



Research article

Distance education and the social literacy of elementary school students during the Covid-19 pandemic



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HIGHLIGHTS

- The effects of distance education on the social literacy skills of elementary school students during Covid-19.
- Factors impacting the social literacy skills of elementary school students during Covid-19.
- The challenges of teaching and developing the social literacy skills of elementary school students during Covid-19.
- Parents' roles in their children's development of social literacy skills during Covid-19.

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ABSTRACT

Despite distance education's negative impacts on students' learning and social literacy skills during the Covid-19 pandemic, it still has significant benefits. This study examined the distance education and social literacy of elementary school students during the Covid-19 pandemic. A qualitative research methodology was used: in-depth interviews were employed to collect data, and the sample population included six elementary school teachers who used distance education during the Covid-19 pandemic. This study had three main findings, including: 1) the factors impacting social literacy skills, 2) the effects of distance education on social literacy skills, and 3) the challenges of teaching in distance education and their effect on the development of social literacy skills. Therefore, the findings of this study encourage teachers to seek opportunities to expand the scope of distance education platforms in order to incorporate additional activities that enhance the development of students' social literacy skills.

1. Introduction

The Covid-19 pandemic has influenced the education sector globally in a number of ways. Many governments responded to the virus by developing containment measures, such as lockdowns and social distance regulations (Korkmaz and Toraman, 2020). Schools were among the first institutions to comply with government regulations and implement containment policies by replacing traditional face-to-face learning with online learning methods. Many children benefited from online learning despite facing multiple challenges associated with limited infrastructure and technological equipment, such as access to laptops or computers (Ferri et al., 2020; Yan et al., 2021). Schools implemented a range of strategies to ensure children were engaged in learning during lockdowns. However, despite the significant steps taken by schools to maintain children's learning, many scholars assert that online learning does not

prepare young students with the emotional and social skills necessary for their development (Dong et al., 2020). Additionally, Bransen et al. (2020) and Tham et al. (2021) assert that, although digital learning models focus on abstract concepts to equip students with essential theoretical skills, they do not enable them to conceptualize sociocultural concepts and develop social skills critical to their academic processes.

Social literacy is an essential skill for every child enrolled in an academic program. It transcends a student's capability to read or write and includes the mastery of literacy skills gained through social interactions with other children and adults both in or outside a formal or informal curriculum (Blair et al., 2018). According to Kirova and Jamison (2018), children also learn social literacy through interaction with themselves, their teachers, families, peers, and even people whom they have not engaged with on a one-on-one basis. Furthermore, O'Byrne et al. (2018) assert that children should learn social literacy through communication

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with peers and family from an early age in normal family interaction. Social literacy helps elementary students to interact with new communities, cultures, and norms that emerge either through technology or the community they live in (Greenthrow and Chapman, 2020). Coman et al. (2020) confirm that many studies on online learning concentrate on how the teacher interacts with the student while delivering academic content and negate the child-to-child and child-to-parent socialization that is critical for the whole academic development of a student (Bozkurt and Sharma, 2020; Rapanta et al., 2020). Accordingly, parental attitudes and beliefs influence the learning of social literacy in elementary school. However, this approach does not include digital academic systems that facilitate learning via technological gadgets away from parents or guardians. Despite the general belief that digital learning limits essential sociocultural interactions and other literacy approaches significant to a student's holistic knowledge development, it integrates abstract academic concepts and social interactions between the child, teacher, and secondary environment, leading to enhanced social literacy.

To our knowledge, there is a lack of studies on the influences of online education on social literacy in elementary school students during the Covid-19 pandemic. Thus, the purpose of this paper is to explore teachers' perceptions and perspectives about distance education and the social literacy skills of elementary school students during the Covid-19 pandemic. Therefore, this study addresses the following research questions:

1. What factors have positively or negatively impacted the social literacy skills of elementary school students during Covid-19 via distance education?
2. What were the effects of online education on the social literacy skills of elementary school students during the Covid-19 pandemic?
3. How do teachers describe the challenges of teaching and improving the social literacy skills of elementary school students via distance education during the Covid-19 pandemic?

