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# LEARNING ACROSS TWO WORLDS: A SYSTEMATIC REVIEW OF HOW PARENTAL INVOLVEMENT SHAPES DIGITAL LITERACY IN SCHOOL AND HOME ENVIRONMENTS

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## ABSTRACT

*The systematic review examined whether parental involvement at home and school levels contributed to the attainment of digital literacy in children. It focused on understanding the role of parents in shaping digital learning outcomes amid a growing technology-assisted education system. The review analyzed 15 qualitative studies, following the PRISMA 2020 guidelines. Relevant research was sourced from five academic databases and screened using predetermined inclusion and exclusion criteria. This review provides full detail on the number of reviewers involved at each stage or measures of inter-rater reliability, which could enhance methodological transparency. Data were extracted and appraised using a structured template and the Joanna Briggs Institute tools to assess methodological quality. The findings showed that parental digital competence was crucial for providing long-term and consistent support, while a lack of digital literacy often led to disengagement. Socio-economic and cultural barriers such as limited access to devices, unstable internet connections, and language challenge further restricted parental participation. School-parent communication improved through digital training workshops. The study concluded that bridging the digital divide required inclusive, community-focused policies and equitable access to digital tools, supported by strong home-school partnerships.*

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**KEYWORDS:** School Communication, Educational Equity, School-Home Partnership, Digital Literacy, Parental Involvement.

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## 1. INTRODUCTION

Digital literacy is a focus of the 21st century, a foundational practice required to succeed in school, prepare to work, and participate in life in a technology-intensive world. Online platforms and digital tools have become a mainstay in teaching, classroom management and communication, and testing. Since the children have been raised with digital media, digital literacy cannot only be instructed in schools; it should also be taught at home. Parents also have a larger role to play in terms of supporting the development of digital capabilities among the children in this dual environment (Josué *et al.*, 2023). Indeed, the first role parents play is to teach kids about technological advancements, online security, and digital intervention into real life (Martin *et al.*, 2021). Schools provide systematic instructions; nevertheless, education at home is unstructured and equally significant.

This systematic review examines the role that parents play in the development of digital literacy of school-aged children, both at home and in school. The subject of concern is that online classes have become a current constituent of national standards, and technology is increasingly affecting the life of children, both at school and in their friendships (Vedechkina and Borgonovi, 2021).

In fact, digital literacy is principally concerned with being able to locate, evaluate, apply, disseminate, and create material through electronic devices. It addresses such things as using the computer, navigating the internet, how to manage information, writing or speaking online, and staying safe when doing that (Lukasz and Ludvik, 2020). Schools attempt to develop this skill set in the classroom by using such lessons as computer science classes, online research projects and multimedia speeches, and online tests. Hence, digital literacy can be supported by parents in various ways: parents can monitor homework on digital media, do lessons in educational applications, discuss behavior on the Internet, limit screen time, or demonstrate proper technology use. There are different factors that influence the sense of involvement among parents, such as socio-economic status, educational level, cultural regulations, availability of devices and the internet, and the support provided in schools (Njeri and Taym, 2024). There are those parents who do not mind taking part in the digital education of their children, and there are those who find it difficult due to the lack of skills, the lack of time, and the failure to feel comfortable with the online tools of the school. Thus, the digital competence of children may be different, as not all families have the same resources

that can assist with the digital learning process. Schools are likely to assume that the parents have knowledge and can assist in digital learning, but this may not be equal to what parents can give (Koskela *et al.*, 2020). Due to this fact, students in some cases form a complete connection between what they are taught at home to what they learn at school, but others just find a gap that derails their digital development.

Both aspects, digital literacy and parent engagement, are mostly acknowledged to be significant; however, several problems reduce the extent to which children can be able to develop digital capabilities in the classroom and at home. The digital divide between families is one of the greatest problems (Bekova *et al.*, 2021). Low-income families lack the devices, strong internet connections, and appropriate digital content.

In addition, the differences in culture, language and in orientation to technology add up to the challenges to establishing positive parental involvement with online education. Some of the caregivers treat screen activities as a time-killer instead of a teacher, and some of them value the traditional academic achievements over skills needed in modern schools (Lau and Lee, 2021). Such conflicting views hamper an alignment with the school practices and reduce the potential of family support in digital literacy.

