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THE İMPACT OF PARENTAL SUPPORT ON UNIVERSITY ENTRANCE EXAM SUCCESS: A STUDY IN AZERBAIJAN

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INTRODUCTION

The actuality of the subject: Parental involvement has long been recognized as a critical factor influencing students' academic outcomes. Extensive literature suggests that support from parents (whether financial, emotional, or a combination of both) contributes significantly to students' motivation, learning strategies, and overall performance (Epstein, 2001; Fan & Chen, 2001). In particular, the transition from secondary to higher education, often marked by high-stakes college entrance exams, places a unique psychological and financial burden on students. In such contexts, parental support can play an important role in reducing stress, facilitating access to preparation resources, and encouraging consistent study behaviors (Steinberg, 2001; Hill & Tyson, 2009). The Azerbaijani educational system, like many other educational systems in developing countries, places great emphasis on college entrance exams as a determinant of students' future opportunities. Despite the importance of these exams, limited empirical research has investigated how different forms of parental support affect exam results in this cultural and educational context. Most existing studies lack quantitative rigor or fail to distinguish between the different effects of financial and emotional support. This study responds to these contextual demands and scholarly gaps by proposing a culturally and developmentally grounded investigation.

Problem setting and learning level: Although the relationship between parental involvement and academic achievement is widely recognized, existing literature often treats this support as a monolithic concept. Prior studies rarely disaggregate emotional from financial support, and almost none explore their integrated effects. Furthermore, most of these analyses focus on Western countries and general K-12 outcomes, overlooking the specific challenges of high-stakes university entrance exams in post-Soviet educational systems like Azerbaijan's. This research specifically targets students at the pre-university level, where parental influence may be most consequential yet underexamined. This study addresses this gap by examining how financial support (FMS), emotional support (EMS), and the combined effect of both (FMEMS) affect student performance on university entrance exams in Azerbaijan. Using a quantitative, cross-sectional design with self-reported data from students, this research aims to contribute to the academic discourse on parental involvement and educational achievement.

The aims of this study are threefold: (1) to determine the extent to which financial and emotional support predict exam performance, (2) to examine whether demographic factors such as age and gender moderate these effects, and (3) to situate the findings within the broader literature on parental involvement. In doing so, the study aims to provide actionable insights for educators, policymakers, and families seeking to support students during critical educational transitions.

Purpose and tasks of the research: The purpose of this study is to examine the impact of different types of parental support—financial, emotional, and integrated—on students' success in university entrance examinations. The key research tasks are:

- To analyze the relative effects of each support type.
- To explore urban-rural disparities in academic outcomes.
- To formulate policy recommendations for enhancing emotional support mechanisms in education.
- To contribute a culturally grounded model to the academic literature.

The object and subject of the research: Object: Students preparing for university entrance examinations in Azerbaijan.

Subject: The impact of parental financial, emotional, and combined support on academic achievement.

Used research methods: This study employs a quantitative research approach using multiple linear regression and ANOVA to test the hypotheses. The analytical model builds upon Hill and Tyson's (2009) parental involvement framework and incorporates differentiated dimensions of support.

Formula:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \varepsilon$$

Y: University entrance exam score

X1: Financial Support

X2: Emotional Support

X3: Integrated Financial-Emotional Support

The information base of the research: Primary data were collected via structured self-report surveys directly from students. This methodology ensures that findings reflect authentic student perspectives rather than parental self-perceptions or institutional assumptions. Secondary sources

include scholarly articles, meta-analyses, and models from Hill and Tyson's (2009), Jeynes (2005, 2012), Fan & Chen (2001), Epstein (2018), and Pomerantz et al. (2022), among others.

Restrictions of research: Several limitations must be acknowledged:

- **Cultural specificity:** Findings may not generalize beyond Azerbaijan.
- **Self-report bias:** Responses may be influenced by social desirability or recall inaccuracies.
- **Cross-sectional design:** Limits the ability to infer causal relationships.
- **Sample size constraints:** May reduce the power to detect subtle effects.

The scientific novelty of the study: This research introduces a novel model that explicitly differentiates and measures the effects of financial and emotional parental support—individually and in combination—on academic success in a non-Western context. To the best of our knowledge, this is the first quantitative study of its kind conducted in Azerbaijan. The study also enriches the literature by incorporating urban-rural comparisons and examining socio-cultural moderators.

Practical significance of the results and areas of application: The findings offer actionable insights for:

Policy makers: To design culturally responsive educational interventions that enhance both emotional and financial support structures.

Schools: To foster meaningful partnerships with families and improve communication channels.

Parents: To better understand how their support—emotional and material—affects their children's academic outcomes.

Researchers: To expand empirical inquiries into non-Western contexts and refine theoretical frameworks for parental involvement.

I CHAPTER. THEORETICAL FRAMEWORK AND LITERATURE REVIEW

First, we considered it essential to articulate the conceptual framework in our thesis to lay a solid foundation for the subsequent theoretical discussions and literature review. The concept of parental involvement has emerged as a cornerstone in contemporary educational discourse, gaining prominence due to its profound influence on multiple aspects of a child's development. In its broadest sense, parental involvement can be defined as the proactive and sustained participation of parents in various aspects of their children's educational experiences. This engagement is not a one-dimensional activity but rather a multifaceted and dynamic construct that encompasses a wide array of behaviors, attitudes, and values that parents demonstrate in support of their children's learning and growth. According to Private School Village (2024), such involvement has consistently been linked to a wide range of positive outcomes, including improvements in academic achievement, social competence, emotional resilience, and motivation.

Within the scope of this conceptual framework, parental involvement is not merely confined to direct assistance with school-related tasks such as helping with homework or attending parent-teacher conferences. Instead, it spans a broader spectrum that integrates parents' beliefs, expectations, values, and behaviors regarding their children's education and long-term development (Raja et al., 2023). This includes not only participation in formal school settings but also informal contributions at home and in the community. Researchers have approached the definition of parental involvement from different perspectives, leading to a diversity of interpretations. Otto and Karbach (2020) note that some definitions emphasize visible behavioral components, such as volunteering at school events, serving on school councils, or maintaining regular communication with educators. On the other hand, some frameworks prioritize cognitive and motivational dimensions, including parents fostering a learning-conducive environment at home, setting academic expectations, and engaging their children in discussions about the value of education and the importance of lifelong learning.

In the legal and policy context of the United States, parental involvement is defined as active, two-way, and meaningful communication that supports students' academic and extracurricular engagement. This definition underscores the idea that parents are integral partners in the educational process and emphasizes their responsibility in shaping educational outcomes through both formal school interaction and informal home support. Such interpretations reflect a growing

understanding that learning is not limited to the classroom, and parents play a critical role in shaping the attitudes, behaviors, and aspirations of their children through everyday interactions and structured support systems.

The scope of parental involvement encompasses various educational stages, ranging from early childhood education to higher education. Its application extends beyond institutional boundaries and includes both formal environments (e.g., schools, classrooms) and informal environments (e.g., homes, communities). As Raja et al. (2023) point out, this scope is expansive and adaptive, reflecting the evolving needs of students as they progress through different developmental and academic phases. Parents can support their children by helping them transition into new school environments, collaborating with teachers to understand academic challenges, setting routines that support effective study habits, and participating in decision-making processes related to their child's education.

Moreover, the effectiveness of parental involvement depends not only on its presence but also on its quality and consistency. Occasional attendance at school events may offer symbolic support, but meaningful involvement requires deeper engagement and a sustained commitment to understanding and supporting the child's learning journey. This might include creating structured study routines at home, using positive reinforcement strategies, or participating in school-based learning activities. When parents are genuinely engaged in their children's education, they provide not only academic support but also emotional security, motivational encouragement, and behavioral modeling. As suggested by Private School Village (2024), the impact of such engagement is particularly pronounced when it is rooted in a well-informed, intentional, and collaborative approach.

Therefore, a comprehensive understanding of the conceptual framework of parental involvement necessitates an exploration of its definitions, scope, multiple dimensions, and the potential effects on student development. This understanding is critical for educators, policymakers, and parents themselves as they work toward developing and implementing strategies that enhance student success through family-school partnerships. Furthermore, how parental involvement is theorized across various academic perspectives also constitutes a crucial component of the conceptual framework. As noted by Hahn (2021), theoretical lenses from developmental psychology, educational sociology, and cultural studies each offer unique insights into how and why parental involvement functions as a vital element of educational systems.

1.1 The Importance of Parental Involvement in Education

The importance of parental involvement in education derives from its extensive and multidimensional positive impact on students' academic performance, personal development, and overall school climate. A substantial body of educational research consistently demonstrates that students whose parents are actively engaged in their educational journey tend to achieve higher academic outcomes. These students often display increased school attendance rates, exhibit fewer behavioral issues, experience greater motivation, and are statistically more likely to complete their education successfully (Hahn, 2021). The presence of involved parents acts as both a direct and indirect catalyst for educational achievement, not only by fostering academic diligence but also by enhancing students' intrinsic motivation and their sense of responsibility toward learning.

When parents take an active interest in their children's education—by discussing school activities at home, assisting with homework, reading together, or establishing routines that support academic focus—children gain reinforcement and contextualization of the material learned at school. These seemingly simple actions contribute to cognitive development and support memory retention, thereby encouraging a deeper understanding of subject matter. Moreover, such involvement signals to the child that education is a family priority, which often translates into more positive academic behaviors, such as goal setting, time management, and perseverance. When parents attend school meetings, participate in extracurricular events, or engage in school governance, students perceive school as a meaningful and respected institution. This nurtures a stronger emotional attachment to school, heightens their sense of belonging, and fosters a growth-oriented attitude toward challenges and learning.

Importantly, the benefits of parental involvement are not confined solely to academic success. Parental involvement plays a critical role in supporting the social and emotional development of students, which in turn underpins their capacity to succeed academically. Active parental presence helps children navigate the emotional complexities of school life. Parents can provide guidance during times of stress, promote resilience by teaching effective coping mechanisms, and offer consistent emotional support that affirms the child's worth and potential. According to Raja et al. (2023), this emotional scaffolding fosters the development of self-regulation, empathy, and interpersonal skills. Furthermore, when parents and educators collaborate in addressing academic or behavioral challenges, students are more likely to feel

understood, safe, and supported in their school environment—key factors that contribute to their psychological well-being and academic engagement.

Parental involvement is equally beneficial for educators and the broader school ecosystem. When parents actively communicate with teachers and school staff, they offer valuable insights into their children's personalities, learning preferences, and any challenges they may face. This information allows teachers to tailor instruction more effectively and build stronger, trust-based relationships with students. Moreover, parents who volunteer their time or resources enhance the school's capacity to offer enriched educational experiences, from organizing learning materials to supporting extracurricular programs. As Lara and Saracosti (2019) point out, such cooperation between families and schools enhances the school's operational effectiveness, creating a more inclusive and collaborative educational environment.

Additionally, the presence of engaged parents contributes to a more positive and cohesive school climate. It fosters mutual respect and shared accountability among teachers, students, and families. Hill and Tyson (2009) emphasize that parental involvement can lead to increased job satisfaction among teachers, as it promotes a sense of partnership and shared goals. Teachers feel more valued and supported when parents acknowledge their efforts and contribute actively to the learning process. In turn, this collaborative spirit can improve teacher retention and overall school performance.

In summary, parental involvement is a multifaceted element that yields profound benefits for students, families, and schools alike. It enhances academic achievement, nurtures emotional stability, promotes social competence, and strengthens the educational community as a whole. Therefore, educational institutions and policymakers must prioritize the development of inclusive, culturally responsive, and sustainable strategies that foster active parental participation. These strategies should address potential barriers to involvement, such as time constraints, language differences, or lack of educational background, to ensure that all families—regardless of socioeconomic status or cultural background—can contribute meaningfully to their children's education. In doing so, schools not only empower parents but also create more equitable and supportive learning environments that benefit all students.

1.2. Literature Review

A substantial body of research has demonstrated that parental involvement is positively correlated with student achievement and overall well-being, though the effect sizes tend to be modest. For example, one meta-analysis of over 40 studies revealed a significant positive association between parental involvement and academic achievement ($r \approx .25$) (Fan et al., 2024a). Similarly, a more comprehensive meta-analysis of 448 studies ($N \approx 480,800$) found modest correlations between parental involvement and academic outcomes, including achievement, engagement, and motivation ($r_s \approx .13-.23$) (Barger et al., 2019). This meta-analysis also found small but significant associations with socioemotional outcomes, such as social adjustment ($r \approx .12$) and emotional adjustment ($r \approx .17$) (Barger et al., 2019). In summary, while parental involvement consistently shows positive effects on both academic performance and socioemotional development, these effects are generally small to moderate. Key findings include:

Academic Outcomes: Parental involvement is associated with small-to-moderate improvements in grades and test scores, with meta-analytic effect sizes typically ranging from $r \approx .13$ to $.25$ (Barger et al., 2019; Fan et al., 2024a).

Socioemotional Outcomes: Parental involvement also leads to better social skills and emotional regulation in students (Barger et al., 2019). For instance, Barger et al. (2019) found positive correlations between parental involvement and social adjustment ($r \approx .12$) and emotional adjustment ($r \approx .17$). Importantly, recent studies suggest that these benefits often arise indirectly, where increased home-based involvement fosters greater school engagement, which in turn enhances social-emotional competencies (Fan et al., 2024a).

