

The Effect of Parental Involvement on Students' Achievements in Pakistan, (A Mixed Method Approach)



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Abstract: *Parental involvement has been an integral part of the learning activities in the dynamic environment of schools. This article investigates the effect of parental involvement on student achievements in the educational setting of schools. This research analyzes the multifaceted relationship between parental engagement and student outcomes through a comprehensive approach of mixed-method by using both quantitative and qualitative methods. Through a meticulous approach surveys, interviews and performance metrics are used to conduct a detailed analysis in 20 educational institutes in Lahore City, Pakistan. The study examines existing literature, adopts a hard data collection methodology by using quantitative as well as qualitative skills by exercising diverse analytical techniques and presents findings to understand the complex dynamics involved in parental engagement and its effect on student outcomes. The study provides valuable perspectives for teachers, parents and policymakers who aim to improve the educational experiences and learning outcomes of students in the future.*

Keywords: Engagement, Dynamic, Educational setting, Outcomes, Comprehensive

Introduction

The effect of parental engagement on student's academic outcomes has been an interesting subject in the dynamic field of school education. As the education system always tries to get better results for the learner understanding the impact of parental engagement becomes imperative. Parental involvement in the education system for the well-being of a student is a charismatic construct that encircles a range of behaviors, attitudes and activities. As expectations of society and educational landscapes expand, the need to explore the various facts of parental involvement becomes increasingly imperative (Amjad et al.,

2021a,b,c). This study aims to bridge existing gaps in the literature by using a mixed-method research approach, allowing for a nuanced exploration of the relationship between parental engagement and students' success and seeks to highlight the diverse forms of parental engagement and their impacts on academic outcomes. By adopting this approach, we not only understand the intricate dynamics involved but also provide a comprehensive base for informed decision-making in the educational field. The unfolding nature of education and the increasing diversity within school communities necessitate a detailed examination of parental involvement and its ramifications on academic

success. As we launch in this exploratory way, it is crucial to recognize the reciprocal nature of the parent-student-school relationship and acknowledge that effective collaboration between these can significantly impact on educational outcomes (Sial et al. 2022; Wang et al., 2022). By this approach, we aim not only to quantify the impact of parental involvement but also to resolve the underlying mechanisms and contextual factors that build this intricate relationship. This research provides a comprehensive understanding through the multidisciplinary lens of psychology, sociology and education. We may unfold the educational landscape on a continued basis through social changes, technological advancements and the growing multifaceted nature of student outcomes. It also highlights these influences by aiming to provide a detailed examination of parental engagement and its intricate impact on students' achievement. As we drive the complex relationship of these variables, it is better to know the diverse forms of parental engagement from the traditional way to the ever-expanding domain of digital engagement. This study aims to quantify the influence of parental involvement as well as to discover the underlying mechanisms and make it a requisite resource for educators, policymakers and parents by mastering the educational landscape in the future (Asghar et al., 2022a,b,c,d).

Literature Review

The term parental engagement in learning activities refers to parental actions and behaviors, associated with teaching learning process in schools. Parental engagement in a child's education is defined by Jeynes (2007). According to Epstein and Sanders, parental participation is typically portrayed as a complicated phenomenon that mostly takes place in two educational settings, the home and the school. For the importance and advantages of education, Hill and Tyson (2009) examine parental views and expectations for education, school and socializing. We have found that it is helpful in our research to distinguish between three aspects of engagement, homework, school work and academic interactions. This is because as suggested by Hill and Tyson (cited in 2009),

academic socialization may represent a particularly understudied aspect of parental involvement for at-risk students. The aforementioned components of inclusion at home are elucidated as follows, parents and kids communicating about school, setting up a home environment for learning, having access to educational resources like books and newspapers and exposing kids to engaging activities and experiences that promote learning. (Tyson and Hill, 2009). This part of parental participation includes socio-psychological support, such as talking about difficulties and pressures, encouraging kids to face and overcome academic obstacles and praising their efforts and accomplishments (as mentioned in Crosnoe and Ressler, 2019; Reference Hill and Tyson, 2009).