This systematic review aims to explore and synthesize the available evidence regarding the role of parental involvement in the development of literacy with digital devices among younger children in schools and at home. This review of peer-reviewed articles seeks to identify emerging patterns, uncover new themes, and highlight gaps in the current understanding of nature and impact of parental involvement in digital learning (Niklas *et al.*, 2021).

### **The specific objectives of the review are**

- To explore the many ways in which parents support or hinder their children's digital literacy growth at home and in partnership with schools.
- To analyze diverse factors such as parental competence, socio-economic status, digital access and school support that effect parental involvement.
- To identify barriers faced and common challenges by people in supporting digital literacy.
- To provide references for policymakers, parents and educators on improving school-home partnerships for digital literacy growth.

The systematic review under consideration

provides the central value to the modern debates about digital learning. Since the use of digital technologies in different educational systems has become rather popular all over the world, there is a very strong need to fully understand the importance of parental engagement in this change (Nudin et al., 2024). The synthesized evidence presented here outlines a broad model of digital literacy education that takes the explicit responsibility between both formal institutions and family settings into account. In the current discussion, parental involvement is placed in the wider context of educational engagement, providing schools with a strict framework with which they should define the types of support that families need to make meaningful contributions to the digital learning of their children. This review also explains some of the problems that families face and how they can address such problems via specific policy intervention and welcoming institutional practices. The findings will provide policymakers with valuable insights as well as the development of strategies that neutralize the differences in digital equity and allow the granting of digital learning to all students. To maintain clarity and avoid unnecessary redundancies, this review focuses on highlighting the research gap and synthesizing key findings that directly address the objectives of the study.

## 2. METHODOLOGY

### 2.1. Protocol and Guidelines

The current systematic review was based on the PRISMA 2020 (Preferred Reporting Items for Systematic Reviews and Meta-Analyses) guidelines to guarantee transparency, replicability, and methodological quality. A potential review protocol was laid down before commencing the search process. The protocol identified the review aims, the eligibility criteria, the search terms, the data sources, the screening strategies, and the synthesis strategy. The review was not intended to include registration of the protocol in PROSPERO, although it served as the point of reference in making uniform decisions during the review. Straight following of the formal documented handling of every step of the process smothered bias and enhanced the reliability of the resultant outputs (Tawfik et al., 2020).

The study selection process for the systematic review is illustrated in the PRISMA flow diagram, which outlines the number of records identified, screened, assessed for eligibility, and ultimately included in the final analysis. This visual representation ensures transparency in the review methodology and helps readers understand how the final pool of studies was determined.