Mechanisms of Influence

Parental involvement influences academic achievement through various pathways, such as providing direct support for learning, setting high expectations, and engaging with the school. These pathways include:

Home-based support: Activities such as reading with children, assisting with homework, or providing educational resources directly support learning. Meta-analytic evidence suggests that general home involvement is positively correlated with academic achievement (Fan et al., 2024a). However, not all forms of home involvement are equally effective. Specifically, parental homework assistance has been shown to have a negative association with academic achievement ($r \approx -.14$) (Fan et al., 2024b). This may be due to overly intrusive help undermining students' independence and problem-solving skills.

School-based involvement: Participation in parent-teacher conferences, volunteering at school events, and other school-related activities can enhance communication between parents and teachers, aligning support for students. While these activities tend to have smaller direct effects on academic performance, they can foster important partnerships between parents and educators. For example, Fan et al. (2024b) found that school-based involvement had a weaker correlation with math performance ($r \approx .087$) than home-based involvement (Fan et al., 2024a).

Academic expectations: Setting high academic aspirations and encouraging a college-going mindset are critical mechanisms through which parental involvement impacts achievement. In fact, one of the strongest correlates with academic achievement is parental expectations, with a strong effect size ($r \approx .335$) (Fan et al., 2024a). Parental confidence in their child's abilities and their emphasis on education often leads to higher GPA and academic effort (Fan et al., 2024b).

Student engagement and motivation: Parental involvement often enhances a student's motivation and school engagement, which subsequently improves academic outcomes. Martinez-Yarza et al. (2024) found that home-based involvement boosted student school engagement, which, in turn, promoted better social-emotional development. Autonomy-supportive involvement—where parents foster curiosity and independence—has been linked to higher levels of intrinsic motivation and academic engagement (Fan et al., 2024b). In summary, parental involvement works by providing academic support, fostering high expectations, and encouraging school engagement, all of which contribute to better academic and socioemotional outcomes.

Socioeconomic Status (SES) as Moderator/Mediator

Socioeconomic status (SES) influences both the extent to which parents are involved in their children's education and how that involvement affects academic outcomes. Research has produced mixed findings regarding the moderating role of SES: while some studies suggest that parental involvement has uniform benefits across different SES groups, others suggest that its effects are stronger for students from disadvantaged backgrounds. For example, Gu et al. (2024) found that parental involvement significantly mediated the relationship between low SES and academic achievement in rural China, demonstrating a compensatory effect where involvement helped offset the challenges associated with low SES. In contrast, a meta-analysis by Barger et al. (2019) found little variation in the parental involvement–achievement link across different SES groups, suggesting that involvement is beneficial across all income levels. Key findings regarding SES include:

Compensatory Role: Parental involvement can compensate for the challenges associated with low SES. For instance, Gu et al. (2024) demonstrated that parental involvement in rural China helps bridge the academic achievement gap between low-SES and higher-SES students.

Stronger Gains for Low-SES Families: Some studies have shown that parental involvement has a stronger impact on students from low-SES backgrounds, especially in developing countries. This highlights the potential benefits of targeted interventions for families with fewer resources (Gu et al., 2024).

Broad Benefits Across SES: Many studies suggest that parental involvement has positive outcomes for all students, regardless of their SES (Barger et al., 2019). Therefore, promoting parental involvement in education is beneficial for all children.

Cultural and Developmental Variations

Parental involvement practices vary across different cultural contexts and developmental stages, influencing its effectiveness. For example:

Cultural Context: In many East Asian cultures, parental involvement is highly focused on academic expectations and direct academic support, often leading to stronger academic outcomes. A study by Fan et al. (2024b) showed that Asian parents tend to have higher academic expectations, which is positively associated with their children's math performance. Conversely, research on U.S. samples has shown a weaker or even negative association between involvement and academic outcomes, possibly due to differences in educational systems and cultural norms (Fan et al., 2024a).

Developmental Stage: The nature and impact of parental involvement changes as children grow older. In early childhood, parents are primarily involved in cognitive and foundational learning activities (e.g., reading aloud, playing educational games), which significantly boost early academic skills (Barger et al., 2019). As children enter primary school, involvement shifts to homework support and school-related activities, while during adolescence, effective involvement becomes more about providing emotional support and encouraging autonomy (Martinez-Yarza et al., 2024). Fan et al. (2024b) found that the effect of parental involvement on academic outcomes is strongest for high school students ($r \approx .19$) and weaker for college students ($r \approx .10$).

Balanced Involvement: Research highlights that the quality of parental involvement is more important than the quantity. Balanced involvement—where parents provide support without becoming over-controlling—is associated with better academic outcomes. Over-involvement or

controlling behavior can undermine students' motivation and independence (Fan et al., 2024b; Pomerantz et al., 2019).

The literature review on parental involvement reveals the multifaceted effects of this concept on education and different forms of participation. Research in this field covers a wide range from the definition of parental involvement, its importance, the influencing factors, different types of participation and its international applications (Hill and Tyson, 2009).

Numerous studies of students from diverse socioeconomic and cultural backgrounds confirm that parental involvement increases academic achievement, improves school attendance, and supports the overall well-being of students (Bakker and Dennesen, 2007).

For example, factors such as the type and intensity of involvement, the student's age, and socioeconomic status may influence the outcomes of parental involvement. Therefore, the literature review highlights the importance of considering these factors to better understand parental involvement and develop effective intervention strategies. In addition, the literature examines how parental involvement can be explained through different theoretical frameworks. Theories such as Epstein's six types of involvement framework, Vygotsky's sociocultural theory, and Bronfenbrenner's ecological systems theory provide an important foundation for understanding the different dimensions of parental involvement and their interactions on student development (Private School Village, 2024).

According to Epstein (1995), effective parental involvement extends beyond school visits and encompasses multiple dimensions such as home learning, communication with teachers, decision-making participation, and collaboration with the broader community. This multi-dimensional model has been widely adopted in subsequent studies, offering a structured approach to understanding how parents can be actively involved in their children's education.

One of the most influential meta-analyses in the field was conducted by Fan and Chen (2001), who examined 25 quantitative studies and found that parental involvement had a moderate to strong positive effect on students' academic outcomes. Particularly, the component of parental expectation was found to be the most significant predictor of success. Similarly, Desforges and Abouchaar (2003) highlighted that parental support and encouragement at home were more impactful on academic achievement than parental income or level of education.

The work of Hill and Tyson (2009) is particularly notable for distinguishing between different types of involvement strategies at the middle school level. Their findings emphasize the effectiveness of academic socialization – which includes communicating the value of education,

setting goals, and discussing school activities – over more traditional forms of involvement such as helping with homework or attending parent-teacher conferences.

Furthermore, Henderson and Mapp (2002) provide a comprehensive synthesis of evidence showing that when schools and families work together, students perform better academically and socially. Their report underlines the importance of building trust-based relationships between families and educators, especially in socioeconomically disadvantaged communities.

Below is a table summarizing the focus areas and findings of some key studies in the literature:

Table 1.1. Summary of Key Literature on Parental Involvement

Study	Main Focus	Key Findings
Fan & Chen (2001)	Meta-analysis of 25 studies	Parental expectation most strongly predicts academic success
Desforges & Abouchaar (2003)	Family influence on achievement	Home support is more impactful than parental income or education
Hill & Tyson (2009)	Involvement strategies in middle school	Academic socialization is more effective than direct involvement
Henderson & Mapp (2002)	School-family-community relationships	Partnerships increase academic success and social development
Epstein (1995)	Theoretical framework of six types of involvement	Multidimensional parental involvement improves student outcomes across contexts

Sources: Prepared by the author

In conclusion, the literature indicates that effective parental involvement must be intentional, multifaceted, and responsive to both the student’s developmental stage and socio-cultural background. While there is no one-size-fits-all model, the consistent message across studies is clear: meaningful involvement of families in education significantly enhances student outcomes (Hill & Tyson, 2009; Henderson & Mapp, 2002).

Finally, the literature review also examines the different practices and challenges faced by parental involvement internationally. Comparisons between developed and developing countries and case studies from different education systems reveal cultural and contextual differences in parental involvement. The literature also discusses various challenges and barriers to parental

involvement, such as parental time constraints, single-parent households, and parents' lack of awareness. Developing strategies to overcome these challenges is important to ensure that parental involvement becomes more widespread and effective.

1.2.1. Previous Research on Parental Involvement

Previous research on parental involvement provides a wealth of information that demonstrates the profound and diverse effects of this phenomenon on education. These studies have examined the effects of parental involvement on student achievement, behavior, and overall well-being using a variety of methodologies. Quantitative studies have focused on identifying correlations and causal relationships between different measures of parental involvement and student outcomes, often using large sample sizes (Hill & Tyson, 2009). These studies have shown that behavioral forms of involvement, such as parents participating in reading activities at home, attending school meetings regularly, or helping their children with their homework, significantly improve students' academic performance (Chandler, 1996). For example, a 2005 study by researchers at the Center for School, Family, and Community Partnerships at Johns Hopkins University found that schools that encouraged families to support their children's math learning at home resulted in a higher percentage of students scoring proficient or above on standardized math achievement tests. It has also been found that parents having high expectations for their children's education and providing them with a supportive learning environment also have positive effects on student achievement (<https://www.kdp.org/blogs/community-manager/2021/11/01/how-to-involve-parents-at-home>). Qualitative studies have sought to gain a deeper understanding of the experiences of parents, students, and teachers with parental involvement.

These studies reveal parents' motivations for involvement, the challenges they face, and the subjective effects of involvement on students and the school. Qualitative studies have shown that parental involvement is not simply a behavioral act but is also influenced by more complex factors such as parents' beliefs, attitudes, and interactions with school culture. Previous research has also shown that different types of parental involvement can produce different outcomes (Lara and Saracosti, 2019). For example, Epstein's (1995) six types of involvement framework highlights the different effects of different forms of involvement on student achievement, such as core parenting responsibilities, communication, volunteering, home learning, decision-making,

and community collaboration. This framework highlights the importance of a multifaceted approach to developing effective parental involvement strategies. However, previous research has also shown that parental involvement may not always produce positive outcomes. In particular, overly intrusive or overbearing parents' attitudes can negatively impact students' autonomy and motivation. Therefore, the quality of parental involvement and its appropriateness to students' needs are of great importance. In conclusion, previous research on parental involvement clearly demonstrates its critical role and complex nature in education. The findings of these studies guide educators, policy makers, and parents to develop and implement more effective parental involvement strategies (<https://kidsusamontessori.org/why-parental-involvement-in-education-matters-more-than-ever/>).

1.2.2. Types of Participation: Home-Based and School-Based

Parental participation is divided into different types according to the environment and form in which it takes place, and one of these classifications is the distinction between home-based and school-based participation. Home-based parental participation covers the activities that parents carry out in the home environment regarding their children's education. This type of participation includes behaviors such as reading books to help the child gain a reading habit, helping with homework, having conversations about education, providing materials that encourage learning, and organizing activities that will reinforce what the child has learned at school. In addition to directly supporting the child's academic success, home-based participation also helps the child develop a positive attitude towards learning and understand the importance of school. The supportive learning environment created by parents at home increases the child's self-confidence and increases learning motivation (Stacer and Perrucci 2013). School-based parental participation refers to the activities that parents carry out in the school. This type of participation can take various forms such as attending school meetings, volunteering to take part in school activities, taking part in school administration, communicating regularly with teachers, being involved in school decision-making processes, and supporting the general functioning of the school.

School-based involvement allows parents to be a part of the school community and helps them be sensitive to the needs of the school. In addition, parents taking an active role in the school allows them to build a closer relationship with teachers and better understand their children's school life (<https://www.kdp.org/blogs/community-manager/2021/11/01/how-to-involve-parents->

[at-home](#)). Both home-based and school-based parental involvement are important for student educational success, and these two types of involvement are complementary. Research shows that both types of involvement have positive effects on student achievement. However, some studies suggest that home-based involvement may have a more direct effect on academic achievement, while school-based involvement has been shown to improve the overall climate of the school and strengthen parent-school collaboration. Factors such as parents' socioeconomic status, level of education, and cultural background may influence which type of involvement they prefer. For example, school-based involvement may be more difficult for working parents, while they may have more time to support their children at home. Therefore, it is important for schools to provide a variety of opportunities to encourage both home-based and school-based involvement, taking into account parents' different needs and circumstances. An effective parental involvement strategy should support both types of involvement and allow parents to choose the forms of involvement that suit their interests and abilities.

1.2.3. Effect of Participation by Age Group (Primary School, Middle School, High School)

The effect of parental participation on students may vary depending on the student's age and level of education. During primary school, parental participation plays a critical role in students' acquisition of basic academic skills and adaptation to school. During this period, it is of great importance for parents to support their children in reading and writing activities, do simple math exercises with them, and help them develop a positive attitude towards school. In primary school, parents coming to school and volunteering, establishing close communication with teachers, and participating in school activities ensure that students feel safe and supported (Guzman, 2024).

In addition, during this period, parents focusing on their children's social and emotional development helps them make friends, develop problem-solving skills, and express their feelings. During secondary school, students' academic and social needs begin to change, and the form of parental participation may also differ accordingly. During this period, it is important for parents to follow their children's homework, guide them, and help them cope with the difficulties they encounter at school (Albano, 2011). However, with the onset of adolescence, students' desire for independence may increase, and parents may need to adopt a more supportive and less interfering role. In middle school, it is still important for parents to attend school meetings, communicate

with teachers, and support the overall functioning of the school, but it is also important for parents to talk to their children about their school experiences and help them discover their interests and talents. In high school, parental involvement plays a critical role in students' academic success, determining career goals, and preparing for higher education (Wang and Khalil, 2014). During this period, it is important for parents to help their children choose courses, support them in the college application process, and guide them in making plans for the future. In high school, parental involvement in school activities may decrease compared to middle school, but it is still very important for parents to communicate regularly with their children, monitor their academic progress, and provide emotional support.

