



Parental Involvement in Elementary School Students' Academic Achievement: A Systematic Literature Review (SLR)

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Abstract. Parental involvement is widely recognized as a critical factor influencing the academic success of elementary school students. This systematic literature review aims to examine the extent to which parental engagement contributes to student achievement by exploring various forms of involvement, including academic support, school participation, and home learning environments. Using the PRISMA methodology, this study systematically analyzes relevant research published within the last ten years, with data exclusively sourced from Google Scholar. The primary objectives of this study are to (1) assess the impact of parental involvement on elementary students' academic performance, (2) identify key barriers that hinder parental engagement, and (3) propose effective strategies to enhance parental participation in education. The findings reveal a strong correlation between parental involvement and improved student outcomes, demonstrating that both direct assistance and indirect support positively influence motivation, cognitive development, and overall academic success. However, disparities in parental engagement persist due to socio-economic challenges, time constraints, and limited access to educational resources. The study underscores the necessity of structured parental involvement programs and digital interventions to bridge these gaps. In conclusion, fostering collaboration among parents, educators, and policymakers is essential for optimizing student learning outcomes. Future research should explore innovative engagement strategies, particularly those integrating technology, to ensure equitable parental participation in education. These findings provide valuable insights for the development of effective policies and interventions aimed at enhancing parental involvement in early childhood education.

Keywords: Parental Involvement, Academic Achievement, Elementary Education, PRISMA Methodology, Digital Interventions, Educational Policy.

1 Introduction

Academic achievement in elementary school is a critical determinant of a child's long-term educational success, serving as a foundation for cognitive development and future

academic progression [1]–[3]. Studies have consistently demonstrated that early academic performance is closely linked to students' self-confidence, intrinsic motivation, and lifelong learning commitment [4]. While academic success is influenced by multiple interrelated factors, parental involvement has emerged as one of the most significant contributors to student achievement [5]. Research suggests that students with actively engaged parents exhibit better cognitive skills, stronger study habits, and a more positive attitude toward learning [6]. Given its far-reaching implications, understanding the mechanisms through which parental involvement influences academic performance is essential for designing effective educational interventions.

Parental involvement manifests in various forms, including home-based support, school participation, and academic engagement. Home-based support involves activities such as reading with children, monitoring homework, and establishing structured learning routines [7]. School participation includes attending parent-teacher conferences, volunteering in school events, and engaging in collaborative decision-making with educators [8]. Meanwhile, academic engagement encompasses direct interactions with teachers, discussions about schoolwork, and reinforcing learning beyond the classroom [9]. Among these, research indicates that academic engagement and home-based support have the most significant impact on student performance, particularly in fostering independent learning skills and motivation [1]. However, despite the well-documented benefits, disparities in parental involvement persist, largely due to socio-economic constraints, parental education levels, and time limitations [10].

One of the major barriers to effective parental involvement is the widespread misconception that education is solely the responsibility of teachers [11]. This belief often stems from cultural norms, limited awareness of the parental role in learning, and institutional communication gaps [12]. Addressing this issue requires proactive initiatives from schools, such as parent education programs, structured engagement strategies, and digital platforms that facilitate home-school collaboration [13]. Research suggests that when schools actively communicate the importance of parental participation and provide accessible engagement opportunities, parents are more likely to contribute meaningfully to their children's education [14]. Consequently, fostering strong parent-school partnerships is essential for mitigating disparities in parental involvement and ensuring equal academic opportunities for all students [15].

Although previous studies have extensively examined the relationship between parental involvement and student achievement, existing literature predominantly focuses on middle and high school students, leaving a gap in understanding its role at the elementary level. While meta-analyses have established a positive correlation between parental engagement and academic success [9], few studies provide a comprehensive synthesis of recent findings specific to early education. Given the distinct developmental characteristics of younger students, further research is required to explore the most effective parental involvement strategies for elementary learners [16].

This study addresses these gaps by systematically analyzing existing research on parental involvement in elementary education. The primary objectives are to (1) examine the impact of parental involvement on elementary students' academic achievement, (2) identify key factors that influence parental engagement, and (3) propose evidence-based strategies to enhance parental participation in schools. By providing a structured

synthesis of empirical findings, this study contributes to the development of effective educational policies and intervention programs aimed at strengthening parent-school collaboration.