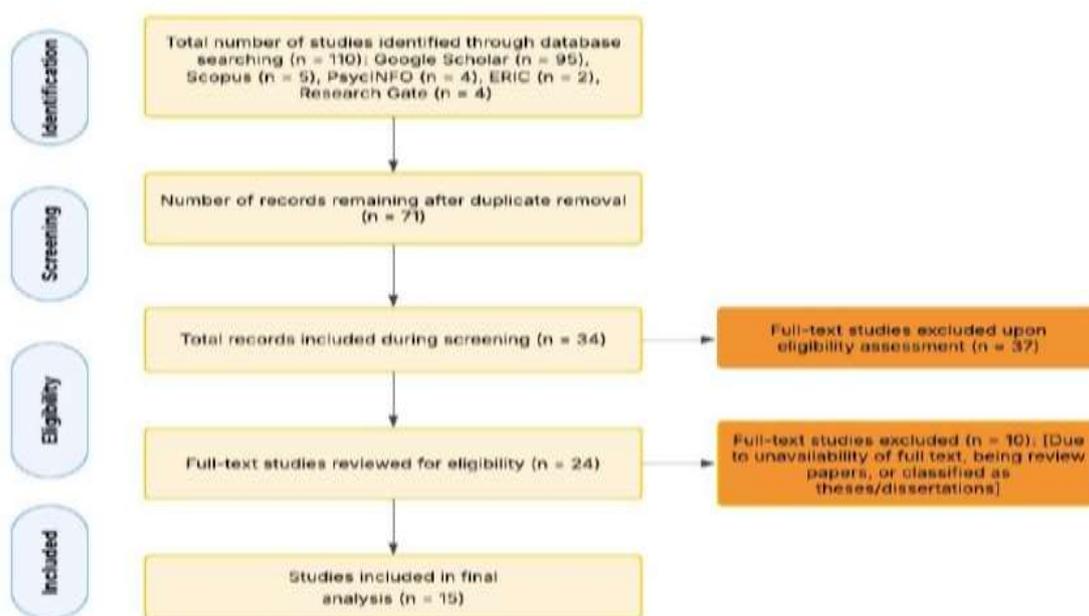


Figure 1: PRISMA Flow Diagram (Source: Self-Created).

### 2.2. Eligibility Criteria

To ensure relevance and focus, specific inclusion

and exclusion criteria were established before selecting studies. The screening process was conducted by two independent reviewers. Any

disagreements were resolved through discussion and consensus meetings. Inter-rater reliability was considered, and agreement between reviewers was found to be consistent throughout the process.

### **2.2.1. Inclusion Criteria**

The present systematic review critically assessed qualitative research published in English-language peer-reviewed journals between 2020 and 2025, focusing on parental involvement in supporting digital literacy among school-aged children (ages 5–18). Articles were to be included provided that they targeted parental involvement in either or both (school or home) learning experiences and included qualitative designs necessitating interviews, focus groups, or observations that conveyed reports on parental strategies concerning digital literacy.

### **2.2.2. Exclusion Criteria**

The present review restricted its focus to the studies that reported the specifics of parental participants in the digital-literacy development of children. Studies that focused solely on higher education, adult learners, or institutional technology policies were excluded, as they did not align with the focus on parental involvement in children's digital literacy. Besides, opinion pieces, editorials, conference papers, literature reviews, and theoretical or conceptual articles were excluded, seeing that they did not add original empirical data. Additionally, the research that commented on digital literacy but did not give special attention to the family or home-school relationship was not included in the current review.

### **2.3. Search Strategy**

The literature review was conducted by accessing five academic databases (ERIC, Scopus, ResearchGate, PsycINFO, and Google Scholar) to identify peer-reviewed publications in the English language published between 2020 and 2025. A mix of controlled words and non-controlled search terms was implemented: the key combination of search phrases was (parental involvement / family engagement) AND (digital literacy, ICT skills, media literacy) AND (home / school). The Boolean operators were used to logically link between these strings. The results were restricted using filters in relation to language, date, and the form of publication (Gusenbauer and Haddaway, 2020). All the articles identified were then hand-searched on their reference list to retrieve any other similar studies that had not been identified during the initial search on the databases.

### **2.4. Study Selection**

The choice of studies was carried out in two stages of screening in accordance with the PRISMA 2020 guidelines. This case also through pre-decided inclusion criteria each article was evaluated whether it was of any relevance or not. The second process was the full-text screening whereby potentially relevant articles passed through another appraisal. To minimize the selection bias, two independent reviewers were used to do all the assessments. Modern systematic reviews are increasingly becoming less informal, with more attention paid to formal procedures and independent evaluation, as compared to the earlier practice where thorough adherence to formal procedures was often not emphasized since agreement was very often informal (Zhang *et al.*, 2020). When full-text screening was performed, the reasons that caused a work to be excluded were noted down. The outcome of the system of the screening and selection process was tallied and written accordingly with the use of the PRISMA 2020 flow diagram. This diagram is shown in the figure 1 where the number of figures of records identified, screened, and examined against eligibility requirements are noted in addition to the causes of exclusions at all the stages. Two reviewers independently screened titles, abstracts, and full texts. Disagreements were resolved by discussion until consensus was reached. Inter-rater reliability was not formally calculated.