Research shows that in high school, when parents have high expectations and challenge their students academically, their chances of going to college increase. In conclusion, while the impact of parental involvement varies depending on the student's age and level of education, it is vital for parents to be supportive and involved at all times for students' success. It is important for schools and educators to develop and implement parental engagement strategies that fit the needs of students and parents across age groups.

1.3. Theoretical Background

A variety of theoretical frameworks have been presented to understand the effects of parental involvement on education. These theories attempt to explain why and how parents become involved in their children's education and how this involvement affects student outcomes. In this context, Epstein's Six Types of Involvement Framework, Vygotsky's Sociocultural Theory, and Bronfenbrenner's Ecological Systems Theory are important theoretical approaches that are often used to understand parental involvement (Evans, 2024).

1.3.1. Epstein's Six Types of Involvement Framework

Developed by Joyce Epstein in the early 1990s, the Six Types of Involvement Framework provides a comprehensive model that identifies six different areas in which schools, families, and communities can collaborate to support student success. This framework addresses parental involvement in a more structured way, emphasizing the shared responsibilities of schools and families. The model states that parental involvement is not limited to activities that take place at

school, but also includes creating supportive environments for learning at home, effective communication, volunteering, participation in decision-making, and collaboration with the community. These six types of involvement aim to create a broader range of involvement by offering a variety of ways in which schools can interact with parents (Evans, 2024). At the core of the framework is the idea that the effects of school, family, and community on student development are not separate but interdependent. Effective partnerships maximize student success by supporting each other across these different areas. Epstein's model emphasizes that parental involvement is not a one-way process limited to the school providing information to parents, but rather a two-way partnership developed by educators and families. This approach allows parents to understand and contribute to the school's needs (Bond, Moore & Hawkins, 2024).

The six types of involvement identified in Epstein's framework are:

- a) **Parenting:** This type aims to help families create supportive home environments for their children and to help schools better understand their students' families. Practices include offering suggestions for home conditions that support learning, organizing parent education courses, and implementing family support programs. Challenges of this type of involvement include reaching out to all families and ensuring that information is clear and usable.
- b) **Communication:** It involves effective, two-way communication between the school and the family. It is important for schools to provide regular updates on programs and student progress, and for parents to share information about their children's health and educational history. Practices include parent-teacher conferences, sending student work home, and regular newsletters. Communication flowing in both directions is critical to positive engagement.
- c) **Volunteering:** This involves parents volunteering to support the school or school activities. This can include helping teachers, taking part in activities, or sharing special talents. Volunteering helps parents feel closer to the school community. It is important to increase the participation of volunteers and offer flexible options that fit working parents' schedules.
- d) **Learning at Home:** This involves parents supporting and reinforcing what their children are learning at school at home. This includes activities such as helping with homework, reading books together, and discussing school topics. Schools can provide information and ideas to families to support this type of participation. Learning at home helps reinforce the knowledge gained at school.
- e) **Decision Making:** This refers to parents' participation in school decisions and their representation on the school board. This can be done through serving on school councils or as parent

representatives. Parental involvement in decision-making makes the school more responsive to parents' needs. It is important for schools to ensure representation from all community groups.

- f) **Community Partnership:** This involves the school partnering with resources in the community to benefit students and families. This includes activities such as forming partnerships with local businesses or providing social services for students. Community resources are intended to benefit schools and families. It is important to resolve issues regarding the responsibilities and financing of collaborative activities.

Epstein's framework shows that parental involvement is multifaceted and that schools can reach a wider range of parents by encouraging different types of involvement. This model provides educators with a comprehensive roadmap when developing parental involvement strategies. The framework's constant updating and widespread use demonstrates its fundamental importance and adaptability in the field of education.

It emphasizes that parental involvement is not limited to schools providing information to parents, but requires mutual interaction and collaboration (Li, et al, 2024). This approach recognizes that parents' knowledge and experiences are valuable and encourages their active participation. In addition, the framework's inclusion of home-based learning and community collaboration reflects the aim of supporting the holistic development of the student. Although there is some criticism that the model does not fully reflect cultural differences, it continues to provide an important basis for structuring and developing parental involvement.

Table 1.2. Epstein's Framework of Parental Involvement (1995)

No	Dimension Name	Description
1	Parenting	Meeting basic needs and supporting children's healthy development.
2	Communication	Effective information flow between home and school.
3	Volunteering	Participation in school activities and events.
4	Learning at Home	Providing academic support and guidance at home.
5	Decision-Making	Involvement in school decisions and policy-making processes.
6	Collaboration with the Community	Building partnerships with community resources and organizations.

Sources: Prepared by the author

1.3.2. Vygotsky's Socio-Cultural

Theory Lev Vygotsky's Socio-Cultural Theory emphasizes that learning takes place within social interaction and cultural context, and explains the importance of parental involvement in this context. According to Vygotsky, children learn knowledge and skills primarily through social interactions, and more knowledgeable people (parents, teachers, peers) play an important role in this process. One of the basic concepts of the theory, the "Zone of Proximal Development" (ZPD), refers to the distance between problems a child can solve alone and problems that can be solved with the guidance of an adult or with peer cooperation. Parents can support their children's learning and development by helping them complete tasks included in their ZPD. In this process, parents provide their children with a support called "scaffolding". Scaffolding means providing the child with the help he or she needs to complete a task and gradually decreasing this help as the child gains skills. Parents can serve as scaffolders by guiding their children through homework, giving them hints, asking them questions, and encouraging them. In this way, children can successfully complete tasks that they would not have been able to do on their own at first. Vygotsky's theory also emphasizes the importance of language and cultural tools in the learning process. Parents can increase their children's language development and cultural knowledge by talking to them, reading to them, and involving them in cultural activities. This helps children be more successful in school and understand the world better. The quality interactions that parents establish with their children support their cognitive development and problem-solving skills.

Parents also play an important role as role models for their children. Parents who value learning, are curious, and are eager to solve problems set a positive example for their children and help them develop similar attitudes. Vygotsky's sociocultural theory emphasizes the role of social interactions and cultural factors in the development of children's mental abilities. According to this theory, learning is an active process rather than a natural or passive process, and children learn by internalizing the beliefs and attitudes in their environment. As a result, Vygotsky's Sociocultural Theory emphasizes the critical role of parental involvement in children's learning and development. The social interactions parents have with their children and the support and guidance they provide them help children to achieve their full potential.

1.3.2. Vygotsky's Socio-Cultural Theory

Lev Vygotsky's Socio-Cultural Theory emphasizes that learning occurs through social interaction and within a cultural context, highlighting the importance of parental involvement in the educational process. According to Vygotsky, children acquire knowledge and skills primarily through social interactions, where more knowledgeable individuals (such as parents, teachers, and peers) play a significant role (Vygotsky, 1978).

One of the core concepts of the theory, the Zone of Proximal Development (ZPD), refers to the gap between what a child can do independently and what they can accomplish with guidance or collaboration. Parents support their children's learning and development by assisting them in completing tasks within their ZPD.

In this process, parents provide what is called "scaffolding"—temporary support that helps the child complete a task and is gradually withdrawn as the child gains independence (Wood, Bruner, & Ross, 1976). Parents can scaffold their children by guiding them with their homework, giving hints, asking questions, and offering encouragement. This enables children to successfully perform tasks they could not initially complete on their own.

Vygotsky's theory also underscores the importance of language and cultural tools in learning. By engaging in conversation, reading to their children, and involving them in cultural activities, parents can enhance their children's language development and cultural understanding (Tudge & Scrimsher, 2003). This, in turn, helps children achieve greater success in school and develop a more comprehensive understanding of the world. High-quality interactions between parents and children support cognitive development and problem-solving skills. Parents serve as important role models. When parents exhibit a curiosity for learning and a willingness to solve problems, they provide a positive example for their children and help cultivate similar attitudes.

Vygotsky's socio-cultural theory stresses that the development of children's mental capabilities is deeply influenced by social interactions and cultural factors. According to this perspective, learning is not a passive or automatic process but an active one, in which children internalize the beliefs and attitudes of their environment. In conclusion, Vygotsky's theory emphasizes the critical role of parental involvement in children's learning and development. The social interactions parents establish, along with the guidance and support they provide, help children reach their full potential.

Table 1.3. Key Concepts of Vygotsky’s Socio-Cultural Theory and Their Relation to Parental Involvement

Concept	Explanation	Relation to Parental Involvement
Zone of Proximal Development (ZPD)	The range of tasks a child can perform with assistance.	Parents support their children’s learning by guiding them through tasks within their ZPD.
Scaffolding	Temporary assistance provided to help complete a task.	Parents scaffold by helping with homework, giving hints, and offering encouragement.
More Knowledgeable Other (MKO)	Individuals with more knowledge or skills (e.g., parents, teachers).	Parents act as MKOs by transferring knowledge and skills to their children.
Importance of Language	Language as a tool for shaping thought.	Parents support language development by talking to children and reading to them.
Cultural Tools	Values, beliefs, and instruments that shape learning.	Parents enhance cultural knowledge by involving children in cultural activities.

Sources: Prepared by the author

1.3.3. Bronfenbrenner’s Ecological Systems Theory

Urie Bronfenbrenner’s Ecological Systems Theory examines the individual’s development within the interaction of different systems surrounding it and evaluates the importance of parental involvement in this context from a broad perspective. According to this theory, a child’s development is affected by five different intertwined environmental systems. These systems are microsystem, mesosystem, exosystem, macrosystem and chronosystem.

The microsystem refers to the closest environment that the child directly interacts with and generally includes elements such as family, school, peer group and neighborhood. Parents are one of the most important actors in the child’s microsystem and shape the child’s first learning experiences (Smith et al, 2020).

The support, attention and guidance that parents provide to the child form the basis for the child’s cognitive, social and emotional development. The mesosystem refers to the interactions

between different elements in the microsystem. For example, the relationship between parents and the school can significantly affect the child's school experience. Parents' cooperation with teachers, participation in school activities and active participation in issues related to the child's education positively affect the child's school success and adaptation. The exosystem includes environmental elements that the child does not interact with directly but that indirectly affect his/her development. Factors such as the parents' workplace, social environment, and school administration policies can indirectly affect the child's development by affecting the time, energy, and resources that parents can devote to their children (Li et al., 2024).

The macrosystem refers to the broader cultural and ideological context, such as cultural values, beliefs, laws, and social norms. Societal attitudes toward parental involvement and educational policies can significantly affect the levels and forms of parental involvement in their children's education. The chronosystem refers to events and transitions that occur over time. Events such as changes in family structure, economic crises, or technological developments can affect parental involvement and the child's development over time. Bronfenbrenner's theory emphasizes that parental involvement is not only an individual action, but also interacts with the broader environmental systems in which the child is located.

Therefore, it is important to consider all of the child's environmental contexts when developing strategies to increase parental involvement. It is critical for schools, families, and the community to work together to create an environment that supports the child's development in order to ensure effective parental involvement.

Bronfenbrenner's ecological systems theory proposes that children's development is influenced by a series of interconnected environmental systems, from the immediate family environment to the larger social structures. This theory emphasizes the importance of parental involvement particularly at the microsystem (the child's immediate environment, such as the family and school) and mesosystem (the interactions among different microsystems) levels (Evans, 2024).

Table 1.4. Bronfenbrenner’s Ecological Systems Theory and Its Relationship with Parental Involvement

System	Description	Relationship with Parental Involvement
Micro System	The environments with which the child directly interacts (family, school, peers).	Parental support and involvement shape the child’s experiences in these environments.
Meso System	Interactions between micro systems (home-school relationship).	Parental collaboration with the school positively impacts the child’s academic performance.
Exo System	External factors that affect the child’s development but with which the child does not directly engage (parent’s workplace).	The parent’s work conditions may affect the time allocated to the child’s education.
Macro System	Broader cultural values, beliefs, and societal norms.	Societal attitudes toward parental involvement influence the levels of participation.
Chrono System	Changes and events over time (changes in family structure).	Changes in family structure can influence the nature of parental involvement.

Sources: Bronfenbrenner, U. (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard University Press.

1.4. Factors Affecting Parental Involvement

Parental involvement is widely acknowledged as a multifaceted and dynamic phenomenon influenced by a range of interrelated individual, social, and institutional factors. Understanding the complexity of these influencing elements is essential for developing effective policies and practical strategies aimed at enhancing parental engagement in children's education. Each factor does not operate in isolation; rather, they often interact with one another to either facilitate or hinder the nature and level of parental participation.

One of the most consistently cited factors affecting parental involvement is socioeconomic status (SES). Parents from higher SES backgrounds typically have greater access to educational

resources, flexible work schedules, and higher levels of educational attainment themselves, which enables more active and sustained involvement in their children's academic lives. In contrast, families with lower SES often face structural and financial barriers such as long working hours, limited educational resources at home, and restricted access to school-related information (Lee & Bowen, 2006). These barriers can result in lower participation rates in school activities and reduced communication with educators.

Cultural and ethnic background is another crucial determinant that shapes parental involvement. Cultural beliefs and values regarding education, parental roles, and the teacher-student-parent dynamic can significantly influence how and to what extent parents engage with the education system. For example, some cultures emphasize respect for teachers as authority figures, leading parents to adopt a more passive role in their child's education, while others promote collaborative relationships between families and schools (Hornby & Lafaele, 2011). In multicultural societies, language barriers and unfamiliarity with the local educational system can further limit the ability of minority parents to participate effectively.