2 Materials and Methods

This study employs a Systematic Literature Review (SLR) methodology to comprehensively analyze existing research on parental involvement and its impact on elementary school students' academic achievement. The SLR method is a structured and replicable approach that facilitates the systematic collection, evaluation, and synthesis of relevant literature in a rigorous and unbiased manner [17]. This method is particularly advantageous in identifying key trends, theoretical perspectives, and research gaps within a specified domain. By synthesizing findings from multiple studies, SLR enables the development of a holistic understanding of the subject matter, reducing the risk of bias that may arise in narrative reviews [18]. The systematic nature of this approach enhances the credibility of the study and ensures that conclusions are drawn based on a comprehensive assessment of previous research. In the context of this study, the SLR method is particularly valuable in consolidating diverse perspectives and empirical evidence regarding the role of parental involvement in elementary education. Furthermore, it allows for the identification of effective parental engagement strategies and their implications for student learning outcomes, providing a robust foundation for future research and educational policymaking.

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) framework is applied in this study to ensure methodological transparency, consistency, and reproducibility throughout the review process. PRISMA is widely recognized for its standardized and structured approach to conducting systematic reviews, offering explicit steps for identifying, screening, and selecting relevant studies [19]. This framework enhances the credibility of the review by reducing potential biases and ensuring that only high-quality and pertinent sources are included in the analysis. The PRISMA process consists of four essential stages: identification, screening, eligibility assessment, and inclusion. During the identification phase, relevant literature is gathered from multiple databases, including Google Scholar, Scopus, Web of Science, and ERIC, using predefined keywords and Boolean operators to optimize the search results. The screening phase involves the removal of duplicate records and the exclusion of studies that do not align with the research objectives. The eligibility assessment stage further refines the selection process by critically evaluating each study based on well-defined inclusion and exclusion criteria, ensuring methodological rigor and relevance. Finally, the selected studies are synthesized to extract key themes, patterns, and insights, facilitating a comprehensive understanding of parental involvement and its influence on academic achievement. Implementing PRISMA in this study ensures a systematic, objective, and reproducible methodology that strengthens the reliability and validity of the findings.

The data for this study were collected from Google Scholar, Scopus, Web of Science, and ERIC to enhance the comprehensiveness of the review and minimize potential selection bias. While Google Scholar provides broad access to scholarly literature, Scopus and Web of Science ensure coverage of high-impact, peer-reviewed journals, and ERIC offers specialized educational research sources. The inclusion of these databases mitigates the risk of missing relevant studies and strengthens the robustness of the findings. To ensure the inclusion of high-quality studies, only peer-reviewed journal articles published within the last ten years were considered. This time frame was chosen to capture recent developments and contemporary findings on parental involvement in elementary education while maintaining relevance to current educational practices. Although foundational studies beyond this time frame were acknowledged where necessary, the focus remained on recent empirical evidence. By incorporating multiple databases, this study ensures consistency in data collection while maintaining a high standard of scholarly rigor in the selection of literature.

The research process involved a systematic search using carefully selected keywords to retrieve relevant studies. The keywords used in this study included "parental involvement," "academic achievement," "elementary school," "student performance," and "education outcomes." Boolean operators such as AND and OR were applied to refine the search results and ensure comprehensive coverage of relevant studies. The search queries were designed to maximize the retrieval of studies that specifically examined the relationship between parental involvement and student academic performance. After obtaining the initial set of articles, a thorough screening process was conducted to remove duplicates and irrelevant studies. The remaining studies were then evaluated based on predefined inclusion criteria, which required them to have an empirical research focus, employing quantitative, qualitative, or mixed-methods approaches. Additionally, studies had to be directly relevant to elementary education, clearly operationalize the concept of parental involvement, and demonstrate methodological rigor, including appropriate sample sizes, statistical analyses, and study designs. Only studies published in peer-reviewed journals were considered for inclusion. Conversely, studies were excluded if they focused exclusively on high school or university-level education, lacked empirical data, or were opinion-based articles without robust methodological frameworks. This systematic approach ensured that only high-quality and pertinent studies were included in the final analysis.

The synthesis of findings was carried out through a qualitative analysis of the selected studies. Each study was carefully examined to identify key themes, patterns, and emerging trends in the literature. The qualitative synthesis involved categorizing the studies based on factors such as the type of parental involvement examined, the impact on student outcomes, and contextual factors influencing engagement. By aggregating and analyzing the findings from multiple studies, this review provides a comprehensive understanding of the ways in which parental involvement influences academic achievement. The conclusions drawn from this synthesis are based on the collective evidence presented in the literature, ensuring that the study offers well-supported insights into the role of parental engagement in elementary education. Furthermore, potential research gaps and areas for future investigation are identified, contributing to the ongoing

discourse on effective strategies for enhancing student learning through parental involvement.

