Check for updates

COVID-19 and Parent-Child Interactions: Children's Educational Opportunities and Parental Challenges During the COVID-19 Pandemic

Arefeh Shahali[1], Mansoureh HajHosseini[2], and Reza Ghorban Jahromi[3]

[1]Educational Psychology, College of Literature, Humanities and Social Sciences, Azad University of science and research, Tehran, Iran
[2]Department of Psychology and Counseling, Faculty of Psychology and Educational Sciences, University of Tehran, Tehran, Iran
[3]Department of Psychology, College of Literature, Humanities and Social Sciences, Azad University of science and research, Tehran, Iran

Objectives: The coronavirus disease pandemic affected people's lives in different ways, including child education and parent-child interactions. The present study aimed to identify the educational opportunities of children and challenges of parents during this pandemic.
Methods: This study was conducted using a qualitative and phenomenological method. The participants were 23 parents of children aged 7−12 years, selected by purposive sampling method. Data were collected by semi-structured interviews, which continued until data saturation was reached, and then classified and processed following Strauss and Glasser's approach.
Results: The findings were classified as parenting transformation, attachment challenges, and parenting challenges due to macro-systemic changes. Online education and changes caused by social distancing were the most significant parenting challenges. Moreover, children did not have the necessary space to be independent and self-sufficient.
Conclusion: For many children, adapting to virtual education has been challenging; therefore, parents should change their parenting control and support. The emergence of such challenges has led to the creation of more opportunities in the field of child education.

Keywords: Parenting; Child rearing; COVID-19; Education; Qualitative method; Phenomenology.

INTRODUCTION

Since 2020, the coronavirus disease (COVID-19) outbreak has greatly affected all aspects of people's lives, and forced governments to impose measures such as social distancing, lockdown, school closure, and teleworking. Cheng et al. [1] believe that COVID-19 has deeply influenced the health and well-being of children, adolescents, and families in different aspects. The resulting disruptions like unemployment and a lack of economic security have led to mental distress for the caregivers, and thus, influenced the quality of marital, parent-child, and sibling relationships [2].

Regarding the transformations occurring in parent-child interactions, many studies have focused on the relationship between parents and children, and considered the family in relation to social macro-system. One of the existing theoretical frameworks is Bronfenbrenner's theory [3]. Accordingly, four factors (person, context, time, and proximal processes) influence parental behavior and child's development, and compose a complete ecosystem where these factors impact each other internally. Meanwhile a person's development across his/her life is strongly impacted by his/her past incidents and environments [3].

The changes occurring in the interactions within the family micro-system can lead to changes in parenting styles and parent-child attachment. Firstly, due to social distancing during the COVID-19 pandemic, families were locked down in their houses for extended periods of time, which can increase stress and weaken the quality of relationships among the family members [2]. Due to school closure, distance learning has too created challenges for both parents and children. Distance learning, by itself, is inadequate for learning and developing skills in children. Moreover, it is necessary for parents with any type of parenting style to participate in their children's education, because their involvement (and not that of teachers) is the key factor to educational success in children [4]. However, the way parents deal with COVID-19-related stress can affect how they support their children, facilitate a positive parent-child relationship, and foster the child's social-emo-

tional competence [5].

Secondly, illness can activate attachment behavior [6]. Insecure attachment is associated with higher levels of anxiety, which itself is a significant predictor of maladaptive behaviors in the pandemic period [7]. The conversion of secure to insecure attachment can occur due to major life events like parental divorce or familial conflicts [8]. The learning attachment theory explains that everyday troubles might reduce the sensitivity of parents; hence, exposure to such events can also negatively affect care-giving. Nevertheless, insecure attachments can change into secure attachments through positive life events such as resolving family conflicts. Furthermore, improvements in daily living conditions in a family can lead to positive experiences of receiving care. Being in close proximity to parents when distressed can have stress-regulating effects on children with insecure attachment [8]. Thus, the impact of the COVID-19 pandemic on child attachment is not clear.

As discussed, the resulting transformations in people's lifestyles after the COVID-19 pandemic might have positive or negative effects on parent-child interactions. Thus, the current study, through adopting a phenomenological approach and taking into account the probable changes in attachment and parenting styles, attempts to answer the following questions: "What challenges have parents encountered in the present situation," "What limitations have they been facing," and "What opportunities have they created?"