2. Review of literature

2.1. Social literacy in the elementary classroom

Social literacy is a critical component in the elementary classroom, helping children to interact and communicate effectively during class activities. It enables them to construct knowledge and manage their environment during school hours. Teachers can help build social literacy in a classroom community through targeted communication using technology-aided tools (Kozak and Recchia, 2019; Wright and Domke, 2019). Pinto and Leite (2020) note that when teachers use class discussion boards, social tagging, video blogging, wikis, and podcasting, they improve social literacy in the classroom. During the global pandemic, many schools reverted to online learning with interactions such as forum discussions. By interpreting messages and responding effectively on such platforms, students develop their ability to interact with others.

Teachers should build an environment in the classroom that allows all students to share ideas and experiences (Karakas and Kartal, 2020). Introducing elementary students to different social settings and allowing them to discuss their feelings afterward creates an important environment for learning social literacy. Children in such settings understand the relevance of social interactions and build confidence and responsibility during peer-to-peer communication. However, online digital learning concepts limit face-to-face interaction and fail to deliver comprehensive social literacy.

The teacher is a central facilitator of learning in the elementary classroom. Law et al. (2019) and Onyema et al. (2019) demonstrate that teachers also play an important role in facilitating social literacy in the online learning environment. Teaching social literacy requires teachers to discuss the relevance of social cues, such as facial expression, vocal tone, eye gaze, and body language, in day-to-day interactions. This enhances the quality of engagement and enables

students to interpret other nonverbal elements in a discussion (Heljakka and Ihamäki, 2018). Additionally, teachers should model how students should talk to one another through practices and role plays. Such approaches allow them to build confidence and develop quality interactions with their peers.

2.2. Social literacy skills and distance education

Distance or online education comprises applying technology-guided software, tools, and equipment to facilitate learning away from the classroom. The success of the distance learning promoted during the Covid-19 pandemic relied upon students' ability to use computer-aided learning and toggle through various applications to interact with teachers and peers (Bond, 2020; Brina and Delahunty, 2021). Many studies have reported elementary students and teachers experiencing multiple challenges in online learning, from broken links to difficulties in coordinating groups of students. However, education and curriculum scholars are increasingly pointing out the absence of stable avenues for elementary students to learn and participate in social literacy on learning platforms facilitated through video links. While teaching social literacy skills to elementary school students requires a partnership between the school and home environment, teachers play an essential role in affirming its principles (Bond, 2020). Teachers should train elementary students to develop listening skills in order to effectively participate in learning.

Similarly, Brina and Delahunty (2021) posit that teachers should train students to develop partnerships in the learning environment and that students should learn to talk and listen to each other during activities. They should compliment each other on various achievements and ask questions. Such partnerships inspire confidence in elementary students and deliver high value in social literacy. Accordingly, educators should provide elementary students opportunities to work with their peers and cooperate or build a partnership community in the classroom. To further support this, teachers should allow elementary students to choose their own friends and task partners rather than tactically assigning them (Schreuder and Savitz, 2020). This approach enables students to choose partners they share common interests with and develop friendship bonds that are essential in fulfilling their academic objectives.

A strong relationship between students is an essential tool in social learning. The move to distance and hybrid learning has created some challenges for children in maintaining these relationships because of the lack of face-to-face interaction. However, online learning helps to create identity safety for elementary students by removing some barriers, such as high poverty levels, lack of equipment, or modest clothing, such as uniforms (Chang et al., 2019; Collins and Halverson, 2018). According to Tyagi et al. (2020), students feel valued, welcomed, and accepted on online platforms. Such avenues, therefore, promote social literacy, as they eliminate the many biases that occur in ordinary classroom settings.

Schools are increasingly switching to lower populations of students per session in online learning. This approach enhances the attention of every student and ensures all students engage fairly with educators and each other on the online platform. According to Darling-Hammond et al. (2020) and Vedder-Weiss et al. (2019), online learning for elementary students bolsters collegial relationships among peers. However, despite attempts to enhance learning and interaction on virtual platforms, comprehensive social literacy programs have failed, since there is no interparty engagement or relationships.

There are several challenges that impact the effectiveness of distance education on teaching social literacy to elementary school students. Limited infrastructure, such as access to computers or laptops, affects many students from accessing virtual platforms (Zhu et al., 2020). This issue is compounded by the different social statuses of children and the fact that some children have more constructive home-learning environments than others. In addition, concentration can be a challenge in online learning due to distractions in the home-learning environment (Zhu et al., 2020). This aspect hinders children from learning social literacy skills and interacting with their peers online.