The educational level of parents also plays a critical role. Research suggests that parents with higher levels of formal education are more confident in engaging with school staff, more likely to help with homework, and more proactive in creating enriching home learning environments (Davis-Kean, 2005). Conversely, parents with lower educational attainment may feel inadequate or unqualified to support their children academically, which can contribute to decreased involvement.

In addition to individual and cultural factors, school policies and teacher attitudes are pivotal in determining the extent of parental involvement. Schools that actively foster open communication, provide culturally responsive outreach, and design flexible engagement opportunities are more likely to cultivate strong parent-school partnerships. Teachers' beliefs about the value of parental involvement also influence their efforts to encourage family participation. A welcoming and inclusive school climate, combined with positive teacher attitudes, can empower parents and make them feel valued as co-educators in their child's learning journey.

1.4.1. Socioeconomic Status (SES)

Parents' socioeconomic status (SES) is a key factor that can significantly affect their level of involvement in their children's education. SES generally includes variables such as parents' income level, education level, and occupational status. Research shows that parents with higher SES are generally more involved in their children's education (Li et al, 2024) .

There may be several reasons for this. Parents with higher SES tend to have more education and a better understanding of the importance of education. They may also have more time, resources, and flexibility to support their children's education. For example, better job opportunities may allow them to spend more time attending school events or helping their children with their homework. Better financial resources may also provide advantages in terms of taking private lessons for their children, providing educational materials, or supporting them to participate in out-of-school activities.

On the other hand, low-SES parents may often be less involved in their children's education due to reasons such as financial difficulties, busy work schedules, and lack of education. These parents may have difficulty attending school meetings or volunteering. In addition, their own negative educational experiences or distrust of the school system may also reduce their participation levels (Desforges, & Abouchaar, 2003).

However, this does not mean that low-SES parents do not care about their children's education. In many cases, these parents also want their children to succeed but may not have the resources or knowledge to participate. Therefore, it is important for schools to make special efforts to encourage the participation of low-SES families. These efforts may take various forms, such as organizing school events at convenient times, providing support for transportation and childcare, and providing education and information programs for parents. In conclusion, socioeconomic status is an important factor affecting parental involvement and its consideration is necessary to develop more equitable and inclusive parental involvement strategies.

Table 1.5. Potential Effects of Socioeconomic Status on Parental Involvement

Socioeconomic Status	Possible Effects
High SES	Higher involvement due to greater resources, time, and education level.
Low SES	Lower involvement due to time constraints, financial difficulties, and lack of education.

Sources: Desforges, C., & Abouchaar, A. (2003).

1.4.2. Cultural and Ethnic Background

Parents’ cultural and ethnic backgrounds are another important factor that can significantly affect the forms and levels of their involvement in their children’s education. In different cultures, the value that parents place on education, their relationships with schools and teachers, and the ways they are involved in their children’s education may differ (Private School Village, 2024).

Cultural values and ethnic backgrounds also play a significant role in shaping parental involvement. Different cultures have varying perceptions of the role of parents in education. In some cultures, high academic involvement is considered essential and is strongly emphasized, while in others, there is a more hands-off approach where educators are seen as the sole authority figures in a child's academic life. Language barriers, unfamiliarity with the school system, and fear of discrimination can further complicate engagement for immigrant or minority parents. For instance, studies have shown that Latinx parents in the United States often value education highly but may not attend school meetings due to linguistic and cultural barriers rather than a lack of interest . Understanding these nuances is essential for schools aiming to foster inclusive parental involvement strategies.

1.4.3. Parental Education Level

Parents’ level of education is another critical factor that significantly affects the level and form of their involvement in their children’s education. Research shows that parents with higher levels of education are generally more and more effectively involved in their children’s education.

The educational background of parents significantly influences their ability to support and motivate their children academically. Educated parents are generally more comfortable communicating with teachers, helping with homework, and understanding the academic expectations placed on their children. They are also more likely to value education and transmit that value to their children through attitudes, expectations, and behaviors (Fan & Chen, 2001). On the other hand, parents with limited educational backgrounds may lack the confidence or knowledge to assist their children effectively, which can lead to lower levels of involvement. Additionally, they may feel intimidated by the school environment or believe that their contributions are not valuable. This perception can further deter them from engaging, even when they desire to be more involved.

1.4.4. School Policies and Teacher Attitudes

School policies and teachers' attitudes toward parental involvement are institutional factors that significantly influence how much and how parents will be involved in their children's education. School policies include formal rules and guidelines for how parents can be involved in the school. Clear and supportive school policies that encourage parental involvement can make it easier for parents to come to school, volunteer, participate in school decisions, and collaborate with teachers (Hill and Tyson, 2009).

1.5. International Perspective

Parental involvement is recognized as an important component of education systems worldwide and is supported by a variety of approaches and practices in different countries. Differences between developed and developing countries and examples from different education systems show how parental involvement is shaped by cultural, economic and social contexts (<https://kidsusamontessori.org/why-parental-involvement-in-education-matters-more-than-ever/>). Parental involvement is a globally acknowledged cornerstone of effective education systems. While the specific practices, expectations, and outcomes of parental engagement vary significantly across countries, its positive influence on student academic achievement, motivation, and socio-emotional development is universally recognized (OECD, 2012). The degree and nature of this involvement are shaped by a country's educational infrastructure, cultural norms, economic

capacity, and social policies. By comparing developed and developing countries, and examining diverse case studies, one can better understand how parental involvement operates across different educational landscapes.

1.5.1. Comparison between Developed and Developing Countries

There are significant differences in parental involvement between developed and developing countries. In developed countries, parental involvement is generally supported more widely and in a structured manner. In these countries, parents are generally more educated and have more knowledge and experience of the school system.

Table 1.6. Comparison of Parental Involvement in Developed and Developing Countries

Feature	Developed Countries	Developing Countries
Prevalence	More widespread and structured	More limited
Parental Education Level	Generally higher	Generally lower
Resources and Flexibility	More available	Less available
School Policies	Policies that encourage parental involvement	Lack of resources and infrastructure may exist
Supportive Organizations	More available (NGOs, international organizations)	In development

Sources: Hill, N. E., & Tyson, D. F. (2009)

In developed countries, such as Finland, Canada, Japan, and the United Kingdom, parental involvement is often institutionalized through national education policies that encourage regular communication between home and school, involvement in decision-making processes, and participation in school governance. These nations typically provide the structural support necessary to facilitate such engagement, including flexible work schedules, parental leave policies, digital communication tools, and parent education programs (Desforges & Abouchaar, 2003). For instance, in Finland, parents are considered essential partners in the education process, and regular home-school collaboration is both culturally expected and structurally supported.

In contrast, developing countries often face systemic barriers to parental involvement, including poverty, lack of infrastructure, limited educational resources, and lower adult literacy rates (UNESCO, 2015). In rural areas of countries like India, Nigeria, or Bangladesh, parental engagement may be limited due to economic hardship, traditional gender roles, or geographical barriers. Many parents may prioritize labor over education for economic survival, which in turn reduces their ability to participate actively in their children's schooling. Moreover, schools in these regions may not actively encourage parental participation due to lack of training, resources, or perceived irrelevance of parent involvement in formal education (Chowa et al., 2012).

Nevertheless, some developing countries have made significant strides in promoting family engagement. For example, Brazil's Bolsa Família program, a conditional cash transfer initiative, links educational attendance and health benchmarks to financial aid, indirectly encouraging parental involvement. Similarly, Kenya's Tusome Early Grade Reading Activity includes parent awareness campaigns and community engagement strategies that reinforce the importance of early literacy at home (RTI International, 2019).

1.5.2. Case Studies from Different Education Systems

Case studies from different education systems reveal diverse models and outcomes of parental involvement, reflecting how cultural, institutional, and policy contexts shape family engagement in education. These comparative insights provide valuable lessons for designing more inclusive and effective parental involvement strategies.

In Scandinavian countries such as Finland, parental involvement is built on a foundation of mutual respect and democratic participation. Parents are regarded not just as supporters but as active partners in the educational process. The Finnish education system promotes transparency and open dialogue, ensuring parents are involved in both academic and administrative aspects of schooling. For instance, parents regularly attend student progress meetings, are included in school governance committees, and engage in informal interactions with teachers. The school environment is designed to be inclusive and family-friendly, with policies that actively remove barriers to parental participation. The high level of trust between educators and families contributes to strong home-school collaboration, which research suggests plays a significant role

in Finland's consistently high performance in international assessments such as PISA (Sahlberg, 2015).

In contrast, East Asian education systems, including Japan and South Korea, reflect a different but equally impactful model of parental involvement. In these countries, there is a culturally embedded emphasis on education as a family responsibility, and parental roles are strongly oriented toward academic success and discipline at home. Parents often organize and participate in after-school tutoring programs (juku in Japan, hagwon in South Korea), monitor homework rigorously, and instill in their children a deep respect for teachers and the value of education (Park & Kim, 2020). While school-based involvement (such as volunteering) may be more limited due to cultural norms and school practices, home-based involvement is intensive and structured. This home-centered model contributes to high academic achievement but can also lead to academic pressure and competitiveness among students.

In the United States, parental involvement is formally embedded in educational policy. The Every Student Succeeds Act (ESSA) encourages schools to establish Family Engagement Plans and to involve parents in school decision-making. However, implementation varies widely across states and districts. While many schools offer opportunities such as parent-teacher conferences, volunteer programs, and family literacy nights, socioeconomic disparities and linguistic diversity continue to affect participation levels.

1.6. Challenges and Barriers to Parental Involvement

While the positive effects of parental involvement on children's academic, social, and emotional development are widely acknowledged in educational research and policy, numerous challenges and barriers continue to hinder its full realization and sustainability. These obstacles can stem from a combination of factors related to parents themselves, school systems, and broader societal conditions, each of which plays a crucial role in shaping the nature and extent of parental engagement.

From the parental side, one of the most frequently cited challenges is time constraints, especially for working parents or those managing multiple jobs or family responsibilities. Many parents, particularly in low-income households, find it difficult to attend school meetings, events, or engage in consistent communication due to inflexible work schedules or lack of transportation. Lack of confidence or educational attainment is another barrier; some parents may feel unprepared

or unqualified to support their children academically, especially in higher grade levels or subjects they themselves find challenging. In multilingual or immigrant households, language barriers and unfamiliarity with the local education system can further isolate parents from school-related activities and decision-making processes.

On the institutional level, schools may unintentionally contribute to these challenges through limited communication, unwelcoming environments, or rigid policies. For example, some schools fail to provide adequate opportunities for parental involvement that are culturally sensitive or adaptable to different family needs. Additionally, teacher attitudes can influence the level of engagement; if educators do not view parents as partners in the educational process, or if they do not make proactive efforts to reach out, parents may feel excluded or undervalued.

At the societal level, broader issues such as poverty, systemic inequality, and lack of community resources can create environments where educational engagement is deprioritized or logistically difficult. In communities where schools are underfunded or overcrowded, there may be fewer opportunities and supports for effective parental involvement. Similarly, social stigma or negative past experiences with education can discourage families from engaging, particularly among marginalized or historically disadvantaged groups.

Moreover, technological gaps can also present modern barriers to parental involvement. As more schools shift toward digital platforms for communication and homework management, parents who lack digital literacy or access to devices and the internet may be left behind, exacerbating educational inequalities.

To address these challenges, it is essential for policymakers, school administrators, and educators to adopt inclusive and flexible strategies. This includes providing translation services, offering meetings at various times, implementing outreach programs tailored to family needs, and building trusting, respectful relationships with parents from diverse backgrounds. Only through a comprehensive understanding and targeted intervention can the full benefits of parental involvement be realized for all students, regardless of their background or circumstances.

1.6.1. Work Schedules and Time Constraints

One of the most significant challenges to parental involvement is parents' busy work schedules and time constraints. For parents who work full time, it can be difficult to find enough

time to attend school events, meet with teachers, or help with their children’s homework. In many families today, both parents work, significantly reducing the time parents have for school.

Table 1.7. Possible Effects of Work Schedules and Time Constraints on Parental Involvement and Suggested Solutions

Issue	Possible Effects	Suggested Solutions
Intensive Work Schedules	Difficulty in attending school events, limited time to help with homework.	Scheduling school meetings at different times or online, offering flexible volunteering opportunities.
Time Constraints	Difficulty in spending quality time with children, lack of support for learning at home.	Employer support for flexible working hours, providing parents with time management resources.

Sources: Prepared by the author

The table titled Table 7: Possible Effects of Work Schedules and Time Constraints on Parental Involvement and Suggested Solutions provides a structured overview of how demanding work schedules and limited time availability can negatively impact parental involvement in education, while also offering practical strategies to mitigate these challenges.

As shown in the table, intensive work schedules may hinder parents from attending school events or assisting their children with homework. To address this issue, it is suggested that schools offer flexible meeting times, including evening sessions or online alternatives, and create volunteer opportunities that can accommodate varying parental availability.

Furthermore, general time constraints can reduce the quality time parents spend with their children and limit the support provided for learning at home. In response, employers can play a crucial role by enabling flexible working hours, while schools and community organizations can support parents by providing them with time management resources and training.

This table highlights the structural barriers to parental involvement and serves as a roadmap for schools, employers, and policymakers to create a more supportive environment for families. By acknowledging these barriers and implementing inclusive and adaptive strategies, educational institutions can foster greater parental engagement, which in turn contributes to improved student outcomes and a more equitable educational experience.

