Impact of the COVID-19 pandemic on children's social, emotional, and moral development: A systematic literature review

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ABSTRACT

This research aims to better understand how the COVID-19 pandemic has affected children's social, emotional, and moral development. Articles and related studies were gathered from the Education Resources Information Centre (ERIC), Scopus, and Science Direct databases. After a quality review following the PRISMA 2020 protocol, 16 articles were selected for a systematic literature review (SLR). The findings from this review were organized into four main themes: (1) the impact of technology and distance learning on children, (2) children's behavior and emotions, (3) the conditions of people around them, and (4) social support. It is suggested that future studies focus on the positive effects of COVID-19 on education.

1. Introduction

Early childhood is defined as a child who has just been born and has not yet reached the age of six years (Britto et al., 2017). Early age is the age when children experience rapid growth and development. This age is crucial for the formation of a child's character and personality. Early childhoods are different, unique individuals and have different characteristics according to their age. Currently, encouraging all aspects of development is very important for the next developmental task. Considering the opinions above, it can be concluded that early childhood is children between the ages of 0-6 years who are in the early childhood growth and development stage and have different characteristics from later ages (Black et al., 2017).

The social-emotional development of humans begins early in life, with infants expressing emotions through crying from birth. In contrast, adults display social-emotional skills through their ability to engage with close relations. Children's social-emotional skills improve as they grow, influenced by age and developmental support. Emotions, such as sadness, fear, anger, happiness, and surprise, are innate and, according to Robinson (2008), develop into more complex emotions over time. Vygotsky emphasized that social interaction shapes human development, with individual learning expanding through experiences and communication, which then supports cognitive growth. Social-emotional skills are essential for development. Through interactions with peers, family, and educators, young children learn communication, empathy, and social cues.

The COVID-19 pandemic's lockdowns and social distancing limited these social experiences, delaying the development of vital social skills. Reduced interaction meant children had fewer chances to practice sharing, negotiating, and conflict resolution, which may contribute to social anxiety and difficulty forming relationships in later life. To address this, virtual playdates on platforms like Zoom or Skype can help children practice social skills and maintain connections.

Disruptions to routine, which is important for young children's emotional stability, also had a significant impact. Routines provide security and predictability, helping children manage emotions and behaviors. When regular activities like playdates, extracurriculars, and preschool were interrupted, children faced confusion and anxiety, sometimes leading to behavioral issues such as defiance or tantrums. Consistent routines help children feel stable and supported by giving them clear expectations. Caregivers can promote stability by following structured routines, helping children understand boundaries and feel in control.

Therefore, social-emotional development is vital for a child's ability to form relationships and manage emotions in interactions with others.

Susanto (2014) explained that young children's moral development is initially limited, as they cannot fully grasp abstract concepts of right and wrong or recognize the value of rules within a social group. Morality, reflected in everyday behaviors, is seen when individuals act in line with group norms, and early social interactions that teach fairness and justice are essential for moral growth. Without such interactions, children may struggle to differentiate right from wrong and may have trouble following social norms, which can lead to behaviors like selfishness, difficulty in sharing, and limited empathy. Parents play a vital role in this process, as children learn by observing and imitating their parents' actions, such as kindness, fairness, and sharing. However, the increased stress faced by parents, especially during the pandemic, may affect the consistency of this guidance, potentially leading to confusion in children about acceptable behavior and making it harder for them to establish a clear moral foundation.

As noted in the studies by Gelir and Duzen (2021), Duban and Sen (2021), Iacolino et al. (2023), Lemos and Saraiva (2022), and Hatzichristou et al. (2021), researchers are interested in how social-emotional and moral aspects of children's behavior have been affected by COVID-19. Many studies have examined the impact of the COVID-19 pandemic on children's social, emotional, and moral development. However, only a few researchers have conducted systematic reviews of this research. Dos Santos et al. (2020) emphasized the importance of systematically reviewing past studies. Traditional literature reviews have limitations; they rely on the researcher's knowledge and experience, introducing potential bias in selecting articles, which can affect the quality of the review.

One of the more in-depth methods for reviewing existing literature is a systematic literature review (SLR). In addition, according to Abouzahra et al. (2020), an SLR is a literature review method that identifies, assesses, and interprets all findings about a research topic to answer research questions. A SLR is performed systematically following established procedures and stages. The main research question of this review is, "How does the COVID-19 pandemic affect the social, emotional, and morale of children?" By systematically reviewing previous research, this study aims to better understand how the COVID-19 pandemic affects children's social, emotional, and moral well-being.

2. Methods

2.1. Review protocol - PRISMA 2020

The Preferred Reporting Items for Systematic Reviews and Meta-Analyses (PRISMA) 2020 guidelines (Page et al., 2021) were used to structure this SLR. PRISMA 2020 was developed to improve the quality of reporting in systematic reviews by providing a clear framework. The PRISMA 2020 guidelines include a checklist, explanatory document, and flow diagram. The checklist has 27 items across seven sections, some of which contain additional sub-items, and it includes a checklist specifically for journal and conference abstracts in systematic reviews. PRISMA also offers a flow diagram template, which can be adjusted based on whether the systematic review is new or an update of an existing one. To make systematic reviews valuable to readers, authors must present clear, complete, and accurate information about why the review was conducted, the methods used (such as study identification and selection), and the findings.

At this stage, the researcher writes a formulation of the problem, which will be discussed in depth based on the keywords in the title. The author chooses the study question traditionally. "How does COVID-19 affect the social-emotional and morale of children?" is the selected question. Furthermore, the document search approach was developed and implemented in three systematic stages: identification, screening, and eligibility. The criteria adjusted by Abouzahra et al. (2020) are then used for quality assessments. Quality assessment is carried out after the article or journal has met the criteria. Articles or journals that will be discussed thoroughly must meet the quality assessment criteria for this research.

2.2. Formulation of the research question

In the first stage, it is necessary to develop clear and concise research questions that drive the entire systematic review methodology. This article aims to analyze the impact of COVID-19 on children's social-emotional and moral development. Appropriate research question, namely the following, were selected. "How is the impact of COVID-19 on the socio-emotional and moral of children?"

