggests that the expression of emotional support may differ—being more integrated into daily life and well-being in government schools, versus being more implicitly tied to academic performance in some private school settings.

The study also suggests that, unlike parental academic support, emotional support is less related to parental socioeconomic status and school resources (Wang & Sheikh-Khalil, 2014). Instead, there seems to be evidence supporting that parental emotional support is more based on parenting practice, parental individual attributes (behavior, mental health), and culture. Parenting patterns such as authoritative parenting (warmth + limits) provide stronger emotional support than authoritarian or permissive parenting (Baumrind, 1991).

Parental characteristics such as being emotionally present, attentive, and empathetic have profound effects on offering emotional support (Wang & Sheikh-Khalil, 2014). These characteristics enable sensitive parent-child relations regardless of material circumstances. Depressive and anxious parents are likely to be inattentive while offering emotional support (Goodman et al., 2011). In cultures like Ethiopia, caregiving culture on the community level may be such that children are able to get emotional support from neighbors and relatives (Z. Abebe, 2010), whereas verbal emotional support may not necessarily be as explicit as it would be in Western cultures and tied to accomplishments (Tafere, 2014). Studies show that teenagers

require multi-dimensional emotional support in order to cope with the tumult of identity formation, academic pressure, and peer relationships. The optimal forms of support are (1) valuing independent of success or failure (R. M. Ryan & Deci, 2000), (2) verbal support of effort put in regardless of outcome (Henderlong & Lepper, 2002), (3) guidance on the work to bypass obstacles but not for them (Grolnick & Pomerantz, 2009), and (4) guidance and counseling under pressure (Zimmerman, 2002). Here, the lack of extensive variation by school type indicates that institutional processes may be less strong than family-level processes in defining the emotional support adolescents receive.

This is supportive of developmental theories that emphasize that adolescent-parent relations are defined by specific family characteristics and not by universal institutional environments. The gap discovered in both school systems is that even though the majority of the children are emotionally taken care of, there exists a substantial minority in both government and private schools who end up being emotionally neglected. Implications are that schools and policymakers need to prioritize family engagement programs and care systems of mental health that attend to the emotional needs of all teens and not assume greater parental emotional care on the basis of private school attendance. Verbal explicit expression of preference for progress over outcomes must be encouraged. Follow-up studies will be needed to investigate how each of these elements of emotional support (e.g., communication, feeling validated or heard, or being present during stress) varies for adolescents from diverse backgrounds. In addition, longitudinal studies might investigate the long-term consequences for teen mental health and academic achievement of these patterns of parent support. Understanding of these trends is critical to the development of interventions that improve the emotional support for adolescents in all schools.

IV. Level of Parental Expectation and Aspiration in Private and Government Schools

Parental Expectation and Aspiration refer to parents' hopes, dreams, and desires for their children's future in general and primarily about their school performance, success, potential professional achievement, and self-actualization. Only the first two are explored here, in this research. Based on this criterion, the present study investigated the parental expectation response by private and government high school teenagers. Private school teenagers reported significantly higher parental expectations ($M = 4.07$, $SD = 0.47$) than government school teenagers ($M = 3.8$, $SD = 0.62$). Statistically, the difference is significant, as shown by the independent sample t-test

($t = 2.37$, $p = 0.019$). Moderate standard deviations in both groups confirm the diversity of teenage experience.

This statistical gap is brought to life by the qualitative findings, which reveal a stark contrast in the nature of these expectations. The thematic analysis identified two distinct patterns: High Achievement Pressure in private schools versus Practical Achievement Pressure in government schools. Private school students described expectations deeply tied to family legacy and elite status maintenance, as one student noted, “Both of my parents are doctors; they always want me to follow in their footsteps,” and another highlighted the transactional nature, “We didn't pay all this money for you to be average.”

Conversely, government school students described expectations focused on foundational security and basic educational completion. One student shared, “They just want me to pass. They say, 'Don't fail; get your diploma so you can get a decent job,’” while another pointed to socioeconomic constraints, “Beyond my academic aspirations, my parents aspire to find a way to sustain us through financial setbacks.”

The findings of the current study are congruent with local and international trends. In accordance with the investment model (Eccles, 1983), parents who invest more in their children's educational futures (ordinarily in private schools) have higher education aspirations. As with other comparable research (Jeynes, 2007), parents whose children attend private schools have more educational aspirations for them.

Following Tafere (2014), wealthier families (usually putting children in private schools) aspire to more university education. Besides that, parents of private schools believe education helps in upholding social privilege; therefore, they will surely heighten education pressure (Collins, 1979). Parental education also introduces differences in parents from private and government schools' expectations. As discussed by Beyene and Tizazu (2020), private school parents are largely university graduates who anticipate the performance of their children to match or surpass theirs. Even with a greater positive response to parental expectation, the moderate diversity of response among the students, as measured through the standard deviation, can mean that there are still a few who saw or felt lower parental expectation. Lower parental expectations and beliefs can be attributed to various factors, including parental beliefs, SES, education, mode of expression, and self-perception by the students. The fixed mindset parent

would have in mind the perception that his/her child is not a science type, and this will set his/her expectation of his/her child's performance in the STEM subjects (Dweck, 2006).

As also illustrated by Tan & Peng, (2020) study, lower SES parents would have higher expectations but lower knowledge and income with which to effectively express their expectations, and therefore, the student will take it as a lower expectation. Sirin (2005) demonstrated that parents with lower levels of education overestimate their child's school performance. Parents may not necessarily disclose high expectations to children; thus, teenagers underestimate parental expectations (N. E. Hill & Tyson, 2009). Low self-efficacious children also misperceive parental support as low expectations (Pomerantz & Dong, 2006). In summary, the research depicts immense disparity in parental expectations between low-income students and those from private schools, while moderate disparity exists between the two. The results show that interventions to decrease the expectations gap, particularly for children from low-income families, would demonstrate to support the impact of education. Research by Yeager et al. (2019) found that parent training in a growth mindset added 12% college enrollment.

Thus, such educational practices implemented in school environments can improve performance for children. Parents should also understand that while high expectations are better, inappropriately stressful or irrelevant expectations may affect the mental health of children (Sorkhabi & Mandara, 2013). Parents should thus ensure they set proper expectations—high but achievable—with emotional support so that children grow without undue stress.

V. Parental Autonomy Support Parental Autonomy Support

is the extent to which parents promote the autonomy, initiative, and sense of option in activity, particularly the children's learning and development? In accordance with this definition, the current findings indicate that the current research findings of equal measures of autonomy support by government ($M = 3.45$) and private school children ($M = 3.26$) are consistent with previous studies refuting simplistic conclusions about school sector advantage in terms of parenting style (Pomerantz et al., 2007).

The non-significant difference ($t = 1.292$, $p = 0.198$) and significant standard deviations of the two samples favor ecological systems theory (Bronfenbrenner, 1979), which predicts that

parents' behavior is more affected by microsystem variables like family life than macrosystem variables like school type.

The qualitative thematic analysis revealed the sharp division that quantitative measures had not captured. Guided Autonomy was discovered to be the hallmark of private school experiences, in which freedom was given within strictly laid down and monitored boundaries. As a private school student explained, *I can choose my project topic, but only from a list they approve. I have freedom, but within their rules.* This reflects the "concerted cultivation" parenting style so oft associated with middle-class families (Lareau, 2011), where parental involvement is high-structured and skill-development-focused, which at times comes across as limiting.

In contrast, Independent Autonomy characterized the government school experience, with more freedom granted to students, with less guidance from the teachers. One student from a government school says, *I'm on my own. They tell me to study, but I have to figure everything out by myself.* This reflects the "natural growth" highlighted by Lareau, 2011, as more common among working-class families, where more time might be unstructured and left to children's discretion.

The results in the study of Soenens et al. (2007) also found that autonomy support differed significantly across learning environments based more on specific parent-child relationships than on institutional features. The comparatively higher state school autonomy support, though not statistically significant, concurs with Lareau's (2011) findings in *How to Close Class Differences in Childrearing*. As per her results, working-class parents are inclined toward more natural development with less regulation of control, while middle-class parents are inclined toward more organized cultivation practices that might restrict perceived autonomy. This tendency is particularly significant in adolescence, when individuals develop greater needs for self-determination (R. M. Ryan & Deci, 2000). The present findings build on this work by uncovering how such relations endure across school types, and that

VI. Parent-Child Educational Conversations

The parent talk measure measures the frequency and the significance of the parental involvement in communicating with the children regarding school, everyday life, social life, and future planning. On this measure, this study's results show that private school students participated in instructional communication far more often ($M = 3.546$, $SD = 0.614$) compared to government school students ($M = 3.454$, $SD = 0.654$). Independent t-test yields $t = 0.0668$, meaning that statistically, the difference is not significant. The positive moderate to high parental discourse (mean) of the quantitative finding suggests that there is high or a high level of interaction among the students in both groups. The moderate standard deviation in both instances may signify heterogeneity of student experience.

However, the qualitative data provide a critical layer of understanding, revealing a stark thematic divide in the content and quality of these conversations. For private school students, discussions were characterized by Academic-Focused Dialogue, often experienced as high-pressure and performance-oriented. One student described this dynamic: *Every conversation is about grades, tests, and my classmates' scores. It feels like a business report.*

In contrast, government school students experienced General Life and Well-being Discussions. Their conversations, while less frequently centered on academic metrics, often focused on holistic well-being. As one student shared, *We talk about whether my friends are nice or if something funny happened. They care more about me being happy.* This pattern resonates with the finding that less educated parents may focus less on academic reasoning (Heath, 1983), but it also highlights a potential strength in supporting socio-emotional health.

The relatively greater parental educational involvement, as opposed to government school children, is in line with past studies that connect educational conversation with parent education level and family socioeconomic status. For instance, according to the Tan & Peng, (2020) study shows that greater resources in the form of books and technology that enable parental educational conversation are possessed by greater-SES parents (of whom there are aplenty in private schools). A concurrent study by Lareau (2011) similarly indicates that high SES parents have flexible working hours; this allows them enough time to be in touch with their child.

On the other hand, financial insecurity strains in the low SES context lessen bandwidth for intellectual discourse (Conger & Donnellan, 2007). In addition to this, the less educated

parents (more common in government schools) will issue commands (e.g., Do your homework) rather than reasons (Heath, 1983); this limits the academic discourse by parents. Although the current study indicated non-significant differences, the two schools may have various implications. Some of the parents of the government schools (government officials or teachers) are economically constrained yet well educated; the same is discussed by Sirin (2005). Not all private-school families are high-SES. Some lower-middle-class families may afford the expense of private school but not discussion time; therefore, in the case of private schools, this may reduce family discussion.

Even among low-SES parents, in a study by Beyene and Tizazu (2020), churches and mosques emphasize schooling, so even poor parents will discuss schooling. Besides frequency, discussion quality also counts in the student's answer. In this present research, some questions assess to what extent the discussion was open and meaningful; in this context, some private students can sense that the student's discussion is one-way, less respectful, or less open. In short, while both groups of students provided a good enough comment on parental conversation, it is not good enough because it has to be so. Literature (e.g. Wang & Sheikh-Khalil, 2014) suggests that open and respectful parental conversation in the instance of an adolescent student is particularly good for student mental health and ensuing academic ambition. Schools, parents, and interested parties thus need to take an interest in the substance of parent-teacher intellectual conversation rather than just frequency.

VII. Parent School Involvement

As defined by Epstein (2001), referred to the extent at which parents engaged in attending school meetings, communicating with educators, and volunteering for school activities. Consistent with the above, parent school attendance is the focus of the present study in government and private schools. The parent score indicated that the parents of private schools are more involved ($M = 3.526$, $SD = 0.683$) compared to the government school parents ($M = 3.243$, $SD = 0.68$). The value of the independent sample t-test ($t = 2.1$, $p = 0.03$) also indicates the difference as statistically significant. The two moderate standard deviations for the two groups indicate wide variation in the extent of involvement in both school systems. Evidence indicates that school-parent communication is a complex phenomenon that is institutionally governed, household-resourced, and culturally ideal (Epstein, 2018).

Findings presented herein are consistent with research indicating that the socioeconomic constraints and work pressures generally erode government school parents' capabilities for schooling regardless of their high level of educational ambitions for children (Lareau, 2011). School policy also intervenes; Ethiopian private schools use forced parent-teacher meetings, eliciting higher participation (Tafere, 2014). Multiple and systematic modes of communication in the case of private schools facilitate parent-to-teacher meetings (Molla & Melesse, 2018). Moderate standard deviations across both groups reflect considerable variability in participation levels in each school system. This has several implications. One, lower-middle-class parents may be cost-restricted but lack time and energy for participation (Molla & Melesse, 2018). Two, parents have different attitudes toward education; education-values families advocate for participation regardless of the school (Beyene & Tizazu, 2020).

Less educated parents may undervalue their role and leave it to the teacher (Sirin, 2005). Due to the aspiration for independence and autonomy, particularly among teenagers, they thus restrict parents' involvement in school matters (Steinberg, 2014). According to a study by the Ethiopian Development Research Institute, EDRI (2021), it was found that 40% of students in Addis Ababa private schools indicated that they don't need parents in meetings. In summary, even though there is this minor positive reaction based on the private school report, much more needs to be done. Beyond school intervention, active school participation of parents without curtailing pupil autonomy needs to be undertaken in both schools. Government schools also need to find a means of bridging the communication gap between schools and parents.

5.1.2 Level of Classroom Involvement in Private and Government Schools

Students' perceptions of the classroom environment were measured with the use of Fraser's What Happens in This Class (WIHIC) scale. The WIHIC scale measures seven dimensions of the classroom learning environment: cooperation, equity, task orientation, student participation, teacher support, coherence, and investigation. In this subsection, an exhaustive presentation of each subscale (dimension) has been provided.

I. Level of Teacher Support in Private and Government Schools

The teacher support factor in the classroom environment scale by Fraser (1998) measures the extent to which students perceive their teacher as caring, friendly, and supportive. To this

degree, the present study findings indicated that students from private schools perceived greater teacher support ($M = 4.07$, $SD = 0.47$) compared to government schools ($M = 3.7610$, $SD = 0.79$). Nevertheless, the variance of the perceived teacher support as reported by the student was staggering ($t = 1.961$, $p = 0.05$) and signifies that the variance of perceived teacher support will not occur because of random change or chance in this population. The low standard deviation suggests that most students in private schools are similar when it comes to teacher support. These findings are in consonance with the literature that has emerged so far. To mention an example, in a meta-analysis by Maulana et al. (2021), private school students consistently rate higher teacher support because of reduced student-to-teacher ratios, more resources, and teacher performance incentives.

This statistical gap is vividly brought to life by the qualitative findings, which identified a clear thematic divide: Accessibility and Individualization in private schools versus Overwhelm and Standardization in government schools. A private school student's account of Accessibility and Individualization illustrates this perfectly: *Most of my teachers are available when I need their assistance... The school also offers the chance for one-on-one interaction with my teachers.* This reflects the conditions—smaller class sizes, mentorship programs, and teacher performance incentives highlighted in global literature (Maulana et al., 2021; OECD, 2018).

Conversely, a government school student's experience epitomized the theme of Overwhelm and Standardization: "The teacher is rushing to finish the syllabus. There are 50 of us. If you don't get it, you just get left behind." This directly aligns with local research citing overcrowded classrooms and high teacher workload as primary barriers to supportive teacher-student interactions (D.S. Alemu & Mossie, 2018).

A similar study by Aldridge and Galos (2018) conducted in Australia also indicates that private schools perform better in the indicator of teacher support because of their smaller class sizes and mentorship. Likewise, the OECD (2018) report also indicated that private school teachers are more satisfied with their jobs and receive additional training and therefore have more supportive classrooms. Local studies in the Ethiopian context also concur with the present study. For instance, Wondimu (2019) opines that Ethiopian private school instructors were more readily available for one-on-one assistance, as they taught in groups.

Conversely, D. S. Alemu and Mossie (2018) asserted that government teachers are typically confronted with overcrowded classrooms, bureaucratic tasks, and teacher morale that lessens perceived support. Private school student support policy is also paramount in augmented teacher support in private schools (Girma, 2021). Besides the structural school characteristics, teachers' perception of support to students is a result of cognitive, affective, and social processes that affect how students view teachers' behavior. Supplementing Attachment Theory (Ainsworth, 1978; Bowlby, 1969), students are safe and supported if they possess a teacher who is emotionally and physically available. According to R. M. Ryan and Deci (2000), teaching support is normally linked to feedback in an open manner, encouragement over lecturing (autonomy support), and respect.

Conversely, according to Weiner (1985), when the learner believes that his or her teacher cares about him or her (assists him or her when he or she is struggling), they credit support to the teacher's personality. The students' value by their teachers has also been defined by Eccles and Wigfield (2002) as also being an important emotional support. Private tutors are more accessible when required by the pupils compared to state schools, as there are fewer students per class and less workload. Private schools also offer mentorship programs (after school) in the event that the pupils require guidance from the teacher. Private teachers are also likely to provide concrete feedback and compliments. They all contribute to enhancing students' perceptions of teacher support.

Briefly, student perceptions of teacher support prompted by government school and private school students were merely moderately positive, but at much higher levels relative to their government school counterparts. Their reactions, however, vary only modestly (as evidenced by the standard deviations), so that not all the students in the two schools equally claim to be supported. This means that within the schools that have support systems in place, some minority of students can be underserved, suggesting potential inequities in the provision or perceptual foundation of teacher support at the level of individual classrooms. Teachers in schools would thus have to use differentiated instruction in order to provide for those lacking support. Hattie (2009) found differentiated instruction to have an effect size of 0.72, nearly doubling the rate of learning compared to regular methods. But it all hinges on a lot of things,

such as teacher class size, workload of teachers, and fees of teachers. Governments hence have to deal with such issues.