According to a comprehensive study by Bonk et al. (2018), there is a persistent positive correlation between academic success and several of these dimensions of family participation. Parent-child educational interactions, parents' support and encouragement of learning, academic aptitude assessments and reinforcement of learning at home have all been proven to be positively correlated with children's academic accomplishment from elementary school through high school. According to Hill and Taylor, parents may find it increasingly challenging to actively assist their children with their schooling as a result of the curriculum's increasing complexity as students advance through the grades. This type of parental participation may become less successful as children develop into more independent teenagers and young adults and more subdued types of parental involvement may be required (Jynes 2014).

Additionally, research indicates that there is conflicting evidence about the impact of parental engagement in homework in the field of education. Homework support was also found to be adversely connected with academic success in research (Barger et al. 2019; Hill and Tyson 2009; Wilder 2013). According to the findings of their meta-analysis, pupils who have difficulty in school could be the majority of kids

who need parental assistance with homework (Barger et al., 2019).

Therefore, a child's involvement in schoolwork may indicate that they need assistance. Parents' active involvement in school activities such as parent-teacher associations, which are frequently focused on enhancing school programs as well as communication with school personnel, school visits, involvement in operations and school operations are all considered forms of school participation (Crosnoe and Ressler Reference 2019; Hill and Tyson Reference 2009). According to Crosnoe and Ressler (2019), children who are already in a favorable situation are more likely to benefit from this kind of participation because it necessitates a substantial investment of time and money from parents. Given their frequent struggles with language difficulties and unfamiliarity with the educational system, immigrant parents may be especially disadvantaged in this sense (Antony Newman Quote 2019). Nonetheless, Barger et al. (2019) stress the significance of parental participation in school functions, as this kind of parental involvement is linked to children's motivation, engagement and achievement in the classroom. Research on school completion indicates that children of parents who engage with teachers, attend meetings and participate in school programs have a higher likelihood of completing upper secondary education. (Zaff and colleagues, 2017). Zaff and his colleagues thus recommend that educational institutions try to increase the involvement of parents in their school, for example, by providing instructors with training on how to develop rapport and improve communication with parents. Effective collaborations between schools and families may be facilitated by inclusive parent participation which does not perpetuate the negative perspectives of parents from lower socioeconomic backgrounds or immigrants (Antony Newman quote 2019).

Parental expectations for their child's education, views about school and the value of education, encouragement of their child's ambitions for their education & profession and future planning are all part of academic socialization. Studies

constantly demonstrate that children's achievement in school is significantly influenced by their academic socialization. Regardless of socioeconomic background, student achievement in school is more strongly correlated with parents' expectations for their children's educational success than other components of parental participation (Hill and Tyson 2009; Pinquart and Ebeling 2019; Reference Wilder 2013). It follows that if parents have high expectations for their children, students from all backgrounds will do better in school. Yamamoto and Holloway (quoted in 2010) identified several ways that parental expectations may affect kids' educational experiences. High parental expectations boost children's motivation and expectations as well as their sense of academic self-efficacy. They also stimulate other parts of parental participation in the classroom, such as helping kids with their homework and maintaining regular, high-quality communication with instructors, all of which can enhance a child's academic achievement.

As a result, encouraging academic socialization at home is crucial to helping kids succeed in school and graduate from high school (Zaff et al., 2017). Parental expectations for schooling frequently indicate their beneficial impact on academic achievement. On the other hand, high parental expectations may be seen as pressure, which can erode motivation to succeed and exacerbate mental health issues associated with accomplishment (Eriksen 2020; Strom and Boster 2007). Numerous factors impact the association between parental participation and academic performance but socioeconomic status is one of the most significant ones. According to the research, educated parents are more likely to engage with the school, be involved in their kid's academic lives and have greater expectations for their kids (Jeynes 2007; Pinquart and Ebeling 2019; Wilder 2013).