### **2.5. Data Extraction**

The initially 110 studies were identified, and after screening and eligibility checks, 15 empirical research studies were included in the final systematic review to examine the effectiveness of parental engagement in developing children's digital literacy. The data were pulled out using a structured template, which was formulated to retrieve standardized and relevant information. Some of the fields were as follows: author(s), publication year, country of study, study design, nature of participants, context (home setting or school setting), definitions on digital literacy, nature of parental involvement, and any critical findings. Thematic clarity and accuracy were achieved with the help of manual extraction. New studies were coded by the nature of parental involvement (e.g., supervision, co-use, modelling behaviour) and method of targeted digital literacy, in case it was possible (Christou, 2022). The resulting dataset gave the starting point to determine repeated themes, patterns, and gaps in the synthesis phase.

## 2.6. Quality Appraisal

The quality appraisal aspect of each study contained in the systematic review was conducted using Joanna Briggs Institute (JBI) Critical Appraisal Tools that suited the research design under study (Rivera et al., 2022). This appraisal was aimed at evaluating methodological soundness, credibility, and relevance. The following criteria were considered: the clarity of research question and methodology, sample size, data collection procedures, and ethics. During the review process, studies that scored below the established threshold on the quality appraisal checklist were excluded, in order to maintain the methodological rigor and credibility of the review outcomes. Two reviewers used a separate method to find the appraisal process, and their disagreement in quality scores was resolved by consensus. A review of quality ratings was included.

## 2.7. Data Synthesis

The current systematic review employed a synthesis approach to organize and interpret the findings of the included studies. This synthesis grouped the results based on thematic similarities, contextual settings, and the nature of parental involvement. This framework was refined by taking a look at the outcomes of the studies several times. Despite such systematic accounts of quantitative data, qualitative evidence presented subtle outlooks on experienced life and circumstances around situations (Kelty and Wakabayashi, 2020). This synthesis thus cleans them all together to come up with a clear guide on how the contribution of parental involvement to digital literacy of children takes place in both home and school settings.

## 3. RESULTS

### 3.1. Review of the Studies Considered

This review included 15 qualitative studies published between 2020 and 2025. The studies involved different geographical areas: the United Kingdom, Australia, the United States, India, and South Africa, whereas the research designs were mostly carried out by relying on interviews and focus groups with parents, educators, and, in some cases, children. The age range of the participants varied between 5 and 18 years, and the conducted studies addressed the digital literacy practice within the home or school environment, or both.

### 3.2. Thematic Synthesis of Findings

#### 3.2.1. Parental Proficiency and Confidence in

## Technology Use

The parental digital proficiency has become a key factor in the decision of the quantitative and qualitative measures of parental engagement in the process of digital literacy development of their children. The examined literature shows unanimously that caregivers with high digital competence remain more confident in their interaction with digital tools, their assistance in conducting educational activities, and in using school platforms (Tomczyk and Potyrała 2021). This reassurance brings about a more active parental role in home-based online learning, thus making the online literacy development more consistent and efficient. Digitally competent parents often engage in co-learning with children, orienting the work with the device. The complete tasks in an online environment, visiting learning websites and online applications as a pair. Through this co-learning, these parents would serve as role models in responsible digital behaviour that would involve, among others, safe use of the internet, critical assessment of the digital materials, as well as ethical conduct over the internet. Such role modelling not only perfects the digital skills of children but also influences their orientation to values and attitudes toward technology.

The inadequate parental digital literacy creates a major obstacle to effective interaction. Some caregivers express a sense of anxiety or even discomfort when quizzed to help with digital tools, with some explaining that they are uncomfortable with educational sites or since they feel that they might make embarrassing mistakes, or the mere fact that they do not have prior technological experience. Such parents tend to fade out of the digital world and leave it to the teachers or siblings (Sliwka et al., 2024). On other occasions, they sound upset about the fast rate of digital impact on schools, claiming that they are at a disadvantage or unsupported.