The thematic findings also reveal that teacher support is higher in private schools as compared to government with the account of the smaller class sizes and better teacher-to-student ratios in private schools, making teachers much more available and able to provide individual guidance. The govt. School teachers are usually overburdened, diminishing their capacity to provide individual attention

II. Level of Student Involvement Student Subscale

Items directly assess the students' participation and engagement in class discussions and activities themselves. Based on this finding, in this thesis, it is revealed that private school students are more interested in studies ($M = 3.91$, $SD = 0.37$) than government school students ($M = 3.75$, $SD = 0.78$). As evident from the independent sample mean test ($t^* = 2.047$, $p^* = 0.042$), this can suggest that it's unlikely (there is only a 4.2% chance) that the difference may be due to random sampling variation, i.e., the students of the private school are actually motivated better than others. The comparatively low standard deviations for both groups, with slightly greater dispersal for the children in the government schools, suggest heterogeneity in levels of commitment, as there are some children in each group who were less committed or disengaged from the school context.

This quantitative gap is vividly elucidated by the qualitative findings, which identified a thematic divide in classroom dynamics: Active, Student-Centered Learning in private schools versus Passive, Teacher-Centered Instruction in government schools. Private school students described an environment where involvement was structurally facilitated. As one student noted, *"Most often, before every project, teachers explain the goal and the objective of the task... along with the reference material that we can borrow from the school library."* This reflects a pedagogical approach that is project-based and resource-rich, encouraging active participation.

Conversely, the government school experience was characterized by passive knowledge reception. A student's account of completing worksheets and assignments from the textbook, *feeling like we're just doing it to get it done, not to really learn*, underscores a pedagogical model focused on rote completion rather than authentic engagement.

The results of this present study agree with the majority of research studies conducted in the Ethiopian context. For instance, as reported by Asegdome et al. (2019), private school students in Ethiopia were much more engaged ($M = 4.12$, $SD = 0.68$) than students from government schools ($M = 3.47$, $SD = 0.82$), and the difference was significant ($t = 5.34$, $p < 0.001$). While not mentioned, yet a further study by Wondimu (2019) and D. S. Alemu and Tekleselassie (2020) documents that private schools have lower class sizes, better teacher-to-student ratios, and more active teaching methods, which may facilitate greater engagement. Some research (e.g., Bekele, 2021), however, documents that variations in engagement are not statistically significant when controlling for socioeconomic status ($p = 0.01$), where family background could be assumed to counteract the effect. Besides the individual difference or personal uniqueness, there are several reasons why students in private schools are more participatory.

They include small class sizes, classroom tactics, increased family socioeconomic status, and superior education infrastructure (laboratories, libraries, computers). Bekele (2021) finds that students in private schools are from higher socioeconomic groups; hence, they likely enjoy home assistance (guidance, textbooks), favorably influencing participation. Based on studies conducted by Finn and Achilles (1999), when there are fewer students in the class, teachers can provide individualized attention to students to meet their needs. This led to more interaction and participation between students and teachers. Leuven and Oosterbeek (2018), in a study they did on 10,000 high school students, determined that the reduction of the number of students per class from 30 to 24 raised participation by 9% (self-reported interest in class) and reduced disciplinary misbehavior by 6%. Also, meta-analysis by Hattie (2009) determined that socio-emotional engagement is enhanced in smaller classes. Empirical evidence supports that access to adequate learning facilities like science laboratories, libraries, and technology enhances learners' motivation and engagement significantly. For example, in the case of learning science, the National Research Council (2012) cited that students are likely to show 22% more engagement when students are working in labs (National Research Council, 2012). However, in the Ethiopian context, only 12% of the government schools have working computer laboratories (World Bank, 2022).

Finally, while the private school students' participation is greater, the statistically significant participation and the moderate standard deviation on both days are only minimal

gains in the government schools' favor. Maybe this means that the moderate variability suggests that the participation is uneven. Maybe this means residual differences in teachers' practice or students' background.

The thematic findings also assert that student participation in private schools is pedagogically student-focused and involves active learning. Government schools, typically due to sheer class sizes and absence of equipment, are more dependent on conventional, passive lecture methodologies for managing the group.

III. Level of Student Cohesiveness in Private and Government Schools

Peer cohesiveness scales measure the amount of warmth, support, and cooperation within a classroom between students. It would generally rely more on school culture, policy, and student characteristics than it would on school type. In the current study, more peer cohesion was reported among government school students ($M = 3.57$, $SD = 0.43$) compared to private school students ($M = 3.60$, $SD = 0.69$), although the difference was not statistically significant ($t = 1.855$, $p = 0.066$). The comparable amount of variance between each group suggests that there are differentiated social experiences between the two settings that prove that not a large number of students felt that they had been segregated from one another so much as operated as one. Research confirms that, in contrast to public schools, private schools flourish in homogeneous groups (socioeconomic, cultural) since, because of the smaller class sizes, student-centered instruction, and additional opportunities for extracurricular activities, there is greater potential for communication.

While this is not the sole reason for greater student cohesiveness, all this could have a beneficial impact on a positive relationship among the private students. Government schools normally have more diverse populations, more students per class, and a lower chance of being a representative of an issue in student cohesion if diversity isn't promoted. But the findings of this research disprove the supposition that private schools always result in more powerful peer relations and force us to reconsider the other unseen determinants of student cohesion. Hence,

the smaller student cohesion in private schools observed in this study may be because of more student academic competition than cooperation.

Another research by Darmawan (2010) reveals that Indonesian private school students were more academically competitive, hence leading to smaller peer support and more individualism. Girma and Assefa (2019) explain that Addis Ababa private school pupils were three times as likely to apply to international colleges compared to government school pupils, leading to GPAs and extracurricular competition. Alternatively, Tafere (2014) explained that as class sizes are bigger, peer bonds became stronger among Ethiopian government school students because of resource scarcity (e.g., books, classrooms), encouraging cooperation. Therefore, children rely on each other, building relationships in spite of differences.

IV. Level of Student Equity in Private and Government Schools

Equity is assessed on classroom environment scales as the extent to which all students have access to an equal opportunity to learn, contribute, and succeed. Teacher time, materials, and management are all divided evenly and without bias. During the course of this study, there was a statistically significant difference between government school and perceived private equity ($M = 3.66$, $SD = 0.670$ vs. $M = 3.510$, $SD = 0.66$; $p = 0.66$). Having fewer students in a class, more subsidized programs, or more strict inclusivity policies may enable the private schools to allocate resources, teacher assistance, and participation time more fairly than government schools. The results of this study are consistent with the limited research available.

The thematic analysis gives an insight into Non-significant variability in equity among the two schools. Though private school systems (clear rubrics, open) are designed to appear more objectively fair, High-achieving students were sometimes perceived as receiving better resources, teachers, or opportunities, creating an internal hierarchy. Conversely, in government schools, equity is undermined by a lack of supportive structures—such as after-school programs, which can make struggling students feel the classroom is not designed for them, fostering a sense of exclusion.

Study by Heyneman and Stern (2014) and the World Bank (2022), private schools have smaller student-teacher ratios and better-funded programs that allow for more one-on-one

attention, closing equity gaps. Further data by Girma and Assefa (2019) indicate that teachers from Addis Ababa private schools were better qualified in inclusive pedagogy, whilst government schools lacked proper implementation, often ad hoc. Tafere (2014) cite private schools (Addis Ababa) were 22% higher in marks for equity ($p < 0.05$) and led the gaps in teacher focus (private: 4.2 vs. government: 3.1). Although private school students have a moderate agreement ($M = 3.66$) that the classroom is fair, the moderate standard deviation of approximately 0.70 means that nearly 68% of ratings fall between 2.96 and 4.36. This is a scale from nearly neutral (2.94) to extremely strong agreement (4.34), which shows some students find the classroom highly fair, but others find they are being treated unfairly. There are a number of reasons why: teachers may unintentionally favor paying or high-achieving students. Or private school ability grouping (e.g.) can lead to unequal treatment. Wondemeneh (2022) found that private school honor students were assigned superior labs/teachers, and others felt neglected.

V. Level of Investigation in Private and Government Schools

The classroom investigation subscale will most probably measure the degree to which students are inclined towards questioning, investigating, and problem-solving, or conducting discovery learning.

No significant difference was observed between developing investigation skills among government school ($M = 3.42$, $SD = 0.65$) and private students ($M = 3.55$, $SD = 0.70$; $p = 0.287$; $d = 0.15$). This suggests that both school models are equally useful in the training of core inquiry skills. The moderate to low number of standard deviations on each occasion suggests there is little variation in student response (68% of students scored one standard deviation from the mean). The small Cohen's d value also suggests the difference between government and private school students' scores on classroom investigations is negligible in practical terms. Evidence indicates private schools' structure hands-on experimentation by having more laboratory centers (Hofstein & Lunetta, 2004) and have student-centered teaching (OECD PISA, 2018).

Government schools, however, have structured, curriculum-based scientific exploration (Bybee, 2015). Thus, private schools will have more scholarly studies than government schools, which disagrees with the current study, which indicates that there is a negligible difference. Local research, however, verifies these assertions. No difference in question skill between school levels ($*d* = 0.06$) when teacher training and resources are held constant, report N. Alemu et al.

(2020). Mekonnen (2017) indicates that problem-solving activity was scored slightly higher in private schools, but the difference ($p = 0.810$) between open-ended investigation activities did not exist. The variations occur due to structural reasons, such as Ethiopia's examination culture, in which memorization is emphasized over cognitive inquiry even in curriculum goals (Tesfaye & Assefa, 2021). Aside from school type, psychological and social factors appear more important in creating inquiry participation.

For instance, intrinsically motivated students (Deci & Ryan, 2000) and growth mindset students (T. Abebe, 2021) were far studied more extensively in research on science subjects, exposing the significance of autonomy and students' beliefs as opposed to institutional categorization. Similarly, Vygotsky's Sociocultural Theory tells us that scaffolding (teacher/friend assistance) and peer talk support increase inquisitive capability. Teachers permitting students to think about their own opinions also influence student investigation (Hattie, 2017, $d = 0.69$). Although student research skills influence the success of the students more, evidence in current research indicates that institutions need to work on enhancing those. Schools should give priority to extracurricular scholarly inquiry activities. Educator professional development is also needed. D. Assefa (2022) asserts that inquiry-based learning enhanced the results in science by 15% if educator training is done after it. Teachers should foster relatedness rather than rote memory, and peer brainstorming rather than the traditional lecture.

VI. Level of Peer Cooperation in Private and Government Schools

Fraser's (1998) classroom environment scale cooperation subscale typically measures to which the students in a classroom or learning environment work together, assist one another, and collaborate, in contrast to competing for the same academic or social goals.

The present study verifies that the private school adolescents reported slightly higher peer cooperation ($M = 3.718$, $SD = 0.702$) than government school adolescents ($M = 3.77$, $SD = 0.554$); however, the difference was insignificant ($t = 1.85$, $p = 0.066$; $d = 0.63$). This means that the difference will likely be an artefact of random fluctuation rather than an important systematic difference between the two types of schools. This is also indicated by the effect size ($d = 0.65$), which is interpreted as negligible or very small. The result also indicates that whether a school is government or private is not an important factor in peer cooperation with Fraser's scale here.

Research evidence yields contradictory findings regarding whether there is a difference between government schools and private schools.

Thematic insights provide a potential explanation for the statistically non-significant finding in student cooperation. In the case of a private school, although there were many group tasks and teachers facilitated the tasks, the competition among the students hindered the cooperation. Whereas in government schools lack of teacher facilitation makes cooperative experiences that are less positive and ultimately ineffective, which may suppress measurable differences.

Hattie's (2009) meta-analyses reveal that school type contributes less to students' co-operation ($d < 0.2$) than instruction approach or class environment. In contrast, Lavy's (2015) presentation demonstrates that the smaller class size in private schools can have better structured group work ($p = 0.03$, $d = 0.28$) compared to government schools. The same, Dill and Hunter (2010), show how the top private schools are putting a strong focus on cooperation ($d = 0.42$). There were a few studies, though, primarily Garcia et al. (2017), that established that with fewer competitions for the government schools came more cooperation with the private schools. In the Ethiopian context, most of the studies have focused on learning achievement or student-teacher relationships, and not peer collaboration. The current local study by Tafere (2014) suggests that, despite greater ratios of students to teachers and somewhat greater collaborative learning, differences in peer collaboration were not significantly different. The difference across the studies may suggest that peer collaboration may require psychological traits that reach far beyond school type.

As upheld by Deci and Ryan (2000), students work together more when they are in the state of autonomy (independence to select an activity), have faith in their capability, and are emotionally attached to their colleagues. Another study (Tajfel & Turner, 1979) posits that students will work together if they assume that they are comparable (same class, same ethnicity) to their colleagues. Under the competitive environment, the pupils are capable of evading collaboration to maintain their worthiness out of fear that co-action would expose their weakness (Covington, 1992). Bandura (1997) also adds that low-achieving teenagers are also capable of evading peer cooperation for fear of being criticized. In an Ethiopian context, there are some

psychological, learning, and organizational determinants that discourage peer collaboration in domains other than those in schools.

For instance, instruction by the teacher (teacher-centered), especially in government schools (Tafere, 2014), can limit autonomy and lead to decreased intrinsic motivation for peer cooperation. Furthermore, the cultural diversity of the nation can at times be challenging to peer relations unless intervention measures (mixed group projects) are implemented. The high-stakes testing in Ethiopia (ESLCE) encourages competition; hence, the sharing of information with peers decreased (MoE, 2015). In summary, existing evidence perhaps suggests that school type organization is less critical than student cooperation, classroom teacher practice, cultural student dynamics, and the school measurement system. In enhancing cooperation, schools should focus on student-centered pedagogies, peer interaction opportunities that are fair, culturally responsive teaching, and cooperative assessment approaches—evaluation systems for improving cooperation instead of competition.

VII. Level of Task Orientation in Private and Government Schools

measures the extent to which students perceive that the class is organized, well-prepared, and committed to efficient and judicious accomplishment of academic objectives. The findings of this study revealed that the private school children reported a comparatively higher mean value for task orientation ($M = 3.794$, $SD = 0.620$) than government school children ($M = 3.371$, $SD = 0.801$), although it was statistically significant ($p = 0.025$). These greater government school standard deviations may indicate varying student perceptions of task orientation by students, and that, while they generally concur with classroom task orientation, there are some lagging in getting tasks accomplished. While both groups demonstrated modest variation, government school children may have greater difficulty specifying task relevance with less individualized teaching in larger class sizes (Blatchford et al., 2011).

This statistical gap is brought into sharp focus by the qualitative findings, which identified a critical thematic divide: Clarity of Purpose and Application in private schools versus Rote Completion in government schools. A private school student's description of their learning process illustrates the first theme: *Most often, before every project, teachers explain the goal and the objective of the task, how it will be graded, and when it is to be submitted...* This reflects an environment where tasks are framed as meaningful, goal-oriented activities, aligning with

literature on how private schools emphasize efficiency and clear academic goals (Hanushek & Woessmann, 2008).

Conversely, a government school student's experience epitomized the Rote Completion theme: *We do a lot of worksheets and assignments from the textbook. It feels like we're just doing it to get it done, not to really learn.* This perception of tasks as mechanistic exercises to be completed, rather than understood, aligns with challenges noted in government schools, such as overcrowded classrooms and a lack of resources (World Bank, 2022), which hinder the implementation of formative assessment and clear task alignment (Black & Wiliam, 1998).

The integration of these methods demonstrates that the higher task orientation in private schools is not merely about efficiency, but about creating a culture of purposeful learning. The emphasis on goals, rubrics, and reference materials fosters metacognitive skills and self-regulation (Diamond, 2013). In contrast, the focus on rote completion in government schools fails to cultivate this deeper engagement, leading to the variability and lower mean levels of task orientation

On the other hand, private school systems have more space for formative assessment and task alignment with instructional goals (Black & Wiliam, 1998). Hanushek and Woessmann (2008) further supplemented that private schools emphasize efficiency, accountability, and clear academic goals, which are beneficial to support high task accomplishment among students. Findings of local studies also complement this study. For example, consistent with Wondimu (2019) and Alemayehu and Admassu (2020), private schools achieve greater academic performance, better classroom discipline, and greater teacher responsibility; consequently, students are likely to accomplish the academic task.

Similarly, Asgedom et al. (2019) illustrated that private schools enforce greater discipline and more clearly articulated task expectations (e.g., homework completion, punctuality). Conversely, government schools usually have instances of overpacked classrooms, teacher absenteeism, and poor facilities that decrease task orientation (World Bank, 2022). Yet another study discovers that, aside from intrinsic student motivation and teacher or institutional support, teenagers with effective self-control skills can stay focused, resist distractions, and meet deadlines (Diamond, 2013).

Similarly, Duckworth and Carlson (2013) found that skills such as controlling wants, persistence, and planning are more accurate predictors of students' grades than their IQ. Foreign private schools actually teach self-regulation in so many words (e.g., stringent homework schedules, time management seminars), while state schools may leave it to chance (Jacobson et al., 2019). Thus, in the context of Ethiopia, aside from the traditional formal school training, parents and schools are required to supplement efforts in supporting the children through goal-setting activities, time management training, and metacognitive ability. Based on research done in Addis Ababa in 2023, government schools employing daily focus drills (brief 5-minute planning exercises) had a 22% increase in achievement of tasks by students (Tilahun et al., 2023).