2.3. Systematic searching strategies

In this study, researchers conducted a data search using accessible journal portals such as ERIC, Scopus, and Science Direct. The search focused on four main keywords—COVID-19, socio-emotional, moral, and children—based on the research questions. The authors used Thesaurus.com to identify synonyms and related terms for these keywords and included keywords suggested by freelance research and those recommended by Scopus. Related keywords, such as SEL (social-emotional learning), principled, and children, were also incorporated. These keyword combinations were applied in the ERIC and Scopus databases using field code functions and search phrase operators. Additionally, a manual search, or "hand selection," was conducted in the Science Direct database. Through these efforts, a total of 1,313 items were identified across the three databases. According to Chigbu et al. (2023), screening is the process of

filtering data to identify research problems relevant to the study's topic. The title examined in this research is "The Influence of COVID-19 on Social-Emotional and Moral Development in Children." Journal data collected in the research was screened based on several criteria. The author applied inclusion and exclusion criteria to select appropriate articles and journals, focusing on topics like COVID-19 and children while excluding books, book sections, and review articles. This screening was also limited to publications from 2020 to 2023 to align with the study's focus on learning during the COVID-19 period, which began in 2019 and continued until 2021. Through this procedure, 955 articles were removed, and 252 articles were disqualified from the Science Direct database for not meeting inclusion requirements; two duplicate articles were also removed from Scopus. Consequently, only 104 articles met the eligibility criteria. The summary of the search string used in the selected databases is presented in Table 1, while Table 2 outlines the inclusion and exclusion criteria applied.

Table 1: Search string used in the selected database

Database	String
Scopus	TITLE-ABS-KEY (("COVID 19") AND (socio-emotional OR SEL OR "social-emotional learning") AND (moral OR behavior OR principled) AND (children))

Table 2: Inclusion and exclusion criteria

Criterion	Inclusion	Exclusion
Timeline	2020-2023	2019 and earlier
Document type	Articles and journal	Book, chapter in book, review article, etc.

The eligibility process is the third step, in which the author manually reviews the retrieved articles to ensure they meet the established criteria after screening. This step involves reading the title and abstract of each article. During this process, 82 articles were excluded because they focused on youth rather than children or emphasized medical health instead of socio-emotional aspects. Ultimately, only 22 articles met the eligibility criteria and were selected for inclusion.

2.4. Quality appraisal

The quality assessment process ensures that the methodology and analysis of the selected studies are conducted appropriately. For this evaluation, the Quality Assessment (QA) by Abouzahra et al. (2020) was applied. Each article's methodological and analytical rigor was assessed by the corresponding author, with support from two co-authors. Careful reading of each article was essential, focusing on the methodology, analytical approach, relevance of the study, literature review, theoretical grounding, and study limitations. Articles were evaluated based on six criteria, using three options: Y (yes), P (partially), and N (no). Articles meeting at least three criteria were included in the review.

All assessment decisions were made collectively, with any disagreements resolved through discussion among the raters and authors. This process led to the exclusion of two articles that did not meet the quality criteria. The remaining articles met the minimum quality standards for methodology and analysis. Overall, three articles met all six criteria, thirteen met five criteria, three met 4.5 criteria, and one met at least three criteria. The results of the quality assessment are displayed in Table 3.

Table 3: Quality assessment results

Reference	Research design	QA 1	QA 2	QA 3	QA 4	QA 5	QA 6	Criteria fulfilled	Inclusion in review
Hatzichristou et al. (2021)	MX	Y	N	Y	Y	Y	Y	5	√
Sun et al. (2022)	QN	Y	N	Y	Y	Y	Y	5	√
Gelir and Duzen (2022)	QN	Y	N	Y	Y	Y	Y	5	√
Duban and Şen (2021)	QL	Y	N	Y	Y	Y	Y	5	√
Grütter and Buchmann (2021)	QN	Y	N	Y	Y	Y	Y	5	√
Chen and Adams (2023)	QL	Y	Y	Y	Y	Y	Y	6	√
Linnavalli and Kalland (2021)	QN	Y	N	Y	Y	Y	Y	5	√
Kim (2020)	-	N	N	N	N	N	N	-	-
Egan et al. (2021)	MX	Y	Y	Y	Y	Y	Y	6	√
Dillmann et al. (2022)	QN	Y	N	Y	Y	Y	Y	5	√
Kesik et al. (2023)	QL	Y	N	Y	Y	Y	Y	5	√
Cohen et al. (2022)	QN	Y	Y	Y	Y	Y	Y	6	√
Wijaya et al. (2022)	QL	Y	N	Y	P	Y	Y	4.5	√
Lemos and Saraiva (2022)	QN	Y	N	Y	Y	Y	Y	5	√
Timmons et al. (2021)	QL	Y	N	Y	Y	Y	Y	5	√
Berasategi Sancho et al. (2021)	QN	Y	N	Y	Y	Y	Y	5	√
Kaya and Ağır (2022)	QL	Y	N	Y	P	Y	N	3.5	√
Mulholland and O'Toole (2021)	-	N	N	N	N	N	N	-	-
Scott et al. (2023)	QL	Y	N	Y	Y	P	Y	4.5	√
Gates and Curwood (2023)	MX	Y	N	Y	Y	Y	P	4.5	√
Tintori et al. (2021)	QN	Y	P	Y	Y	Y	P	5	√
Iacolino et al. (2023)	QN	Y	P	Y	P	Y	Y	5	√