2.3. Improving social literacy of elementary school students

Social literacy encourages elementary students to work in group settings. [Teo and Divakar \(2021\)](#) state that social literacy enables elementary students to engage in cooperative learning that promotes social and relationship skills and is required for academic progress. Teachers also play an important role by helping children practice negotiation and leadership skills, which help them navigate difficulties at school ([Zhu et al., 2020](#)). [Wang et al. \(2018\)](#) illustrate that social literacy enables elementary students to ascertain their strengths and contribute to teachers' group assignments or forum discussions. According to [Teo and Divakar \(2021\)](#), teachers can teach elementary school students to manage conflict with peer mediation, which is a fundamental problem-solving approach that helps them resolve disputes and achieve integration in the classroom ([Ay et al., 2019](#)). Such programs demonstrate the significance of social literacy to elementary students and facilitate cognitive or soft skills for holistic academic development.

Additionally, social learning gives students the confidence to engage in a private, confidential, and safe setting through a peer mediator to manage their conflicts, leading to a harmonious community ([Coakley, 2019](#)). When properly managed, online education can improve peer-to-peer engagement in an elementary class. The approach also eliminates various systemic biases, such as differences in local dialects, color, or structural biases. Therefore, online education facilitates enhanced social literacy compared with abstract face-to-face learning.

3. Theoretical foundation

The social learning theory is a theoretical foundation that argues that students learn better by observing peers, through interaction, and through other targeted communications ([Heslop and Meredith, 2020](#)). The theory was founded by psychologist Albert Bandura in the early 1960s and presupposes social experiences and behaviors as critical to students ([Heslop and Meredith, 2020](#)). Therefore, a well-structured online learning platform should enable students to develop social cognition through the online learning community and to work collaboratively through forums, blogs, and wiki discussions to construct knowledge with their peers ([Huang et al., 2020](#)). Based on social learning principles, online learning accelerates social literacy when teachers encourage elementary students to engage in discussions and other academic activities as a team ([Li et al., 2020](#); [Martin and Bolliger, 2018](#)). A student is more likely to attempt to answer a question posed on the online discussion platform if another member of the forum has answered one or will ask questions if others have asked. This demonstrates that online digital learning platforms can be highly engaging and contribute to social literacy. Therefore, based on the social learning theory, online learning supports social literacy by allowing elementary students to engage in sessions with academic and other social content, such as games or singing, through a video link. This theory sets the research basis for this study.

4. Methodology

The qualitative method was used to conduct this study. Phenomenological study was utilized to capture and explore teachers' perceptions and perspectives about the influence of distance education on the social literacy skills of elementary school students during the Covid-19 pandemic. This methodology was chosen since it allowed the researcher to obtain an in-depth understanding of teachers' perceptions and attitudes and to understand and describe the individual experience of each teacher ([Creswell, 2009, 2013](#); [Merriam, 2009](#); [Marshall and Rossman, 2006](#)).

4.1. Participants

After ethical approval from the Research Ethics Committee at King Faisal University was obtained, the data were collected during the second

semester of the 2021 academic year in Saudi Arabia. In this study, gatekeepers were used to help the researcher find teachers to participate in this study. These teachers were female and were identified as successful literacy teachers by their principals ([Alsubaie, 2018](#); [Hatch, 2002](#)). The participants in this study were six third-grade teachers in different elementary schools.

It is important to indicate the participants' backgrounds, school demographics, and students' socioeconomic statuses in the schools where each participant taught because this information likely influenced the results of the study. All of the participants were Saudi Arabian females, and they taught in public schools placed in the same city. **Teacher 1** had taught elementary school for 28 years and was teaching the third grade in a public school at the time of the interview. She taught second grade students for two years in a private school before her third-grade position. She was not very familiar with using technology in education before the Covid-19 pandemic. **Teacher 2** had been teaching elementary school for three years and, at the time of the interview, was teaching the third grade in a public school. **Teacher 3** had been teaching elementary school for five years and, at the time of the interview, was teaching the third grade in a public school. **Teacher 4** had been teaching elementary school for 11 years and, at the time of the interview, was teaching the third grade in a public school. **Teacher 5** had been teaching elementary school for eight years and, at the time of the interview, was teaching the third grade in a public school. Before her third-grade position, she taught intermediate school students for four years in a private school. Finally, **Teacher 6** had been teaching elementary school for five years and was teaching the third grade in a public school at the time of the interview. In short, the participants in this study ranged in age from 25 to 60 years of age. All six teachers were familiar with using technology in education before the Covid-19 pandemic except for Teacher 1. In addition, the students in their school came from slightly different socioeconomic backgrounds.