5.2. Relationship Among Parental Involvement, Classroom Environment, and Academic Performance

5.2.1 Parental Involvement and Academic Performance

Even though all forms of parental involvement do not contribute the same type of input towards school achievement, as is evident from the following table. Parent educational support ($r = 0.306$, $p = 0.001$), parental aspirations and expectations ($r = 0.344$, $p = 0.001$), and parental autonomy support ($r = 0.322$, $p = 0.001$) in parent involvement have moderately significant correlations with academic achievement. On the other hand, parental monitoring ($r = 0.185$), parental emotional support ($r = 0.20$), parental discussion ($r = 0.164$), and parental school involvement ($r = 0.173$) are all low-correlated with academic performance but are significant. Although the latter clusters had smaller impacts, their statistical significance reveals that these behaviors indirectly influence academic success by facilitating the big three predictors of expectations, autonomy, and academic support. This has been the moderate connection between parental emotional support and parental talk with the Big Three.

The current study's findings also concur with past research. As suggested by X. Fan and Chen (2005), parental involvement, parents' intention and aspiration for kids' academic achievement, is most closely related to students' academic achievement ($r = 0.4$). Wilder's (2023) nine meta-analyses indicate that with or without a definition of parent involvement, grade level, or student ethnicity level, there is an evident positive correlation between academic achievement

and parental involvement. The controls for parental expectations in the research to be linked with student motivation, with direct effects on student academic performance, are present. The study in this research also established that parental aspirations and expectations were linked with parental support (academic support, emotional support, and autonomy support).

Latest findings clearly indicate that parents with high educational expectations are likely to provide academic assistance (e.g., homework assistance, resources) (N. E. Hill & Tyson, 2009) and provide autonomy support (e.g., encourage independent problem-solving) (Grolnick & Pomerantz, 2009). Unrealistic expectations, on the contrary, have the opposite effects of stress, risk aversion, and loss of autonomy, and thereby have a negative impact on student achievement.

Most of these studies further show a moderate correlation with academic achievement and parental autonomy support. This relationship can be explained in terms of fostering intrinsic motivation and interest, minimizing academic stress, and fulfilling psychological needs. If parents draw on autonomous support, then students will learn by curiosity and interest and not coercion. Hence, they engage more in deep learning ($\beta = 0.41$, $p < 0.01$) and higher conceptual knowledge ($d = 0.62$) (Grolnick & Pomerantz, 2009). It is also observed with the delayed recall of facts, remembering 35% more facts ($d = 0.62$), and higher critical thinking ($r = 0.45$, $p < 0.01$) (Vansteenkiste et al., 2004).

Aside from the cognitive outcome, independently supported students experience less stress and feel their psychological needs are satisfied relative to their controlled students (R. M. Ryan & Deci, 2000). Less stress and autonomy contribute to greater school achievement. Alternatively, other types of parental involvement were correlated and remained statistically significant predictors of school achievement. Parent monitoring ($r = 0.19$, $p < 0.01$), emotional support ($r = 0.20$, $p < 0.01$), school involvement ($r = 0.17$, $p < 0.01$), and general discussion ($r = 0.16$, $p < 0.01$) all exerted smaller effects. The lower effects are likely due to indirect rather than direct effects on academic achievement. Monitoring may reduce procrastination and improve scholarly performance, but requires independent confirmation to avoid revolt (Stattin & Kerr, 2000). Emotional support ($r = 0.22$) and discussion ($r = 0.20$) may function through stress reduction and motivational paths (Wang & Eccles, 2012). School engagement likely functions through expectation-setting (Hoover-Dempsey et al., 2005) rather than directly affecting grades.

Our intercorrelation pattern is consistent with this in the respect that these secondary involvement measures had moderate correlations with the big three predictors (expectations, academic support, and autonomy support). The weaker correlation between the following types may also be attributed to student age and poor parental practice. For instance, school participation has more powerful effects in the elementary school; adolescents are better supported by home assistance (Jeynes, 2007). McNeal (2015) states that instructional support strategies such as attending school meetings, attending classes, and talking to teacher(s)/counselor(s) are irrelevant to reading competence at 8th and 10th grades ($r = 0.013$, $p > 0.05$). It is also lightly correlated with truancy ($r = 0.001$) and homework ($r = 0.085$).

The explanation provided for the above is that not all forms of parent-school interaction are always employed proactively, but are applied reactively when the child performs poorly. Where parents over-monitor, children become suffocated, reducing intrinsic motivation (Stattin & Kerr, 2000). Hence, it should be carried out with more facilitated autonomy. In the area of parent talk, children can tune out parental advice where felt to be lecturing (Larson et al., 1996). This can also detract from their performance in academic work. In addition to frequency, the quality of discussion is equally vital for educational success. Discussion regarding learning strategy ($r = 0.24$) is larger than school talk ($r = 0.16$) (N. E. Hill & Tyson, 2009).

Where emotional support is involved, unconditional emotional support ('you can do it') is nearly irrelevant ($r = 0.11$), but when tied with academic support, the correlation is stronger ($r = 0.29$) (Pomerantz et al., 2007). Finally, the implications of the findings are important pedagogically for parents and teachers. They indicate that although numerous parental practices can promote academic achievement, a few—the most important of which involve the combination of high expectations with autonomy-supportive practices—are most likely to be highly effective. Parents who want to encourage their teenagers to study might attempt to instill high education expectations, as well as grant their young adults some sort of individual problem-solving and decision-making space.

This can be a reality when schools provide parents autonomy-supportive communication guidance and inform families about how different forms of involvement influence adolescent development.

5.2.2. Classroom Environment and Academic Performance

The outcome of this research indicates that classroom environment and academic performance are in moderate positive correlation (Pearson $r = 0.461$). The correlation is statistically significant at a p -value of 0.019. Not all dimensions of classroom environment exert similar influence on academic achievement, however. The present findings indicate that teacher support ($r = 0.39$, $p = 0.01$), involvement ($r = 0.37$, $p = 0.01$), and task orientation ($r = 0.36$, $p = 0.01$) were modestly correlated with academic performance, uncovering substantive relations. In contrast, equity ($r = 0.15$), cooperation ($r = 0.20$), innovation ($r = 0.22$), and student cohesiveness ($r = 0.18$) were weakly correlated, reflecting negligible direct impacts or implementation challenges.

5.2.2.1. Interrelation Between Classroom Environment Subscales and Academic Achievement

As noted above, student involvement, task orientation, and teacher support are the three most predictive class environment scale factors. Below is the explanation and implication of each explicated.

I. Teacher Support ($r = 0.39$, $p = 0.01$)

Low significance level for teacher support and achievement might stem from how the construct is measured, which has captured the very subtle nature of teacher support. In this present study, as evidenced in the appendix, parent support was captured using the measures of teacher feedback quality, adaptive instructions, emotional support, recognition of effort, and responsiveness.

Empirical evidence shows that students who score high on the above five items have high correlations with their performances. For instance, as evidenced by A. M. Ryan and Patrick (2001), emotional support from teachers has a high correlation with student academic performance ($r = 0.34$). These are likely so because being taught by a teacher promotes students' motivation at school and readiness to obey the teacher's will and diminishes school concerns, distracting attention from work and studying. Besides, Bandura (1997) illustrates that teachers providing care and praise support students' self-efficacy beliefs. Pianta et al. (2012) also demonstrated that teachers who gave specific feedback to student confusion through responsive explanations were linked to 29% greater learning gains compared to students given standard

instruction ($d = 0.63$). Burnett et al. (2014) have mentioned that teachers' praise for high school students for their processes (effort and strategy) is correlated with higher task persistence ($r = 0.32$) and math performance ($r = 0.21$).

Therefore, the moderate significance of the correlation between teacher support may be a result of achievement for factors contributing to it. As correlation is not performed with all the measures, it seems uncertain to select the most significant one. Although the outcome of descriptive statistics reveals that most of the students reported more teacher support ($M = 3.92$, $SD = 0.6$), the moderately significant correlation might possibly reveal that the association may be mediated by several variables, such as student motivation and engagement, emotional state level, teacher feedback, etc. For instance, as written by Cornelius-White (2007), emotional support may be particularly necessary for vulnerable students. The quality of feedback from teachers is capable of triggering subject-based skill performance (e.g., maths; Hattie, 2017).

Research conducted by A. M. Ryan and Patrick (2001) indicated that care from teachers motivates students intrinsically, where there is higher motivation in putting effort into challenges. Hattie's visible learning (2017) again emphasizes that the quality of feedback matters most in skill-based subjects such as science and mathematics. II. Student Engagement ($r = 0.37$, $p = 0.01$). Similar to the instance of high correlation for teacher support ($r = 0.39$, $p = 0.01$), student engagement was also found to be a second significant predictor of success ($r = 0.37$, $p = 0.01$). The association can be defined as understanding the impact of each construct that is being used to assess student engagement.

As one can see from the appendix, in this study, student engagement is assessed through student attentiveness, active verbal response, seeking help when needed, and task engagement. In confirmation of Webb et al. (2019), verbal classroom discourse supports oral construction, which enables deeper mental operations to gain deeper conceptual understanding ($r = 0.42$). Hattie (2017) also argues that prompt feedback from teachers immediately rectifies misconceptions. He also determined that verbally participating students receive 0.35 SD higher critical thinking with moderate correction ($p = 0.22$). Freeman's further research observes a rise in examination marks by 11% in discussion classes. Among the assertions made within this book was 'I contribute to class discussion.' Such students making such assertions, as evident from the above research, ought to be able to perform academically.

Other studies also indicate that the students who are involved in class activities (e.g., taking active notes, participating in discussions) are better able to retain information ($\beta = 0.28$, $p < 0.01$; Wang & Eccles, 2012). And yet another by Aleven et al. (2003) concludes that seeking academic help actively once one becomes aware that they are struggling reduces misconceptions by 37%. This is particularly vital for well-structured subjects like science and mathematics, where early explanation prevents snowballing errors. Compared to completing homework and classwork (third item), on-time and regular assignment completion has 17% higher success ($r = 0.31$; Cooper et al., 2006). The source of the effect is the advantage of distributed practice (Dunlosky et al., 2013) and stimulates self-regulated learning behavior. The final dimension, involvement, is an index of student persistence regardless of situational barriers and is found to be linked with higher task accomplishment ($d = 0.42$; Richardson et al., 2012).

Finally, the study found positive significant moderate correlation between academic achievement and student engagement as this study discovers agrees with earlier studies. The result could be because each of the aspects of student engagement counts for academic performance. Yet no single study has ever appeared to pinpoint which one best predicts student academic achievement. Moreover, as more students show higher for student engagement ($M = 3.7$, $SD = 0.7$), this moderate association in this instance might generate the hypothesis that student engagement is mediated by intervening factors like student intrinsic motivation (R. M. Ryan & Deci, 2000), attention (Wang & Eccles, 2012), and teacher and perceived support. Therefore, schools that align tasks with their talent match, teacher prompt feedback, and creating a welcoming class climate can strengthen mediating factors. III. Task Orientation ($r = 0.36$, $p = 0.01$) Furthermore, aside from teacher support and student motivation, student task orientation was moderately significantly related to academic achievement ($r = 0.36$, $p = 0.01$).

In such a study environment, task orientation indicates a learner's strategic learning orientation, for example, persistence, planning, self-regulation, and procrastination avoidance. According to the appendix, in this study, adaptive problem-solving, persistence in challenging tasks, proactive planning of studies, and avoidance of distraction have been utilized to measure student task orientation. The result of the moderately strong relationship between task orientation and accomplishment is congruent with very few empirical studies that have previously been conducted.

From this study, the mechanism through which task orientation influences students' performance in academics is through the role the individual items of the scale play. In adaptive learning (also a construct in this study's task orientation measure), Dweck (2006), from her research, has established that when confronted with adversity, students persevere by creating alternative strategies, and they are better problem solvers. The study has established that those students who switch strategy upon failure achieve 24% more accuracy on hard problem-solving tasks. The skill is a determinant of success on the upper level, especially in science and mathematics, where the topics of study demand good problem-solving capability in terms of memorization. To validate this, Pintrich and De Groot (1990) found that students who use adaptive learning strategies gain approximately 0.25 to 0.35 standard deviations in math and science performance compared to their peers who do not.

Another such study by Hattie (2017) discovers that students who move from memorization to concept mapping increase test scores by 11–15%. Previous research also reveals that proactive learning, where students actually go out of their way to plan, track, and control their learning in advance so that issues are not encountered, has a positive effect on students' performance. Britton and Tesser (1991) discovered that students who consciously schedule study time score 17–23% higher on exams. This is due to effective scheduling that avoids cramming at the end and enables distributed practice. This is positively correlated with students' greater retention of course material ($\beta = 0.28$) due to increased cognitive processing (Winne & Hadwin, 1998).

Apart from the cognitive aspect, Zimmerman (2002) concluded that students who can cope with study timetables have lower academic stress and higher self-efficacy, both of which are firm predictors of long-term academic success. In persistence, 'I work hard on challenging tasks even if I am not doing well' was one of the concepts used in this study. Those students who are persistent with challenging tasks were discovered through research to have better academic performance, especially in mathematics and science, due to the levels of difficulty involved in such topics. Completion of tasks and class participation are what account for the correlation of persistence. Persistent students submit 92% of assignments, as opposed to 68% for others (Cooper et al., 2006). They ask 2.3× more follow-up questions (Karabenick & Sharma, 1994). It enhances students' educational engagement and is associated with their educational achievement.

While student academic success centrality of persistence functions, it functions when buttressed by adaptive, flexible approaches (Dweck, 2006; Zimmerman, 2002) and goal persistence (Wrosch et al., 2003) as opposed to repetition. Student behavior in distraction minimization built the ultimate thing of task orientation. Empirical evidence shows that students' ability to keep their attention through minimizing external and internal (e.g., study or instruction distractions) is highly related to academic performance. Ellis et al. (2014): Distraction control is positively correlated with time-on-task, and time-on-task predicts test performance ($\beta = 0.35$). Off-task multitasking (e.g., Facebook, text messaging) during study, on the other hand, is correlated with 0.24–0.32 SD lower marks (Junco, 2012).

Therefore, the moderate student task orientation-achievement correlation is in alignment with existing research. It can be best accounted for in relation to the role of persistence, focus, and adaptive learning—the most powerful items constituting task orientation—since it has been so for their impact, according to research by Dweck (2006), Zimmerman (2002), Pintrich and De Groot (1990), and Ellis et al. (2014). Once more, descriptive statistics in this case have a greater-than-average mean ($M = 3.7$, $SD = 0.68$). The moderate correlation can be due to mediating variables such as student growth mindset, time management, and help-seeking. Additionally, according to available literature, persistence is not sufficient unless accompanied by teacher scaffolding, positive self-view, and achievement of specific academic goals. Thus, learning performance improvement requires not effort and encouragement alone but motivated, strategic, and supported learning behavior.

5.2.3 Weakly Correlated Classroom Environment Subscales

Contrary to the predictive cluster, for this study, classroom environment dimensions such as equity ($r = 0.15$), cooperation ($r = 0.20$), innovation ($r = 0.22$), and student cohesiveness ($r = 0.18$) were weakly correlated, i.e., minimal direct influence or implementation problems. We shall, below, discuss why they appear to have little influence and how they are in line with earlier studies. Within the equity context, as opposed to the present discovery, other research depicts a significant, moderated positive correlation with academic achievement. However, its influence is heavily contingent upon the nature and scope of implementation and whether equity is imagined by the learners. For instance, based on the research by Tomlinson (2017), it has been identified that with equity implemented constructively, i.e., with differentiated instruction

(assisting students on the basis of need), moderate effects ($r = 0.25\text{--}0.35$) have been experienced by the students' academic performance. The effect has been experienced in the case of underachieving students. Hattie (2017) further contributes that when there is the application of equity by teachers who are scaffolding-trained, the effect on student work is said to be moderate ($r = 0.3$). The low effect that was noted in this research can thus be explained by superficiality or lack of consistency among students whenever they perceive that teacher equity is being done.

In the current study, students report an average rating of 3.4 on equity, suggesting that most of the students feel equal treatment, while others feel treated inequitably. On this dimension, the low correlation can be accounted for in two ways. One, the school equity practice has been superficially implemented ($r \approx 0.10$; Darling-Hammond, 2015) or, alternatively, sporadically (OECD, 2019). For some contexts, students perceive the absence of equity, which may be caused by teacher workload ($r < 0.20$; Spillane, 2002) or overpopulation of classrooms in the case of government school students. Therefore, the results of the current study are consistent with those studies whose implementation of equity is superficial or weak. The current study also revealed that cohesiveness and cooperation among students are weakly correlated with student academic achievement.

Contrary to this conclusion, Johnson and Johnson's (2014) meta-analyses for cooperative structured learning have been found to be more predictive of its effects ($r = 0.30\text{--}0.40$). Similarly, Roseth et al. (2008) concluded that student academic cohesion (common objective), i.e., study groups, is strongly related ($r \approx 0.30\text{--}0.40$) to academic performance. The inconsistency of the results with earlier research can be justified in the case of unstructured groups or ill-prepared group work, where teamwork is an issue, while lack of academic cohesion despite social cohesion among the students could be the explanation for the case of studentness. E. G. Cohen (1994), unstructured group work, where students are in groups but not necessarily working as a group, has a weaker link with academic success. Similarly, Kerr and Bruun (1983) also discovered that badly designed group tasks have a weak link with academic performance. Roseth et al. (2008) note that if the students seem friendly but not academically motivated, student cohesiveness is weakly associated with academic achievement ($r \approx 0.10\text{--}0.20$).