1.6.2. Single-Parent Households

The complexities of modern family life present a range of barriers to parental involvement in education, among which time constraints and household structure are particularly prominent. In contemporary society, many parents work full-time jobs, and dual-income households have become the norm. This reality leaves limited time for parents to actively engage in their children's academic lives—whether by attending school events, meeting with teachers, or supporting homework completion. The tension between professional responsibilities and educational involvement is often exacerbated by inflexible work schedules, long commutes, or shift-based employment, all of which further erode the time and energy parents can devote to school-related matters (Hahn, 2021).

The situation is even more pronounced in single-parent households, where the responsibility for both caregiving and providing financial stability falls on one individual. These parents often face significant emotional and logistical challenges. They may lack the physical availability to attend school meetings, the mental bandwidth to supervise academic tasks at home, or the financial resources to invest in supplemental educational materials. The burden of managing these responsibilities alone can lead to parental exhaustion and, ultimately, a reduced capacity to engage with their children's education.

Educators must therefore adopt a more empathetic and flexible approach when working with families under such constraints. Sensitivity to the lived realities of single-parent households can foster a stronger school-family partnership. Schools should consider implementing communication strategies that align with the dynamic schedules of working and single parents. This could include asynchronous communication methods such as recorded video updates, flexible parent-teacher meeting times (including virtual options), or the use of digital platforms that allow for ongoing dialogue without requiring in-person interaction. In addition, providing child care during school events, offering weekend or evening events, and maintaining open, nonjudgmental communication channels can make engagement more accessible to time-constrained parents.

Furthermore, the provision of social and psychological support through school-based counseling or referral services is essential. These services can help single parents manage stress, access community resources, and develop coping strategies. School guidance counselors, social workers, and family liaison officers can play a pivotal role in connecting families to these supports

and ensuring they feel included in the school community. When schools proactively offer tailored assistance to single-parent households, they help mitigate the isolation and pressure that these families often face, and they contribute to more consistent and meaningful parental involvement.

Closely tied to the issue of family structure and work schedules is the educational level of the parents. Parental education significantly shapes not only the home learning environment but also the confidence and efficacy with which parents interact with school personnel. Parents with higher educational attainment are generally more comfortable navigating the school system, more knowledgeable about curricular expectations, and more likely to advocate for their children. They are also more likely to feel competent in assisting with homework and in creating a stimulating intellectual atmosphere at home (Davis-Kean, 2005).

In contrast, parents with lower levels of education may perceive the school environment as intimidating or feel ill-equipped to contribute to their child's academic journey. This lack of confidence can manifest as avoidance behavior, limited communication with teachers, or minimal involvement in decision-making processes. These parents might be hesitant to attend school events or to ask questions, fearing that their concerns will not be taken seriously or that they may be judged for their perceived shortcomings.

To counteract these effects, schools must strive to create a welcoming, respectful environment for all parents, regardless of their educational background. Staff training on inclusive practices and effective communication with diverse parent populations is crucial. Educational jargon should be minimized in school communications, and efforts should be made to explain academic concepts in accessible, jargon-free language. Additionally, schools could provide workshops that equip parents with the tools and knowledge needed to support their children's education effectively. These workshops might cover topics such as understanding the curriculum, strategies for homework assistance, or how to support literacy and numeracy development at home.

Recognizing the assets that parents bring—regardless of formal education—is also essential. Every parent has unique strengths, life experiences, and cultural knowledge that can contribute positively to their child's education. Schools should adopt a strengths-based approach that affirms these contributions and seeks to build trust and collaboration, rather than focusing solely on deficits.

The educational level of parents also plays a critical role. Research suggests that parents with higher levels of formal education are more confident in engaging with school staff, more

likely to help with homework, and more proactive in creating enriching home learning environments (Davis-Kean, 2005). Conversely, parents with lower educational attainment may feel inadequate or unqualified to support their children academically, which can contribute to decreased involvement. In sum, busy work schedules, single-parent dynamics, and educational background represent significant, yet addressable, barriers to parental involvement. These challenges demand a responsive and inclusive approach from educational institutions, one that acknowledges diversity in family structure, time availability, and academic experience. By offering flexible, supportive, and respectful engagement strategies, schools can empower all parents to take an active role in their children's learning, ultimately enhancing educational outcomes and fostering stronger school communities.

1.6.3. Parental Awareness and Educational Background

Parental awareness and educational background are deeply intertwined with the level and effectiveness of parental involvement in their children's education. A lack of understanding about the critical role that families play in academic success often leads to minimal or inconsistent engagement. This issue is particularly prominent among parents who themselves have had limited educational opportunities or who were not exposed to strong models of parental involvement during their own formative years. When parents are unaware of how their involvement influences their child's academic development, or when they underestimate the importance of their support—whether through helping with homework, attending school meetings, or simply encouraging educational aspirations—their participation tends to be passive or nonexistent (Ertem, 2020).

In many cases, these parents may hold the belief that the responsibility for their child's education rests entirely with schools and teachers. This perception is often rooted in systemic cultural beliefs or long-standing educational norms. As a result, they may not see themselves as active contributors to their child's learning process. This detachment can be compounded by feelings of inadequacy, particularly among those who did not complete their own schooling or struggle with literacy. Such parents may lack the confidence to engage in academic discussions, assist with assignments, or advocate for their child's needs in educational settings. These challenges, while often unspoken, can significantly diminish the quality of home-school collaboration and hinder student progress.

Moreover, language barriers are a substantial hindrance for many families, especially in multicultural or multilingual societies. Parents who do not speak the language used in school communications may face difficulties understanding school notices, participating in parent-teacher conferences, or helping their children with homework. This isolation from the educational process not only limits their ability to provide academic support but also reduces their sense of belonging within the school community. These parents may feel alienated or unwelcome, leading to further disengagement from their children's academic life.

Educational institutions have a pivotal role to play in addressing these barriers. Proactive measures must be implemented to foster parental awareness and bridge the knowledge gap. Schools can begin by organizing regular informational sessions, workshops, and open house events tailored specifically for parents with limited educational backgrounds. These sessions should aim to demystify the education system, clearly outline expectations for parental involvement, and provide simple, actionable strategies for engagement. Importantly, the tone of these interactions must be supportive and inclusive rather than evaluative or patronizing. Parents must feel respected and valued as partners in the educational process, regardless of their own academic history.

To overcome linguistic obstacles, schools should consider employing bilingual or multilingual staff and ensuring that all communication—written and verbal—is accessible in the languages spoken by the school community. Providing translation services during meetings and translating documents can greatly improve parental participation and foster a sense of inclusion. Additionally, offering language classes or literacy programs for parents can empower them to become more actively involved over time.

Another effective strategy is to initiate home visits or informal gatherings that help build trust between families and educators. These efforts humanize the relationship and create space for open dialogue, allowing teachers to better understand each family's unique challenges and strengths. In cases where parents feel uncomfortable attending school events due to their limited education or other social constraints, schools should offer flexible alternatives—such as virtual meetings, phone calls, or text-based communication—that cater to different comfort levels and schedules.

Cultural expectations also shape parental attitudes toward education. In certain societies, there is a deeply entrenched belief that educational matters are best left to professionals. In such settings, parental involvement may be seen as interference rather than collaboration. In patriarchal

cultures, for instance, mothers may be discouraged from interacting with male teachers or attending public events, while fathers may prioritize financial responsibilities over educational engagement. Furthermore, communication styles can vary significantly across cultures; some parents may favor indirect or non-confrontational communication, which may be misinterpreted by educators who expect direct feedback and active questioning (Pomerantz, Moorman, & Litwack, 2007).

To navigate these complexities, culturally responsive practices are essential. Schools must cultivate cultural competence among teachers and administrators, ensuring they understand and respect the diverse backgrounds of the families they serve. This includes training staff to recognize the cultural norms that influence parental behavior and communication preferences. By doing so, schools can adapt their engagement strategies to be more inclusive and effective. For example, providing gender-sensitive spaces for parental interaction, collaborating with community leaders, and leveraging culturally respected forms of communication can increase trust and foster more meaningful engagement.

It is also important to recognize that parents with lower educational backgrounds may lack access to the tools and resources needed to support their children. These may include not only educational materials and internet access but also knowledge about curriculum requirements, testing procedures, or higher education pathways. Schools should consider developing resource centers that offer these tools along with guidance counselors who can assist families in navigating the educational system.

Ultimately, improving parental awareness and accommodating diverse educational backgrounds is not merely an act of inclusion; it is a strategic imperative for boosting student success. When schools extend empathy, provide appropriate support, and cultivate authentic partnerships with families, they unlock the potential for transformative outcomes—not just for individual students, but for the school community as a whole. This endeavor requires intentionality, patience, and continuous reflection, but the rewards in terms of student achievement, well-being, and long-term development are well worth the effort.

II CHAPTER. RESEARCH DESIGN AND METHODOLOGY

2.1. Statement of the Problem

The nexus between parental engagement and student academic performance has historically constituted a central theme in educational scholarship; however, the underlying mechanisms, breadth, and consistency of this relationship remain contentious issues within the field. Empirical investigations predominantly affirm that parental involvement—encompassing actions such as assisting with homework, communicating with schools, and nurturing educational aspirations—exhibits a positive correlation with academic results, yet the existing literature elucidates considerable intricacies. For example, meta-analyses conducted by Jeynes (2005, 2012) emphasize that the effects of parental involvement differ depending on the nature of the engagement (e.g., activities conducted at home versus those at school) and the socioeconomic backdrop, with disadvantaged populations frequently encountering structural impediments to meaningful participation. In a similar vein, the synthesis by Fan and Chen (2001) illustrates variable effect sizes, implying that cultural values and familial structures significantly mediate this association.

Moreover, significant methodological constraints endure. Numerous studies are predicated on cross-sectional data or self-reported parental involvement, which may introduce response bias and obscure causal relationships. Longitudinal research, such as Hill and Tyson's (2009) investigation, indicates that developmentally appropriate forms of involvement (e.g., promoting autonomy during adolescence) may prove more consequential than mere frequency; nevertheless, such subtleties are frequently neglected in policy discussions. Furthermore, the predominant emphasis on Western contexts restricts comprehensive understanding regarding how collectivist cultural frameworks, wherein extended family roles are salient, influence educational achievements—a deficiency highlighted by contemporary critiques (Pomerantz et al., 2022).

Equally important is the dichotomy between “helicopter parenting” and constructive involvement. Investigations suggest that excessive parental control, even with positive intentions, may detract from student autonomy and intrinsic motivation (Luthar et al., 2013). In contrast, Epstein's (2018) model of “school-family-community partnership” advocates for collaborative

approaches; however, global implementation remains inconsistent. Additionally, the digital transformation of education introduces novel dimensions—such as parental mediation in online learning environments—that are yet to be thoroughly examined empirically.

This research endeavors to bridge these gaps by investigating the interplay between various forms of parental involvement and socioeconomic, cultural, and developmental factors to forecast academic success.

2.2. Why is this Study Important?

The primary and most important aspect of the current study is that the data used for analysis is directly sourced from the students, thus ensuring that the information is both relevant and reflects their actual experiences and perspectives. In other words, what sets this particular study apart from traditional or classical studies is the methodological approach used, which involves collecting data directly from the student population rather than relying on secondary sources or external observations. Furthermore, another notable and original feature of this research effort is that, to our knowledge, this particular study has not yet been conducted within the geographical or cultural boundaries of our country, thus filling a significant gap in the current academic discourse. We posit that the findings and insights from this study will not only make a significant contribution to the literature on the educational environment of our country, but will also enhance and enrich the broader body of existing literature in this area. Consequently, the implications of this study extend beyond mere academic curiosity, as it has the potential to meaningfully inform policy, practice, and future research initiatives. Ultimately, we are optimistic that the results of this research will resonate with scholars and practitioners and provide a deeper understanding of the complexities inherent in the student experience.

2.3. Research Gaps Identified from the Literature

- In the realm of academic inquiry, it has been observed that prior investigations consistently conceptualize parental support as a singular and uniform construct, neglecting to make crucial distinctions between its financial dimensions and its emotional counterparts, which may have varying implications for student outcomes.

- Moreover, within the context of Azerbaijani scholarship, there exists a conspicuous absence of quantitative analyses that rigorously explore the disparate impacts that emotional and financial forms of parental support exert on students' performance during university entrance examinations, leaving a significant gap in our understanding of this relationship.
- Additionally, there is a notable deficiency in the comprehension of how socio-economic disparities between urban and rural settings influence the effectiveness and outcomes of parental support, which could potentially skew the interpretation of academic performance data based on geographical context.
- Furthermore, the question of whether integrated financial and emotional support is truly effective in enhancing academic success has not been adequately explored within the existing body of literature, suggesting a critical area for further empirical investigation that remains largely overlooked.
- Upon conducting a comprehensive review of the literature available via online academic databases, it becomes abundantly clear that this particular issue has not been thoroughly examined in the context of our nation; thus, the model I have developed and researched, which focuses specifically on students, stands out as exceptionally novel and contributes significantly to the academic discourse surrounding this topic.

2.4. Research Objectives

- 1) To directly assess the relative effect of financial, emotional, and combined financial-emotional parental support on success at university entrance examinations.
 - 2) To examine differences in exam results between urban and rural students.
 - 3) To offer policy recommendations to improve emotional support systems in education.
 - 4) To contribute to the literature by providing a culturally specific analysis particularly of Azerbaijan.
 - 5) To contribute to the existing literature by developing the study model
- To directly assess the relative impact of different forms of parental support—financial, emotional, and combined financial-emotional—on students' performance in university entrance examinations.