While this study follows a rigorous SLR methodology, certain limitations must be acknowledged. The focus on peer-reviewed journal articles may exclude relevant insights from unpublished studies, reports, or non-peer-reviewed sources. Additionally, although multiple databases were used, publication bias remains a potential concern. Future research could further enhance comprehensiveness by incorporating gray literature, conference proceedings, and longitudinal studies to provide a more nuanced understanding of parental involvement across diverse educational settings.

2.1 Literature Search and Article Selection Process

This study adhered to the PRISMA (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to ensure a structured and transparent literature search and selection process. The search was conducted exclusively through Google Scholar, as specified in the methodology. The inclusion criteria for article selection were: (1) studies published within the last ten years, (2) peer-reviewed journal articles, (3) empirical research focused on parental involvement and academic achievement at the elementary level, (4) articles written in English, and (5) studies employing qualitative, quantitative, or mixed-methods approaches. Articles that did not explicitly examine the relationship between parental involvement and student academic performance, review papers without empirical data, and those focused on higher education or non-school-age children were excluded.

The initial search using predefined keywords and Boolean operators yielded 350 articles. After removing duplicates and irrelevant studies based on title and abstract screening, 78 articles remained. A full-text review was conducted to assess methodological rigor and relevance, leading to the selection of 22 studies that met all inclusion criteria. The selection process is illustrated in Figure 1 following the PRISMA flowchart approach.

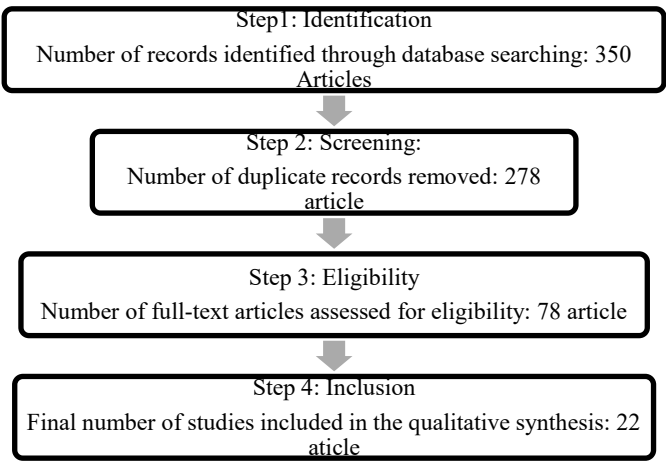


Fig. 1. PRISMA flow diagram for article selection

3 Result

3.1 Summary of Selected Studies

The selected studies were analyzed to extract key themes, methodologies, and findings. These studies provide a comprehensive understanding of how parental involvement influences academic performance among elementary students. The findings indicate that various forms of engagement, including direct assistance with homework, communication with teachers, and participation in school activities, significantly enhance student achievement. Additionally, the literature highlights key challenges such as socio-economic disparities, parental education levels, and institutional support mechanisms, which affect the extent of parental involvement in education.

3.2 Synthesis of Findings

The qualitative synthesis of the selected studies revealed common patterns in the effectiveness of parental involvement. Studies consistently demonstrate that higher levels of parental engagement correlate with improved academic outcomes. However, the impact varies depending on factors such as the type of involvement, cultural context, and socio-economic background of the families. Research suggests that schools play a pivotal role in facilitating parental involvement through targeted programs and outreach efforts. Furthermore, studies indicate that indirect involvement, such as fostering a home environment that values education, can be just as impactful as direct academic assistance. Despite the clear benefits of parental involvement, challenges such as time constraints, socio-economic limitations, and lack of awareness continue to hinder effective engagement. To address these barriers, schools should implement structured parental engagement programs, offer flexible meeting schedules, and leverage digital tools to enhance communication between parents and educators. Additionally, providing training workshops, online learning resources, and culturally responsive outreach initiatives can help parents overcome these obstacles and actively support their children's education.

The study also acknowledges the role of digital tools in increasing parental engagement. However, specific technology-based interventions and their effectiveness warrant further exploration. Research suggests that mobile applications, virtual parent-teacher conferences, and AI-driven educational platforms can significantly improve parental participation by providing accessible and real-time updates on student progress. Future studies should assess the comparative effectiveness of these interventions across different socio-economic and cultural backgrounds to determine the most suitable approaches for diverse educational contexts. This systematic review contributes to the broader discourse on parental engagement by synthesizing empirical evidence and identifying gaps that require further research. Future studies should explore innovative approaches to parental involvement, particularly in underprivileged communities, to en-

sure equitable educational opportunities for all students. Additionally, examining longitudinal data on parental engagement trends may offer deeper insights into the sustained impact of different involvement strategies on student outcomes.