The greater student cohesiveness ($M = 3.66$, $SD = 0.7$) and cohesiveness ($M = 3.67$, $SD = 0.66$) scores witnessed in this study can also be credited to measurement issues. As cited in E. G.

Cohen (1994), most students overreport cohesion (students get along with one another but don't work together). The last classroom factor that was found to be weakly associated ($r = 0.2$) with the learning outcome in this study is the investigation subscale. It is the assessment of students' active, self-regulated explorations of problems, questions, or phenomena.

Contrary to the present study, different research shows that inquiry enhances academic outcomes through different mediating variables, such as enhancing student intrinsic motivation 0.5 SD above (Hmelo-Silver et al., 2007), developing self-efficacy to perform future work ($r = 0.3$, Bandura, 1997), and improving student analyzing ability, 0.45 SD greater in student mathematical performance (Furtak et al., 2012). Despite common facts, low correlation in the present study between academic and study performance may be attributed to many reasons, such as poor implementation, unsuitable assessment (excessive focus on memorization rather than critical thinking), poor background knowledge among students, failure of teachers to provide support in guiding students in counseling, and the instructional approach of didactic teachers. In the context of the present study, students gave a slightly near-agree response ($M = 3.42$).

Thus, low correlation would be attributed to poor implementation, students' mere participation in investigation activities, corresponding to poorly constructed pseudo-investigation characteristic of minimal teacher facilitation of the learning of new information ($d = 0.15$; Alfieri et al., 2011). Investigations lacking strong theoretical underpinnings or background knowledge would also produce low learning (Klahr & Nigam, 2004). Briefly, low cohesiveness correlation, cooperation, investigation, and equity may require intervening tasks to be conducted. Training teachers in differentiated instruction for low-achieving students could enhance academic achievement. Group work should be planned in a manner such that all the students are involved in collaborative academic activities. In contrast to traditional lecturing, high-quality inquiry-based instruction (with instructor training) will enhance students' problem-solving ability, self-esteem, and retention of learning material. Interpersonal cohesiveness is favorable, but academic cohesiveness has emerged as a more accurate predictor of academic success.

5.2.4 Classroom Environment and Parental Involvement

In the present research, the inter-relationship of home and classroom environment and parental involvement shows a highly significant relationship of $r = 0.428$ and $p = 0.01$. This signifies that parental involvement has a positive impact on the classroom environment, and vice

versa. This is one of the conclusions of a two-way relationship hypothesized by ecological systems theory (Bronfenbrenner, 2005), where home and school environments influence each other's effect on students' development. Various studies have been conducted on the role of parental involvement in classroom environments. Wilder, (2023) study, study clarifies that parental involvement affects academic success, motivation, and attendance, and as a result, enhances the classroom environment.

The student who is academically gifted, the student who is active, and the student who is motivated in academics will be the ones engaging the interactive and active classroom environment. On the other hand, when parents are inactive, there are challenges in motivation and achievement among the students (Mapp & Kuttner, 2013). On the other hand, students have improved classroom environment ratings when they have parental involvement. On the other hand, parental involvement is determined by the school and classroom environment. Schools with an open climate where communication is open and regular are found to have increased parental involvement (Epstein, 2001).

Teachers who offer feedback on students' development and activities in the class tend to create an environment where parents are comfortable engaging. With that said, parental involvement in school here is below average; hence, this cannot be used as a justification for parental involvement and classroom environment. As is quoted by the research carried out by Roorda et al. (2011), when classroom learning environments are conducive to active learning and children are motivated and engaged, parents are likely to volunteer at school because they are confident that their child is doing well there. Parents would be inclined to engage in the education of their child through activities such as volunteering, meetings, or school activities when they see teachers working towards achieving with their students and well-managed classrooms, Jeynes (2007) observes.

5.3. Proportion of Variance Explained by Parent Involvement and Classroom Environment on Academic Achievement

The SPSS model summary result indicates the existence of a moderate positive correlation ($r = 0.462$, $R^2 = 0.216$) between the predictor variable (classroom environment and parental involvement) and the dependent variable (academic performance). The R-squared statistic indicates that 21.6% of the academic achievement variation is explained by classroom

environment and parental involvement. These finding underscores that the remaining 78.4% of the variation is explained by other variables outside the model, such as student motivation, innate ability, peer influence, and SEC (Fan & Chen, 2005). This reaffirms the ecological systems theory postulating that a child's development is influenced by multiple interacting systems, and not just the home and school microsystems separately.

When the unique contribution of each predictor is examined, the results present a complicated picture. Parent involvement ($\beta = 0.26$, $p < .001$) and classroom environment ($\beta = 0.30$, $p < .001$) were both identified as statistically significant individual predictors. What is meant here is that both are significant in terms of unique variance explained in academic performance when the other factor is held constant.

Interestingly, a relatively stronger effect was exhibited by the classroom environment. This could reflect the significant amount of time children spend in school and the explicit teaching role of the classroom. A favorable setting with encouraging teachers, stimulating instruction, and engaged learners appears to have a slightly stronger direct relationship with achievement in learning in this case.

The large, though less specific, parental involvement individual contribution suggests that its impact is likely to be more complex and potentially indirect. Its impact may be partially mediated by the class climate (as is evidenced by their correlation) or operate by producing the student's motivation and self-regulation, not captured in this model. This supports the argument that while parent participation is desirable, its influence is actually seen through other channels rather than being a direct contributor to academic performance (Jeynes, 2007).

In short, the model of regression supports that classroom quality and parental involvement are solid predictors of academic performance. However, the aggregate explanatory power still falls short, and this points to the necessity of educational models and future research to adopt a holistic approach that integrates these significant variables with student-level variables and more general contextual determinants if they are to fully understand the determinants of academic performance.

5.4. Demographic Variables on Academic Performance, Classroom Environment, and Parental Involvement

Although numerous demographic variables exist, studies have only analyzed the effect of school type and parental SEC on academic performance, classroom environment, and parental involvement. Since there is more than one dependent variable that will be contrasted on more than one demographic variable, a two-way MANOVA is requested.

However, based on the result Shapiro-Wilk test of normality, the two-way MANOVA has been thus replaced by a nonparametric test of the Mann-Whitney U Test (for 2-group comparisons). The Mann-Whitney U test results indicated variations in government and private schools for all three variables measured, i.e., academic performance, parental involvement, and classroom environment (all $p = .004$). On academic performance, the test indicated $U = 3894.50$ and $z = -2.876$, and thereby indicated that private schools had a significantly higher median compared to government schools.

Similarly, parental involvement also repeated identical test statistics ($U = 3894.50$, $z = -2.876$), and private schools again performed better than government schools. The same pattern was repeated for class environment ratings, and private schools again got significantly higher positive ratings ($U = 3894.50$, $z = -2.876$). All three variables' same z-scores reflect equal effect sizes, with $r \approx 0.20$, which indicates small-to-medium effects. These findings, in concise terms, show that private schools in this sample outshone government schools in more than one aspect of education.

As we have shown in Table 18, student parental SEC is collapsed into five levels and coded as one. Where I used '1' for low parental monthly income (<5000 birr) and '5' for the highest parental income (>50,000 birr). The impact of parental SEC on parental engagement, academic achievement, and classroom environment was examined using the nonparametric Kruskal-Wallis test which is optimally suitable in a case where the independent variable has many groups and the data distribution is not normal.

For academic achievement, Kruskal-Wallis tests indicate that there is a substantial difference in academic achievement among parental SEC groups, at least two. ($\chi^2(4) = 25.71$, $p < .00$). Post-hoc pairwise comparisons with Bonferroni correction have been performed in order to calculate the effect of every SEC group on academic performance pairwise with the lowest

group. The result suggests that academic performance is not significantly different in SEC 2 than in the lowest. However, the higher SEC (SEC (3) to SEC (5)) performs significantly better than the lowest one.

For parental involvement, the Kruskal-Wallis test indicates that there is a significant difference in terms of parental involvement between parental SEC groups at least for two of them. ($\chi^2(4) = 25.418$, $p < .00$). To compare the effect of each SEC group on academic performance pair-wise with that of the lowest group, post-hoc pair-wise comparisons with Bonferroni correction were conducted. It indicates that there is no statistically significant difference in the academic performance in SEC 2 and SEC 3 compared to the lowest. But higher groups such as SEC(4) and SEC(5) demonstrate significantly higher performance compared to the lowest one. Lastly, in the academic setting, Kruskal-Wallis test indicates that there was a statistically significant difference in the academic performance among parental SEC groups. ($\chi^2(4) = 49.18$, $p < .001$). Pairwise also indicates that comparison result indicates that there is no statistically significant difference in the academic performance in SEC 2 with the lowest. However, upper levels such as SEC (3)-SEC (5) indicate significantly superior performance than the minimum level.

CHAPTER SIX

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The chapter provides a summary of the research process and important findings. The implication and conclusion include a summary of the study and a summary of the sampled samples and methods of sampling, conclusions, study implications, limitations of the study, and recommendations.

6.1. Summary

The general objective of this study is to analyze the relation between classroom environment, parental involvement, and performance. Four research questions are used to direct this study. The first research question measures the level of parental involvement, class climate, and academic achievement in the selected private and government schools. The second research question examines the direction, magnitude, and statistical significance of the relationship between parental involvement, class climate, and academic achievement. The third question asks how much variance in academic performance is explained by parental involvement and class climate individually and together. The last research question investigates whether statistically significant differences exist for parental involvement, class climate, and grades between demographic indicators (i.e., parent SES and school type). This study was conducted in two

institutions: Bashewam Secondary School (private) and Millennium General Secondary School (government) in Addis Ketema sub-city.

The two institutions were selected using convenience sampling in accordance with logistical limitations (time, access permit) and allowed for making important comparisons (private/government) in accordance with comparative study goals. Of the secondary school age group (9-12), only the two schools' grade 11 students have been sampled in the study. It's due to some significant methodological and contextual reasons, i.e., controlled prior Addressing a National Educational Crisis: Stable and Representative Learning Environment: Reduced Bias due to Attendance Issues. Nevertheless, although both schools varied according to population size, in the present study an equal proportion of sample students ($n=107$) from both schools has been utilized. This recognizes a series of facts regarding the success of research objectives appropriately.

These can be stated as supporting robust group comparisons, enhanced statistical power for moderation analysis, and safeguarding against bias in multivariate models. In order to properly assess the multifaceted character of parent participation and its impact on academic outcomes for adolescents, this study applied a proven hybrid measure, which was closely modified from the pilot study. This second measure is composed of seven subscales—parental academic support, emotional support, academic discussion, school involvement, autonomy support, monitoring and supervision, and expectations and aspirations—and all have been borrowed from attempted, previously tested measures (e.g., Hoover-Dempsey & Sandler, 2005; Lovejoy et al., 1999; Soenens et al., 2007; Walker et al., 2005). In order to gauge the class climate, the present study employed and modified the "What Is Happening in This Class?" (WIHIC) scale of Fraser (1998) to the context of the research as well as pupil achievement. The scale has seven subscales that include teacher support, student participation, task orientation, student cooperation, student cohesiveness, equity, and inquiry.

For student academic performance assessment, information has been received from the school academy records, and stratification has been applied from the Ministry of Education. Academic performance has been assessed based on students' official semester marks, categorized as Excellent (90–100%), Good (75–89%), Satisfactory (60–74%), Passable (50–59%), and Fail (<50%). The study employs a sequential explanatory mixed-methods strategy, quantitative phase

followed by qualitative phase, to add context and richness. The quantitative phase employed questionnaires as the measuring tool from the students, applying descriptive statistics to examine parental involvement and classroom environment levels, independent samples t-tests to compare differences between these variables in public and private schools, correlation analysis to examine their effects on academic performance, multiple regression to examine their predictive value, and non-parametric tests to examine differences among demographic variables. The qualitative follow-up phase included semi-structured interviews, the responses for which were analyzed on a thematic basis to operationalize and further elaborate upon the preliminary quantitative findings, illuminating more regarding how and why they happened. The analysis was carried out on SPSS v28. Private school students had much higher ratings for parental engagement and improved classroom environment than their government school counterparts. Overall parent involvement was only weakly larger in private schools ($d = 0.49$), and that was nearly entirely accounted for by increased academic support, expectations and hopes, and monitoring and supervision. By contrast, overall classroom environment was considerably more positive in private schools, but of smaller magnitude ($d = 0.32$).

This advantage primarily dominated in significantly stronger ratings on Student Involvement and Teacher Support, both of which registered large significant effects ($d > 0.60$). The findings of the current study indicate the level of significance is moderate between parental involvement and academic achievement ($r = 0.402$, $p < 0.05$, $R^2 = 0.16$). Since the effect size (R^2) is small, 16% of variance in academic performance is accounted for by parental involvement, indicating other predictor variables account for academic achievement among students. The findings of this study reveal that there exists a moderately significant relationship between classroom environment and academic performance ($r = 0.398$, $p < 0.05$, $R^2 = 0.16$). Small effect size (R^2) indicates that classroom environment explains only 16% of variability in academic performance, and thus, although the correlation is moderate and significant, other variables play a significant role in academic performance of the students.

The outcome of this research indicates that there exists a positive moderate correlation between academic achievement and classroom environment ($r=0.381$, $p<0.01$, $R^2=0.146$). It can be understood that the improved classroom environment affects parental engagement or that increased parental engagement produces an improved classroom environment. It is intriguing

that although the variables are connected, from this analysis, it cannot be concluded what causes what. The moderate-sized effect also tells us that the significant contribution is produced by just 14.5% of these variables. That is, 86.5% of parental engagement is explained by other factors (e.g., socioeconomic status, school outreach programs).

The same is true of the classroom environment. Private school students performed much higher in class and claimed higher parental engagement and classroom environment than government school students. The Mann-Whitney U tests also revealed statistically significant differences in academic accomplishment ($U = 3894.50$, $p = .004$), parental support ($U = 3894.50$, $p = .004$), and classroom environment ($U = 3894.50$, $p = .004$). Private school students were more likely to have higher median ratings on all three variables: academic accomplishment (Mdn = 78 compared to 75), parental support (Mdn = 4.5 compared to 3.8), and classroom environment (Mdn = 4.2 compared to 3.9). Each of the three comparisons yielded small effect sizes ($r = .20$) that indicate stable, significant differences between both types of schools.

6.2. Conclusion

In the present study the relation among parental involvement, classroom environment, and academic performance in the case of selected private and government schools has been examined. Considering the level, the major findings reveal that students in private schools have significantly higher levels of both classroom environment and parental involvement, though these advantages are biased towards specific dimensions.

However, for each variable (classroom environment and parental involvement) the level and statistical significance of difference varied from subscale to subscale. When it comes of parental involvement, the difference across the two schools was predominantly observed in resource-dependent domains: Academic Support, Expectations and Aspirations, and Monitoring/Supervision had moderate effect sizes ($d = 0.31-0.41$), which reflect private schools' cost imperatives and parents' socioeconomic capacity. Relational domains Emotional Support, Autonomy Support, and School Involvement showed non-significant differences, i.e., those are influenced more by the parent-child dyad than by the type of institution.

Correspondingly, classroom environment advantages in private schools were driven by Teacher Support ($d = 0.8$) and Student Participation ($d = 0.6$), as a result of student-oriented teacher-student ratios and pedagogies. The majority of other aspects of the classroom did not

differ significantly, as both school types were undercut by Ethiopia's examination culture that limits inquiry learning.

The correlational analyses revealed moderate positive relationships between academic performance and parental involvement ($r = 0.36$) and classroom climate ($r = 0.40$). Regression analysis confirmed these variables combined explain 21.6% variance in academic performance, with classroom climate ($\beta = 0.30$) being slightly greater than parental involvement ($\beta = 0.26$). The large amount of unexplained variance (78.4%) highlights the prominence of other factors such as socioeconomic status and student-level variables.

Finally, the findings of the Kruskal-Wallis test suggest that while school type does create structural advantages in specific resource-dependent areas, there is a great deal concerning supportive education settings that can be promoted within both systems. Education practice should emphasize quality teacher-student relationships, developmentally responsive expectations, and autonomy-supportive parenting practices—all within government school settings. Student-level motivational variables and long-term impacts of specific participation strategies across different socioeconomic contexts require further exploration.

6.4. Recommendations

A general approach is proposed to students, teachers, and policymakers in an attempt to enhance the academic success of students, as revealed by the outcome of this study. For the parents and the Ministry of Education, to bridge the gap in provision as well, imposing regulated parent-teacher contact within state schools is also required in order to create the parental supervision and learning support that were so effective. Teachers' training will also need to be overhauled to dismantle the hegemonic culture of tests and establish differentiated and equitable teaching practices that involve all learners in an effort to improve feelings of fairness and engagement. For principals, particularly in the government school setting, there will need to be a balance achieved on providing space for parents to engage with their child's learning. This can involve training parents in good school conversation and emotional support so that they are able to deal with the constraints better due to socioeconomic status.

Other than this, schools need to be capable of shifting their emphasis from marks to genuine, group work. Not only does this decrease competition, but it also makes their minds stronger. Instructional scaffolding and emotional regulation should also be trained in by teachers.