QA=Quality assessment; QN=Quantitative; QL=Qualitative; MX=Mix method

Of the 22 articles assessed for eligibility, 16 were ready for analysis, and six could not be continued because two of them did not meet the quality appraisal, and the other four articles did not match the predetermined theme. The process of filtering articles is displayed in Fig. 1.
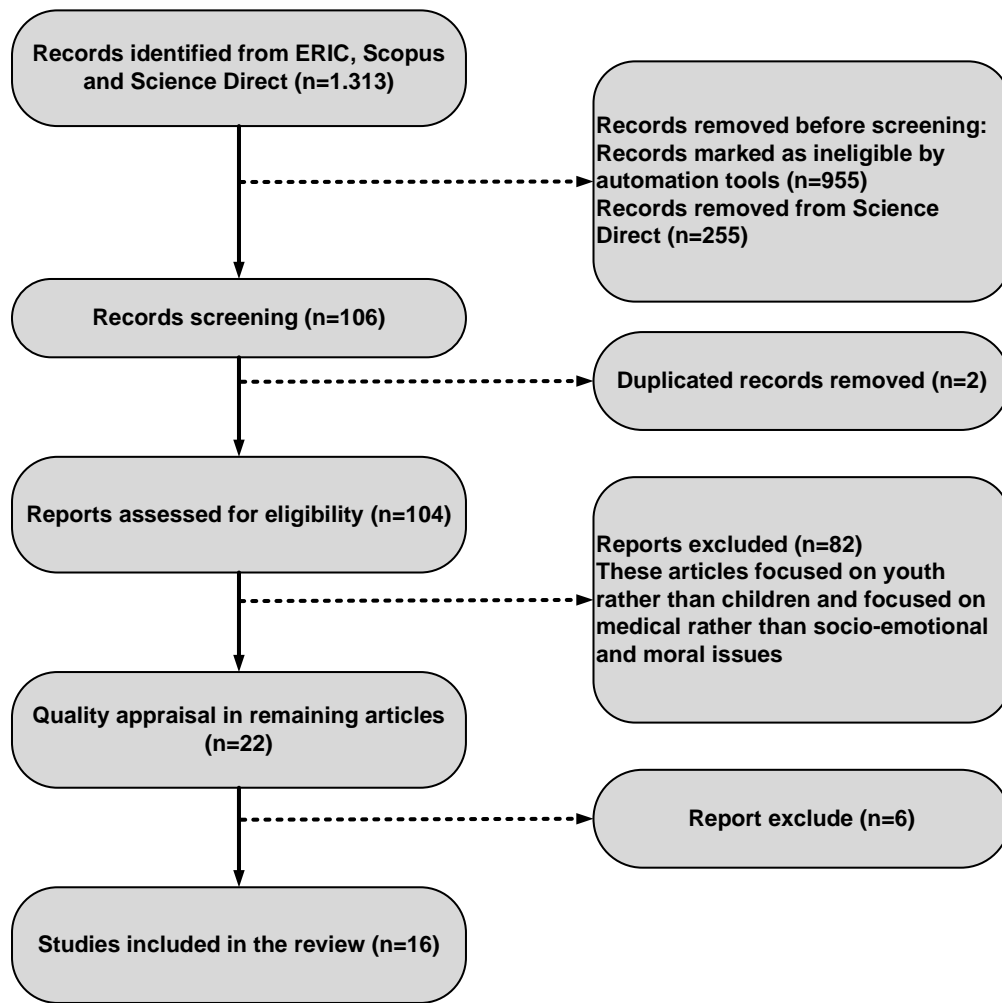

Fig. 1: Flow diagram of the search process

2.5. Data extraction and analyses

The selected articles underwent a data extraction and analysis process guided by the main research questions. The data extraction was directed by these questions, while the extracted information was analyzed using qualitative data synthesis, known as thematic synthesis. To ensure alignment with the review's objectives, the authors followed protocol suggestions and considered alternatives. Once data meeting the criteria were classified, extraction could proceed. With the identification, screening, and eligibility stages completed, the data extraction results reveal the amount of data that continues to meet the criteria for further analysis.

In this review, thematic synthesis was based on thematic deductive analysis. After reviewing multiple articles, the author identified themes by noting frequently recurring words and phrases with similar meanings. The identified themes for this study include the effects of technology and distance learning, children's behaviors and emotions, the environment around them, and support from their surroundings. The researcher analyzed 16 articles by repeatedly reading the results and discussion sections, looking for recurring words and phrases that aligned with the study's three themes. When relevant words or sentences were identified, the researcher extracted these passages to begin composing the literature review.

3. Results

3.1. Background of the selected studies

The total number of articles by country used is shown in Fig. 2. Of the 16 articles, four focused in Turkey (Gelir and Duzen, 2022; Duban and Sen, 2021; Kesik et al., 2023; Kaya and Ağır, 2022), three in the USA (Sun et al. 2022; Cohen et al., 2022; Timmons et al., 2021), Greece (Hatzichristou et al., 2021), Finland (Linnavalli and Kalland, 2021), Ireland (Egan et al., 2021), German (Dillman et al., 2020), Indonesia (Wijaya et al., 2022), Portugal (Lemos and Saraiva, 2022), Spain (Berasategi Sancho et al., 2021), Switzerland (Tintori et al., 2021), and Italy (Iacolino et al., 2023).

Fig. 3 presents the total number of articles categorized by research design. Nine studies were recorded that focused on quantitative analysis (Sun

et al., 2022; Gelir and Duzen, 2022; Linnavalli and Kalland, 2021; Dillman et al., 2020; Cohen et al., 2022; Lemos and Saraiva, 2022; Berasategi Sancho et al., 2021; Tintori et al., 2021; Iacolino et al., 2023), five articles with qualitative analysis (Duban and Sen, 2021; Kesik et al., 2023; Wijaya et al., 2022; Timmons et al., 2021; Kaya and Ağır, 2022) and two other articles on the mixed method (Hatzichristou et al., 2021; Egan et al., 2021). The total number of articles by year used in the study is shown in Fig. 4.