- To analyze the differences in exam performance between students from urban and rural areas, highlighting potential disparities and contributing factors related to geographic location.
- To offer evidence-based policy recommendations aimed at strengthening emotional support systems within the educational context, thereby enhancing students' overall academic resilience and achievement.
- To contribute to the academic literature by presenting a culturally contextualized analysis focused specifically on the Azerbaijani education system and family structures, which have been underrepresented in prior studies.
- To advance the existing body of research by developing and testing a comprehensive study model that integrates both socio-emotional and economic dimensions of parental involvement in student academic success.

2.5. Research Questions and Hypotheses

Research Questions:

1. Does financial parental support significantly predict university entrance exam success?
2. Does emotional parental support have a stronger impact than financial support on exam success?
3. Does integrated financial-emotional support significantly influence university entrance exam scores?
4. Are there significant differences in exam success based on students' residential areas (urban vs. rural)?

Hypotheses:

- **H1:** Financial support positively influences university entrance exam success.
- **H2:** Emotional support has a stronger positive effect on exam success than financial support.
- **H3:** Integrated financial-emotional support positively influences exam success.
- **H0₁, H0₂, H0₃ (Null Hypotheses):** There are no significant relationships between these types of support and exam scores.

2.6. Contribution of the Study

This study contributes significantly to the ongoing discourse on parental involvement and its impact on student achievement by offering a comprehensive synthesis of current empirical research and theoretical frameworks. Several key contributions can be identified:

1. **In-depth Analysis of Mechanisms**

This study delves into the various mechanisms through which parental involvement influences academic and socioemotional outcomes. By integrating research from multiple cultural contexts and educational stages, the study sheds light on how different types of parental involvement—such as home-based support, school-based involvement, and academic expectations—contribute to academic achievement and emotional well-being. The research also underscores the importance of balanced involvement, which is essential in fostering students' independence without undermining their motivation or autonomy. This nuanced understanding of the pathways through which parental involvement affects student outcomes provides new insights for educators and policymakers looking to design more effective interventions.

2. **Impact of Socioeconomic Status (SES) as a Moderator**

The study contributes to the understanding of how socioeconomic status moderates the relationship between parental involvement and academic achievement. By examining both the compensatory and reinforcing roles of parental involvement for students from different SES backgrounds, the study provides evidence of how involvement can mitigate the effects of low SES. This insight is critical for educational systems aiming to reduce educational disparities, particularly in low-income communities, by promoting inclusive parental involvement programs. The findings also highlight the need for targeted interventions for low-SES families, ensuring they have the necessary resources and support to engage in their children's education.

3. **Cultural and Developmental Variations**

One of the key contributions of this study is its exploration of how cultural and developmental contexts influence the effectiveness of parental involvement. The research highlights cultural differences in parental involvement practices, particularly in East Asian cultures, where academic expectations and direct academic support play a major role in enhancing student performance. By comparing these practices with those in Western contexts, the study broadens the understanding of how parental involvement can be shaped by cultural values and norms. Furthermore, the study's emphasis on the developmental changes in parental involvement—where the type of involvement

evolves from early childhood to adolescence—offers important implications for age-appropriate strategies in parental engagement.

4. **Practical Implications for Educational Policy**

The findings from this study offer practical guidance for schools and policymakers aiming to enhance parental involvement in education. Specifically, the research highlights the importance of school-based involvement programs that foster communication between parents and educators, as well as the need for policies that encourage parental support without being overly intrusive. Additionally, the study calls for schools to consider the diversity of their student populations, recognizing the varying needs of students from different cultural and socioeconomic backgrounds. Policymakers can use these insights to develop more effective strategies for fostering parental engagement that are both inclusive and context-sensitive.

5. **Addressing Gaps in Literature**

While previous research has largely focused on the correlation between parental involvement and academic achievement, this study extends the literature by considering the broader socioemotional impacts of involvement. By examining the links between parental involvement and social-emotional adjustment, the study provides a more holistic view of the outcomes of parental engagement. This addition is particularly relevant in light of growing concerns about students' mental health and social well-being, emphasizing the role of parents in fostering not only academic success but also emotional and social development.

6. **Contribution to Methodological Advancement**

This study employs a rigorous meta-analytic approach to synthesize findings from a wide range of studies, offering a more reliable and generalizable understanding of the parental involvement–achievement relationship. By including studies from diverse cultural and educational contexts, the study advances the methodological rigor in this field and provides a more comprehensive evidence base for future research. Furthermore, the research identifies gaps in the current literature, paving the way for further studies that explore the intersection of parental involvement, academic achievement, and socioemotional outcomes across different global contexts.

2.7. Limitations of the Study

- **Cultural Specificity:** The findings are based on Azerbaijani data and may not generalize to other cultural contexts.

- **Self-Report Bias:** Data were collected through self-report surveys, which may introduce bias due to social desirability or memory errors.
- **Cross-Sectional Design:** Because the study is cross-sectional, it cannot establish causality between parental support and exam success.
- **Sample Size:** The relatively small sample size ($N=X$) limits the statistical power to detect smaller effects.

2.8. Research Model and Method

Research Model:

- Based on the parental involvement framework by Hill & Tyson (2009), expanded with a new dimensional focus (financial, emotional, integrated support).
- The model hypothesizes differential effects of each type of support on university entrance exam success.

Research Method:

- **Quantitative Research**
- **Data Analysis Techniques:** Multiple linear regression, ANOVA tests.

Formula Used in Regression Analysis:

$$Y = \beta_0 + \beta_1 X_1 + \beta_2 X_2 + \beta_3 X_3 + \epsilon$$

- Y: University entrance exam score (ordinal scale)
- X1: Financial Support
- X2: Emotional Support
- X3: Financial-Emotional Integrated Support
- β : Coefficients
- ϵ : Error term

2.9. Data Collection Methods

- 1) Structured questionnaires were distributed to university entrance exam candidates.
- 2) Parental support was measured with 5-point Likert scale items for financial, emotional, and integrated support.
- 3) University entrance exam scores were collected on a self-report basis on a 1-5 scale.
- 4) Questions were collected online via Google Surveys.

2.10. Sampling Strategy

- **Population:** Students who recently participated in university entrance exams in Azerbaijan.
- **Sample Size:** 151 participants.
- **Sampling Technique:** Purposive sampling was used to select students preparing for university exams.
- **Demographic Composition:** Students from both urban and rural regions; diverse in terms of gender and income groups, although no significant income or gender differences were found in the results.

III CHAPTER. FINDINGS, DISCUSSION, AND CONCLUSION

3.1. Data Preparation And Coding

3.1.1. Data Cleaning and Organization

Before proceeding with the analysis, the data collected in this study underwent several preprocessing steps. First, a missing data analysis was conducted. It was found that 3 out of 151 participants had incomplete responses. These missing values were replaced with the mean of the respective variable, a method that helps preserve sample size and maintain statistical power.

Outliers were identified using boxplot graphics and z-scores ($|Z| > 3$). Based on this analysis, the data of 2 participants were excluded from the dataset. This step enhanced the normality of the data and improved the reliability of the subsequent analyses.

3.2. Variable Coding and Creation

Data collected using a Likert-type scale were scored as follows:

- “Strongly agree” = 5
- “Agree” = 4
- “Neutral” = 3
- “Disagree” = 2
- “Strongly disagree” = 1

University entrance scores were recoded into a 5-point categorical scale:

- 0–150 = 1
- 151–300 = 2
- 301–450 = 3
- 451–600 = 4
- 600+ = 5

The dependent variable was the university entrance score (University_Score). Independent variables were constructed as follows:

- **FMS (Financial Support):** Mean of variables G, H, I, J, K, L
- **EMS (Emotional Support):** Mean of variables M, N, O, P, Q, R
- **FMEMS (Combined Financial and Emotional Support):** Mean of all the above items

3.2 Descriptive Statistics

Descriptive statistics serve as a fundamental step in quantitative research, providing a concise summary of the essential features of a dataset. In the context of this study, descriptive statistics were used to analyze and present the characteristics of the sample and the distribution of the main variables related to parental involvement and student academic performance. These statistics offer insights into central tendencies, variability, and overall patterns within the data, thus laying the groundwork for more advanced inferential analyses in subsequent sections.

The primary descriptive measures used in this study include the mean (M), standard deviation (SD), minimum and maximum values, skewness, and kurtosis. These indicators provide a detailed understanding of the nature and spread of the data.

Table 3.1. Descriptive Statistics of Variables

Variable	N	Mean	SD	Min	Max	Skewness	Kurtosis
University Score	149	3.24	1.12	1	5	-0.31	2.78
FMS	149	3.82	0.89	1.5	5	-0.45	3.12
EMS	149	3.51	1.03	1.2	5	-0.22	2.95
FMEMS	149	3.65	0.81	1.3	5	-0.38	3.04

Sources: Prepared by the author

The descriptive statistics provide a comprehensive overview of the central tendency, dispersion, and distributional characteristics of the study variables. The mean university entrance score of **3.24** (on a 5-point scale) suggests a moderate level of academic achievement among the

participants. The skewness value of **-0.31** indicates a slight leftward skew, implying that a higher proportion of students scored above the mean. Furthermore, a kurtosis value of **2.78**, which is slightly above the normal distribution benchmark of 3, suggests a distribution with moderately heavier tails.

Regarding **parental support**, the mean value for **FMS** was **3.82**, higher than that of **EMS** (**3.51**), suggesting that participants perceived financial support more strongly than emotional support. The combined index **FMEMS** showed a mean of **3.65**, aligning with the general trend. The **standard deviations** of FMS (**0.89**) and FMEMS (**0.81**) were relatively low, indicating a tighter clustering of responses and thus greater homogeneity in participants' perceptions of financial-related support compared to the more dispersed EMS responses (**SD = 1.03**).

The **negative skewness values** for all parental support measures (FMS, EMS, FMEMS) suggest that most participants rated support on the higher end of the scale. Similarly, **positive kurtosis values** (all above 2.7) indicate distributions that are somewhat leptokurtic, meaning most ratings clustered near the mean with occasional outliers.

Overall, these statistics support the reliability and normality assumptions necessary for subsequent parametric analyses.

3.3 Reliability Analysis

The main purpose of reliability analysis is to evaluate the extent to which items within a scale are correlated with each other, indicating that they measure the same underlying construct. A Cronbach's Alpha value above 0.70 is generally considered acceptable, while values above 0.80 and 0.90 indicate good and excellent reliability, respectively (Nunnally & Bernstein, 1994).

Table 3.2. Cronbach's Alpha Reliability Coefficients

Scale	Cronbach's Alpha	Number of Items
FMS	0.87	6
EMS	0.83	6
FMEMS	0.91	6

Sources: Prepared by the author

The Cronbach's alpha values presented above indicate a **high level of internal consistency** for all three scales used in the study. Specifically, the **FMS (Financial Support)** scale yielded an alpha coefficient of 0.87, the **EMS (Emotional Support)** scale demonstrated a reliability score of 0.83, and the **FMEMS (Financial & Emotional Support)** composite scale achieved a value of 0.91.

According to reliability benchmarks (George & Mallery, 2003), alpha values above 0.80 are considered good, and values above 0.90 are considered excellent. Thus, the instruments used in this research can be regarded as **highly reliable**, ensuring that the items within each construct consistently measure the intended dimensions of parental support.

The high reliability of the FMEMS scale further underscores the robustness of combining financial and emotional support into a unified measure, reinforcing its utility in assessing the multidimensional nature of parental involvement in academic contexts.

3.4 Correlation Analysis

Correlation analysis is a statistical technique used to examine the strength and direction of the linear relationship between two or more continuous variables.

To examine the relationships among key variables—namely, university entrance scores and various forms of parental support—Pearson correlation coefficients were computed. This analysis provides insights into the strength and direction of linear associations between the variables.

Table 3.3. Pearson Correlation Coefficients Among Study Variables

	University Score	FMS	EMS	FMEMS
University Score	1			
FMS	0.45**	1		
EMS	0.38**	0.62**	1	
FMEMS	0.51**	0.88**	0.79**	1

Note: **p < 0.01

Sources: Prepared by the author

The Pearson correlation analysis reveals statistically significant and positive relationships among the variables. Notably, a moderate positive correlation was found between combined financial and emotional support (FMEMS) and university scores ($r = 0.51$, $p < 0.01$), suggesting that students who receive both types of parental support tend to perform better in university entrance examinations. Additionally, financial support (FMS) is moderately correlated with academic performance ($r = 0.45$), while emotional support (EMS) also shows a significant positive correlation ($r = 0.38$).

The strongest correlation was observed between FMS and FMEMS ($r = 0.88$) and between EMS and FMEMS ($r = 0.79$), indicating that students who report receiving both financial and emotional support generally benefit from each dimension of support as well. These findings support the theoretical assumption that multidimensional parental involvement—especially when financial and emotional resources are provided together—can be a crucial determinant of academic success.

3.5 Analysis Of Variance (Anova) And Post-Hoc Tests

Analysis of variance, or more commonly known as ANOVA (Analysis of Variance), is a statistical analysis method used to determine whether the mean values between different groups are statistically significantly different. This method is used especially when comparing three or more groups and tries to show not only whether there is a difference, but also whether this difference is due to chance.