4.2. Data collection and analysis

The qualitative research procedure comprised in-depth interviews along with field notes that were collected and used to compare the responses from teachers to create a conclusion. Interviews were recorded so that additional notes could be made while listening to the recordings and transcribing them ([Falk and Blumenreich, 2005](#); [Marshall and Rossman, 2006](#)). Carrying out the above procedures was essential in order to go beyond examining the structured and numerical data and to provide answers to assumptions and notes made during the study ([Vindrola-Padros et al., 2020](#)). The interviewing procedure comprised semi-structured interviews with teachers, which covered areas such as the technology used before the Covid-19 pandemic, the methods of implementing classroom learning before the pandemic, the methods of implementing remote learning, and teachers' concerns about online learning.

Other areas included teachers' attitudes toward distance learning, their levels of motivation in implementing it, and children's attitudes toward distance learning. The restrictions that were in place due to the Covid-19 pandemic created several challenges for the researcher, as it was not easy to implement the research method on-site to get firsthand information. These challenges included the identification of participants, the determination of which procedure to follow to gain accurate and reliable information without face-to-face communication, and the methods used to deal with time constraints since mass interviews were restricted.

Each collection of data was analyzed differently. The classical analysis method was used to analyze the data collected through semi-structured interview. Content analysis was performed through the use of codes on several parts of the findings. The coding process performed in the analysis was inductive coding, which derived codes from the qualitative data ([Elliott, 2018](#)). There was no specific codebook from which the codes arose directly from respondents. The data were broken down into qualitative data sets containing smaller samples ([Elliott, 2018](#)). The data were read, and the codes for the small identified samples were created. The

codes were categorized using coding frames responsible for representing the organizational structure of themes in the research. The coding process had a high reliability rate and, therefore, provided more accurate results since the researcher applied the code–recode strategy and coded these data twice with two weeks between each coding to observe whether the findings were the same. Moreover, the researcher achieved credibility for this study by utilizing rich descriptions to present the teachers' perspectives and experiences of each phenomenon of each theme (Chilisa and Preece, 2005; Creswell and Miller, 2000; Marshall and Rossman, 2006).

5. Findings

During in-depth interviews, the six participating teachers described their experiences with and perspectives on distance education and the social literacy skills of elementary school students during the Covid-19 pandemic. The findings of this study involved three main themes, including: 1) the factors impacting social literacy skills, 2) the effects of distance education on social literacy skills, and 3) the challenges of teaching and developing social literacy skills (Table 1).

5.1. The factors impacting social literacy skills

The research question leading to this focus area, factors in effective social literacy skills of elementary school students, was “What are the factors that positively or negatively impacted the social literacy skills of elementary school students via distance education during the Covid-19 pandemic?”

The teachers described various factors that arose from distance learning and their impact on the improvement of social literacy skills among elementary school students. These factors (main themes) contained many sub-themes, which are listed below.

These findings are comprised of three core ideas: 1) students, 2) teachers, and 3) relationships between teachers and students.

Students. Leading to the first factor, the student, the interview question was “What do you think are the factors that influence elementary school students to improve in their social literacy via distance education during Covid-19?”

This theme included two core ideas: 1) face-to-face student interaction and 2) unequal access to learning materials and opportunities.

Face-to-face student interaction. All six participating teachers (n = 6) observed how face-to-face student interaction in learning settings was

important in the development of social literacy skills for third-grade students via distance education during the Covid-19 pandemic.

The teachers pointed out that most of the effects of distance education on the social literacy skills of elementary school students during the Covid-19 pandemic were due to the loss of face-to-face student interaction in the learning environment that was common before the pandemic hit. Some of the effects of the lack of face-to-face interaction included a reduction in students' sense of awareness, failure to improve communication and socialization skills, loss of self-confidence, and loss of the ability to create peer relationships. The teachers also reported that reduced face-to-face interactions among the students led to reduced development of problem resolution skills, ability to work in teams, and conflict resolution skills.