It can be observed that the most articles are in 2021, as many as eight articles, and the fewest articles are in 2023 (Iacolino et al., 2023; Kaya and Ağır, 2022; Sun et al., 2022; Cohen et al., 2022; Wijaya et al., 2022; Lemos and Saraiva, 2022; Gelir and Duzen, 2022; Duban and Sen, 2021; Kesik et al., 2023; Timmons et al., 2021; Linnavalli and Kalland, 2021; Egan et al., 2021; Berasategi Sancho et al., 2021; Tintori et al., 2021; Dillman et al., 2020; Hatzichristou et al., 2021).
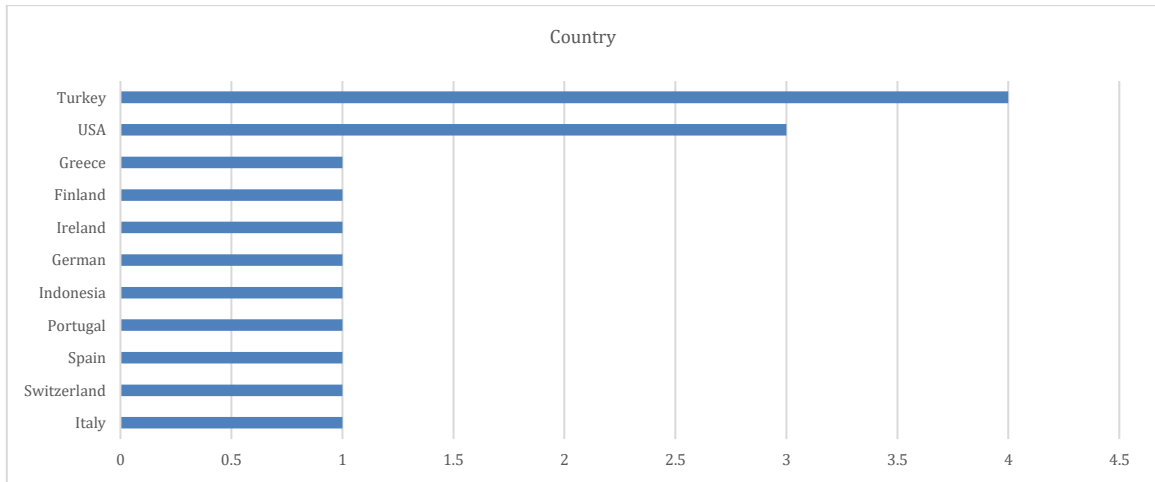

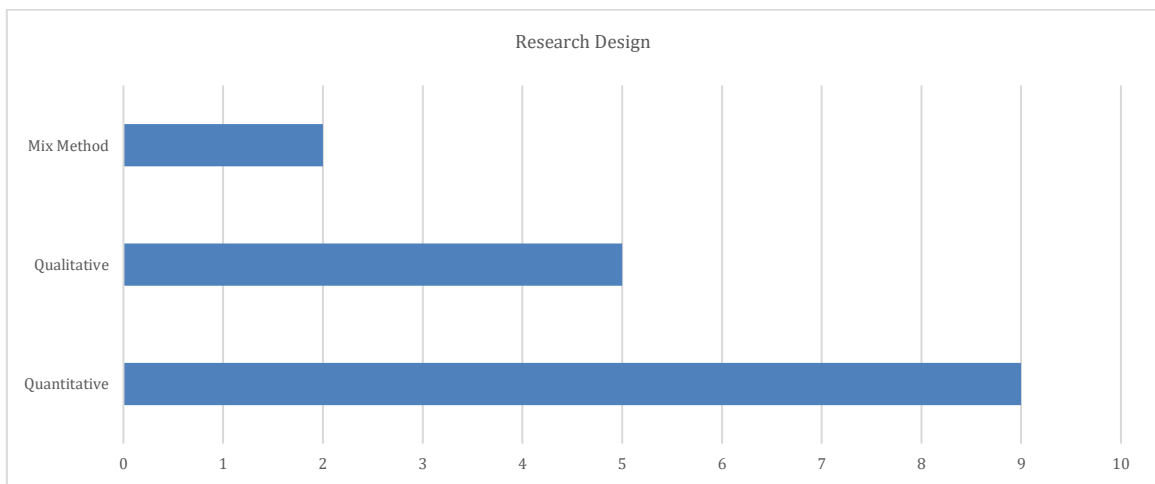**Fig. 2:** Total of articles by country

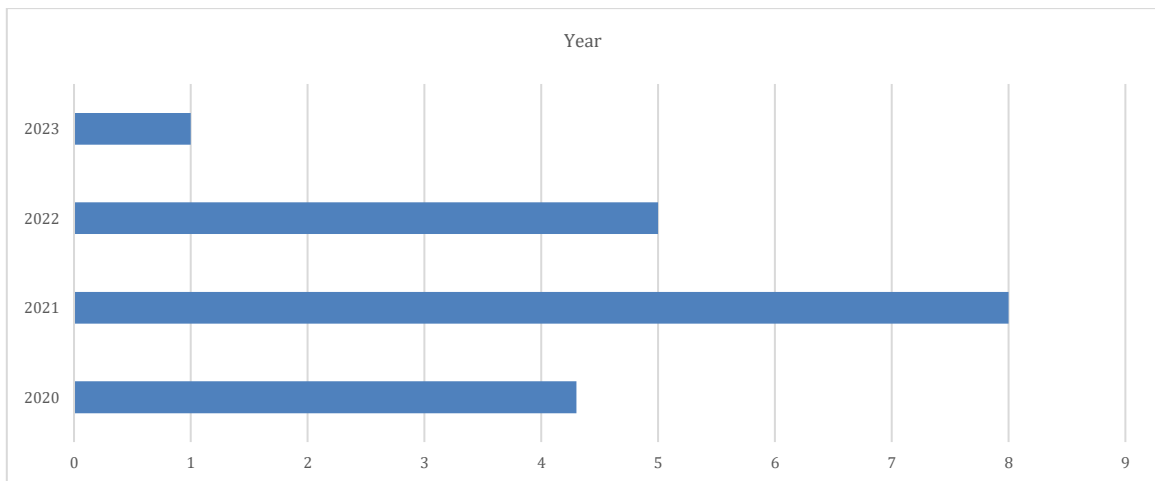**Fig. 3:** Total of articles by research design

Fig. 4: Total of articles by year

3.2. The developed themes

The thematic analysis of the sixteen selected articles identified four main themes: environmental support, the circumstances surrounding children, children's behaviors and emotions, and the impact of distance learning and technology. These themes address the central research question of the systematic literature review (SLR): "How does COVID-19 affect the social, emotional, and moral development of children?" Each theme provides insights into the effects of the pandemic on these aspects of children's development, detailed in the following sections.