Parent groups do not have identical digital competence. The level of digital skills is greatly affected by the socio-economic status, the age of an individual level of education, and the exposure to technology in the past. It is typical of parents who have younger generations or work in technology-related spheres since they tend to be more competent with their children meeting the digital demands of education. Older caregivers, immigrants, and disadvantaged families find it harder to adjust to their children's education needs digitally. The lack of supply of training or assistance to the parents on the improvement of their digital skills. Even in the cases when there were no organized interventions and/or

school-based workshops, parents with limited internet access remain excluded from the learning processes of their children, hence increasing the gap between home-school cooperation. The digital competence of the parents directly influences the confidence and the ability to help children in building digital literacy (Tomczyk and Potyrała 2021). Enhancement of the skills of digitalization among all parents by inclusive training, the use of simplified digital communication tools, as well as the availability of easy-to-read resources, would be important steps toward ensuring that diverse families equally engage in digital learning.

### **3.2.2. Digital Learning Strategies Used at Home**

Distance learning at home also became a critical factor that shapes the digital literacy of children. Distance learning at home also became a critical factor shaping the digital literacy of children. In the reviewed studies, a wide range of digital habits and support strategies within the home environment were identified. Such practices were significantly affected by the digital culture created by parents, their perceptions of technology, and resource access (Hammer *et al.*, 2021). These results identified that not only was a home a physical learning place but also a social and emotional environment in which the use of technology by children was encouraged or, in other cases, denied.

In families where digital learning was pre-planned, parents were actively involved in controlling the use of digital by their children. There was frequent incorporation of educational digital tools in daily life by these parents, such as planned use of learning apps, educational games, online research, and digital storytelling. It was typical of parents to co-engage by being present with their children when engaging in online activities or teaching them how to work with devices efficiently and securely (Yu *et al.*, 2021). This type of practical engagement served to strengthen several skills like navigation, digital problem solving, and proper online behaviour, also offering cognitive and emotional support. Some of the parents also establish digital standards and limitations of screen time so that there is equilibrium, and children can do something meaningful using technology, such as video production or computer programming. These houses enjoyed reliable Internet, silence in studying locations, and various gadgets, which facilitated productive digital education.

Nevertheless, not every house exhibited encouraging digital habits. Their technology use was unorganized and unintended by parents; kids were

spending their time passively with the help of technologies (Clemente-Suárez *et al.*, 2024). This constrained them to grow up with many important digital capabilities, including evaluation, creation, and responsible communication. Other parents had low expectations of the educational usefulness of digital tools or were not confident in helping them use them. The attitude of parents also played an essential role in digitalizing their homes, as, on one hand, some viewed technology as an educational tool, whereas others held more negative perceptions of the topic around screen addiction or safety or inappropriate content, and even failed to use this technology even in the cases when it was deemed mandatory at school.

Infrastructural constraints would oftentimes determine the quality of home-based digital learning. Families with low internet speed, old/shared computers, and without any personal space experienced problems being consistent with digital routines. These problems were connected with socio-economic status since they constrained the development of digital skills in children. The difference in the use of digital learning depended on parental participation and attitude, and access to resources (Labudova and Fodranova, 2024). Higher levels of digital literacy were observed in households that promoted active, guided, and balanced use of technology. An increase in the awareness of the parents regarding the way to transform passive technology use into an active learning process also remains crucial in the future as a means of improving digital experiences of children and reducing gaps in home learning environments.

### **3.2.3. School-Parent Communication and Collaboration**

The two most important aspects were effective communication and collaboration between the schools and parents in support of the digital literacy of the children. Researcher indicated the importance of collaboration between schools and parents, which had a positive impact on parental engagement in digital tools and home learning (Kent *et al.*, 2022). In cases when communication was timely, clear, and supportive, parents were more willing to engage in digital learning. In comparison, ambiguous or vice versa, scarce communication did not leave a good feeling with many. The schools utilized diverse mobile applications, email messages, learning management tools, and messengers to post homework-related updates, resources, schedules, and announcements. Parents were more involved and felt informed when such tools were user-friendly

and up-to-date. That was to help them follow progress, help in assignments, and educate themselves concerning curriculum aims. Transparency improved the relationship between home and school, leading to the reinforcement of cooperativeness and trust, which ultimately benefited the children in their digital learning (Purssell and Gould, 2021).