Constant physical learning amongst elementary school students is vital for the growth of problem-solving skills, which are important social skills for young learners. However, this is not available in the distance education system. Therefore, I think that the social literacy skills of primary school children have been negatively affected, especially since the Covid-19 pandemic limits face-to-face communication. (Teacher 1)

Unequal Access to Learning Materials and Opportunities. Three teachers (n = 3) reported that there was significant inequality in social literacy skills among their students because of unequal access to learning materials and opportunities. Thus, one of these teachers blamed this disparity on the unequal access to academic materials. Another teacher reported that teachers were not in a position to ensure that all students had access to online learning platforms. For example, for students who lacked the hardware or software required for distance learning, the teacher observed that there was a slight drop in their social literacy skills. They could not effectively communicate with others and could not be active in the various online platforms and get their messages across.

Teachers. The interview question that led to the second factor, teachers, was “What do you think are the factors that influence elementary school teachers in improving their students' social literacy via distance education during Covid-19?”

This theme included two core ideas: 1) changes to teaching approaches and 2) flexible learning opportunities.

Changes to Teaching Approaches. All six participating teachers (n = 6) discussed their teaching approaches via distance education before and during Covid-19 and their impact on the social literacy of third-grade students. They reported that some of their approaches were changed to adapt with another education system, that is, “distance education.”

Most teachers (n = 5) indicated that online education necessitated changes in the methods used to teach social literacy skills and to ensure that students learned the importance of social literacy skills.

Moreover, one of them noted that they had to change their teaching approach because they could not apply it via distance education.

For example, distance learning made it impossible to implement role playing among students; this challenge affected our ability to effectively support children’s interactions. Moreover, we were unable to implement group learning activities, and this resulted in students being unable to learn teamwork skills. (Teacher 4)

Flexible Learning Opportunities. Most participants (n = 4) reported that distance education enhanced their flexibility in dealing with students, the types of teaching materials and techniques used, and their ability to employ creativity in diverse situations. The respondents noted that distance education forced them to utilize varying approaches to effectively teach social literacy skills.

One of the teachers noted that the flexibility of distance education was a good chance to improve students' social literacy during the Covid-19 pandemic.

Flexible learning in this system has enabled us to schedule regular checks with students and their families. It has helped us identify

Table 1. Findings for Study: The main themes with their sub-themes.

The Factors Impacting Social Literacy Skills	The Effects of Distance Education on Social Literacy Skills	The Challenges of Teaching and Developing Social Literacy Skills
Student:	Positive Effects	Technology Issues
- Face-to-face student interaction - Unequal access to learning materials and opportunities		
Teachers:	Negative Effects	Social Challenges
- Changes to Teaching Approaches - Flexible Learning Opportunities		
Relationships Between Teachers and Students:		Support from Parents
- The importance of the relationship between teachers and students in enhancing social literacy skills of elementary school students via distance education		

social literacy weaknesses that our students may have and helped them overcome the challenges through using platforms and programs to communicate because of their flexibility and ease of use to students. Being flexible allows the students to express their understanding of concepts in various ways. (Teacher 2)

Relationships Between Teachers and Students. In the same context, one of the interview questions explored the impacts of distance learning on students and their social literacy through their relationships with teachers: “What do you think has been the impact of the relationships between teachers and students on students’ social literacy via distance education during the Covid-19 pandemic?”

This theme included one core idea: the significance of the relationship between teachers and students in enhancing social literacy skills of elementary school students via distance education.

Three teachers ($n = 3$) discussed the significance of relationships between elementary school teachers and their students in teaching and developing students’ social literacy skills, and they indicated that these relationships are fundamental to improving the social literacy skills of third-grade children. One of them talked about her experience building connections with her students during Covid-19 via distance education:

We all had to accept and adapt to the new learning environment via distant learning. I tried to encourage my students to follow my new directions and to communicate rules to treat each other nicely via distance learning. You know, we are supporting each other; we have a family feel in our virtual classroom. Thus, each one of us is genial as we push each other to participate in the discussion and interact freely and comfortably, as well as respect and listen to the opinions and ideas of others. So, this means I tried to improve the social literacy skills of my students during this pandemic by using a hidden curriculum. (Teacher 3)

Another teacher explained the importance of the positive relationships between teachers and students on the development of social literacy during the Covid-19 pandemic:

During the Covid-19 pandemic, distance education and technology have greatly affected the skills and abilities of children to express and communicate with others. Therefore, it is necessary for us teachers to build a positive and comfortable relationship with children to relieve them of the pressure of technology and encourage them to express themselves freely and comfortably. (Teacher 4)

Some teachers ($n = 4$) described their experience developing students’ social literacy skills and establishing a relationship with their students and noted that distance education increased the frequency of their interactions with students, leading to improved communication skills among the students. For example, one of them ($n = 1$) reported that distance education enabled them to build robust teacher–student relationships through aspects such as reaching out to individual students, tracking their participation, and interacting with the students’ parents and families. For most of the participants, these improved relationships enhanced their effectiveness in imparting key social literacy skills to their students.