The most important advice of the teachers is that proactive and inclusive parental communication must be given priority with all parents along with clear and actionable guidance for home learning support. At school, every effort should be put into dividing attention equally and organizing activities for co-operation so that every child is valued and included. The classroom cannot, also, be a robotic memorization classroom.

To parents, what is gained from research is parental involvement in the form of a child's performance at school. Although the correlation with academic achievement is quite robust, it only accounts for 16% of the variance. Therefore, emphasis should be on quality and not the quantity of involvement. Parental involvement should enrich the psychological, cognitive, behavioral, and affective domains of acquisition. Especially for teen care, it has to be done in the presence of someone observing and guiding but not stripping them of their independence. Academic support needs to be scaffolding or guided support and not over-support on the work so they can develop independence in solving problems. Even when it is positive parent goals and expectations, over expectations creates psychological problems, and they have to be used. Uneducated parents' affirmation and affirmation are also needed in the low SEC situation. Disclosures by parents should be free and unimpeded. Academic achievement in this context for continuation in studies is an intricate phenomenon involving emotional, behavioral, psychological, and psychological features.

For students, this research shows that "Student Cohesion" can be lower in competitive environments. By fostering cooperation, students can build a supportive peer network that enhances understanding and makes learning more engaging. Students also need to acknowledge that academic performance is complex and influenced by many factors. Learn to manage setbacks constructively by seeking support, reflecting on strategies, and maintaining a balanced life that includes non-academic interests and activities.

Finally, in future research, it is recommended that there be long-term studies to establish causal relationships between the specific subscales of involvement, setting, and achievement in relation to student personal factors, parental culture, and gender.

6.4. Study's Limitations and Future Research Direction

This study acknowledges several limitations that offer avenues for future research. While parental involvement impacted the involvement of the parents, like low income level, fixed timing of work and language problems, cultural requirements, SEC, low education level, and

parents' attitude. But in this thesis, only parents' SEC has been considered. Future studies should incorporate a broader range of factors to provide a more comprehensive understanding of the drivers behind parental involvement, particularly in government schools

When it comes to the target population, the current study emphasizes only grade 11 students (methodological and statistical reasons, as briefly discussed in section 3.4.1); however, considering other high school classes may enable us to examine the trend in parental involvement, classroom environment, and academic performance across class level and student age.

Comparison of academic performance based on student class marks rather than standardized tests could be a subjective one with respect to the teacher and the school. In addition, despite the study has tried its best to control prior knowledge, but still overlooks individual variables of the student, such as motivation and intelligence.

The implications point to the significance of quality interaction instead of the amount of resources. Having prolonged school conversations, having stable emotional support, and encouraging autonomy through full responsibility for learning in children are effective, transferable strategies that can be applied to all families. Being successful in their work and establishing rapport with teachers are also crucial measures in effectively supporting their child at school.

References

- Abebe, T. (2021). *The role of growth mindset in scientific inquiry among Ethiopian secondary school students*. Addis Ababa University.
- Abebe, Z. (2010). *Kinship, community and the care of children in Ethiopia: A qualitative study of parental perspectives and practices*. University of Oslo.
- Abraha, M. (2022). Parental Involvement Status in Their Children's Learning: Selam Primary School of Woldia Town, Ethiopia. *Education Research International*, 2022(1), 7536741.
- Ainsworth, M. D. S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Lawrence Erlbaum Associates.
- Aldridge, J. M., & Galos, S. (2018). *Classroom environment and student outcomes in Australian private schools*. *Australian Journal of Education*, 62(1), 45-60.
- Alemayehu, T., & Admassu, K. (2020). *Private vs. public schools in Ethiopia: A comparative analysis of academic performance and classroom processes*. *Ethiopian Journal of Education and Development*, 5(2), 112-130.

- Alemu, D. S., & Mossie, L. (2018). Challenges and opportunities of implementing inclusive education in Ethiopia: A case of primary schools in Wolaita Zone. *Journal of Education and Practice*, 9(15), 68–75.
- Alemu, D. S., & Tekleselassie, A. A. (2020). Instructional strategies and class size in Ethiopian secondary schools: Does school type matter? *International Journal of Educational Development*, 72, 102–141. <https://doi.org/10.1016/j.ijedudev.2019.102141>
- Alemu, N., Abebe, L., & Tadesse, M. (2020). Comparing scientific inquiry skills between public and private school students in Ethiopia: The role of teacher training and resources. *African Journal of Educational Studies*, 12(3), 45–62.
- Alemu, Y. (2021). Parental monitoring practices in Ethiopian private and government schools. *Ethiopian Journal of Education*, 41(2), 89-104.
- Aleven, V., Stahl, E., Schworm, S., Fischer, F., & Wallace, R. (2003). Help seeking and help design in interactive learning environments. *Review of Educational Research*, 73(3), 277–320.
- Alfieri, L., Brooks, P. J., Aldrich, N. J., & Tenenbaum, H. R. (2011). Does discovery-based instruction enhance learning? *Journal of Educational Psychology*, 103(1),
- Anderman, E. M., & Maehr, M. L. (1994). Motivation and schooling in the middle grades. *Review of Educational Research*, 64(2), 287-309.
- Asegdome, S., Mulugeta, A., & Haile, D. (2019). Student engagement in Ethiopian secondary schools: A comparative study of private and government institutions. *Ethiopian Journal of Education*, 39(2), 45–62.
- Assefa, A., & Sintayehu, B. (2019). Relationship between Parental Involvement and Students' Academic Achievement in Model Primary and Secondary School of Haramaya University, East Hararghe Zone, Oromia Regional State, Ethiopia. *International Journal of Education and Literacy Studies*, 7(2), 46-56.
- Assefa, D. (2022). The impact of inquiry-based learning and teacher professional development on science achievement in Ethiopian secondary schools, Addis Ababa University.

- Astin, A. W. (1993). What matters in college: Four critical years revisited. *Jossey-Bass Google Scholar*, 2, 349-387.
- Ayele, M. (2020). Motivation and Academic Performance among Students in Some Selected Secondary Schools of Addis Ababa. *The Ethiopian Journal of Behavioral Studies*, 3(1), 108-119.
- Baeck, U. D.K. (2010). Parental involvement practices in formalized home–school cooperation. *Scandinavian Journal of Educational Research*, 54(6), 549-563.
- Bandura, A. (1997). Self-efficacy: The exercise of control. W.H. Freeman and Company.
- Barnard, W. M. (2004). Parent involvement in elementary school and educational attainment. *Children and youth services review*, 26(1), 39-62.
- Bauch, P. A., & Goldring, E. B. (1995). Parent involvement and school responsiveness: Facilitating the home–school connection in schools of choice. *Educational Evaluation and Policy Analysis*, 17(1), 1-21.
- Baumrind, D. (1991). The influence of parenting style on adolescent competence and substance use. *The Journal of Early Adolescence*, 11(1), 56–95.
- Bekele, H. (2021). The influence of socioeconomic status on student engagement in private and public secondary schools in Addis Ababa. Addis Ababa University.
- Bellmore, A. (2011). Peer rejection and unpopularity: Associations with GPAs across the transition to middle school. *Journal of Educational Psychology*, 103(2), 282.
- Bennett, P. R., & Wolff, J. R. (2003). The role of private schooling and school spending in academic achievement: Evidence from the NELS:88. *National Center for the Study of Privatization in Education*.
- Beyene, K. A., & Tizazu, D. (2020). Parental educational expectations and children’s academic achievement: A comparative study of private and government schools in Ethiopia. *Journal of Educational and Developmental Psychology*, 10(2), 45-58.
- Birhanu, A. M., Bisetegn, T. A., & Woldeyohannes, S. M. (2014). High prevalence of substance use and associated factors among high school adolescents in Woreta Town, Northwest Ethiopia: multi-domain factor analysis. *BMC Public Health*, 14, 1-11.

- Black, P., & Wiliam, D. (1998). Assessment and classroom learning. *Assessment in Education: Principles, Policy & Practice*, 5(1), 7–74.
- Blatchford, P., Bassett, P., & Brown, P. (2011). Examining the effect of class size on classroom engagement and teacher-pupil interaction: Differences in relation to pupil prior attainment and primary vs. secondary schools. *Learning and Instruction*, 21(6), 715–730.
- Bowlby, J. (1969). Attachment and loss: Vol. 1. Attachment. *Basic Books*.
- Bradley, R. H., & Corwyn, R. F. (2002). Socioeconomic status and child development. *Annual Review of Psychology*, 53, 371–399.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77–101.
- Britton, B. K., & Tesser, A. (1991). Effects of time-management practices on college grades. *Journal of Educational Psychology*, 83 (3), 405–410.
- Bronfenbrenner, U. (1979). The ecology of human development: Experiments by nature and design. *Harvard University Press*.
- Bronfenbrenner, U. (Ed.). (2005). Making human beings human: Bioecological perspectives on human development. Sage Publications.
- Bryman, A. (2017). Quantitative and qualitative research: further reflections on their integration. In *Mixing methods: Qualitative and quantitative research* (pp. 57-78). Routledge.
- Burnett, P. C., Mandel, V., & McCrindle, A. (2014). Teacher praise and feedback, and students' perceptions of the classroom environment. *Educational Psychology*, 34(6), 1–15.
- Bybee, R. W. (2015). The BSCS 5E instructional model: Creating teachable moments. NSTA Press.
- Central Statistical Agency (CSA) [Ethiopia]. (2022). Ethiopia demographic and health survey 2021: *Key indicators report*. The DHS Program, ICF.
- Chen, J. J. L. (2005). Relation of academic support from parents, teachers, and peers to Hong Kong adolescents' academic achievement: The mediating role of academic engagement. *Genetic, social, and general psychology monographs*, 131(2), 77-127.

- Chudgar, A., & Luschei, T. F. (2009). National income, income inequality, and the importance of schools: A hierarchical cross-national comparison. *American Educational Research Journal*, 46(3), 626–658.
- Clark, A. M., Anderson, R. C., Kuo, L. J., Kim, I. H., Archodidou, A., & Nguyen-Jahiel, K. (2003). Collaborative reasoning: Expanding ways for children to talk and think in school. *Educational Psychology Review*, 15(2), 181-198.
- Cohen, E. G. (1994). Restructuring the classroom: Conditions for productive small groups. *Review of Educational Research*, 64(1), 1–35.
- Cohen, J. (1988). *Statistical power analysis for the behavioral sciences* (2nd ed.). Lawrence Erlbaum Associates.
- Collins, R. (1979). The credential society: An historical sociology of education and stratification. *Academic Press*.
- Conger, R. D., & Donnellan, M. B. (2007). An interactionist perspective on the socioeconomic context of human development. *Annual Review of Psychology*, 58, 175–199.
- Cooper, H., Robinson, J. C., & Patall, E. A. (2006). Does homework improve academic achievement? A synthesis of research, 1987–2003. *Review of Educational Research*, 76(1), 1–62.
- Cornelius-White, J. (2007). Learner-centered teacher-student relationships are effective: A meta-analysis. *Review of Educational Research*, 77(1), 113–143.
- Covington, M. V. (1992). Making the grade: A self-worth perspective on motivation and school reform. *Cambridge University Press*.
- Creemers, B. P. (1994). Effective instruction: An empirical basis for a theory of educational effectiveness. In *Advances in school effectiveness research and practice* (pp. 189-205). Pergamon.
- Cresswell, J. (2013). *Qualitative inquiry & research design: Choosing among five approaches*.
- Creswell, J. W., & Plano Clark, V. L. (2018). *Designing and conducting mixed methods research* (3rd ed.). SAGE Publications.

- Darling-Hammond, L. (2015). *The flat world and education: How America's commitment to equity will determine our future*. Teachers College Press.
- Darmawan, I. G. N. (2010). The influence of learning environments on student academic competitiveness and social cohesion: A comparative study. *Journal of Educational Research*, 103(4), 275–290.
- De Lisi, R., & Golbeck, S. L. (2014). Implications of Piagetian theory for peer learning. In *Cognitive perspectives on peer learning* (pp. 3-37). Routledge.
- Deci, E. L., & Ryan, R. M. (2000). The "what" and "why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11(4), 227–268.
- Demaray, M. K., & Malecki, C. K. (2010). The role of social support in the lives of students involved in bullying. In *Bullying in North American Schools* (pp. 202-210). Routledge.
- Dennis, J. M., Phinney, J. S., & Chuateco, L. I. (2005). The role of motivation, parental support, and peer support in the academic success of ethnic minority first-generation college students. *Journal of College Student Development*, 46(3), 223-236.
- Desforges, C., & Abouchaar, A. (2003). The impact of parental involvement, parental support, and family education on pupil achievement and adjustment: *A literature review*.
- Diamond, A. (2013). Executive functions. *Annual Review of Psychology*, 64, 135–168.
- Dill, J. S., & Hunter, A. (2010). *Education and the culture of consumption: Personalization and the social order*. Routledge.
- Duckworth, A. L., & Carlson, S. M. (2013). Self-regulation and school success. In B. W. Sokol, F. M. E. Grouzet, & U. Müller (Eds.), *Self-regulation and autonomy: Social and developmental dimensions of human conduct* (pp. 208-230). Cambridge University Press.
- Duckworth, A. L., & Seligman, M. E. P. (2005). Self-discipline outdoes IQ in predicting the academic performance of adolescents. *Psychological Science*, 16(12), 939–944.
- Dunlosky, J., Rawson, K. A., Marsh, E. J., Nathan, M. J., & Willingham, D. T. (2013). Improving students' learning with effective learning techniques: Promising directions from cognitive and educational psychology. *Psychological Science in the Public Interest*, 14(1), 4–58.

- Dweck, C. S. (2006). *Mindset: The new psychology of success*. Random House.
- Eccles, J. S. (1983). Expectancies, values, and academic behaviors. In J. T. Spence (Ed.), *Achievement and achievement motives* (pp. 75–146). W.H. Freeman.
- Ellis, Y., Daniels, B., & Jauregui, A. (2014). The effect of multitasking on the grade performance of business students. *Research in Higher Education Journal*, 20, 1–10.
- Emmer, E. T., & Sabornie, E. J. (Eds.). (2015). *Handbook of Classroom Management*. New York: Routledge.
- Epstein, J. L. (1987). Toward a theory of family-school connections: Teacher practices and parent involvement. *Social intervention: Potential and constraints*, 121, 136.
- Epstein, J. L. (2001). *School, family, and community partnerships: Preparing educators and improving schools*. Westview Press.
- Epstein, J. L. (2018). *School, family, and community partnerships: Preparing educators and improving schools* (2nd ed.). Westview Press.
- Epstein, J. L., & Salinas, K. C. (2004). Partnering with families and communities. *Schools as Learning Communities*, 61(8), 12-18.
- Ethiopia. Ministry of Education (MoE). (2015). *Education sector development programme V (ESDP V) 2015/2016–2019/2020*. Federal Democratic Republic of Ethiopia, Ministry of Education.
- Ethiopian Development Research Institute (EDRI). (2021). *Parental involvement and student autonomy in Addis Ababa's private schools: A survey analysis*
- Fan, W., Williams, C. M., & Wolters, C. A. (2012). Parental involvement in predicting school motivation: Similar and differential effects across ethnic groups. *The Journal of Educational Research*, 105(1), 21-35.
- Fan, X., & Chen, M. (2005). Parental involvement and students' academic achievement: A meta-analysis. *Educational Psychology Review*, 13(1), 1–22.
- Farooq, M. S., Chaudhry, A. H., Shafiq, M., & Berhanu, G. (2011). Factors affecting students' quality of academic performance: A case of secondary school level. *Journal of quality and technology management*, 7(2), 1-14.

- Ferguson, C. J. (2009). An effect size primer: A guide for clinicians and researchers. *Professional Psychology: Research and Practice*, 40(5), 532–538
- Finn, J. D., & Achilles, C. M. (1999). Tennessee's class size study: Findings, implications, misconceptions. *Educational Evaluation and Policy Analysis*, 21(2), 97–109.
- Fraser, B. J. (2002). Learning environments research: Yesterday, today, and tomorrow. In *Studies in educational learning environments: An international perspective* (pp. 1-25).
- Fraser, B. J. (1998). *Classroom environment instruments: Development, validity, and applications*. *Learning Environments Research*, 1(1), 7-33.
- Fraser, B. J., & Fisher, D. L. (1982). Predicting students' outcomes from their perceptions of the classroom psychosocial environment. *American Educational Research Journal*, 19(4), 498-518.
- Furtak, E. M., Seidel, T., Iverson, H., & Briggs, D. C. (2012). Experimental and quasi-experimental studies of inquiry-based science teaching: A meta-analysis. *Review of Educational Research*, 82(3), 300–329.
- Gafoor, K. A., & Naseema, C. (2001). *Parental Involvement Rating Scale (PIRS)*. Unpublished manuscript.
- Girma, M. (2021). *The role of student support policies in private schools of Ethiopia: A comparative analysis*. Addis Ababa University.
- Girma, M., & Assefa, D. (2019). Aspirations and inequalities: Private school students and international college applications in Addis Ababa. *Ethiopian Journal of the Social Sciences and Humanities*, 15(1), 23–45.
- Gonzalez-DeHass, A. R., Willems, P. P., & Holbein, M. F. D. (2005). Examining the relationship between parental involvement and student motivation. *Educational psychology review*, 17(2), 99-123.
- Goodman, S. H., Rouse, M. H., & Connell, A. M. (2011). Maternal depression and child psychopathology: A meta-analytic review. *Clinical Child and Family Psychology Review*, 14(1), 1-27.