The way of school-parent digital communication. Parents who are not tech-savvy struggle to understand the school sites, are uneducated about technology, and can't navigate the platform without training or guidance, leading to missed information, confusion, and failure to receive information (Ferri et al., 2020). Multicultural families with different linguistic backgrounds also had problems since they did not communicate in their native language. The assumption that all parents possessed equal technological abilities and accessibility was incorrect in some schools, thus leaving out parents who had technological or literacy disadvantages behind. This created a gap in the support and alternative way of communication, which, inadvertently, left many willing parents outside the scope of digital learning and restricted their ability to provide positive assistance to their children.

The positive benefits were observed when the schools actively worked on communication barriers by including or involving the parents, and this worked positively on the children. Workshops on digital literacy and guided step-by-step instructions empowered the parents and made them feel more engaged. Having digital and non-digital options in communication, such as a printed newsletter or an in-person check-in, ensured that parents were not left out, even when it comes to parents who may not feel conversant with digital options. Designated digital coordinators or parent liaisons also enhanced communication (Kraft and Bolves, 2022) as interreligious between school systems and families, solving tech problems, and providing support in the use of resources. The parent-school communication is a very important element to help in creating support at home for digital learning. Open, participatory, and caring approaches will enable the parent to make a more active contribution to the digital literacy of the child. The schools that invest in such partnerships contribute to the creation of a more equitable and coherent digital learning space that students can learn within.

### **3.2.4. Socio-Economic and Cultural Barriers**

There were socio-economic and cultural factors that played a major role in the participation of

parents in digital literacy. It was observed that families with disadvantaged cultural backgrounds or diverse histories had more obstacles to digital labor support. These were financial barriers, access to the technology, language barriers, and different perceptions of the digital technology. The low-income families were not able to afford educational necessities, including personal devices, stable internet, and renewed software (Francis and Weller, 2022). The use of similar devices by children or with working adults diminished frequent digital interactions. Interrupted or the lack of internet access also hampered the learning process, particularly when schools used the digital platform to receive assignments and communicate. This meant that low-income children had more disadvantages, and this increased the digital divide between them and their rich counterparts.

The cultural and language constraints also influenced the degree of parental involvement when it came to the digital learning of children. Newcomers or minorities, Parents who were immigrants or underrepresented minorities, have often not known what to expect when it comes to their child using technology in school, and found communications difficult since they are using different languages or languages about which they do not understand the terminology. These aspects did not assist in effective school partnerships. Involvement was also affected by cultural views on technology- some communities did not take digital tools seriously due to the practice of entertainment or screen addiction (Throuvala et al., 2021). The truth is that most of the parents felt that the likes of the digital revolution cannot change the trend of traditional learning; books, handwriting, and oral teaching were more effective than the digital way. This caused digital activities to be discouraged at home, even where schools demanded such digital literacy, causing children the opportunity to practice their required skills and decreasing compatibility between home and school practices.

Digital learning was not allowed sufficiently by parents as they had time restrictions due to stressful work in single-parent families or low-income families. Children are usually left to figure out technology on their own, which causes detachment or the learning of surface content. These challenges notwithstanding, researchers discovered that demoralized parents have resilience (Mak et al., 2020). They became eager to participate in the digital development of their children with the help of guidance and culturally responsive services that were available. Community actions, translated

resources, and culturally competent workshops were the most effective ones (Detlor *et al.*, 2022). Socio-economic and cultural barriers significantly affect parental support for children's digital literacy. To address these challenges, schools and policymakers must adopt inclusive and equitable approaches. This includes providing targeted resources and support systems to ensure that all families regardless of their background or circumstances – can actively participate in their children's digital learning.

### 3.2.5. Parents' Perceptions of Their Role

Parents' perceptual descriptions of their role in the development of their children, as far as digital literacy is involved, determined their level of engagement. Different studies showed that there was a level of self-awareness, accountability, and confidence on how adults should direct the use of digital tools by children (Robbeets *et al.*, 2024). Parents, based on these perceptions, had different ways of approaching digital learning at home and addressing school requirements. Particularly, they perceived themselves as possessors of active roles by envisaging digital education as a collective effort of home and school. They engaged in the role as digital guides or co-learners, who helped to promote digital and online safety, creativity, and critical thinking. Some of them considered the role of their responsibility as secondary, as the school should work on digital skills. Their role was restricted to logistical support, such as the provision of devices or the internet (Timotheou *et al.*, 2023). Unconfident parents tended to be afraid of making mistakes, so they did not want to engage in further practice. They were typically passive and less focused on learning than what is being monitored by screen time support. Yet, among the parents, the process of perception change has occurred during the remote-learning period. With the growing use of technology, the parents became more aware of the digital needs of the children, and as a result, they came ready to adjust and be more involved. Such changing responsibilities, though not always easy, were often defined as positive, providing new chances to affect their children's academic and online development.