5.2. The effects of distance education on social literacy skills

The research question that led to this focus area, effective use of online education on the social literacy skills of elementary school students, was “What were the effects of distance education on the social literacy skills of elementary school students during the Covid-19 pandemic?”

This theme included two core ideas: 1) positive effects and 2) negative effects.

All participant teachers ($n = 6$) reported that distance education during the Covid-19 pandemic had both positive and negative effects on

particular aspects of the improvement of elementary students’ social literacy skills. For instance, in comparing their experiences before and during the pandemic, the teachers noted that distance education enhanced students’ attention during learning. Those who noted this improvement indicated that the students were more focused and engaged in the learning process.

Positive Effects. Some ($n = 4$) of the participants indicated that distance learning enhanced communication, listening, and active participation skills among the students. “This learning model has also helped boost active listening among learners” (Teacher 5). In addition, one of them noted that the virtual classroom necessitated the development of effective communication and listening skills to improve the quality of online peer conversations. Another teacher indicated that distance learning forced the students to develop considerable technological skills and credits these skills to the observed social literacy improvements of their students. Furthermore, some of the teachers reported that learning completely via distance education improved the teacher–learner–family relationship.

Some of the teachers noted that, previously, students mostly used their digital technology skills for entertainment purposes but were able to transfer their technological skills to online learning. In addition, one teacher indicated that distance education during Covid-19 provided children with the experience of connection with teachers and their classmates, in a way other than face-to-face, in a virtual environment that required them to follow instructions and work to develop skills in listening, speaking, and respecting others’ personal space. The use of information technology to support distance learning was the factor that had the most positive impact on enhancing the social literacy skills of students.

In addition, some teachers ($n = 3$) described the impact of distance learning on various self-control skills. In this regard, one participant reported that students were able to respect the rules of interaction during online classes by waiting for their turn to participate. Two more teachers reported that most of their students demonstrated enhanced self-regulation, motivation, and supervision.

Another positive impact of distance education during the Covid-19 pandemic, as some teachers noted, was that the completely online experience improved the teacher–learner–family relationship, which played a great role in enhancing the social literacy skills of students.

Negative Effects. However, all participating teachers also indicated that distance learning had negative effects on the students’ improvement of social literacy skills. In this respect, one of the teachers noted that distance learning reduced the students’ abilities to control their emotions, communicate, and show respect to other students and increased their susceptibility to stress and anxiety. For example, one of the teachers pointed out that students’ insufficient experience with technology in education before the Covid-19 pandemic was a main cause of anxiety and stress for teachers and students that impacted the development of students’ social literacy skills.

During the Covid-19 pandemic, distance education also affected students’ conflict resolution skills, their empathy, leadership, and interpersonal skills as well as relational discipline. The teachers noted that reduction in face-to-face interactions and the inability to observe emotions and implement class stories in online classes were some of the factors that contributed the most to reduced development of social literacy skills.

5.3. The challenges of teaching and developing social literacy skills

The interview question that led to this focus area, the challenges and difficulties of elementary school students with social literacy skills, was “What are the challenges you have encountered trying to teach and improve the social literacy skills of elementary school students via distance education during the Covid-19 pandemic?”

This theme’s concentration area comprised three main ideas: 1) technology issues, 2) social challenges, and 3) support from parents.

Technology Issues. Some teachers ($n = 3$) pointed out that the lack of experience with using technology and the distance education system was the biggest issue. Some of the teachers indicated that using distance education was a new experience for them.

Using distance education to teach and communicate with my students was something new to me because, throughout my long experience of teaching (28 years), I was following the traditional system (face-to-face). So, at the beginning, I could not teach and communicate well with my students, but now I am doing well. I wished that I had had experience in dealing with digital literacy before the Covid-19 pandemic. (Teacher 1)

Social Challenges. Four of the participating teachers ($n = 4$) discussed the social challenges associated with trying to teach and improve social literacy skills via distance education during the Covid-19 pandemic. This challenge was an indirect reason for the incapacity of some female teachers to effectively verbally communicate with their students and teach them essential social literacy skills. The reason for this may be related to culture and phobia.