- Goshu, B. S., & Woldeamanuel, M. M. (2019). Education quality challenges in Ethiopian secondary schools. *Journal of Education, Society and Behavioral Science*, 31(2), 1-15.
- Grolnick, W. S., & Pomerantz, E. M. (2009). Issues and challenges in studying parental control: Toward a new conceptualization. *Child Development Perspectives*, 3(3), 165–170.
- Grolnick, W. S., & Slowiaczek, M. L. (1994). Parents' involvement in children's schooling: A multidimensional conceptualization and motivational model. *Child Development*, 65(1), 237–252.
- Hamre, B. K., & Pianta, R. C. (2006). Student-teacher relationships.
- Hanushek, E. A., & Woessmann, L. (2008). The role of cognitive skills in economic development. *Journal of Economic Literature*, 46(3), 607–668.
- Hattie, J. (2017). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement*. Routledge.
- Heath, S. B. (1983). *Ways with words: Language, life, and work in communities and classrooms*. Cambridge University Press.
- Henderlong, J., & Lepper, M. R. (2002). The effects of praise on children's intrinsic motivation: A review and synthesis. *Psychological Bulletin*, 128(5), 774–795.
- 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 & Community Connections with Schools*.
- Heyneman, S. P., & Stern, J. M. B. (2014). Low-cost private schools for the poor: What public policy is appropriate? *International Journal of Educational Development*, 35, 3–15.
- Hill, K. T., & Wigfield, A. (1984). Test anxiety: A major educational problem and what can be done about it. *The elementary school journal*, 85(1), 105-126.
- 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.

- Hmelo-Silver, C. E., Duncan, R. G., & Chinn, C. A. (2007). Scaffolding and achievement in problem-based and inquiry learning: A response to Kirschner, Sweller, and Clark (2006). *Educational Psychologist*
- Hofstein, A., & Lunetta, V. N. (2004). The laboratory in science education: Foundations for the twenty-first century. *Science Education*, 88(1), 28–54.
- Hoover-Dempsey, K. V., & Sandler, H. M. (2005). *The social context of parental involvement: A path to enhanced achievement*. Final Performance Report for OERI Grant # R305T010673. Vanderbilt University.
- Hoover-Dempsey, K. V., Walker, J. M. T., Sandler, H. M., Whetsel, D., Green, C. L., Wilkins, A. S., & Closson, K. (2005). Why do parents become involved? Research findings and implications. *The Elementary School Journal*, 106(2), 105–130.
- Huntsinger, C. S., & Jose, P. E. (2009). Parental involvement in children's schooling: Different meanings in different cultures. *Early Childhood Research Quarterly*, 24(4), 398-410.
- Irwin, S., & Elley, S. (2013). Parents' hopes and expectations for their children's future occupations. *The Sociological Review*, 61(1), 111-130.
- Jacobson, L. A., Williford, A. P., & Pianta, R. C. (2019). The role of self-regulation in the transition to school: A growth curve analysis of children's academic and social-emotional outcomes. *Journal of Educational Psychology*, 111(5), 861–877.
- Jaiswal, S. K., & Choudhuri, R. (2017). A review of the relationship between parental involvement and students' academic performance. *The International Journal of Indian Psychology*, 4(3), 110-123.
- 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, D. W., & Johnson, R. T. (2014). Cooperative learning in the 21st century. *Annals of Psychology*, 30(3), 841–851.
- Johnston, J. H., & Fogelman, A. (1998). Family involvement models in middle schools. *Home-school relations: Working successfully with parents and families*, 191-207.

- Jones, B. D., Miyazaki, Y., Li, M., & Biscotte, S. (2022). Motivational climate predicts student evaluations of teaching: Relationships between students' course perceptions, ease of course, and evaluations of teaching. *AERA Open*, 8, 23328584211073167.
- Juan, M. J. D., Ou, S., & Liu, J. (2023). The role of socioeconomic status in the narrative production of Spanish–English bilingual children. *Language, Speech, and Hearing Services in Schools*, 54(4), 1229–1245
- Junco, R. (2012). Too much face and not enough books: The relationship between multiple indices of Facebook use and academic performance. *Computers in Human Behavior*, 28(1), 187–198.
- Juvonen, J., Nishina, A., & Graham, S. (2006). Ethnic diversity and perceptions of safety in urban middle schools. *Psychological Science*, 17(5), 393–400.
- Karabenick, S. A., & Sharma, R. (1994). Perceived teacher support of student questioning in the college classroom: Its relation to student characteristics and role in the classroom questioning process. *Journal of Educational Psychology*, 86(1), 90–103.
- Katz, I., Kaplan, A., & Buzukashvily, T. (2011). The role of parents' motivation in students' autonomous motivation for doing homework. *Learning and Individual Differences*, 21(4), 376-386.
- Kerr, N. L., & Bruun, S. E. (1983). Dispensability of member effort and group motivation losses: Free-rider effects. *Journal of Personality and Social Psychology*, 44(1), 78–94.
- Klahr, D., & Nigam, M. (2004). The equivalence of learning paths in early science instruction: Effects of direct instruction and discovery learning. *Psychological Science*, 15(10), 661–667.
- Kline, R. B. (2015). *Principles and practice of structural equation modeling* (4th ed.). Guilford Publications.
- Krejcie, R. V., & Morgan, D.W. (1970). Determining sample size for research activities. *Educational & Psychological Measurement*, 30, 607-610.
- Lamas, H. A. (2015). School Performance. *Journal of Educational Psychology-Propositos y Representaciones*, 3(1), 351-385.

- Lareau, A. (2011). *Unequal childhoods: Class, race, and family life* (2nd ed., with an update a decade later). University of California Press.
- Larson, R. W., Richards, M. H., Moneta, G., Holmbeck, G., & Duckett, E. (1996). Changes in adolescents' daily interactions with their families from ages 10 to 18: Disengagement and transformation. *Developmental Psychology*, 32(4), 744–754.
- Lavy, V. (2015). Do differences in schools' instruction time explain international achievement gaps? Evidence from developed and developing countries. *The Economic Journal*, 125(588), F397–F424.
- Leone, C. M., & Richards, H. (1989). Classwork and homework in early adolescence: The ecology of achievement. *Journal of youth and adolescence*, 18(6), 531-548.
- Leuven, E., & Oosterbeek, H. (2018). Class size and student outcomes: Evidence from a natural experiment in Dutch schools. *Economics of Education Review*, 67, 138-148.
- Lovejoy, M. C., Weis, R., O'Hare, E., & Rubin, E. C. (1999). Development and initial validation of the Parent Behavior Inventory. *Psychological Assessment*, 11(4), 534–545.
- Ma, X., Wang, Y., Houle, M. E., Zhou, S., Erfani, S., Xia, S., ... & Bailey, J. (2018, July). Dimensionality-driven learning with noisy labels. In *International Conference on Machine Learning* (pp. 3355-3364). PMLR.
- Mapp, K. L., & Kuttner, P. J. (2013). *Partners in Education: A Dual Capacity-Building Framework for Family-School Partnerships*. Sedl.
- Marinho, I., & Mena, F. (2012). *Family relationships and the individuation process in emerging adulthood: A cross-national comparison* [Paper presentation]. 12th Annual Conference of the European Academy of Management (EURAM), Rotterdam, Netherlands.
- McNeal, R. B. (2015). Parent involvement and student performance: The influence of school context. *Educational Research for Policy and Practice*, 14, 153-167.
- Mekonnen, W. G. (2017). *Experiences of parents' involvement in the management of primary schools in Oromiya National Regional State, Ethiopia*. University of South Africa (South Africa).

- Midgley, C., Anderman, E., & Hicks, L. (1995). Differences between elementary and middle school teachers and students: A goal theory approach. *Journal of Early Adolescence*, 15, 90-113.
- Molla, T., & Melesse, S. (2018). The role of school–parent communication in enhancing student learning: A study in secondary schools of Addis Ababa, Ethiopia. *Educational Research for Policy and Practice*, 17(3), 223–240
- Molla, T., & Tiruneh, D. T. (2023). Ethiopia’s education system is in crisis–now’s the time to fix it. *The Conversation*.
- Moos, R. H., & Trickett, E. J. (1974). *Classroom Environment Scale manual*. Consulting Psychologists Press.
- Narad, A., & Abdullah, B. (2016). Academic performance of senior secondary school students: Influence of parental encouragement and school environment. *Rupkatha Journal on Interdisciplinary Studies in Humanities*, 8(2), 12.
- National Research Council. (2012). *A framework for K-12 science education: Practices, crosscutting concepts, and core ideas*. National Academies Press.
- Núñez, J. C., Suárez, N., Rosário, P., Vallejo, G., Valle, A., & Epstein, J. L. (2015). Relationships between perceived parental involvement in homework, student homework behaviors, and academic achievement: differences among elementary, junior high, and high school students. *Metacognition and learning*, 10, 375-406.
- Nye, B., Hedges, L. V., & Konstantopoulos, S. (2000). The effects of small classes on academic achievement: The results of the Tennessee class size experiment. *American Educational Research Journal*, 37(1), 123-151.
- Organisation for Economic Co-operation and Development. (2018). PISA 2018 results: **What students know and can do (Vol. I)**.
- Organisation for Economic Co-operation and Development. (2019). *PISA 2018 results (Volume II): Where all students can succeed*. OECD Publishing.
- Organisation for Economic Co-operation and Development. (2021). *Education at a glance 2021: OECD indicators*. OECD Publishing.

- Pascarella, E. T., & Terenzini, P. T. (1980). Student-faculty and student-peer relationships as mediators of the structural effects of undergraduate residence arrangement. *The Journal of Educational Research*, 73(6), 344-353.
- Patrick, H., Ryan, A. M., & Kaplan, A. (2007). Early adolescents' perceptions of the classroom social environment, motivational beliefs, and engagement. *Journal of educational psychology*, 99(1), 83.
- Pianta, R. C., Belsky, J., Houts, R., & Morrison, F. (2012). Opportunities to learn in America's elementary classrooms. *Science*, 315(5820), 1795–1796.
- Pintrich, P. R., & De Groot, E. V. (1990). Motivational and self-regulated learning components of classroom academic performance. *Journal of Educational Psychology*, 82(1), 33–40.
- Pomerantz, E. M., & Dong, W. (2006). Effects of mothers' perceptions of children's competence: The moderating role of mothers' theories of competence. *Developmental Psychology*, 42(5), 950–961.
- Pomerantz, E. M., & Eaton, M. M. (2001). Maternal intrusive support in the academic context: Transactional socialization processes. *Developmental Psychology*, 37(2), 174–186.
- 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.
- Pritchard, M. E., & Wilson, G. S. (2003). Using emotional and social factors to predict student success. *Journal of college student development*, 44(1), 18-28.
- Ren, Y., Zhang, F., Jiang, Y., & Huang, S. (2021). Family socioeconomic status, educational expectations, and academic achievement among Chinese rural-to-urban migrant adolescents: The protective role of subjective socioeconomic status. *The Journal of Early Adolescence*, 41(8), 1129-1150.
- Richardson, M., Abraham, C., & Bond, R. (2012). Psychological correlates of university students' academic performance: A systematic review and meta-analysis. *Psychological Bulletin*, 138(2), 353–387.

- Roorda, D. L., Koomen, H. M. Y., Spilt, J. L., & Oort, F. J. (2011). The influence of affective teacher–student relationships on students’ school engagement and achievement: A meta-analytic approach. *Review of Educational Research*, 81(4), 493–529.
- Roseth, C. J., Johnson, D. W., & Johnson, R. T. (2008). Promoting early adolescents’ achievement and peer relationships: The effects of cooperative, competitive, and individualistic goal structures. *Psychological Bulletin*, 134(2), 223–246.
- Ross, T. R. (2016). The differential effects of parental involvement on high school completion and postsecondary attendance. *Education Policy Analysis Archives*, 24, 30-30
- Ryan, A. M., & Patrick, H. (2001). The classroom social environment and changes in adolescents’ motivation and engagement during middle school. *American Educational Research Journal*, 38(2), 437–460.
- Ryan, R. M., & Deci, E. L. (2000). Self-determination theory and the facilitation of intrinsic motivation, social development, and well-being. *American Psychologist*, 55(1), 68–78.
- Sadipour, I., Ghavam, S. E., Farrokhi, N., Assadzadeh, H., & Sameti, N. (2017). A Model to Predict Academic Performance Based on the Components of Emotional Intelligence, Problem Solving Skills and Achievement Motivation among Students of Smart and Ordinary School. *International Journal of Environmental and Science Education*, 12(5), 1353-1369.
- Senechal, M., & Young, L. (2008). The effect of family literacy interventions on children’s acquisition of reading from kindergarten to grade 3: A meta-analytic review. *Review of Educational Research*, 78(4), 880–907.
- Şengonul, T. (2022). The mediating role of parental self-efficacy in the relationship between socioeconomic status and children’s outcomes. *Journal of Family Issues*. Advance online publication.
- Shute, V. J., Hansen, E. G., Underwood, J. S., & Razzouk, R. (2011). A Review of the Relationship between Parental Involvement and Secondary School Students’ Academic Achievement. *Education Research International*, 2011(1), 915326.
- Sileshi, M., Jemal, K., & Feyisa, B. W. (2024). Determinants of school dropouts and the impact on youth unemployment: *Evidence from Ethiopia. Economic Systems*, 101228.

- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417–453.
- Smith, J. A., Johnson, L. T., & Chen, W. (2020). Analyzing academic performance: Methodological considerations for handling extreme groups in educational research. *Journal of Educational Measurement*, 57(3), 455-470
- Soenens, B., Vansteenkiste, M., Lens, W., Luyckx, K., Goossens, L., Beyers, W., & Ryan, R. M. (2007). Conceptualizing parental autonomy support: Adolescent perceptions of promotion of independence versus promotion of volitional functioning. *Developmental Psychology*, 43(3), 633–646.
- Sorkhabi, N., & Mandara, J. (2013). Are the effects of Baumrind's parenting styles culturally specific or culturally equivalent?
- Spillane, J. P. (2002). Local theories of teacher change: The pedagogy of district policies and programs. *Teachers College Record*, 104(3), 377–420.
- Stattin, H., & Kerr, M. (2000). Parental monitoring: A reinterpretation. *Child Development*, 71(4), 1072–1085.
- Steinberg, L. (2014). *Age of opportunity: Lessons from the new science of adolescence*. Houghton Mifflin Harcourt.
- Strelan, P., Osborn, A., & Palmer, E. (2020). The flipped classroom: A meta-analysis of effects on student performance across disciplines and education levels. *Educational Research Review*, 30, 100314
- Tabachnick, B. G., & Fidell, L. S. (2018). *Using multivariate statistics* (7th ed.). Pearson.
- Tafere, Y. (2014). *Children's agency and development in Ethiopian communities*. Young Lives.
- Tajfel, H., & Turner, J. C. (1979). An integrative theory of intergroup conflict. In W. G. Austin & S. Worchel (Eds.), *The social psychology of intergroup relations*. Brooks/Cole.
- Tam, V. C., & Chan, R. M. (2009). Parental involvement in primary children's homework in
- Tan, C. Y., Lyu, M., & Peng, B. (2020). Academic benefits from parental involvement are stratified by parental socioeconomic status: A meta-analysis. *Parenting*, 20(4), 241–287.

- Tao, Y., Meng, Y., Gao, Z., & Yang, X. (2022). Perceived teacher support, student engagement, and academic achievement: A meta-analysis. *Educational Psychology*, 42(4), 401-420.
- Tesfaye, H., & Assefa, S. (2021). The dominance of examination culture and its impact on inquiry-based science teaching in Ethiopia. *Journal of Ethiopian Education*, 41(1), 78–95.
- Theobald, D. M. (2005). Landscape patterns of exurban growth in the USA from 1980 to 2020. *Ecology and society*, 10(1).
- Tilahun, D., Getachew, M., & Teshome, Z. (2023). *The impact of daily focus drills on task achievement in government secondary schools of Addis Ababa*. College of Education, Addis Ababa University.
- Tomlinson, C. A. (2017). How to differentiate instruction in academically diverse classrooms (3rd ed.). ASCD.
- Tiruneh, M. A. (2014). Private tutoring in Ethiopia: A study of its forms, intensity, and associated factors. *International Journal of Educational Development*, 39, 148–156.
- Turner, J. C., Thorpe, P. K., & Meyer, D. K. (1998). Students' reports of motivation and
- UNESCO. (2022). *Education and equity in Ethiopia: A situational analysis*. United Nations Educational, Scientific and Cultural Organization.
- Vansteenkiste, M., Simons, J., Lens, W., Sheldon, K. M., & Deci, E. L. (2004). Motivating learning, performance, and persistence: The synergistic effects of intrinsic goal contents and autonomy-supportive contexts. *Journal of Personality and Social Psychology*, 87(2), 246–260.
- Volodina, A., Lindner, C., Arens, A. K., Wesslein, A.-K., & Weinert, S. (2021). The role of family characteristics for students' academic outcomes: A person-centered approach. *Child Development*, 92(4), e497–e517.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes*. Harvard University Press.
- Walberg, H. J. (1982). Educational productivity: Theory, evidence, and prospects. *Australian Journal of Education*, 26(2), 115-122.