The cultural expectations and personal values influenced the perception of parents regarding their participation in digital literacy. The enthusiastic users of traditional delivery models, such as learning to write by hand and memorization, prefer digital technologies to be considered as something optional. Some adults felt that their children growing up tech-savvy could take care of themselves, and not involve the parents. These views had a direct impact on the

kind and amount of support that is given at home. The crucial thing to understand is that parents need to consider themselves as valuable contributors and not based on their digital knowledge to improve active involvement (Nurhayati, 2021). Schools need to provide a sense of security, learning, and accessibility to communication resources and opportunities, especially to parents with varying self-perceptions and limited partnership between homes and schools, to make effective digital learning support possible.

### 3.3. Key Patterns and Contrasts across Studies

Several similarities and differences were observed in the reviewed studies. The dominant pattern was the fact that parental digital competence was central to facilitating meaningful inclusion into children's digital literacy. The importance of controlled digital practices at home and healthy relationships between schools and parents as preconditions supporting positive results. Nevertheless, the level of engagement differed across the socio-economic and cultural contexts. Families with abundant monetary and digital sources of support were able to give more relatively uniform help, and low-income families that were linguistically varied experienced significant obstacles. Some of the parents felt they were co-educators, and others felt they could not do much due to low confidence or belief in their own culture. Parents also had different experiences in supporting children due to the differences in school support, which empowered or excluded them.

## 4. DISCUSSION

### 4.1. Summary of Findings

The study is a systematic review of what we have done regarding parental involvement that affects the digital literacy development among children, both in school and at home. Findings reveal that engagement is defined by numerous variables, such as digital competence, home practices, school communication, socio-economic status, and perceptions in the cultural domain. The five themes that are identified give an insight into the way Digital literacy is facilitated or negated at home. An important conclusion is that the digital competence of the parents has a broad influence on the quality and quantity of support. Parents who felt capable of using the digital tools had higher chances of their participation in co-learning, supervision, and the facilitation of digital activities (Campana *et al.*, 2024). Conversely, the poorly skilled did not actively participate in some of the tasks, or they remained unconfident, thus making them less helpful. This

points to the requirements of specialized support to overcome digital inequality in the most intimate sphere.

Digital practices in home-based learning revealed a high degree of variation in family engagement. Children in the parent-involved communities, as compared to other households, had structured and enhanced digital learning experiences since parents were keen on integrating digital tools in learning activities. Conversely, a passive or unorganised type of use of technology was less efficient in developing fundamental digital capability. The attitudes of the parents towards technology and the quality of home resources determined how parents could model, monitor, and be engaged in digital activities (Ahtinen et al., 2023). Parental engagement was enhanced through clear, multifaceted, and available messages, whereas parents felt ostracized by messages that were too technical or that were disjointed. Most of the parents appreciated digital literacy training sessions or bilingual materials to fill the gaps. Low-income and migrant families were especially affected by such socioeconomic and cultural obstacles as a lack of devices, weak internet connection, and language barriers. Attitudes to digital education were also formed following the cultural beliefs.

#### **4.2. Policy and Practice Implications**

The findings of this review carry significant implications for educational policy and school practices. The digital literacy initiatives should not focus solely on students but also their parents and caregivers. Enhancing the digital competence of the parents by providing them with training, workshops, and easy-to-read guides will nurture parent support of digital schooling.

Such initiatives must be inclusive, women-friendly, and sensitive. Investment in user-friendly and multilingual platforms that foster two-way digital communication has to be prioritized by schools with competent training or helplines (Sinha, 2025). Communication must not be based on digital fluency; it is better to provide schools with printed materials, face-to-face assistance, and additional ways of contact to help parents with technological or language obstacles.