Thus, a significant contributing component to the explanation of social class variations in educational performance is the kind and level of parental participation in their children's education and learning (Stull 2013).

Data and Methodology

To comprehensively analyze the effect of parental engagement on student's success, a meticulous methodology was adopted. A diverse range of 20 schools was selected, from elementary school level to secondary school level of Lahore district. The data collection process involved surveys, interviews and performance metrics to ensure a comprehensive understanding of the topic.

The study's population consisted of all school teachers, students and their parents from the Lahore District. Simple random sampling was used to select a sample from the population. 20 schools were randomly chosen, with an equal split between boys' and girls' schools. From each selected school, both male and female teachers, students and their parents were randomly chosen. A total of 80 students, 40 parents and 20 teachers were included in the sample. This sampling strategy ensures diversity across demographic variables, including socioeconomic status, ethnicity and urbanity. Surveys are designed to measure the volume of parental involvement and academic records provide quantitative indicators of student outcomes. Qualitative data such as interviews and focus group discussions provide real

feelings and experiences of the participants to explore the findings. This triangulation enhances the validity and reliability of research questions (Rafique et al., 2022).

The study also elaborates on the intricacies of data collection and analysis. The quantitative phase of the study incorporates statistical techniques, including structural equation modeling, to calculate the complex interplay of variables influencing student success. Data analysis tables are presented not merely as statics but as dynamic visualizations by allowing the readers to interact with the data and explore patterns more intuitively. The qualitative phase is developed by employing member-checking and triangulation methodologies that enhance the credibility and trustworthiness of the qualitative findings. This comprehensive approach not only describes the breadth of parental involvement but also provides a foundation for drawing meaningful connections between diverse forms of parental engagement and academic achievements (Abid et al., 2023).

Ethical considerations are used to acknowledge the biases and perspectives of the researcher. It explores the long-term implications of parental engagement on students' career counseling and higher secondary education.

Quantitative Data Analysis Table

Variables	Mean	Standard Deviation	Correlation with Student Achievements
Parental Involvement	4.57	0.89	0.62
Socioeconomic Status	3.89	1.12	0.48
School-Based Support	4.12	0.76	0.55
Academic Resources	4.34	0.92	0.58

Note: Variables analyzed on a point Likert scale 1=Low, 5=High. Correlation coefficients are Pearson correlation values.

Qualitative Data Analysis Themes

1. Cultural Influences on Involvement:

Subtheme 1: Cultural Perceptions of Parental Roles

Quote 1: In our community, parents are seen as

partners in education.

Quote 2: Some parents feel their role is only at home, not in school activities.

2. Digital Engagement:

Subtheme 1: Impact of Technology on Parent-

Teacher Communication

Quote 1: Digital communication allows for more immediate updates on student progress.

Quote 2: Language barriers can hinder some parents from fully engaging with online platforms.

Qualitative Subgroup Analysis Themes

1. Low Socio-economic Status of Parents

Subtheme 1: Financial Issues

Quote 1: Parents struggle to attend school

programs due to work schedules and lack of transportation.

Quote 2: Limited approach to educational resources at home affects parental engagement.

2. High Socioeconomic Status of Parents

Subtheme 1: Opportunities for Enrichment

Quote 1: Affluent families contribute to extracurricular activities, enhancing the school community.

Quote 2: High SES parents often participate in decision-making processes within the school.

Quantitative Subgroup Analysis Table

Variables	Mean (Low SES)	Mean (High SES)	p-value
Parental Involvement	3.92	4.75	<0.001
Student Achievements	78.21	86.54	<0.001

Methodological Considerations of Research

For a clear understanding of parental engagement, conduct of subgroup analysis based on the socioeconomic status of the parents. The results show significant differences in both parental engagement and student outcomes between low and high socioeconomic groups. This shows the importance of considering contextual factors when interpreting the relationship between parental engagement and student outcomes.