4 Discussion

The results of this systematic literature review highlight the significant role of parental involvement in shaping elementary school students' academic achievement. The synthesis of selected studies consistently demonstrates that increased parental engagement is positively correlated with improved student performance. Various forms of parental involvement, including direct academic support, participation in school activities, and effective communication with teachers, contribute to better educational outcomes [20]. The findings align with the theoretical framework which suggests that parents' beliefs about their role in education and the invitations from schools influence their level of involvement [21]. Furthermore, the analysis identifies that parental involvement positively affects students' motivation, study habits, and overall cognitive development. However, despite the clear benefits, disparities in parental engagement persist due to socio-economic constraints, time limitations, and lack of awareness about effective participation strategies [22]. These findings indicate a need for targeted interventions that encourage and facilitate parental participation in children's education.

The results also address the research questions outlined in the introduction by confirming the extent to which parental involvement impacts academic achievement and identifying the main barriers preventing parental participation. The review supports the notion that a collaborative approach between schools and families significantly enhances student learning experiences. The findings reinforce that parental involvement is a multi-dimensional construct, encompassing academic assistance at home, emotional support, and engagement in school activities. Importantly, the results highlight that indirect parental support, such as fostering a learning-friendly environment at home, can be just as impactful as direct academic assistance [23]. This insight suggests that parental engagement should not be limited to direct classroom participation but should extend to home-based learning practices that cultivate academic curiosity and self-discipline in students.

Furthermore, the discussion links the findings with prior theories and empirical evidence, emphasizing how different socio-economic backgrounds influence the level and effectiveness of parental engagement. Higher socio-economic status (SES) parents are more likely to engage actively in their child's education, providing better learning resources and support structures. Conversely, lower SES families often face significant barriers such as financial constraints and lack of access to educational materials, limiting their ability to support their children academically [24]. Digital parental involvement tools, including online communication platforms and virtual learning environments, can bridge this gap by offering low-cost, accessible means of parental engagement. This highlights the potential for technology-based interventions to enhance parental involvement across different economic demographics.

The research gap identified in previous literature is further addressed in this study by systematically synthesizing findings on parental involvement in elementary education. While prior studies have predominantly focused on middle or high school students, often overlooking the crucial developmental stage of early education, this review provides a more refined understanding of how parental engagement influences foundational learning. Research suggests that early academic experiences significantly impact future educational attainment, making it imperative to examine parental involvement at this stage [16]. The novelty of this study lies in its comprehensive and structured approach, integrating diverse perspectives to present a holistic understanding of parental involvement and its correlation with student performance. By systematically analyzing existing studies, this review addresses critical gaps in understanding, particularly regarding how different forms of parental engagement—academic support, emotional reinforcement, and school collaboration—affect learning outcomes [25]. Furthermore, the findings reinforce the argument that structured school-led initiatives play a crucial role in fostering effective parental participation regardless of socio-economic disparities. By bridging the existing research gap, this study contributes valuable insights for educators, policymakers, and researchers aiming to enhance student success through improved parental engagement strategies.

The implications of this study are significant for both educators and policymakers, as it highlights the necessity of fostering a collaborative learning environment between schools and families. Schools should actively develop initiatives that encourage parents to engage in their children's education by offering targeted resources, structured workshops, and accessible communication platforms that facilitate ongoing involvement [26]. Research has shown that when schools create inviting and inclusive opportunities for parental engagement, student motivation and academic performance improve [27]. Additionally, policymakers should consider implementing policies that promote equal access to parental involvement programs, particularly for families facing socio-economic challenges that may hinder their participation [28]. Providing financial support, offering flexible engagement opportunities, and leveraging digital tools can help mitigate these barriers and ensure more equitable educational outcomes. Future research should explore innovative approaches to parental involvement, such as the role of artificial intelligence in personalized learning experiences, gamified educational interventions, and the effectiveness of mobile applications in fostering parent-teacher communication [29]. By addressing these gaps, educational institutions can create a more inclusive and dynamic learning environment that maximizes the potential benefits of parental engagement. Ultimately, these efforts will lead to sustained improvements in academic outcomes for elementary school students, reinforcing the critical role of parental involvement in shaping a child's educational success.