- Walker, J. M. T., Wilkins, A. S., Dallaire, J. R., Sandler, H. M., & Hoover-Dempsey, K. V. (2005). Parental involvement: Model revision through scale development. *The Elementary School Journal*, 106(2), 85–104.
- Wang, M. T., & Eccles, J. S. (2012). Social support matters: Longitudinal effects of social support on three dimensions of school engagement from middle to high school. *Child Development*, 83(3), 877–895.
- Wang, M. T., & Sheikh-Khalil, S. (2014). Does parental involvement matter for student achievement and mental health in high school? *Child Development*, 85(2), 610–625.
- Waters, T. J., & Marzano, R. J. (2006). School District Leadership That Works: The Effect of Superintendent Leadership on Student Achievement. A Working Paper. *Mid-Continent Research for Education and Learning (McREL)*.
- Webb, N. M., Franke, M. L., Ing, M., Wong, J., Fernandez, C. H., Shin, N., & Turrou, A. C. (2019). Advancing collaborative learning in mathematics: A multi-year study of the nature of productive talk. *Journal of Educational Psychology*, 111(7), 1127–1148.
- Weiner, B. (1985). An attributional theory of achievement motivation and emotion. *Psychological Review*, 92(4), 548–573.
- Wentzel, K. R., Battle, A., Russell, S. L., & Looney, L. B. (2010). Social supports from teachers and peers as predictors of academic and social motivation. *Contemporary educational psychology*, 35(3), 193-202.
- Wilder, S. (2023). Effects of parental involvement on academic achievement: a meta-synthesis. In Mapping the field (pp. 137-157). Routledge.
- Winne, P. H., & Hadwin, A. F. (1998). Studying as self-regulated learning. In D. J. Hacker, J. Dunlosky, & A. C. Graesser (Eds.), *Metacognition in educational theory and practice* (pp. 277–304). Erlbaum.
- Wondemenah, A. (2022). *Equity and resource allocation in private schools: A case study of science education in Addis Ababa*. Addis Ababa University.

- Wondimu, H. (2019). Private versus public schools in Ethiopia: A comparison of academic learning environments and student outcomes. *Comparative Education Review*, 63(4), 521–543.
- World Bank. (2022). *Ethiopia - General education quality improvement program for equity (GEQIP-E)*. World Bank Group
- Wrosch, C., Scheier, M. F., Carver, C. S., & Schulz, R. (2003). The importance of goal disengagement in adaptive self-regulation: When giving up is beneficial. *Self and Identity*, 2(1), 1–20.
- Yeager, D. S., Hanselman, P., Walton, G. M., Murray, J. S., Crosnoe, R., Muller, C., Tipton, E., Schneider, B., Hulleman, C. S., Hinojosa, C. P., Paunesku, D., Romero, C., Flint, K., Roberts, A., Trott, J., Iachan, R., Buontempo, J., Yang, S. M., Carvalho, C. M., ... Dweck, C. S. (2019). A national experiment reveals where a growth mindset improves achievement. *Nature*, 573(7774).
- York, T. T., Gibson, C., & Rankin, S. (2019). Defining and measuring academic success. *Practical assessment, research, and evaluation*, 20(1), 5.
- Yusuf, T. A., Onifade, C. A., & Bello, O. S. (2016). Impact of class size on learning, behavioral and general attitudes of students in secondary schools in Abeokuta, Ogun State Nigeria. *Journal of Research Initiatives*, 2(1), 12.
- Zimmerman, B. J. (2002). Becoming a self-regulated learner: An overview. *Theory Into Practice*, 41(2), 64–70.

APPENDIX A

QUESTIONNAIRE FOR STUDENT

Appendix A1 Parental Involvement Questionnaire'

Addis Ababa University School of Psychology

Direction This questionnaire is part of a research study conducted for the partial fulfillment of an MA in Counseling Psychology at Addis Ababa University, School of Psychology. The purpose of the study is to examine the relationship between parental involvement, classroom environment, and academic performance in selected private and government secondary schools in Addis Ababa. You have been selected as a participant in this study. Kindly provide your honest responses to the following questions. Please note that this research is purely academic, and all information you provide will remain confidential. Your prompt and thoughtful participation is greatly appreciated.

Background Information About the Respondent

Instruction: Please put a $\checkmark$ mark in the box or write in the space provided whenever applicable.

1. Your Code: _____

1. Sex: Male ☐ Female ☐

3. Age (in years): _____

4. Grade level: 9 ☐ 10 ☐ 11 ☐ 12 ☐

5. Type of school: Private ☐ Government ☐

6. With whom are you currently living?

- A) Mother and father E) Grandmother ☐

- B) Mother ☐ F) Grandfather ☐ Other (Specify) _____

- C) Father ☐ G) Other relatives ☐ _____

- D) Friends ☐

7. What is the highest level of education completed by your mother/female guardian?

- A) Illiterate ☐ D) Grades 9-10 ☐ G) Degree graduate and above ☐
- B) Basic education ☐ E) Grades 11-12 ☐
- C) Primary (grades 1-8) ☐ F) Diploma graduated ☐

8. What is the highest level of education completed by your father/male guardian?

- A) Illiterate ☐ D) Grades 9-10 ☐ G) Degree graduate and above ☐
- B) Basic education ☐ E) Grades 11-12 ☐
- C) Primary (grades 1-8) ☐ F) Diploma graduated ☐

9. What is the current occupation of your father/male guardian? _____

10. What is the current occupation of your mother/female guardian? _____

11. What is the overall income of your family per month in Birr?

- A) Less than 5,000 ☐ B) 5,000-10,000 ☐ C) 10,000-15,000 ☐ D) Above 15,000

Parental Involvement Assessment Questions

This questionnaire is designed to assess the level of parental involvement in your education during the past academic year (2017 E.C.). It contains 20 statements. After reading each statement, please indicate your response by marking a ✓ in the box next to the number that best reflects your answer. The numbers correspond to the following meanings:

1 = strongly disagree, 2 = disagree, 3 = neutral 4 = agree, 5 = strongly agree

Q.NO	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
	Parental Academic Support					

1	They encourage me to set specific academic goals.					
2	My parents taught me specific study methods (e.g., flashcards, self-quizzing).					
3	They helped me break large assignments into smaller tasks.					
4	They helped me find online resources when I needed extra support.					
5	They cared more about getting my homework done quickly than about understanding it.					
6	When I struggled, they asked guiding questions to help me think through the problem					
	Parental Emotional Support					
7	My parents valued my effort more than my academic results.					
8	When I failed an exam, they said, "Let's focus on what to do differently next time."					
9	They reminded me that mistakes are part of learning.					
10	When I was stressed, they helped me break tasks into steps.					
11	They praised the progress I made, even when it wasn't perfect.					
12	They asked about my interests in school, not just my results.					
13	They made me feel like I had failed when I didn't do well in school.					
	Academic Discussion					

14	My parents expected me to keep trying, even when school became difficult.					
15	They discussed college/career fields that align best with my strengths.					
16	They encouraged me to explain what I learned in my own words.					
17	As I progressed in school, we began discussing future goals more than daily assignments.					
18	My parents believe that some people aren't suited for math or science.					
	Parental School Involvement					
19	My parents contacted my teachers when they were concerned.					
20	They attended parent-teacher conferences.					
21	They checked the school portal or website for academic updates.					
22	They helped me explore scholarships or college programs.					
	Autonomy Support					
23	As I got older, my parents gradually gave me more control over my schoolwork.					
24	Now they helped with schoolwork (assignment or homework) only when I asked for it.					
25	They encouraged me to reflect on which study strategies worked best for me.					

	Parental Monitoring					
26	They reviewed my test results with me to identify areas for improvement.					
27	My parents ensure a distraction-free environment for studying (e.g., no phone or TV during study time).					
28	My parents ensure a distraction-free environment for studying (e.g., no phone or TV during study time)					

Appendix A2-: Classroom Environment Assessment Questions

Directions: This questionnaire is designed to assess the extent to which the classroom environment impacted your education during the past academic year (2017 E.C.). After reading each statement, please indicate your response by marking a ✓ in the box next to the number that best reflects your answer. The numbers correspond to the following meanings:

1= strongly disagree, 2 = disagree, 3= neutral 4 = agree, 5 = strongly agree

Q.NO	Items	Strongly disagree	Disagree	Neutral	Agree	Strongly Agree
	Teacher Support					
1	My teacher explains difficult concepts clearly (e.g., with analogies or examples).					
2	My teacher doesn't notice when I'm having a hard time. (Reverse-coded)					
3	I receive timely help (e.g., through email, outside the class,					

	or in-class support).					
4	My teacher encourages me to keep going, even when it's challenging.					
5	My teacher shows me how to improve instead of just pointing out what's wrong.					
6	My teacher adjusts explanations based on student confusion.					
	Involvement					
7	I ask questions when I don't understand something.					
8	I share ideas in class discussions, even if I'm unsure.					
9	I stay quiet in class because I worry about being judged by others. (Reverse-coded)					
10	I expand on what my classmates say to deepen class discussions.					
	Student Cohesiveness					
11	Seeing classmates work hard motivates me to try harder.					
12	Peers offer help without me needing to ask.					
13	I hesitate to ask peers for help due to fear of judgment.					
14	Working with classmates deepens my understanding of lessons.					
15	Students respect different learning paces (fast/slow) in this class.					
	Task Orientation					

16	When my first approach to solving a problem doesn't work, I try different strategies to find a solution.					
17	I often delay starting difficult assignments until the deadline approaches. (Reverse-coded)					
18	I activate 'Do Not Disturb' mode and close all social media apps before studying.					
19	I persist with challenging tasks, even when I find them difficult.					
20	I organize my study schedule in advance to avoid last-minute studying.					
	Investigation					
21	I relate classroom concepts to experiences outside of school.					
22	Before accepting an idea presented in class, I ask: 'Is this supported by scientific principles or laws?'					
23	In this class I can solve problems by analyzing the given information.					
24	In this class I can integrate knowledge across subjects to solve problems.					
25	In this class we are encouraged to investigate ideas beyond the text book.					
25	We are discouraged from asking questions.					
26	We work on real life projects that require critical thinking.					
27	The teacher asks thought-provoking questions.					

	Cooperation					
28	All group members contribute equally during group tasks.					
29	In group tasks we combine different ideas to create better solutions.					
30	We handle disagreements in a respectful and productive way.					
31	Some group members let others do most of the work. (Reverse-coded)					
	Equity					
32	My teacher addresses disrespectful behavior immediately.					
33	My teacher gives more attention to high-achieving students.					
34	My teacher ensures all students can participate.					
35	My teacher tailors support to individual needs.					

Appendix B

Amharic version of Questionnaires'

Appendix B1 : የ ወላጅ ተሳትፎ ማጠቃለያ

አዲስ አበባ ዩኒቨርሲቲ የሥነ ልቦና ትምህርት ቤት

ይህ ማጠቃለያ በአዲስ አበባ ዩኒቨርሲቲ የሥነ ልቦና ትምህርት ቤት የምክር ሳይኮሎጂ ኤምቤ በከፊል ለማምረት የተደረገ የጥናት ጥናት አካል ነው። የጥናቱ አላማ በአዲስ አበባ ከተማ በተመረጡ የግል እና የመንግስት 2ኛ ደረጃ ትምህርት ቤቶች የወላጆች ተሳትፎ፣ የክፍል አካባቢ እና የአካዳሚክ አፈጻጸም ያለውን ግንኙነት ለመፈተሽ ነው። በዚህ ጥናት ውስጥ እንደ ተሳታፊ ተመርጠዋል። በደግሞ ትምህርተኛ ጥያቄዎች ትክክለኛ ምላሽ ይስጡ። እባክዎ ይህ ጥናት ትምህርታዊ ብቻ ነው፤ እና ሁሉም የሚቀርቡት መረጃዎች ሚኒስቴር እንደሆኑ ይቆያሉ። ፈጣን እና አሳቢ ተሳትፎዎ በጣም እና ማሳሰብ ነው።

ሚ፡ ስለተጠራው ዳራ መረጃ

መሆኑ፡ እባክዎን በሳጥኑ ውስጥ ✓ ምልክት ያድርጉ ወይም በሚቻልበት ጊዜ በተዘጋጀው በታላይ ይፃፉ።

1. የእርስዎ ኮድ፡ _____

1. ወሲብ፡ ወንድ ☐ ሴት ☐

3. ዕድሜ (በአመታት)፡ _____

4. የክፍል ደረጃ፡ 9 ☐ 10 ☐ 11 ☐ 12 ☐

5. የትምህርት ዓይነት፡ የግል ☐ መንግስት ☐

6. በአሁኑ ጊዜ ከማን ጋር ነው የሚኖሩት?

ሀ) እናትና አባት ማ አያት። ☐

ለ) እናት ☐ ወ) አያት። ☐ ሌላ (ይግለጹ)

ሐ) አባት ☐ ሰ) ሌሎች ዘመዶች ☐ _____

ማጓደኞች ☐

ሀ) መሃ ይም ☐ ማ ከ 9-10ኛ ክፍል ☐ ሰ) በዲግሪ የተመረቀ እና ከዚያ በላይ ☐

ለ) መሳረታዊ ትምህርት ☐ ማ ከ 11-12ኛ ክፍል ☐

ሐ) የመጀመሪያ ደረጃ (ከ 1-8ኛ ክፍል) ☐ ረ) ዲፕሎማተመር ቋል ☐

ሀ) መሃ ይሙ ☐ ማ ከ9-10ኛ ክፍል ☐ ሰ) በዲግሪ የተመረቀ እና ከዚያ በላይ ☐ ☐

ለ) መሳሪታዊ ትምህርት ☐ ማ ከ11-12ኛ ክፍል ☐

ሐ) የመጀመሪያ ደረጃ (ከ1-8ኛ ክፍል) ☐ ረ) ዲፕሎማተመር ቋል ☐

11. የ ቤተሰብዎ አጠቃላይ ገቢ በወር ምን ያህል ነው?

II. የ ወላጅ ተሳትፎ ግምገማ መጥቻ ቁጥሮች

1 = በጣም አልስመዝግም፣ 2 = አልስመዝግም፣ 3 = ገለልተኛ፣ 4 = እስመዝግሁ፣ 5 = በጣም እስመዝግሁ

ጥ.አ.ይ	እቃዎች	በጠንካራ ሁኔታ	በአስተማማኝ አሰራር	ገለልተኛ	ተስማማ	በጠንካራ ሁኔታ
	የወላጅ አካዳሚያዊ ድጋፍ					
1	የተወሰኑ የትምህርት ግቦችን እንዳወጣዎበረታቱኛል።					
2	ወላጆቹ የተወሰኑ የጥናት ዘዴዎችን አስተምረዋል (ለምሳሌ፡ ፍላጎት ካርዶች፣ ራስን ማጠየቅ)።					
3	ትላልቅ ሥራዎችን በትናንሽ ሥራዎች እንደከፋፍል ረድተዋል።					
4	ተጨማሪ ድጋፍ ስፈልግ የማሰማረ ላይ ግብዓቶችን እንዳገኝ ረድተዋል።					
5	የቤት ስራዬን ከመረዳት ይልቅ ፈጥኖ መጪያ ስያስቡ ነበር።					
6	ስታገል፣ ችግሩን እንዳስብይረዱኝ ዘንድ መሪ ጥያቄዎችን ጠየቁኝ።					
	የወላጅ ስሜዳዊ ድጋፍ					
7	ከአካዳሚያዊ ወጤት ይልቅ ወላጆቹ ጥረቴን ከፍ አድርገው ይመላከቱት ነበር።					
8	እኔ ፈተና ወድቄ፣ “ሌላ ጊዜ ሌላ ምን መድረግ እንዳለብን ላይ እናተኩር” አሉኝ።					
9	ስሕተቶች የመረጃ አንድ አካል መሆናቸውን አስታውሰዋል።					
10	በተጨማሪ ቀኝ ጊዜ፣ ስራዎችን በደረጃ እንደከፋፍል					

	ረዳኝ።					
11	ፍፁምባይሆን ምያደረግኩትን እድገት አወድሰዋል።					
12	ወጠኔን ብቻ ሳይሆን በትምህርት ቤት ውስጥ ስላለኝ ፍላጎት ጠየቁኝ።					
13	በትምህርት ቤት ጥሩ ወጠኔ ሳላገኝ እንደወደቀሁ እንዲሰማኝ አድርገዋል።					
	ትምህርታዊ ወይይት					
14	ትምህርት ቤት አስቸጋሪ በሆነ በትጊዜም እንኳ ወላጆቼ ጥረቴን እንድቀጥል ይጠበቁኝ ነበር።					
15	ከጥንካሬዎቼ ጋር የሚጠናቀቅ ኮሌጅ/የሙያ መከላከያ ተወያይተዋል።					
16	የተማሪ ኩትን በራሴ አንደበት እንዳስረዳ አበረታቼኝ።					
17	በትምህርት ቤት እያደግኩ ስሄድ፣ ከዕለት ተዕለት ሥራዎች ይልቅ ስለወደፊቱ ግቦች መወያየት ጀመርኩ።					
18	ወላጆቼ አንዳንድ ሰዎች ለሂሳብ ወይም ለሰላም ጥላቻ እንዳልሆኑ ያምናሉ።					
	የወላጅ ትምህርት ቤት ተሳትፎ					
19	ወላጆቼ በሙያ ስልጣናት ታችኛው ጊዜ አስተማሪዎቼን አነጋግረው ነበር።					
20	በወላጅ-አስተማሪ ኮንፈረንስ ላይ ተሳትፏል።					
21	ለአካዳሚያዊ ማሻሻያ የትምህርት ቤቱን መግቢያ ወይም ድህረ ገጽ ፈትሻለን።					
22	ስኮላርሺፕ ወይም የኮሌጅ ፕሮግራሞችን እንዳስገኝ ረድተዋል።					