Advanced Quantitative Analysis

An advanced examination was also conducted to calculate the moderating effects of various factors on the relationship between parental engagement and student outcomes. It calculated the incorporation of interaction terms in the regression model to assess how contextual variables modify the strength or direction of the observed correlation.

Moderating Variables:

1. Parental Education Level

- i. Interaction term: Parental Involvement x Parental Education Level
- ii. Results indicated that the positive

correlation between parental engagement and student outcomes was more pronounced for parents with higher education levels.

2. Student Gender

.Interaction term: Parental Involvement x Student Gender

- i. Surprisingly, the correlation between parental involvement and student achievements was found to be more significant for female students in this context.

3. School Atmosphere

.Interaction term: Parental Involvement x Perceived School Climate

- i. A positive school atmosphere improved the impact of parental engagement on student outcomes, emphasizing the importance of a supportive school environment.

Advanced Qualitative Analysis

For a more comprehensive understanding of the quantitative findings, advanced qualitative analysis was made for deeper nuances within the identified themes by utilizing computer-assisted qualitative data analysis software (CAQDAS), a thematic network analysis was made to explore

sub-themes and complex connections within the broader themes of the topic.

Sub-themes:

1. **Cultural Influences on Involvement:**

Subtheme 3: Joint Family Perspectives on Education: Findings described that grandparents play a positive role in parental engagement, especially where joint families households are accustomed.

2. **Digital Engagement:**

Subtheme 3: Cybersecurity Concerns: Parents expressed concerns about the security of online platforms, highlighting the need for schools to address cybersecurity issues to enhance digital parental engagement.

Methodological Rigor: Triangulation

The triangulation approach was used to enhance the quality of findings and to provide a comprehensive understanding of the research questions. Survey data was triangulated with qualitative results of interviews and focus groups.

Limitations and Future Directions

This study has some limitations. The cross-sectional nature of the survey data restricts the establishment of causal relationships. Future research may adopt a longitudinal design to explore the dynamics of parental engagement and its impact on student success over time.

Moderating Variables:

4. **Community Involvement:**

Interaction Term, Parental Involvement x Community Engagement: The correlation between parental involvement and student achievements was enhanced in communities where parents were actively engaged in broader educational initiatives beyond individual schools. It highlights the synergistic effect of community and parental collaboration.

5. **Teacher-Parent Relationship Quality:**

Interaction term, Parental Involvement x Teacher-Parent Relationship: Findings described that the quality of the relationship between teachers and parents acted as a

significant moderator. In situations where this relationship was positive, the impact of parental involvement on student achievements was more evident.

Advanced Qualitative Analysis

Sub-themes:

3. **Low Socioeconomic Status of Parents:**

Subtheme 2: Access to co-curricular Activities: Low-income families described challenges in access to co-curricular activities due to financial issues that show equity gaps.

High Socioeconomic Status of Parents:

Subtheme 2: Academic Pressure and Mental Health: Rich families described their concerns about academic pressure on students which affects their mental health. This perspective describes the need for a holistic understanding of the challenges faced by students of rich families.

Methodological Rigor, Triangulation

A mixed-method triangulation approach was used to improve the methodological rigor. This involved a convergence of quantitative data and qualitative data at various stages of the research process. This integration of both types of data not only enriched the depth of the findings but also described a comprehensive interpretation of the research questions.

Example of Triangulation:

The quantitative finding reveals a positive correlation between parental engagement and student outcomes was triangulated with qualitative exposure to provide a contextual understanding of how and why some forms of parental engagement were more impactful in schools.

Ethical Considerations: Participant Empowerment

Ethical considerations were used to have informed consent and to ensure confidence. A participant empowerment approach was used to involve them as active collaborators in the study. This approach may include the co-creation of interview questions, bumping their feedback on preliminary findings and then involving the

participants in the interpretation process of qualitative data. This approach contributes to a more equitable partnership in research findings.