5 Conclusion

This systematic literature review has provided a comprehensive analysis of the impact of parental involvement on the academic achievement of elementary school students. The findings highlight that active parental engagement plays a crucial role in shaping

students' academic success through various forms of support, including direct assistance with schoolwork, communication with teachers, and fostering a positive learning environment at home. The results consistently demonstrate that higher levels of parental involvement correlate with improved student motivation, cognitive development, and overall academic performance. Furthermore, the study confirms that indirect parental engagement, such as establishing routines and emphasizing the value of education, can be just as impactful as direct academic assistance. However, despite these well-documented benefits, disparities in parental participation persist due to socio-economic constraints, time limitations, and varying levels of parental education, indicating the need for more inclusive engagement strategies.

The study addresses the research questions by affirming that parental involvement is a multi-dimensional construct that significantly influences students' academic achievements. The evidence supports the idea that fostering strong partnerships between parents and schools enhances learning outcomes and creates a more conducive academic environment. Previous research has also demonstrated that socio-economic status plays a critical role in determining the extent of parental engagement, with higher-income families generally having more opportunities and resources to support their children's education. However, the integration of digital tools and school-based interventions presents promising avenues for increasing parental engagement across diverse socio-economic backgrounds. These findings emphasize the importance of policy initiatives and institutional support to bridge the gap between parental involvement and student academic success. The novelty of this study lies in its systematic synthesis of existing research, filling a gap in the literature by focusing specifically on elementary education. While previous studies have largely examined parental involvement at the secondary and higher education levels, this review provides deeper insights into the foundational years of a child's academic development. By consolidating evidence from multiple studies, the research underscores the need for structured parental involvement programs that extend beyond conventional classroom participation. Schools and policymakers must take proactive steps to implement strategies that encourage parental engagement through accessible resources, structured communication channels, and socio-economic support mechanisms.

Beyond elementary education, parental involvement has long-term implications for student success in middle school, high school, and higher education. Research suggests that students who receive strong parental support during their early years are more likely to maintain high academic performance, develop self-regulated learning skills, and pursue higher education. Parental engagement also contributes to students' emotional resilience and adaptability, equipping them with the skills necessary to navigate academic challenges in later educational stages. Therefore, future research should further investigate the sustained impact of parental involvement across different educational levels and explore strategies to maintain parental engagement as students advance in their academic trajectories. In conclusion, this study reaffirms that parental involvement is a pivotal factor in shaping students' academic achievement, yet challenges remain in ensuring equitable participation among all families. Addressing these barriers requires a collaborative effort between educators, policymakers, and parents to

create a supportive educational ecosystem that fosters student success. By implementing targeted interventions and embracing technological advancements, schools can enhance parental engagement and, consequently, improve educational outcomes for elementary school students. This research provides a valuable foundation for future studies and policy development aimed at strengthening parent-school collaboration and maximizing the benefits of parental involvement in early education.

6 Limitations, Future Research, and Implication

While this systematic literature review provides significant insights into the role of parental involvement in elementary students' academic achievement, several limitations must be acknowledged. First, the study relies exclusively on secondary data obtained from existing literature, which may introduce inherent biases based on the original authors' methodologies and sample populations. Additionally, this review is limited to studies published within the last ten years, potentially omitting valuable insights from older research that could provide a broader historical perspective. Another limitation is the exclusive use of Google Scholar as the primary database, which, while comprehensive, may not encompass all relevant academic contributions from other databases such as Scopus or Web of Science. Furthermore, variations in parental involvement across different cultural and educational contexts were not fully explored due to the constraints of available literature. These limitations highlight the need for further empirical research that incorporates primary data collection, cross-cultural comparisons, and mixed-method approaches to gain a deeper understanding of parental engagement in education.

Future research should address these gaps by conducting longitudinal studies to examine the long-term impact of parental involvement on students' academic trajectories. Additionally, more research is needed to explore the effectiveness of digital interventions, such as AI-driven educational tools and virtual parent-teacher communication platforms, in enhancing parental engagement across diverse socio-economic backgrounds. Policymakers and educators should also consider developing structured intervention programs that promote inclusive parental involvement, ensuring equitable access to educational resources regardless of economic status. The findings of this study have significant implications for educational institutions, as they emphasize the necessity of fostering strong parent-school collaborations. By implementing targeted policies and leveraging technological advancements, schools can bridge existing gaps in parental involvement and enhance overall student learning outcomes. The continued exploration of innovative engagement strategies will be essential for optimizing parental participation and promoting sustained academic success among elementary students.

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