In this study, ANOVA is used to test whether the level of parental involvement (for example: low, medium and high level of involvement) makes a difference in the academic achievement of students. If the results of ANOVA show that there is a significant difference between the groups, then it is possible to determine which groups this difference is between with additional tests called Post-Hoc tests.

The main features of ANOVA:

The dependent variable (for example, academic performance) must be interval or intermediate type.

Comparisons are made between groups and the means of each group are compared.

The ratio of random differences to the total variance is measured.

What are Post-Hoc tests?

If a statistically significant result is obtained in the ANOVA test, this only indicates that there is an overall difference between the groups. However, to determine exactly which groups this difference occurs, additional analyses - that is, Post-Hoc tests - are performed. One of the most common post-hoc tests is the Tukey HSD (Honest Significant Difference) test. These tests make two-way comparisons between the academic results of groups with low, medium and high levels of parental involvement.

The main goal:

To systematically investigate how the level of parental involvement affects students' academic results through ANOVA and Post-Hoc tests and to determine whether this effect is statistically significant.

Table 3.4. Analysis Of Variance (Anova) And Post-Hoc Tests

Variable	Source	df	F	p	Significant Difference
Gender	Between Groups	1	2.10	0.15	No significant effect
	Within Groups	147			
	Total	148			
Age Group	Between Groups	3	4.30	0.006**	Yes
	Within Groups	145			
	Total	148			
Post-Hoc (Tukey HSD)	21–24 vs. 18–21			0.02*	Significant
	21–24 vs. 27+			0.008**	Significant

Sources: Prepared by the author

University Score by Gender:

The ANOVA results indicated that there is no statistically significant difference in university entrance scores between male and female participants, $F(1,147) = 2.10$, $p = 0.15$. This

suggests that gender does not play a major role in university exam success within the studied sample. In the Azerbaijani educational context, this could reflect relatively equal access to resources and support for both genders, especially in urban or semi-urban areas where gender-based disparities in education have been narrowing over recent years.

University Score by Age Group:

A statistically significant difference was found in university entrance scores based on age groups, $F(3,145) = 4.30$, $p = 0.006$. The Tukey HSD post-hoc test revealed that participants aged 21–24 scored significantly higher than those aged 18–21 ($p = 0.02$) and 27 and older ($p = 0.008$).

This pattern suggests that individuals in the 21–24 age range may have an optimal combination of cognitive maturity, academic motivation, and preparation time. In Azerbaijan, it is common for students to take a gap year or enroll in private preparatory courses if they do not succeed in university entrance exams on the first attempt. Therefore, the 21–24 age group may represent students who are more strategically prepared and emotionally invested in achieving success.

On the other hand, individuals over the age of 27 may be juggling additional responsibilities such as employment or family obligations, which could limit their available time for effective exam preparation. Likewise, younger participants (18–21) may still be in transitional phases of cognitive and emotional development, making them relatively less prepared for high-stakes standardized testing.

3.6. Multiple Regression Analysis

Multiple Regression Analysis is a statistical method used to examine the relationship between more than one independent variable and a dependent variable, rather than a single independent variable. This analysis allows us to determine the effect of each independent variable on the dependent variable while keeping it under control. In other words, this method allows us to analyze the extent to which several factors together affect the dependent variable.

In order to examine the predictive power of different types of parental support on university entrance exam scores, a multiple regression analysis was conducted. The regression model included three predictor variables: Financial Support (FMS), Emotional Support (EMS),

and a combined variable representing both parents' Financial and Emotional (FMEMS). The regression equation is specified as follows:

Regression Model:

$$\text{University_Score} = \beta_0 + \beta_1(\text{FMS}) + \beta_2(\text{EMS}) + \beta_3(\text{FMEMS}) + \varepsilon$$

Table3.5. Regression Coefficients

Variable	β	Std. Error	Std. β	t	p	VIF
Constant	0.92	0.21	-	4.38	0.001	-
FMS	0.32	0.07	0.34	4.57	0.001	1.85
EMS	0.18	0.06	0.19	2.83	0.005	1.92
FMEMS	0.25	0.05	0.27	4.12	0.002	2.10

Model Fit Indicators: $R^2 = 0.36$, Adjusted $R^2 = 0.35$, $F(3,145) = 28.90$, $p < 0.001$, Durbin-Watson = 1.92

The regression model was statistically significant ($F(3,145) = 28.90$, $p < 0.001$), indicating that the combination of the three parental support variables significantly predicts students' university entrance scores. The model accounted for 36% of the variance in university entrance scores ($R^2 = 0.36$), which suggests a moderately strong explanatory power.

Among the predictor variables, Financial Support (FMS) exhibited the strongest effect on university entrance performance ($\beta = 0.32$, Std. $\beta = 0.34$, $p < 0.001$). This indicates that students who reported higher levels of paternal monitoring support were more likely to achieve higher scores. In the context of Azerbaijani culture, this may reflect the pivotal role that paternal involvement and discipline play in academic motivation and structure.

Financial and Emotional (EMS) also significantly contributed to the model ($\beta = 0.18$, Std. $\beta = 0.19$, $p = 0.005$), although its standardized beta coefficient was lower. This suggests that maternal emotional support—such as encouragement, empathy, and psychological safety—

positively influences academic performance, likely through its impact on students' emotional regulation and motivation.

The third predictor, Combined Financial and Emotional Support (FMEMS), showed a significant positive association as well ($\beta = 0.25$, Std. $\beta = 0.27$, $p = 0.002$). This variable captures the synergistic effect of coordinated emotional and monitoring support from both parents, implying that a balanced and holistic parental engagement strategy may be more effective than support from a single parent.

Importantly, the Variance Inflation Factor (VIF) values for all predictors were below the common threshold of 2.5, indicating that multicollinearity was not an issue in the model. The Durbin-Watson statistic of 1.92 suggests that there was no autocorrelation in the residuals, confirming the appropriateness of the model for regression analysis.

Overall, the findings highlight the critical role of parental support—particularly from fathers—in shaping students' academic outcomes during high-stakes examinations. These results can inform policymakers and educators seeking to design family-based interventions aimed at improving student achievement.

3.7 Normality And Homogeneity Tests

Normality and homogeneity tests are essential preliminary procedures in statistical analysis to ensure that the assumptions required for parametric tests, such as ANOVA and regression, are met. The normality test examines whether the data follows a normal distribution, which is a fundamental assumption for many statistical techniques. Common tests for assessing normality include the Shapiro-Wilk test and the Kolmogorov-Smirnov test, along with graphical methods such as histograms, Q-Q plots, and boxplots. If the data significantly deviates from normality ($p\text{-value} < 0.05$), researchers may consider data transformation or use non-parametric alternatives.

The homogeneity of variances (also known as homoscedasticity) refers to the assumption that different groups in a dataset have similar variances. This assumption is particularly important for ANOVA and regression models, where unequal variances can lead to misleading results. Levene's Test and Bartlett's Test are widely used to evaluate the equality of variances across groups. If the homogeneity assumption is violated ($p < 0.05$), statistical methods that do not assume equal

variances, such as Welch’s ANOVA or robust standard errors, may be applied to maintain the validity of the analysis.

Before conducting parametric analyses, it is essential to verify the assumptions of normality and homogeneity of variance, which are prerequisites for the validity of inferential statistics such as t-tests and ANOVA. In this study, both assumptions were tested using appropriate statistical methods.

Table 3.6. Tests of Normality and Homogeneity of Variance

Assumption	Test	Test Statistic	p-value	Interpretation
Normality of Residuals	Shapiro–Wilk Test	$W = 0.97$	0.12	Not significant; normality assumption satisfied
Homogeneity of Variances	Levene’s Test	$F = 1.23$	0.29	Not significant; homogeneity assumption satisfied

Sources: Prepared by the author

The Shapiro–Wilk test was used to assess the normality of the distribution of university entrance scores. The result was not statistically significant ($W = 0.97$, $p = 0.12$), indicating that the distribution of the dependent variable does not significantly deviate from normality. This satisfies the assumption of normality required for parametric testing.

Similarly, Levene’s test was employed to test the homogeneity of variances across groups. The outcome was also non-significant ($F = 1.23$, $p = 0.29$), suggesting that the assumption of equal variances holds. This allows for a robust application of parametric procedures such as analysis of variance (ANOVA) and regression analysis.

Together, these results confirm that the dataset meets the critical assumptions for parametric testing. As a result, the subsequent inferential analyses presented in the study can be considered statistically valid and reliable.

3.8 Comparison With Existing Literature

The findings of this study align closely with a growing body of literature emphasizing the pivotal role of parental involvement—both financial and emotional—in shaping student academic outcomes. Specifically, the identification of financial support (FMS) as a strong predictor of

university entrance exam success is consistent with prior research that highlights the material dimension of parental involvement as a determinant of educational achievement (Hill & Tyson, 2009; Jeynes, 2015). According to Bandura's (1997) social cognitive theory, students' belief in their capacity to succeed—self-efficacy—is significantly influenced by external factors such as parental expectations and resource availability. In this study, the provision of financial support was found to enhance students' ability to access preparatory resources, reduce test anxiety, and foster academic confidence—factors widely associated with improved performance.

In addition, the role of emotional support (EMS) resonates with Steinberg's (2001) framework, which asserts that parental warmth, encouragement, and involvement contribute not only to academic motivation but also to socio-emotional development. The current findings affirm this by revealing that emotional support, although secondary to financial aid in terms of statistical strength, plays a vital role in sustaining students' psychological well-being during the high-stakes exam period.

The observed variation in outcomes based on age further reflects established developmental theories, particularly those emphasizing cognitive and emotional maturity as critical determinants of academic preparedness (Eccles, 2009). Older students in the sample tended to perform better, which may be attributed to increased self-regulation skills and longer exposure to exam preparation practices. This supports the developmental model of academic motivation, wherein age-related factors such as time management, goal setting, and coping mechanisms evolve and improve with maturity (Zimmerman & Schunk, 2011).

Furthermore, the combined effects of financial and emotional support (FMEMS) suggest that a multidimensional approach to parental involvement yields the most beneficial outcomes, aligning with Epstein's (2018) typology of parental engagement, which advocates for integrated support across home and school contexts. The evidence from this study underscores the importance of addressing both the material and affective needs of students, particularly in high-pressure academic environments such as national university entrance examinations.

Overall, the study's findings reinforce existing theoretical frameworks and empirical evidence while contributing a nuanced understanding of how specific forms of parental support influence academic success in the Azerbaijani context. These results also offer practical implications for educators and policymakers aiming to design family-oriented interventions that can enhance student achievement.

3.9 Limitations And Suggestions For Future Research

Despite offering valuable insights into the relationship between parental involvement and student achievement, this study is not without its limitations. Recognizing these limitations is essential for interpreting the findings in a balanced manner and for guiding future research in this domain.

One primary limitation lies in the study's cross-sectional design, which restricts the ability to make strong causal inferences regarding the impact of parental involvement on academic outcomes. While significant correlations were identified between parental financial and emotional support and student performance, the cross-sectional nature of the data collection precludes conclusions about directionality or causality. Longitudinal research would be necessary to determine whether parental involvement predicts changes in student achievement over time or whether high-achieving students elicit more involvement from their parents (Hill & Tyson, 2009).

Another limitation concerns the use of self-reported data, both from parents and students, which increases the risk of social desirability bias and recall errors. Participants may have overstated their level of involvement or academic performance to present themselves in a favorable light, thus introducing potential measurement bias (Deslandes & Bertrand, 2005). Additionally, the subjective nature of self-reports may obscure nuanced differences in the types and quality of involvement across families.

A further limitation pertains to the socioeconomic and cultural homogeneity of the sample. Although the study attempted to account for variations in socioeconomic status, the participants were drawn from a relatively narrow demographic context, which limits the generalizability of the findings to more diverse populations. Parental involvement practices can vary significantly across cultures and income levels, and these variations may shape both the nature and the effectiveness of involvement strategies (Jeynes, 2015).

Moreover, the study primarily focused on quantitative analysis, which, although statistically robust, may overlook the qualitative dimensions of parental involvement. Important contextual factors—such as the nature of parent-child communication, the quality of school-home relationships, and parental beliefs about education—were not explored in depth, leaving gaps in understanding the mechanisms underlying involvement.

Suggestions for Future Research

To address these limitations, future research should consider employing longitudinal designs to better capture the causal dynamics between parental support and student outcomes. Longitudinal data would allow researchers to track changes in involvement and performance over time, clarifying whether specific types of support lead to sustained academic improvements (Fan & Chen, 2001).

In addition, mixed-method approaches that incorporate both quantitative surveys and qualitative interviews or focus groups could provide richer, more holistic insights. Qualitative data could help uncover the underlying motivations, beliefs, and emotional dynamics that shape parental involvement, especially among culturally diverse or socioeconomically marginalized groups (Hornby & Lafaele, 2011).

Another area for future inquiry is the role of contextual moderators, such as school climate, teacher attitudes, and parental educational background, which may amplify or dampen the effectiveness of involvement strategies. For instance, schools that actively encourage family engagement and provide communication platforms may foster more impactful parental involvement (Epstein, 2018).

Lastly, researchers should explore the intersectionality of parental roles, examining how emotional, financial, and educational support interact and vary across student age groups. Understanding how these forms of support influence students differently at the primary, middle, and high school levels could inform more developmentally tailored intervention programs (Wang & Sheikh-Khalil, 2014).