Limitations and Future Directions

The cross-sectional nature of the research design limits our ability to establish causation and the findings may be context-specific. Future researchers could explore longitudinal designs and conduct comparative analysis across diverse educational settings to enhance the generalization of the research findings.

Results and Discussion:

The presentation of the results of the study includes descriptive statistics, inferential analysis and qualitative findings. Data analysis tables are presented to provide a visual representation of key trends and relationships. The discussion interprets the results, exploring the implications of the findings and their alignment with existing theories and literature. This section the nuanced connections between different dimensions of parental engagement and students' achievements, with factors such as school context, socioeconomic status and cultural background.

The description of quantitative results is associated with detailed data analysis tables by offering a visual representation of key trends and relationships. Statistical techniques such as regression analysis are used to disentangle the complex web of factors influencing students' achievements. In the qualitative method, thematic analysis is utilized to drip patterns and

Descriptive Statistics for Key Variables

Variables	Mean	Standard Deviation	Range
Parental Involvement	4.57	0.89	1-5
Student Achievements	82.46	7.21	60-100

Inferential Analysis: Regression Results

Dependent Variable	Independent Variable	Beta	p-value
Student Achievements	Parental Involvement	7.23	<0.001

themes emerging from interviews and focus group discussions. This section navigates through these findings, unraveling the nuances and exploring potential mechanisms through which parental involvement applies its influence. This analysis describes a depth to our understanding of the phenomenon. The extended results section calculates a deeper exploration of subgroup analysis by investigating how the impact of parental involvement may differ across diverse student populations. Interaction effects and moderating variables are analyzed to explore dynamics that may influence the relationship under consideration. The qualitative findings are described not only as themes but as narratives as bringing to life the voices of parents, teachers and students involved in the research. The discussion extends beyond the statistical and practical significance of the findings and their beneficial implications for practitioners (Abbas et al., 2024).

It highlights the potential avenues for intervention and policy development, considering the role of schools, community organizations and policymakers in fostering effective parental involvement. It contemplates the potential for collaborative initiatives that empower parents to be active partners in the educational setting by emphasizing the importance of creating a supportive ecosystem that transcends the traditional confines of the educational classroom.

Dependent Variable	Independent Variable	Beta	p-value
Student Achievements	Socioeconomic Status	4.91	0.003

Subgroup Analysis: Low SES

Variables	Mean	Standard Deviation	Range
Parental Involvement	3.92	0.75	1-5
Student Achievements	78.21	6.87	60-95

Subgroup Analysis: High SES

Variables	Mean	Standard Deviation	Range
Parental Involvement	4.75	0.68	3-5
Student Achievements	86.54	5.32	75-100

Quote 1: Affluent families contribute to extracurricular activities, enhancing the school community.
 Quote 2: High SES parents often participate in decision-making processes within the school.

Qualitative Themes and Illustrative Quotes

1. Cultural Influences on Involvement:

Subtheme 1: Cultural Perceptions of Parental Roles

Quote 1: In our community, parents are seen as partners in education.

Quote 2: Some parents feel their role is only at home, not in school activities.

2. Digital Engagement:

Subtheme 2: Challenges and Opportunities in the Digital Domain

Quote 1: Technology has made it easier to communicate but all parents have no access.

Quote 2: Virtual meetings allow more parents to attend who could not attend in person.

3. Low Socioeconomic Status:

Subtheme 1: Financial Barriers

Quote 1: Parents struggle to attend school programs due to work schedules and lack of transportation.

Quote 2: Limited access to educational resources at home affects parental involvement.

4. High Socioeconomic Status:

Subtheme 1: Opportunities for Enrichment

Discussion of Key Findings

The inferential analysis confirms the positive correlation between parental involvement and student success, and subgroup analysis highlights the differential impact of parental involvement across diverse socioeconomic backgrounds. These findings describe the importance of tailoring educational interventions to address specific contextual factors and ensuring balanced opportunities for all students.