3.2.1. The effects of technology and distance learning

At the beginning of the pandemic, students and teachers had difficulty adjusting to distance education; hence, children and teachers struggled to establish a good learning process (Hatzichristou et al., 2021; Kaya and Ağır, 2022). The challenges faced by students and teachers in adapting to distance education can be understood through Cognitive Load Theory. Effective learning processes were probably hampered by the sudden switch to online learning, which overwhelmed cognitive capacities. According to the theory, which emphasizes effective use of cognitive resources, the learning gap became wider when access to technology was restricted (Timmons et al., 2021). Technologies like tablets help children learn more literacy, yet parents say their children are experiencing behavioral problems such as increasing reliance on gadgets. When students spend more time in front of screens and less outdoor activity, their mental health is under threat. However, if parents take gadgets and limit them to playing gadgets, they will act up and sulk. Children will experience depression and look stressed if their wishes are not fulfilled (Gelir and Duzen, 2022; Kesik et al., 2023; Cohen et al., 2022). According to Wijaya et al. (2022) and Iacolino et al. (2023), during the pandemic, children choose to spend time in front of screens to overcome loneliness, boredom, and solitude. Digital media causes aggressive behavior, obesity, lack of physical activity, and sleep disturbances in children. The increased reliance on gadgets and behavioral problems observed in children can be analyzed through Behavioral Theory (Skinner, 1938). Skinner's (1938) theories imply that reinforcement and punishment have an impact on behavior. Screen time may be reinforced as the main reinforcer, which may lead to behavioral issues in children, such as acting out when usage of devices is limited (Gelir and Duzen, 2022). Additionally, the onset and progression of myopia can also be affected by increased time spent on digital screens and limited outdoor activities during the COVID-19 pandemic. It can also delay children's speech, especially those between the ages of 3 and 4. During this pandemic, children experience problems such as psychological stress, anxiety, anger, psychological stress, internet addiction, depression, and disturbances in children's cognitive, linguistic, social, emotional, and motor development (Tintori et al., 2021). Bronfenbrenner's model highlights the interaction between individuals and their environment. This theory helps explain the detrimental effects of increased screen usage on children's physical and mental health during the pandemic. The developmental trajectories of children were disrupted by changes in their microsystems (school and home) and restricted outside activities, which contributed to psychological stress and disturbances (Wijaya et al., 2022; Tintori et al., 2021).

Having the skills to use the software in the right way is a new problem that arises due to distance education. According to Timmons et al. (2021), lack of access to technology becomes a major problem in families where several family members use devices together. This may have widened the learning gap. Certain students and families were disadvantaged because of the transition to distance learning (Berasategi Sancho et al. 2021). However, children need parental supervision during this pandemic when using electronic devices. This is done so that parents can explain how electronic devices are used in life and how they function. According to Iacolino et al. (2023), emotional intelligence and metacognition are useful for helping teachers deal with the stress of distance learning. In doing so, they can reduce fatigue and other dysfunctional symptoms caused by difficulties adapting to distance learning methods that employ work technology.

Schools in Finland and Switzerland were better equipped to make the transition to distance learning because they have strong infrastructures for digital education as well as equitable access to technology (Linnavalli and Kalland, 2021; Tintori et al., 2021). These countries have made large investments in integrating technology into education, giving teachers and students the resources and support they need. Learning interruptions have been reduced due to the proactive approach to bringing technology into the learning environment. Conversely, students had major difficulties with remote learning in areas such as rural Turkey and Indonesia, where digital infrastructure is underdeveloped and internet connectivity is limited (Gelir and Duzen, 2022; Wijaya et al., 2022). Differences in access to technology exacerbated already-existing educational disparities, emphasizing the necessity of focused measures to close the digital divide.

3.2.2. Behaviors and feelings experienced by children

Preschoolers do not seem to experience as much difficulty due to the poorer everyday environment or changes in routine. However, parents rated their child's prosocial behavior worse than before. This may suggest that prosocial skills are a major result of the stress children experience during quarantine (Linnavalli and Kalland, 2021). Among the negative

impacts of COVID-19 on children's mental health are fear and feelings of loneliness, as well as changes in the personality of preschoolers that may have a long-term impact on them (Gelir and Duzen, 2022). Note that children misbehave beyond fear and withdrawal (Sun et al., 2022). As revealed by Lemos and Saraiva (2022), children are lonelier than ever, yet they seem to have survived the quarantine. Compared to before the lockdown, children exhibited fewer physical symptoms on average, and their moods were more positive (Linnavalli and Kalland, 2021). Having no relationship with friends, they are less happy and more worried than before (Egan et al., 2021). Attachment Theory emphasizes the importance of secure relationships in children's socio-emotional development. Children's attachment relationships may have been impacted by the pandemic's disruptions, such as fewer social interactions, which may have resulted in behavioral changes and feelings of loneliness. This is consistent with the growing number of children experiencing negative emotional patterns and loneliness (Lemos and Saraiva, 2022; Sun et al., 2022).

According to Cohen et al. (2022), during the pandemic, they rarely saw their friends, and they lost many opportunities to learn how to start social interactions with their peers. The child will feel annoyed when his friends must go home, and the child will feel exhausted from the routine at home. During the lockdown, there were gender differences in the emotional patterns experienced. Girls tended to experience more negative emotional patterns. The boredom experienced during lockdown is related to activities such as eating, sleeping, and resting; in other words, doing the same routine in a pandemic situation feels boring (Lemos and Saraiva, 2022). Consequently, some children feel lonely, more specifically, children who do not have siblings. Maslow's framework provides insight into the psychological needs impacted by the pandemic. Children's senses of safety, belonging, and esteem may have been weakened by the challenges posed by the pandemic, which included interrupted routines and fewer social connections. As a result of not being able to address their basic psychological needs, children might experience behavioral changes, increased anxiety, and loneliness (Linnavalli and Kalland, 2021; Cohen et al., 2022). Some children are shy when they are not usually shy, quiet when they are not usually quiet, and noisy. During the lockdown, there have been recurring concerns about a lack of social interaction at the kindergarten through 2nd-grade levels of primary school. Additionally, the scientific community has taken notice of the activities children engage in at home, particularly due to the excessive use of technology. Many things affect the health and well-being of children (Berasategi Sancho et al., 2021).