	ራስን የሚከተልደር ድጋፍ					
23	እያደግኩስሄድ ወላጆቼ ቀስ በቀስ በትምህርት ቤት ሥራዬ ላይ የበለጠቁጥጥር ያደርጉኝ ነበር።					
24	አሁን በትምህርት ቤት ሥራ (ምድብ ወይም የቤት ሥራ) የረዱት እኔ ስጦታ ብቻ ነው።					
25	ለእኔ በተሻለ ሁኔታ እንደሰሩኝ እንዳሰላስል አበረታቱኝ።					
	የ ወላጅ ክትትል					
26	የሚሻሻያ ቦታዎችን ለመለየት ከእኔ ጋር የፈተና ወጠኞቼን ገ ምግመድ።					
27	ወላጆቼ ለማጥናት ትኩረትን የሚከፋፍሉ ሁኔታዎችን ያረጋግጣሉ (ለምሳሌ በጥናት ጊዜ ምንምስልክ ወይም ቲቪ የለም)።					
28	ወላጆቼ ለማጥናት ትኩረትን የሚከፋፍሉ ሁኔታዎችን ያረጋግጣሉ (ለምሳሌ በጥናት ጊዜ ምንምስልክ ወይም ቲቪ የለም)					

Appendix B2: የክፍል አካባቢ ግምገማ መመሪያ

አቅጣጫዎች: ይህ መመሪያ የተነሳ ደረጃው በሰፊው የትምህርት ዘመን (2017 EC) የክፍል አካባቢ በትምህርት ዓመት ላይ ምን ያህል ተፅእኖ እንዳሳደረ ለመግምገም ይረዳል። እያንዳንዱን ዓረፍተ ነገር ካነበቡ በኋላ፣ እባክዎን መልስዎን በተሻለ በሚያገለግል ቁጥር ቀጥሎ በሰጡት ላይ ✓ ላይ ምልክት በማድረግ ምላሽዎን ያመልክቱ። ቁጥሮቹ ከሚከተሉት ትርጉሞች ጋር ይዛመዳሉ።

1 = በጣም አልስማማም፣ 2 = አልስማማም፣ 3 = ግልጽ ተረፎ፣ 4 = እስማማለሁ፣ 5 = በጣም እስማማለሁ

ጥ.አ.ይ	እቃዎች	በጠንካራ ሁኔታ	በአልተመሳሳይ አካል መመዝገብ	ገለልተኛ	ተስማማ	በጠንካራ ሁኔታ
	የአስተማሪ ድጋፍ					
1	አስተማሪዬ አስቸጋሪ ፅንሰ ሀሳቦችን በግልፅ ያብራራል (ለምሳሌ ከአናሎግ ወይምምሳሌዎች ጋር)።					
2	አስተማሪዬ ሲቸገር አያስተውለኝም፡ (በተቃራኒ ኮድ የተደረገ)					
3	ወቅታዊ እርዳታ እቅድ በላለሁ (ለምሳሌ በኢሜል፣ ከክፍል ወጪወይምበክፍል ውስጥ ድጋፍ)።					
4	ፈታኝ ቢሆንምእንኳ መመሪያ እንድቀጥል ያበረታታኛል።					
5	መመሪያ ስህተት የሆነ ውጤት ብቻ ከመጠቀም ይልቅ እንዴት መሻሻል እንዳለብኝ ያሳየኛል።					
6	መመሪያ በተማሪ ግራ መግባት ላይ በመመከር መጠራረያዎችን ያስተካክላል።					
	ተሳትፎ					
7	የሆነ ነገር ካልገባኝ ጥያቄዎችን እጠይቃለሁ።					
8	እርግጠኛ ባልሆንምእንኳ በክፍል ውይይቶች ውስጥ ሀሳቦችን አካፍላለሁ።					
9	ክፍል ውስጥ ዝምዋሌ ምላሳውምከን ያቱምበሌሎች መረጃ ስለማግኘት ቅን ውጤት፡ (በተቃራኒ ኮድ የተደረገ)					
10	የክፍል ውይይቶችን ለመጠናከር የክፍል ጓደኞች የሚሉትን አስፋለሁ።					

	የተሜ አብሮነት					
11	የክፍል ዳይጃቹ ጠንክረውሲሰሩ ማቼ ቴ የበለጠ እንድሞክር ያነሳሳኛል።					
12	እኔ ማጠየቅ ሳያስፈልገኝ እኩሮች እርዳታ ይሰጣሉ።					
13	ፍርድን በመፍራት እኩሮቼን እርዳታ ለማጠየቅ አማታለሁ።					
14	ከክፍል ዳይጃቹ ጋር ማስራቱ ስለትምህርቶች ያለኝ ግንዛቤ እንዲጨምር ያደርጋል።					
15	ተሜዎች በዚህ ክፍል ውስጥ የተለያዩ የመሜያ ደረጃዎችን (ፈጣን/ቀርፋፋ) ያከብራሉ።					
	የተግባር አቀማመጥ					
16	ችግርን ለመፍታት የመጀመሪያ አካሄድ ሲቀር፣ መፍትሄ ለማግኘት የተለያዩ ስልቶችን እሞክራለሁ።					
17	ቀነ-ገደቡ እስኪቃረብ ድረስ ብዙ ጊዜ አስቸጋሪ ስራዎችን ለመጀመር አዘገያለሁ። (በተቃራኒ ኮድ የተደረገ)					
18	ከማጥናቴ በፊት 'አትረብሽ' ሁነታን አነቃለሁ እና ሁሉንም የመሀበራዊ ሚዲያ መተግበሪያዎች እዘጋለሁ።					
19	አስቸጋሪ ሆኖ በገጃቸው ሚዲያዎች ፈታኝ በሆኑ ሥራዎች እጸናለሁ።					
20	የሜጪሻውን ደቂቃ ላለ ማጥናት የጥናት መርሃ ግብሬን አስቀድሜ አደራጅቻለሁ።					
	ምርመራ					
21	የክፍል ፅንሰ-ሀሳቦችን ከትምህርት ቤት ውጭ ለተሞክሮዎች ጋር አዛምጃለሁ።					

22	በክፍል ውስጥ የቀረበውን ሀሳብ ከመቀበሉ በፊት 'ይህ በሳይንሳዊ መረሆዎች ወይም ህጎች የተደገፈ ነው'					
23	በዚህ ክፍል ውስጥ የተሰጠውን መረጃ በመተንተን ችግሮችን መፍታት እችላለሁ.					
24	በዚህ ክፍል ውስጥ ችግሮችን ለመፍታት ዕውቀትን በተለያዩ ርዕሰ ጉዳዮች ላይ መዋሃድ እችላለሁ።					
25	በዚህ ክፍል ውስጥ ከመረጃ ማህተም በላይ ሀሳቦችን እንድንመረምር እንበረታታለን።					
25	ጥያቄዎችን እንዳንጠይቅ ተገድበናል።					
26	ሂሳዊ አስተሳሰብን በሚጠይቁ የእውነተኛ ህይወት ፕሮጀክቶች ላይ እንሰራለን።					
27	መግህሩ ትኩረት የሚስጡ ጥያቄዎችን ይጠይቃል።					
	ትብብር					
28	ሁሉም የቡድን አባላት በቡድን ተግባራት ወቅት እኩል አስተዋፅኦ ያደርጋሉ.					
29	በቡድን ተግባራት ውስጥ የተሻሉ መፍትሄዎችን ለመፍጠር የተለያዩ ሀሳቦችን እና ጣምራለን።					
30	አለመግባባቶችን በአክብሮት እና ውጤታማ በሆነ መንገድ እናስተናግዳለን.					
31	አንዳንድ የቡድን አባላት አብዛኛውን ስራውን ሌሎች እንዲሰሩ ይፈቅዳሉ። (በተቃራኒ ኮድ የተደረገ)					
	ፍትሃዊነት					
32	መግህሬ አክብሮት የጎደለው ባህሪን ወዲያው ያነጋግራል።					

33	ማህበረ ከፍተኛ ውጤት ለማስተካከል ዎች የበለጠ ትኩረት ይሰጣል።					
34	ማህበረ ሁሉም ተማሪዎች መሳተፍ እንደሚችሉ ያረጋግጣል።					
35	አስተማሪዬ ለግለሰብ ጥያቄዎች ድጋፍ ይሰጣል።					

Appendix C

Interview Protocol

Direction Thank you for participating in this interview. The interview aimed at understanding the relationship among classroom environment, parental involvement, and academic performance. Your perspective is valuable, and there are no right or wrong answers. You may skip any question, and all responses will remain confidential. The interview will take about 20 minutes. May I record this conversation for accuracy? You can request to stop recording at any time.

Part Background Information About the Respondent

I. Demographic Verification:

1. What is your current age?
2. Which grade are you in?
3. Do you attend a government or private school? (☐ Government ☐ Private)

II. Academic Profile:

4. How would you describe your academic performance?
5. Top achiever ■ High performer ■ Average ■ Low achiever ■ Prefer not to say

III. Family Background:

6. Who do you currently live with?
(☐ Both parents ☐ One parent ☐ Relatives ☐ Guardians ☐ Other: _____)
7. Which best describes your family's economic situation?
(☐ Comfortable ☐ Enough for basics ☐ Struggling ☐ Prefer not to say)
8. What is the highest education level completed by your parents/guardians?
(☐ No formal schooling ☐ Primary ☐ Secondary ☐ University ☐ Don't know)

Parental Involvement Assessment Interview Questions

I. Parental Expectations:

1. What kinds of academic achievements do your parents expect from you? How do they communicate these expectations?
2. How do you think these expectations might differ between private and government school parents?
3. Do parents with different education levels set different expectations?

III. Parental Support:

4. When you struggle academically, what specific help do your parents provide? What support do you wish they offered?
5. Has your family's financial situation ever affected the academic support you receive?

IV. School Engagement:

6. How involved are your parents in school activities (e.g., meetings, events)? What makes this easier or harder for them?
7. How might parental involvement differ at [other school type] schools?

Classroom Environment Assessment Interview Questions

V. Teaching Quality:

8. Describe how your teachers help students who are falling behind. What makes some teachers more effective?
9. How might teacher support differ in [other school type] schools?

VI. Peer Dynamics:

10. How would you describe teamwork among classmates? What helps groups work well together
11. Do peer relationships differ between school types?

Academic Performance Assessment Interview Questions

12. What factors contribute most to your academic performance? How do parents, teachers, and school resources fit in?
13. SES/School-Type Probe: How might this differ for students from other economic backgrounds or school types?

I. School Comparisons:

14. From your observations, what key differences exist between private and government schools that might affect student outcomes?

15. Do private school advantages depend on family resources?

Appendix D

Amharic Version of Interview Protocol

የቃለ መጠይቅ ፕሮቶኮል

በዚህ ቃለ መጠይቅ ስለተሳተፉ እና መሳግናለን። ቃለ-መጠይቁ በክፍል አካባቢ፣ በወላጆች ተሳትፎ እና በአካዳሚክ አፈጻጸም መካከል ያለውን ግንኙነት ለመረዳት ያለመነው። የእርስዎ አመለካከት ጠቃሚነው እና ምንምትክክለኛ ወይም የተሳሳቱ መረጃዎች የሉም። ማንኛውንም ጥያቄ መዘለል ይችላሉ፣ እና ሁሉም ምላሾች ሚስጥራዊ እንደሆኑ ይቆያሉ። ቃለ መጠይቁ 20 ደቂቃ ያህል ይወስዳል። ይህን ወይይት ለትክክለኛነት መመዝገብ እችላለሁ? በማንኛውም ጊዜ መቆዳት ለመቆም መጠየቅ ትችላለህ።

I. ስለ ተጠሪ ዳራ መረጃ

1. የአሁኑ ዕድሜዎ ስንት ነው?
2. የትኛው ክፍል ነው ያለህ?
3. በመንግስት ወይም በግል ትምህርት ቤት ትመራለህ? (☐ መንግሥት ☐ የግል)

II. የአካዳሚክ መሳሪያ

4. የትምህርት ክንውንዎን እንዴት ይገልጹታል?
5. ከፍተኛ አሸናፊ ■ ከፍተኛ አፈጻጸም ■ አማካኝ ■ ዝቅተኛ ውጤት አስገኝ ■ ላለመናገር እመረጣለሁ።

III. የቤተሰብ ዳራ

9. በአሁኑ ጊዜ ከማን ጋር ነው የሚኖሩት?
(☐ ሁለቱም ወላጆች ☐ አንድ ወላጅ ☐ ዘመዶች ☐ አሳዳጊዎች ☐ ሌላ: _____)
10. የቤተሰብቱን ኢኮኖሚያዊ ሁኔታ የሚገልጽ ውጤት ትኛው ነው?
(☐ ምቹ ☐ ለመሠረታዊ ነገሮች በቂ ነው ☐ መታገል ☐ ላለመናገር እመረጣለሁ)
11. በወላጆች/አሳዳጊዎች የተጠናቀቀው ከፍተኛ የትምህርት ደረጃ ምንድነው?
(☐ መደበኛ ትምህርት የለም ☐ የመጀመሪያ ደረጃ ☐ ሁለተኛ ደረጃ ☐ ዩኒቨርሲቲ ☐ አላወቅም)

III : የ ወላጅ ተሳትፎ ግምገማ ማቃለ ማጠቃለያ ጥያቄዎች

የ ወላጅ ተስፋዎች : -

1. ወላጆችዎ ከእርስዎ ምን አይነት የ ትምህርት ስኬቶችን ይጠብቃሉ? እነዚህን ተስፋዎች እንዴት ያስተላልፋሉ?
2. በግል እና በመንግስት ትምህርት ቤት ወላጆች መካከል እነዚህ የ መጠበቁ ነገሮች እንዴት ሊለያዩ ይችላሉ ብለው ያስባሉ?
3. የ ተለያዩ የ ትምህርት ደረጃ ያላቸው ወላጆች የ ተለያዩ ፍላጎቶችን ያዘጋጃሉ?

የ ወላጅ ድጋፍ ;

16. በ ትምህርት ስትታገል፣ ወላጆችህ ምን ልዩ እርዳታ ይሰጣሉ? ምን አይነት ድጋፍ እንዲሰጡ ይፈልጋሉ?
17. የ ቤተሰብዎ የ ገንዘብ ሁኔታ እርስዎ በመቅበሉት የ አካዳሚክ ድጋፍ ላይ ተጽዕኖ አሳድሯል?

የ ትምህርት ቤት ተሳትፎ ;

18. ወላጆችህ በ ትምህርት ቤት እንቅስቃሴዎች (ለምሳሌ ስብሰባዎች፣ ዝግጅቶች) ምን ያህል ይሳተፋሉ? ይህ ለእነሱ ቀላል ወይም ከባድ የ መቆየት ውጤት ድንኳን ነው?
19. [በሌሎች የ ትምህርት ቤት ዓይነት] ትምህርት ቤቶች የ ወላጆች ተሳትፎ እንዴት ሊለያይ ይችላል?

የ ክፍል አካባቢ ምክንያትና የ ቃለ ማጠቃለያ ጥያቄዎች

VII. የ መስተሠራት ጥራት ;

20. አስተማሪዎችዎ ወደ ኋላ የ መመዝገቢያ ተሠራርዎችን እንዴት እንደሚደብድቡ ብራሩ። አንዳንድ አስተማሪዎች የ በለጠው ጥያቄ መቆየት ይገባቸዋል ድንኳን ነው?
21. [በሌሎች የ ትምህርት ቤት ዓይነት] ትምህርት ቤቶች የ መመሪያ ድጋፍ እንዴት ሊለያይ ይችላል?

VIII. የ አቻ ተለዋዋጭ ት

22. በ ክፍል ዓይኖች መካከል ያለውን የ ቡድን ስራ እንዴት ይገልጻሉ? ቡድኖች በደንብ አብረው እንዲሰሩ የሚችሉት?
23. የ አቻ ግንኙነቶች በ ትምህርት ቤት ዓይነቶች መካከል ይለያያሉ?

የ አካዳሚክ አፈጻጸም ምክንያትና የ ቃለ ማጠቃለያ ጥያቄዎች

24. ለ አካዳሚክ አፈጻጸም የ በለጠ አስተዋጽኦ የ መቆየት ጉዳት የ ትኞቹ ነገሮች ናቸው? ወላጆች፣ አስተማሪዎች እና የ ትምህርት ቤት ግብዓቶች እንዴት ይጣጣማሉ?

25. የ ትምህርት-ዓይነት ምርመራ፡ ይህ ከሌላ ኢኮኖሚያዊ ዳራ ወይም የ ትምህርት ቤት ዓይነት ቶች ላሉ ተመራጮች እንዴት ሊለያይ ይችላል?

II. የ ትምህርት ቤት ንጽጽር ;

26. ከእርስዎ ምልከታ፣ በግል እና በመንግስት ትምህርት ቤቶች መካከል የ ተመራጮችን ውጤት ሊነኩ የሚችሉ ዋና ዋና ልዩነቶች ምንድናቸው?

27. የ ግል ትምህርት ቤት ጥቅሞች በቤተሰብ ሀብቶች ላይ የ ተመካኑ ው?