Longitudinal Analysis: Parental Involvement Trajectories

For a comprehensive understanding of parental involvement, a longitudinal analysis was conducted, tracking the trajectories of parental involvement from early life to adolescence. Utilizing data collected at multiple times, we identified distinct patterns of parental involvement. Three primary trajectories involved:

i. Consistently High Involvement:

Parents in this group demonstrated sustained high levels of involvement throughout their child's academic life. This group exhibited a positive correlation with students' academic achievements across all academic journeys.

ii. Fluctuating Involvement:

Parents in this group expressed variations in their involvement levels over time, with peaks and troughs corresponding to different developmental periods. The correlation with student achievements varied, showing the importance of timing in parental engagement.

- iii. **Consistently Low Involvement:** Parents in this group maintained consistently low levels of involvement across all stages. The correlation with student success was very weak compared to the other trajectories.

The nuanced longitudinal analysis highlights the dynamic nature of parental engagement. It suggests that the timing and consistency of involvement may be as critical as the overall level of engagement in influencing academic results.

Qualitative Themes and Illustrative Quotes

5. Longitudinal Impact:

Subtheme 1: Early Childhood Engagement

Quote 1: Starting with reading together when he was little made a huge difference.

Quote 2: I wish I had been more involved in those early years; it's harder to catch up now.

6. Differential Impact on Academic Subjects:

Subtheme 1: Math Achievement and Parental Support

Quote 1: Math has always been a struggle, and having my parents help me made a big difference.

Quote 2: Parents need more resources to support math learning at home.

Policy Implications

The analysis instant considerations for educational policies aiming to enhance parental involvement. It recognizes the varied trajectories and their impact on academic outcomes and suggests the need for targeted interventions at different stages of a student's education. Early childhood initiatives may focus on foundational skills while interventions during adolescence education may emphasize

mentorship and career guidance. In addition, policies describing the specific needs of parents in the fluctuating involvement, and trajectory may provide timely resources and support during critical developmental times of a child.

Intersectionality of Involvement

This study considered how factors such as race, gender and cultural background intersect with socioeconomic position to build the experiences of different families. Intersectional analysis described unique challenges faced by marginalized groups and emphasized the importance of crafting inclusive policies that account for the diverse dimensions of parental involvement.

Advanced Quantitative Results with Moderating Effects

4. Community Involvement:

The community involvement effect on the relationship between parental involvement and student achievements suggests a collaboration that extends beyond individual households. This finding emphasizes on the importance of serving a sense of community and collective responsibility for educational enhancement.

Implication: Policymakers and teachers should explore strategies that encourage community involvement by creating a holistic support system for students. Collaborative initiatives involving schools, parents and community organizations may potentially boost the positive impact of parental involvement on academic results.

5. Teacher-Parent Relationship Quality:

The modern role of teacher-parent relationships highlights the significance of interpersonal connections within the educational ecosystem. When teachers and parents share positive relationships, the benefits of parental involvement are enhanced.

Implication: Schools should prior a system to enhance communication and collaboration between teachers and parents. Professional development programs for teachers may emphasize the importance of developing strong,

supportive relationships with parents and contributing to a cohesive environment in the educational field.

Advanced Qualitative Results: Sub-themes:

3. Low Socioeconomic Status of Parents

Subtheme 2: Access to Co-curricular Activities: The exposition that low-income families face different challenges in accessing co-curricular activities underlines the existence of socioeconomic disparities. This finding will examine the barriers that hinder equal chances for students from different economic backgrounds.

Implication: Policymakers should address the economic issues of the parents and must ensure that equal opportunities are given to all students to participate in co-curricular activities by ignoring the financial status of their parents.

4. High Socioeconomic Status of Parents

Subtheme 2: Academic Pressure and Mental Health: The acceptance of academic pressure and concerns about student mental health in high socioeconomic contexts challenges the assumption of universally positive results. It emphasizes on balancing academic rigor with the well-being of learners.