As stated by Egan et al. (2021), it positively impacts children's socio-emotional development. They see more opportunities and time to play outdoors, with siblings, or even alone. Parents who report positive experiences may have adjusted to a new routine after two months of lockdown, and their child may have adjusted well to the changed situation and lack of early childhood care or education. Children and their caregivers exhibited fewer positive emotions when they completed worksheets or logged into the school district's virtual learning platform than when they played outside with their families or engaged in culturally significant activities Cohen et al. (2022). This is comparable to the article of Wijaya et al. (2022) regarding children who practice social distancing and demonstrate lower anxiety levels when their mother and father are around.

Close-knit family interactions give children emotional stability and resilience in countries like Portugal and Italy, where community support is valued and family ties are strong (Lemos and Saraiva, 2022; Balenzano et al., 2020). These countries created atmospheres in which children felt comfortable expressing their feelings and asking for help from their family members. On the other hand, children may encounter difficulties in obtaining treatment for psychological discomfort in societies such as Greece and Spain, where mental health stigma persists and access to mental health services is limited (Hatzichristou et al., 2021; Berasategi Sancho et al., 2021). Cultural stigmas related to mental health may impede open discussions and keep children from getting the help they need in a timely manner.

3.2.3. Circumstances of people around

Parents' distress is an excellent signal for children's actions to express and internalize fears and withdrawals. Children equipped with high peer social skills significantly reduced their behavior problems during crises. However, parental pressure on children's behavior problems is not as great as controlling pre-pandemic behavior and peer social skills (Sun et al., 2022). According to Hatzichristou et al. (2021), female teachers face higher stress levels and use functional coping strategies more frequently than male teachers (Sun et al., 2022). A study suggests that women are more concerned with family life and health than men. During the COVID-19 pandemic, mothers and women also demonstrated lower levels of life satisfaction and higher symptoms of depression and anxiety (Dillmann et al., 2022). Family Systems Theory examines how family interactions influence individual behavior. The stress caused by the pandemic on parents, especially mothers, leads to increased family tension and conflict. This stress aggravated bad parent-child interactions and had a negative impact on children's emotional well-being, especially when combined with the twin roles of teaching and caregiving (Dillmann et al., 2022; Egan et al., 2021).

The current world health crisis limits microsystem interactions. In addition, it limits interactions between other fields, such as mesosystems and ecosystems. Parents feel unable to care for and educate their children due to a lack of

space and a place to play, living indoors at home, and limited outside contact. This creates tension and results in conflict between parents and children (Gelir and Duzen, 2022). Some parents referred to their emotional state and the challenges of balancing work and home life during this lockdown period (Egan et al., 2021). Nevertheless, it can be concluded that parents who work and must care for children cause stress, which is reflected in the worsening parent-child relationship (Linnavalli and Kalland, 2021). This also aligns with the opinion of Timmons et al. (2021) that parents must teach, as parents may have more than one child at home. This argument is due to the indefinite closure of schools and childcare facilities, which can increase the pressure on parents (Dillmann et al., 2022).

As stated by Timmons et al. (2021), teachers not only pay attention to their students' welfare but also the impact of stress and workload on parents and the family. Parents often attribute their emotions to their children's experiences, and parental pleasure is positively related to child pleasure (Cohen et al., 2022). Moreover, parents' emotional well-being is also directly related to children's academic and social achievement. Hence, children forced to study online is indeed one of the biggest challenges of this pandemic and is a major source of stress for families (Berasategi Sancho et al., 2021). Stress in the educational environment not only impacts teachers but also negatively impacts educational institutions. Currently, stress is considered important in predicting the outcome of teacher loss (Iacolino et al., 2023). Self-determination theory focuses on intrinsic motivation and psychological needs. Parents' and educators' feelings of competence and autonomy may have been weakened by the stress they endured throughout the pandemic, which affected their capacity to support the learning and well-being of their children. This is consistent with observations that parents and teachers are experiencing increased levels of stress (Berasategi Sancho et al., 2021; Iacolino et al., 2023).

Families in countries like Switzerland and Germany, which have strong social support networks and policies to assist working parents, have fared better when it comes to balancing work and childcare obligations during the lockdown (Dillman et al., 2020; Tintori et al., 2021). Comprehensive support systems have aided in reducing stress and tension in families. In contrast, families may find it difficult to get support services during times of crisis in areas with inadequate social safety nets, such as certain areas of Indonesia and Turkey (Gelir and Duzen, 2022; Wijaya et al., 2022). Limitations on healthcare, financial aid, and social welfare programs can increase family stress and have a detrimental effect on children.

3.2.4. Social support

Our society has learned to respond to health disasters like COVID-19. Communities must come together to help our children overcome academic difficulties and maintain mental and physical health (Cohen et al., 2022). As mentioned by Egan et al. (2021), some young children may need additional assistance to deal with the negative impact of the COVID-19 crisis on their socio-emotional development. According to Hatzichristou et al. (2021), children need support from school psychologists, which includes emotional support, psychosocial support, learning crisis management, and facilitation of return to school and return to school routines. Additionally, schools should also encourage social-emotional and socialist learning. Changes in public policy in Finland are due to the increasing number of children who need the services of child protection authorities both during the lockdown and after it. Furthermore, avoiding closing schools and child education centers is the highest priority since the daycare is maintaining the parent-child relationship during the pandemic. According to Linnavalli and Kalland (2021), attending early childhood education improves the child's relationship with his parents.