Teachers' ought to be aware of the place of home in digital learning. Inequities can be decreased with policies that offer subsidized internet access or devices. The partnership with libraries and community organizations assists in reaching the underserved families (Butler et al., 2020). The interventions need to consider parental perception with empathy and dialogue. The idea of parents

being co-educators will support the development of efficient school-home partnerships and collective ideas about the responsibility of digital development.

Involvement of the parents in the curriculum design process, particularly those developed within a digital learning system, might also be able to fill out the expectation gap. With schools engaging parents in determining digital objectives and providing unified instructions in fostering these objectives at home, the likelihood of getting a coherent learning experience within school and at home is increased. On the policy level, the recommendations regarding the official parental engagement regarding digital literacy should be taken into account by the ministries of education and local governments (Komen and Onginus, 2024). They may entail norms of digital communication, parental training programs, equity in access policies, and school-level accountability systems of inclusive participation.

In order to provide a more comprehensive knowledge of how parental participation influences digital literacy in both home and school settings, this review brings together studies that are frequently scattered across several disciplines and contexts. Our synthesis highlights the interrelated roles of families, schools, and larger policy frameworks, in contrast to previous reviews that have tended to focus on isolated elements like technical skills or school-based interventions. In doing so, this review not only identifies persistent gaps but also offers concrete directions for future research and practice in supporting children's digital learning across both worlds.

#### **4.3. Limitations of the Review**

Although this review provides a precise model of integrating qualitative studies on parental involvement and digital literacy, certain limitations should be mentioned. It gave narrow visibility to only qualitative research during the 2020 to 2025 period, and left out anything that may be of interest and very fruitful to quantitative or mixed-method explorations that are likely to have wide-reaching generalizability.

The studies used in this review are mostly from high and middle-income countries, which limits the generalizability of the findings to low-income or underrepresented communities, resulting in a potential of non-representation of the experience of families in these regions. Therefore, insights from resource-constrained settings remain underexplored. Such disparity draws attention to an important research gap. Therefore, future investigations in these areas should be given priority in future

research to create a more internationally representative data base, where cultural norms and digital infrastructure also differ.

Additionally, the digital divide is still considered prominent in terms of global representation, and a more comprehensive picture of the role of parental involvement in digital literacy in various contexts worldwide would be supported by the increase of studies by researchers working in diverse, under-researched contexts. The digital divide remains a significant issue in global education. A more comprehensive understanding of parental involvement in digital literacy can be achieved through increased research in diverse and under-researched contexts worldwide.

The fact that self-reported data have been used is also a limitation, as they can be underestimating or overestimating. This is since the few points of view of children, educators, and extended families do not allow a complete perspective of the home-school digital relationship. Thematic synthesis is subjective, and it can be subject to bias on the part of reviewers. Irrespective of attempts to be consistent, some overlapping themes could be present, and some nuances could be condensed.

Moreover, since of the exclusion of longitudinal data, the longer-term effects of parental digital engagement on knowledge acquisition and the like were not investigated. The future requires wider, multi-dimensional, and longitudinal studies to gain an in-depth view and to be able to gain multi-

dimensional insights into the semantics of digital literacy development. In addition, the review only included qualitative studies, while quantitative and mixed-methods research was excluded. This narrows the evidence base and may overlook measurable outcomes of parental involvement.

## 5. CONCLUSION

The topic of this systematic review was the impact of parental involvement on the digital literacy of children both at home and in school. A study of fifteen qualitative studies showed that parental digital competence, attitudes, access to resources, and school support significantly affect whether engagement can be made or not. Organized home activities and inclusive school communication facilitated parental participation in school activities, whereas socio-economic and cultural impediments commonly stunted parental participation. Perceptions of parents towards their role directly affected the quality of support, as parents turned to be co-educators or reluctant observers.

The review appeals to schools and policymakers to focus on digital training. The review implies the need to improve parental online skills, overcome socio-economic factors, and promote inclusive partnership between schools and families to meet the objective of developing digital literacy in children both in the school and at home. Fair access and training are the crucial priorities.

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