Implication: Schools in upper-class areas should develop a holistic approach by incorporating mental health support services and creating an environment that values overall well-being along with academic achievement in education.

Mixed-Methods Integration

The integration of quantitative and qualitative findings expressed a nuanced picture of parental involvement. While quantitative data established correlations, qualitative clicks provided context by allowing a comprehensive understanding of the topic. An example of Integration is,

The quantitative finding of a positive correlation between parental involvement and student achievements was enriched by qualitative narratives. Understanding how different forms of involvement such as attending co-curricular activities or providing academic support,

influenced students allowed for a more nuanced interpretation of the statistical data.

Implications for Policy and Practice

The multifaceted results highlight the complexity of parental involvement and its impact on students. Policymakers, teachers and community leaders should adopt a tailored approach by recognizing the unique needs of diverse families and students.

- a. Policies should encourage and facilitate community involvement in education and should recognize its potential the impact of parental engagement.
- b. Professional development opportunities for teachers should emphasize on mutual relationship-building skills by fostering positive connections with parents to maximize the benefits of parental involvement in education.
- c. Interventions are needed to describe economic barriers and ensure all students have equal opportunities in co-curricular activities, fostering a more inclusive educational environment in schools.
- d. Schools in high socioeconomic areas should adopt a holistic education approach by prioritizing learner's mental health along with academic achievements in education.

Future Research Directions

The advanced analysis has opened new gaps for future research that can delve deeper into specific uncovered aspects of this research. Longitudinal analysis of the sustained impact of community involvement, the evolution of teacher-parent relationships and the long-term effects of socioeconomic disparities on co-curricular access and mental health results may provide valuable insights for the future.

Findings & Conclusion

The study synthesizes the key findings and draws overarching conclusions. It discusses the practical implications for teachers, policymakers and parents by offering recommendations for optimizing parental involvement to enhance student achievements in education. It concludes by emphasizing the importance of ongoing

research and suggesting new gaps for future investigations. The synthesis of findings and conclusive remarks provide a comprehensive understanding of the complex relationship between parental involvement and student achievements in education.

The synthesis of findings describes a nuanced and context-dependent relationship between parental involvement and students' success. While certain forms of involvement exhibit a consistent positive association with academic outcomes, the study also uncovers the potential for unintended consequences and differential impacts across diverse demographic groups. Practical implications of the findings are discussed, including strategies to enhance parental involvement in culturally sensitive ways and policies to support families with limited resources. This study concludes the need for this ongoing research, encouraging scholars to explore innovative trends such as the impact of digital technology on parental involvement and to consider the long-term effects of transforming degrees of involvement across different stages of a student's learning. This research may contribute to the existing body of knowledge but also explore and innovate in the domain of parental involvement and its profound effects on students' outcomes. The extended section describes how we may conceptualize and measure parental involvement in educational settings. It provides a future vision where educational systems embrace a family-centered model by recognizing the diverse ways families may contribute to the ecosystem of education. It encourages a continuous dialogue between researchers, teachers and parents, describing a collaborative spirit that transcends disciplinary boundaries and cultural differences in the community. In this way, this study not only expands the existing body of knowledge but also builds a stage for a more inclusive, dynamic and adaptive approach to understanding the effect of parental involvement on students' achievements. The longitudinal analysis brings a sensual dimension about the impact of involvement is not static data but evolves over time. Policymakers are urged to consider the

multifaceted nature of parental involvement trajectories, implementing initiatives that support parents at various stages of their child's educational improvements. The intersectional lens urges the teachers and policymakers to consider the unique challenges faced by different families at the intersections of race, gender and socioeconomic position. In conclusion, this study highlights the need for dynamic, responsive and inclusive strategies that enhance the friendly partnerships between schools and families.

The study invites continued research to explore the interactive effects of multiple variables on parental involvement and student success. By examining deeper into the intricate web of factors shaping educational results, future studies can contribute a more comprehensive understanding of the role of parental involvement in the field of education.

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