Parents were perceived to be actively involved in organizing healthy activities for their children during the lockdown (Cohen et al., 2022). Social Learning Theory emphasizes the role of observation and modeling in learning and behavior. This approach provides an understanding of the positive impact of social support, including peer interactions and family cohesion, on children's well-being throughout the pandemic. Children can learn to cope with difficult situations by watching others use coping mechanisms and by getting emotional support from peers and parents (Hatzichristou et al., 2021; Wijaya et al., 2022). According to Hatzichristou et al. (2021), positive interaction with family members and time with family helps parents and children. Meanwhile, based on Gelir and Duzen (2022), parents take the time to analyze and normalize stressful situations, answer questions, and talk about stressors experienced by children during the COVID-19 pandemic, thereby helping children cope with and respond to the same stressors. Meanwhile, Sun et al. (2022) revealed that this is an effective approach to improving organizational, independence, and self-regulation skills in children. Balenzano et al. (2020) also looked at some Italian families and discovered that spending more time with family during lockdown increased cohesion. These families exhibit resilience and the ability to overcome challenges and adjust to new lifestyles (Egan et al., 2021). According to Wijaya et al. (2022), parents are very important in maintaining their children's mental health and peace during a pandemic (Garcia de Avila et al., 2020). Resilience Theory emphasizes the capacity to recover from adversity. The critical resilience factors during the pandemic include the involvement of community support, the assistance of school psychologists, and strong family cohesion. These support systems show how important a strong support system is for children to overcome the obstacles presented by the pandemic by assisting them in adapting to changes and maintaining their

mental health and well-being (Cohen et al., 2022; Wijaya et al., 2022). In addition, many teachers state how difficult it is for students to interact with peers and how important social interaction is in the early grades of primary school (Timmons et al., 2021). Peer social skills of pre-pandemic children were a significant predictor of all three children's behavior problems (Sun et al., 2022). Research reveals that better social skills exhibited by a child's peers are linked to reduced fearful and withdrawn behaviors, as well as levels of anxiety expressed by children. If a lockdown is enforced, children are isolated from their peers (Egan et al., 2021). Interaction with other children helps with many aspects of socio-emotional development. Therefore, peers play an important role in a person's life from preschool to adolescence (Wijaya et al., 2022).

Communities in countries like the USA and Ireland, which place a high value on communal resilience and well-being, have mobilized resources to assist families and children throughout the pandemic (Egan et al., 2021; Cohen et al., 2022). Social support has been largely provided via community outreach programs and grassroots initiatives. On the other hand, a unified communal reaction to the pandemic may be lacking in nations where individualism is prevalent, such as Finland and Greece (Hatzichristou et al., 2021; Linnavalli and Kalland, 2021). In times of crisis, vulnerable families and children may not receive the necessary care due to fragmented social support networks and a dependence on individual fortitude.

According to Kaya and Ağır (2022), fulfilling children's self-actualization and social needs during preschool and school education, both in daily activities and outside of school, provides an environment that encourages and supports a healthy lifestyle. Therefore, children can easily overcome feelings of loneliness during the COVID-19 pandemic. According to Berasategi Sancho et al. (2021), physical activity and creativity are needed for children to stay healthy during the lockdown. Therapists and specialists recommend two activities to support parents and caregivers of young children during lockdown: semi-structured play and intentional play aimed at creating a secure environment. During lockdown, it is essential to develop critical and ethical skills that help children engage with contemporary media safely. These skills are crucial for safeguarding children's well-being and fostering greater social inclusion (Tintori et al., 2021). The findings of the four themes from the thematic analysis conducted on the sixteen selected articles can be found in Table 4.

Table 4: Findings

Reference	The effects of technology and distance learning	Behaviors and feelings experienced by children	Circumstances of people around	Social support
Gelir and Duzen (2022)	√	√	√	√
Duban and and Sen (2021)				
Kesik et al. (2023)	√			
Kaya and Agir (2022)	√			√
Sun et al. (2022)		√	√	√
Cohen et al. (2022)	√	√	√	√
Timmons et al. (2021)	√		√	√
Hatzichristou et al. (2021)	√		√	√
Linnavalli and Kalland (2021)		√	√	√
Egan et al. (2021)		√	√	√
Dillman et al. (2020)			√	
Wijaya et al. (2022)	√	√	√	√
Lemos and Saraiva (2022)		√		
Berasategi Sancho et al. (2021)	√		√	√
Tintori et al. (2021)	√			√
Iacolino et al. (2023)	√		√	

4. Discussion

The pandemic has affected many changes that occurred in people's lives, especially the prevailing daily conditions, one of which was a change in education. Distance learning is something new for school children during COVID-19; they are trying to get used to this change in their way of learning. According to research conducted by Koller et al. (2023), during a pandemic, children experienced changes in their daily lives, namely new challenges and learning related to the enactment of school closures. During this school closure, children are required to study from home; parental involvement is very much needed during this distance learning. This is in line with the opinion of Rizaldi et al. (2021) that the role of parents is very important for students who learn from home since the supervision carried out at school by teachers is now carried out at home by parents.

Koller et al. (2023) argued that the transition to online learning is difficult for many children and parents alike since they have difficulty concentrating, there are technology issues, and poor internet connections. This has happened to some parents; not all parents understand the technology required in online learning. Another consequence of this distance learning is that it is undeniable that

many children and their parents have difficulty adjusting. Not only parents but teachers feel the same way. Moreover, stress felt by parents can negatively affect parenting behavior, negatively affecting the interactions and relationships between parents and children and children's social-emotional development (Dillman et al., 2022). As a result of the difficulties and pressure experienced by parents during learning from home during the pandemic this has resulted in children's emotional disturbance. The interaction between children and parents will be bad if the parent's mental health is disturbed.