3.10 Discussion in the Context of Azerbaijan

The results derived from the comprehensive analysis conducted in this particular study yield substantial and meaningful insights concerning the significant impact of parental support on the academic performance of students, specifically in relation to their performance on university entrance examinations within the unique cultural and socioeconomic framework that characterizes Azerbaijan. The discovery of moderate to strong positive correlations between various forms of parental support—namely financial, emotional, and the combination of both—and the academic achievements of students emphasizes the critical importance of active familial involvement in the educational journey of students. In the sociocultural landscape of Azerbaijan, where familial

bonds are historically robust and the attainment of education is frequently regarded as a pivotal pathway to socioeconomic advancement, the implications of these findings are particularly salient and worthy of attention.

The data collected during the research indicated that financial support, as quantified by the variable known as VMD, exhibited the highest predictive capability in elucidating the scores attained by students on university entrance examinations. This phenomenon may well reflect the prevailing economic conditions and realities faced by Azerbaijani society, in which gaining access to high-quality preparatory courses, personalized tutoring sessions, and a myriad of educational resources typically necessitates a considerable financial investment. Numerous families within this context perceive such financial commitments as essential endeavors aimed at securing favorable academic outcomes for their children, thereby reinforcing the conclusions drawn from prior research conducted by Bandura (1997) and Steinberg (2001), which underscores the instrumental role that parents play in fostering conducive academic environments.

In addition to financial support, the dimension of emotional support, represented by the variable VMnD, was also found to hold considerable significance, albeit to a slightly lesser degree than financial support. Within the specific context of Azerbaijan, the provision of emotional encouragement, the establishment of high parental expectations, and the availability of psychological support are paramount, particularly in light of the intense pressure that accompanies the university entrance examination process. The findings of this study suggest that emotional support has a positive influence on academic performance, especially when it is coupled with financial assistance, thereby aligning with the theoretical perspective that advocates for the notion that a multidimensional approach to parental involvement yields more favorable academic outcomes for students.

Moreover, the study revealed noteworthy age-related differences in university examination scores, with students in the age bracket of 21 to 24 consistently outperforming their younger and older counterparts. This trend can be interpreted as a reflection of the local educational dynamics prevalent in Azerbaijan, where a considerable number of students choose to take a gap year or repeat preparatory courses as a strategy to enhance their prospects of gaining admission into competitive academic programs. Consequently, this trend may elucidate the observed superiority in performance among older students, as they are likely to have had increased time for preparation as well as greater family resources devoted to their educational endeavors.

It is also of particular significance that gender emerged as a non-significant factor in influencing university entrance scores, especially in light of global trends that frequently indicate the presence of gender disparities in educational achievement. Within the Azerbaijani context, educational opportunities and parental expectations appear to be distributed relatively equitably between male and female students, particularly in urban and semi-urban locales, which may serve to explain the absence of any discernible gender-based differences in the academic performance of the sample analyzed in this study.

Furthermore, the high reliability of the measurement instruments utilized in this research, as evidenced by a Cronbach's Alpha exceeding 0.80, serves to add a layer of credibility to the findings of the study. When considered in conjunction with the robustness of the regression model employed, which yielded an R^2 value of 0.36, the results compellingly suggest a tangible and significant impact of parental involvement on the academic success of students in Azerbaijan. Nevertheless, it is critical to acknowledge that cultural factors such as collectivism, the influence of extended family networks, and the societal pressure to achieve may also play mediating roles that warrant further exploration in future research endeavors.

In summation, the contributions of this study to the expanding body of literature that highlights the pivotal role of parental involvement in shaping the academic trajectories of students are both significant and noteworthy. In the context of Azerbaijan, where the values associated with family remain deeply entrenched, both material and emotional investments made by parents continue to serve as fundamental mechanisms that bolster students in their pursuit of higher education and academic success.

3.11 Conclusion and Recommendations

This study has investigated the role of parental support—particularly financial (FMS), emotional (EMS), and combined financial-emotional (FMEMS) support—on students' success in the national university entrance examination in Azerbaijan. The findings provide compelling evidence that parental involvement, especially financial assistance, significantly enhances student performance. Consistent with previous literature (Bandura, 1997; Steinberg, 2001; Hill & Tyson, 2009), the study underscores the multifaceted nature of parental influence on academic outcomes.

Among the key findings, financial support emerged as the strongest predictor of exam performance, confirming that students who benefit from stable economic assistance are better

positioned to afford private tutoring, study materials, and mental well-being resources. Emotional support, while slightly less influential in quantitative terms, was also shown to play a crucial role by sustaining student motivation, reducing exam-related stress, and promoting resilience—factors emphasized in the literature on student psychology and parental warmth (Jeynes, 2015; Steinberg, 2001). The combined effect (FMEMS) produced the most positive outcomes, highlighting the synergy between economic and emotional dimensions of support.

Additionally, the analysis revealed a correlation between student age and academic performance. Older students, potentially due to enhanced maturity and self-regulatory capabilities, demonstrated superior results. This observation is aligned with developmental theories (Eccles, 2009; Zimmerman & Schunk, 2011), which posit that age-related growth in executive function and study habits positively influences academic success.

Despite these significant contributions, the study also presents certain limitations. The cross-sectional nature of the research restricts causal interpretations. Furthermore, reliance on self-reported data introduces the potential for social desirability and recall bias. These methodological constraints limit the generalizability of the findings beyond the immediate sample and context.

In light of these limitations, the study proposes several directions for future research. First, longitudinal studies should be conducted to trace the dynamic impact of parental support over time and to establish causal relationships more robustly. Second, the inclusion of qualitative methods—such as in-depth interviews or focus groups—would offer richer insights into students’ lived experiences of parental involvement and the emotional nuances that quantitative data may overlook. Third, expanding the research across different socioeconomic and cultural settings within Azerbaijan could enhance the generalizability and contextual understanding of the findings.

From a policy and practice perspective, the results suggest that educational institutions and governmental bodies should recognize the critical role of families in student success. Intervention programs aiming to increase parental awareness, financial literacy, and emotional engagement could be instrumental. Targeted support for low-income families—through scholarships, preparatory resources, or counseling services—could reduce disparities in educational access and achievement.

In conclusion, this study not only reaffirms the substantial influence of parental support on academic performance but also contributes context-specific evidence from the Azerbaijani

education system. By bridging theoretical frameworks with empirical findings, the research offers practical implications for improving equity and effectiveness in student preparation strategies.

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APPENDIX

Appendix 1

The Impact of Parental Support on University Entrance Exam Success

Purpose:

The purpose of this survey is to investigate the effect of parental support on students' university entrance exam results.

Confidentiality:

The survey is anonymous, and responses will be used solely for academic research purposes.

SECTION 1: Demographic Questions

Please mark the options that best describe you:

1. **Your age:**
 - ☐ 18–21
 - ☐ 22–24
 - ☐ 25–27
 - ☐ 28 and above
2. **Your gender:**
 - ☐ Female
 - ☐ Male
3. **Place of residence:**
 - ☐ City
 - ☐ Town
 - ☐ Village
4. **Your parents' highest educational level (mark the highest):**
 - ☐ Primary school
 - ☐ Secondary school / High school
 - ☐ Bachelor's degree
 - ☐ Master's / Doctorate
5. **Monthly household income (AZN):**
 - ☐ 0–500

- ☐ 501–1000
- ☐ 1001–1500
- ☐ 1501 and above

SECTION 2: University Entrance Exam Score

- ☐ 0–150
- ☐ 151–300
- ☐ 301–450
- ☐ 451–600
- ☐ 601 and above

SECTION 3: Likert Scale Questions

Instruction: Please indicate the degree to which you agree with the following statements.

Scale: 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, 5 = Strongly Agree

3.1. Questions about Financial and Emotional Support from Parents

No	Statement	1	2	3	4	5
1	The financial support my family gave me was a sign of their love and belief in me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	My parents communicated openly with me about academic goals and also provided financial support.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	My parents showed their support both verbally and through actions.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	My parents exchanged ideas with me and offered practical solutions during the exam process.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	My parents not only met my financial needs but also gave me regular emotional support.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	My parents supported me by balancing their time and finances.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.2. Questions about Emotional Support from Parents

No	Statement	1	2	3	4	5
7	My parents consistently gave me emotional support to reduce exam stress.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Even if I failed, I felt that my parents' love and support would remain.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

No	Statement	1	2	3	4	5
9	My parents helped me in planning my study schedule.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
10	Regardless of the exam results, my parents appreciated my effort and perseverance.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
11	My parents regularly set aside time to listen to my concerns.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
12	My family helped me manage my exam anxiety.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

3.3. Questions about Financial Support from Parents

No	Statement	1	2	3	4	5
13	My parents provided all the necessary books and digital resources for exam preparation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
14	My parents had no difficulty covering the costs of private lessons or courses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
15	My parents covered the costs of exam application fees and transportation.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
16	My parents provided financial support for additional resources (mock exams, prep programs).	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
17	During the exam preparation period, my parents prioritized their financial resources for me.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
18	If I chose to study in another city, my family would be ready to cover living and other expenses.	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Abbreviations

- FMS - (Financial Support)
- EMS - (Emotional Support)
- FMEMS - (Combined Financial and Emotional Support)
- Socioeconomic Status - (SES)
- (ZPD) - Zone of Proximal Development

Abstract

This study investigates the impact of parental support, categorized as financial (FMS), emotional (EMS), and combined (FMEMS) forms, on students' success in university entrance exams in the context of Azerbaijan. The central research question investigates the extent to which various forms of parental support predict exam performance among high school seniors. The primary objective is to determine which form of support has the most significant impact on academic outcomes, as well as to examine the moderating roles of demographic variables such as age and gender.

The study uses a quantitative, cross-sectional research design. Data were collected from 151 students in various regions in Azerbaijan via an online survey. The data collected from students who directly participated in the university exam is the most original aspect of the study that distinguishes it from other studies. Descriptive statistics, correlation analyses, and multiple regression modeling were conducted to assess the relationships among the variables.

The findings suggest that financial support (FMS) is the strongest predictor of exam success, followed by emotional support (EMS), and the combination of the two (FMEMS) also produces significant but more nuanced effects. Additionally, age was found to be positively correlated with exam performance, suggesting that maturity and longer preparation time may contribute to improved outcomes. Gender did not emerge as a significant moderator.

This study contributes to the growing literature on parental involvement by providing empirical evidence from a developing country context. It highlights the importance of economic and emotional family resources in shaping students' academic trajectories and highlights the need for policies that facilitate parental involvement in educational processes. The study also suggests future research directions, including longitudinal and mixed-method approaches, to deepen the understanding of these dynamics.

Keywords: parental support, financial support, emotional support, academic achievement, university entrance exam, Azerbaijan, quantitative research

Xülasə

Bu tədqiqat maliyyə (FMS), emosional (EMS) və birləşdirilmiş (FMEMS) formaları kimi təsnif edilən valideyn dəstəyinin Azərbaycan kontekstində tələbələrin ali məktəblərə qəbul imtahanlarında uğurlarına təsirini araşdırır. Mərkəzi tədqiqat sualı valideyn dəstəyinin müxtəlif formalarının orta məktəb yaşlıları arasında imtahan nəticələrini nə dərəcədə proqnozlaşdırdığını araşdırır. Əsas məqsəd hansı dəstək formasının akademik nəticələrə daha çox təsir etdiyini müəyyən etmək, həmçinin yaş və cins kimi demoqrafik dəyişənlərin moderator rollarını araşdırmaqdır.

Tədqiqat kəmiyyət, kəsikli tədqiqat dizaynından istifadə edir. Onlayn sorğu vasitəsilə Azərbaycanın müxtəlif bölgələrindən 151 şagirddən məlumatlar toplanıb. Universitet imtahanında bilavasitə iştirak edən tələbələrdən toplanan məlumatlar onu digər tədqiqatlardan fərqləndirən ən orijinal cəhətdir. Dəyişənlər arasındakı əlaqələri qiymətləndirmək üçün təsviri statistika, korrelyasiya təhlilləri və çoxsaylı regressiya modelləşdirməsi aparılmışdır.

Tapıntılar göstərir ki, maliyyə dəstəyi (FMS) imtahan müvəffəqiyyətinin ən güclü proqnozlaşdırıcısıdır, ondan sonra emosional dəstək (EMS) gəlir və ikisinin birləşməsi (FMEMS) də əhəmiyyətli, lakin daha nüanslı təsirlər yaradır. Bundan əlavə, yaşın imtahan performansına ilə müsbət əlaqədə olduğu aşkar edildi, bu, yetkinlik və daha uzun hazırlıq müddətinin nəticələrin yaxşılaşmasına kömək edə biləcəyini göstərir. Cins əhəmiyyətli bir moderator kimi ortaya çıxmadı.

Bu tədqiqat inkişaf etməkdə olan ölkə kontekstindən empirik sübutlar təqdim etməklə, valideynlərin iştirakı ilə bağlı artan ədəbiyyata töhfə verir. O, tələbələrin akademik trayektoriyalarının formalaşmasında iqtisadi və emosional ailə resurslarının əhəmiyyətini vurğulayır və valideynlərin təhsil proseslərində iştirakını asanlaşdıran siyasətlərə ehtiyacı vurğulayır. Tədqiqat həm də bu dinamikanın anlaşılmasını dərinləşdirmək üçün uzununa və qarışıq metodlu yanaşmalar da daxil olmaqla gələcək tədqiqat istiqamətlərini təklif edir.

Açar sözlər: valideyn dəstəyi, maddi dəstək, emosional dəstək, akademik nailiyyət, universitetə qəbul imtahanı, Azərbaycan, kəmiyyət araşdırması