Support From Parents. Two teachers ($n = 2$) indicated that support from parents was a difficulty or challenge they faced when attempting to teach and improve the social literacy skills of their elementary school students.

I believe I faced the challenge of some students' parents wanting to support them but not knowing how, parents did not have enough time to work with their children at home since most of them were employed. As you know, third-grade students still need to be monitored and supervised, especially in the distance education system during this pandemic. (Teacher 5)

6. Discussion and recommendations

This qualitative study provided insights on online education and the social literacy skills of elementary school students during the Covid-19 pandemic via their teachers' perspectives. There were several factors of distance education led to changes in teaching techniques. In particular, distance education reduced physical interactions between students and teachers, which presented significant challenges in their ability to effectively equip the students with social literacy skills. For instance, distance education caused the absence or reduction of physical interactions between students each other and their teachers. Consequently, teachers could not use strategies based on face-to-face interaction between students, such as cooperative learning, and peer interactions that support the development of the social literacy skills (Coakley, 2019; Teo and Divakar, 2021; Wang et al., 2018) because the lack of physical contact limited students' interaction, making them less able to handle various social scenarios. In addition, they were not interacting with new people (Grose, 2020; Hebebcı et al., 2020; Hurst et al., 2013; Petersen, 2020, 2021; Uzun et al., 2021; Yang et al., 2021). Thus, distance education, given its nature of zero physical interaction, has had a negative impact on social literacy skills, especially for elementary school students (Berker, 2021).

Physical peer interactions are essential to enhancing communication and social literacy skills, but they are absent in distance education. Thus, the self-confidence of most students declined via distance education during the Covid-19 pandemic, which led to emotional stress and anxiety because face-to-face peer interactions are crucial to developing students' abilities to interact (Coakley, 2019; Rapanta et al., 2020). The cumulative effects of the Covid-19 pandemic may have exacerbated the impact of distance education on elementary students' social literacy skills because the technostress has affected students' behaviors, feelings, abilities, and practices (Al-Abdullatif et al., 2020). In addition, some social literacy skills have been negatively affected by online education during the Covid-19 pandemic, such as sharing, respecting personal space, and maintaining eye contact, as Fitria et al. (2021) indicated in their study.

Despite the negative impact of distance education on students' development of social literacy skills during the Covid-19 pandemic, distance education also had significant benefits that attracted students' attentiveness and focus to peer conversation and orderly engagement in the virtual classroom, which was a new experience for most of them. In addition, using the platforms for distance education enhanced the elementary school students' social literacy skills. These findings showed the potential of online learning platforms to shape the future of interactions between teachers, learners, and parents, thereby enhancing the overall academic progress of the students. Bond (2020) indicated that the assistance that parents offered their children during online classes was one way of promoting healthy relationships among the three parties. Essentially, parent engagement in the learning process can address the emotional issues that arise from the difficulties that students experience via the distance education system, which impedes the development of their social literacy skills.

Moreover, teachers could provide students with social literacy skills via distance education because they could reach out to individual students during the pandemic since most of the children were in familiar environments, at home. Hence, it became easier for educators to teach them new social literacy skills, which they could apply later (George et al., 2021; Tzifopoulos, 2020). In the same context, teachers could teach their students social literacy skills through indirect methods by using a hidden curriculum (Alsubaie, 2015).

The teachers' experiences in this study may have demonstrated that online learning platforms enhance students' self-control, regulation, motivation, and supervision. In addition, while the students were unable to extend their self-control to manage their emotions, the study of Dong et al. (2020) found that online learning does not equip young students with emotional and social skills. However, the findings of this study suggested that, through concerted efforts between parents and teachers, online learning can foster emotional control among young students. Alsubaie (2018) stressed the importance of parents' participation in supporting their children's educational performances, especially in the literacy field.

Distance education requires teachers to adapt their instruction techniques and teaching materials to the specific features of online classes. The study findings showed that the teachers enjoyed more flexibility in online classes. Huang et al. (2020) supported this finding and indicated that teachers should be flexible in their instruction techniques, learning content, and resources as well as the way in which they adapt with another learning system. In this context, flexibility allows teachers to incorporate creative solutions to overcome the hurdles that online learning presents. Consequently, they can effectively impart the intended knowledge and skills (Burgess and Sievertsen, 2020).