Children's social lives were significantly disrupted during the pandemic due to physical distancing and limited interaction opportunities, making it challenging for them to communicate and play together. As noted by Koller et al. (2023), reduced social contact and restricted play opportunities affected children's social experiences. Many children felt isolated and missed direct human contact, particularly those without siblings. Dillman et al. (2022) found that children with few or no siblings, especially older children, may have been more affected by the lack of peer interaction. Lockdown measures impacted children's emotional well-being, resulting in a range of social and emotional responses, including sadness at not seeing friends and grief over lives lost to the virus. Additionally, some children reported feelings of worry and fear (Koller et al., 2023).

Parents are experiencing difficulties since the pandemic requires them to play a dual role as parents who care for their children's physical and mental health and as teachers who teach what children normally receive at school. Parents of preschoolers and teachers are required to always help their children learn from home. According to Brakemeier et al. (2020), the COVID-19 pandemic significantly disrupted family life, as parents were forced to adapt to new and challenging circumstances, requiring considerable flexibility. Teachers have expressed concerns about the stress and increased workload on parents and families, who were responsible for supporting the well-being of students learning from home during the pandemic. According to Dillman et al. (2022), mothers seem to have been negatively affected by the pandemic and lockdown. One reason for this finding may be that, in many cases, mothers were responsible for care work, both prior to and during the pandemic.

The community believes that maintaining the mental health of children and parents facing the difficulties caused by this pandemic requires everyone's help and cooperation. According to Toresano (2020), one of the collaborations that can be performed is to communicate. Parents must be diligent in communicating with teachers and parents of other students. In addition to intensive communication with children, parents must also be proactive in contacting teachers and homeroom teachers. In addition to sharing information, parents can periodically ask about their child's progress.

Establishing communication with other fellow parents can also be done. This will have a good impact on children and parents since children can comprehend the condition of their friends, and parents can strengthen one another.

Teachers and parents must work together to meet children's self-actualization and social needs, providing emotional and moral support for children in learning. Parents can assist children in understanding the subject matter when they experience difficulties. In addition, parents can also look for additional learning materials outside of the core learning materials from school to deepen children's understanding and broaden their horizons related to the subject matter obtained. The support and activity of parents when accompanying children will determine the extent to which learning at home provides positive benefits and impacts on children's development. The role of parents, which had seemed lost until now, was "forced" again simultaneously and suddenly.

Given the significant disruptions to children's education and well-being caused by the pandemic, it is crucial to provide targeted support to ensure their continued development and success. Integrating social-emotional learning into the daily curriculum is essential for helping students develop crucial skills like emotional regulation, empathy, and resilience. This can be achieved through virtual group activities, mindfulness exercises, and peer support groups. Social-emotional learning offers significant benefits by enabling students to manage their emotions, build positive relationships, and make responsible choices. Incorporating social-emotional learning can also alleviate the emotional challenges and social isolation that children face during and after the pandemic. Regular mental health check-ins should be implemented, where teachers and school counselors routinely assess students' emotional well-being and provide necessary support or referrals to mental health professionals. On the other hand, parents must create a well-structured and supportive learning environment for their children. It's essential to designate a quiet, dedicated area for online classes and homework, free of distractions and equipped with necessary supplies. Setting up a consistent daily schedule that balances schoolwork, physical activity, leisure, and rest is crucial. This routine helps children feel secure, supports their overall well-being, and boosts their focus and academic performance. Regularly checking in with children to talk about their schoolwork, any difficulties they are experiencing, and their overall emotions is important. Listening and providing reassurance can greatly reduce feelings of isolation and stress in children. Besides, policymakers should ensure that all students have equitable access to technology and resources. Funding should be allocated to provide students with the necessary devices and reliable internet access. Support programs are essential to assist low-income families in obtaining these resources. Partnerships between schools, local businesses, and community

organizations can help create technology-lending libraries and internet hotspots, ensuring that no student is left behind due to resource limitations. Ensuring equitable access to technology is vital for effective distance learning, bridging the digital divide, and giving all students an equal opportunity for academic success.

Understanding the long-term effects of the COVID-19 pandemic on children's social, emotional, and moral development is essential for shaping future policies and interventions. Longitudinal studies can examine the extended impact of pandemic-related social disruptions on children's social development and peer relationships. This can be achieved through surveys, observations, and interviews to assess changes in social skills, friendship networks, and peer interactions. Key aspects such as social competence, loneliness, and social support would provide valuable insights into how social isolation and distance learning have influenced children's social growth over time.

Additionally, longitudinal studies could explore the evolution of children's emotional regulation and coping mechanisms post-pandemic. Ongoing assessments would allow for monitoring improvements in children's coping strategies, emotional expression, and resilience. Furthermore, such research could investigate how the pandemic's long-term effects on children's development interact with cultural and socioeconomic factors. By conducting longitudinal analyses stratified by demographics such as race, ethnicity, socioeconomic status, and geographic location, researchers can explore how systemic inequalities shape children's post-pandemic experiences and outcomes. This approach would support identifying strategies to reduce disparities and promote equity in children's developmental pathways.

5. Conclusion

During the COVID-19 pandemic, effective distance learning required collaboration among many individuals to achieve optimal learning outcomes. With most learning taking place at home, parental support became crucial. Parents provided essential assistance to schools, from preparation to the implementation of learning activities. A key form of social support for children during this period was learning assistance, which helped them face various challenges, including academic ones. Schools were expected to address the psychological difficulties faced by students to proactively prevent mental and emotional issues.

Several strategies were identified to support parents in assisting with distance learning. First, parents could establish a conducive learning environment. Children tend to focus better in a quiet, well-lit room, so parents were encouraged to minimize distractions, such as turning off the radio, television, or other media. Additionally, parental involvement in learning, such as helping children understand challenging lessons or providing extra

materials, could enhance understanding and broaden knowledge. Regular, two-way communication between parents and teachers became increasingly important during the pandemic, as it allowed parents to stay informed and actively support their children's learning.

A limitation of this research is its reliance on only three databases—ERIC, Scopus, and Science Direct—due to restricted access to other sources. Future studies are encouraged to examine the positive impacts of COVID-19 on education, as this study found it challenging to locate literature discussing the beneficial aspects of distance education during the pandemic.

Compliance with ethical standards

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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