In addition, flexible learning opportunities are in agreement with the results of Alawamleh et al. (2020), Kaufman (2021), Mitchell (2020), which noted that distance learning is the same as face-to-face communication, as it allows bonding and information exchange and fosters a sense of community. Therefore, teachers who understand how to use distance learning tools can utilize them to help shape and improve their students' social literacy skills. Thus, digital literacy is a significant issue to consider, and all members of educational institutions should have it (Johnson et al., 2021; Lytras et al., 2021).

One finding in this study was the unequal access to learning materials and online learning hardware and software among the elementary students. These tools were essential for students to access and grasp the content being taught in online classes. The teachers cited this inequality as the cause of significant disparity in social literacy skills among their students. This problem was a significant lack of inclusivity, as some students were unable to acquire the devices and digital resources necessary to continue their education online. This result aligns with another study that indicated that not all students had an equal opportunity to access academic material. From their end, teachers could not guarantee universal access to online learning since their capacities varied (Ferri et al., 2020; Yan et al., 2021; Zhu et al., 2020). This inequality

meant that the students who were unable to obtain learning materials, either the hardware or software required for distance learning, were at a disadvantage (Bol, 2020), and this had a negative impact on their literacy skills (UNESCO, 2020).

The unexpected finding in this study was the teachers' lack of experience with technology and the distance education system. It is important to spread the culture of digital literacy among teachers and students, particularly during the Covid-19 pandemic (Hung et al., 2020; Johnson et al., 2021; Kunzmann, 2020). Therefore, the teachers' sentiments demonstrated the need to enhance access to digital learning devices and resources among disadvantaged student populations to ensure all students can effectively access online learning. The lack of these tools hampered their acquisition of teacher-guided social literacy skills essential to their behavioral, cognitive, and academic development.

One of the interesting findings in this study was the social challenge represented by the reticence of women's voices in Arab culture, which may have a role in limited the ability of some female teachers to communicate effectively with their students via the online education system. This finding is in agreement with other studies that indicated that female fears of vocally participating in direct virtual classrooms were probably due to sensitivities of their social culture and the image and voice of women in Arab cultures (Al Lily et al., 2020; Al Lily et al., 2021).

Hence, to improve the development of social literacy skills among elementary school students, teachers, parents, and others, education stakeholders have to encourage and support teachers to seek opportunities to expand the scope of distance education platforms in order to incorporate additional educational activities and enhance the development of students' social literacy skills. In this respect, teachers must demonstrate flexibility and creativity in replicating physical class activities online in order to enhance holistic learning. In addition, parents and education stakeholders must strive to offer support in operating and acquiring digital learning devices and resources. As Kuhfeld and Tarasawa (2020) noted, using distance education during the Covid-19 pandemic had a positive impact on social literacy skills among elementary school students. This was achieved via the ability of the children to fully and knowledgeably interact with information technology for learning—a positive aspect that cannot be overlooked.

7. Limitations

This study had some limitations that need to be considered. For example, the participants in this study were from one single-sex public elementary school and comprised female teachers from one city in an Arabic country. However, it is the belief of the researcher that the findings provided deep, unique, and insightful aspects of the influence of the Covid-19 pandemic on social literacy in elementary school students. Thus, considering Creswell (2013), there is an inability to generalize findings. In addition, collecting the data of this study occurred during a critical period during the Covid-19 pandemic, which may have affected the participants' responses. This means some participants may not have been at ease sharing their attitudes, experiences, and opinions, so this would influence the results (Marshall and Rossman, 2006). Moreover, challenges might have arisen from this method of study, as the data collection and analysis was time-consuming, especially during the Covid-19 pandemic.

8. Conclusion

This research investigated teachers' perspectives on and experiences with online education and the social literacy skills of elementary school students during the Covid-19 pandemic. The findings of this study discussed the factors impacting social literacy skills, the effects of online education on social literacy skills, and the challenges of teaching and developing social literacy skills.

Declarations

Author contribution statement

Merfat Ayesh Alsubaie: Conceived and designed the experiments; Performed the experiments; Analyzed and interpreted the data; Contributed reagents, materials, analysis tools or data; Wrote the paper.

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Data availability statement

The data that has been used is confidential.

Declaration of interestS statement

The authors declare no conflict of interest.

Additional information

No additional information is available for this paper.

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