METHODS

Using a qualitative approach, the current research aimed to identify the educational opportunities and challenges faced by parents during the COVID-19 pandemic. Qualitative research is multi-method and guarantees an interpretative and naturalistic approach. This implies that qualitative researchers study phenomena in their natural situations, and attempt to interpret them based on the meanings people assign to them [9].

Among the different qualitative approaches, the phenomenological approach was chosen for this research. Phenomenology is primarily rooted in a philosophical movement started by Husserl. He believed that the starting point of knowledge is an individual's internal experience of the phenomena consisting of affections, perceptions, and images that emerge when one's attention is focused on an object in a conscious state [9]. In this method, before any kind of evaluation, the lived experiences of the individuals are collected and investigated [10]. Hence, in the present study, description, specification, and classification of data were made through communication with the parents.

Data collection method and instruments

A semi-structured interview was conducted to collect data in the form of profound information. Though the questions were predesigned, they were flexible according to the respondent's answers [11]. In this study, according to Patton's pattern [12] of a semi-structured interview, the researcher defined the guidelines of the interview so that the overall interview structure for all participants remains the same; however, if necessary, the interviewer can ask other questions in order to profoundly track the respondent's affections and emotions. Permission was obtained for recording the interviews and later analyzing them.

Participants

The participants of this study included mothers of 7−12-year-old children, who were selected by purposive and snowball sampling. The selection criteria were as follows: 1) having at least one child in the 7−12 years range; 2) not having been separated from the child's other parent; and 3) participating in the interview willingly.

Among the participants, eight people had a master's or higher degree, 11 had a bachelor's degree, and four had a postgraduate or lower degree. Moreover, 10 people were employed and 13 were housewives. The age range of the participating mothers was 30−44 years; 12 families had one child, eight families had two children, and three families had three children. All participants lived in districts 1−13 in Tehran City.

The interviews continued till they achieved data saturation, and the number of parent participants reached 23 based on saturation principle and repetitive answers. The interviews were performed by one researcher, and the time of interview varied between 25−60 minutes based on the participants' situation.

Data analysis

For data analysis, all interviews were recorded and then transcribed verbatim. Data analysis was done based on Strauss and Glasser's theory using an interpretational analysis [9]. For this, firstly, the concepts being researched on were extracted from each response. Based on the conceptions, the primary codes were derived and compared with the spoken transcripts. Next, according to the frequency of responses and by putting together the main concepts, the main categories were elicited. In the next step, other responses were examined, and the data related to each category were subcategorized. In case a new subject was come across, a new concept and category was defined for it. Finally, all the categories were compared and re-examined (Table 1).

To guarantee the validity and accuracy of the findings achieved by the interviews in a phenomenological approach,

the Guba and Lincoln's [13] model was followed (Table 2). We attempted to apply this principle by allowing enough time to collect the required data, combining the methods, and re-examining the participants. This was done by giving each participant his/her own transcript files so that, if necessary, they can add an explanation, or if any phrase contradicted what they were actually trying to express, it could be omitted or rephrased. In order to uphold the Data Verification Principle, the researchers strived to avoid any kind of bias during the process of interviewing and extracting results. For increasing the reliability, the opinions of all members of the research group were considered. Moreover, all ethical considerations such as maintaining the dignity of individuals and expressing the clear intent of the research were followed. This study was approved by the Ethics Committee of Azad University of Science and Research, Tehran/Iran (Ethical code: IR.IAU.SRB.REC.1399.177).

RESULTS

Based on the statements of the participants and through coding, analysis, classification, and interpretation of the answers, the findings were classified and the main concepts of each subtopic were obtained (Tables 3-5).

Table 1. Strauss and Glasser approach

Strauss and Glasser analysis approach	Strauss and Glasser procedure
The data analysis process is done in the form of coding, in which the data are broken down and conceptualized and then re-connected to each other in a new way.	Open coding/Axial coding These two types of coding are, generally, done at the beginning of the research and for selective coding; however, it is sometimes done in the near-end stages for better coordination. During the open coding, the theorists break down the data, and then analyze and compare them. Next they label and categorize the data through asking questions about the data and comparing them to find similarities and differences. Axial coding deals with the process of relating sub-categories to a single category in line with a paradigm. Selective coding This type of coding includes choosing the central category and relating other categories to it; the process continues until no further information is added in the main category (saturation).

The content has been summarized from Mohammadpour. Social Sciences 2010;17:73-107 [32].

Table 2. Goba and Lincoln approach

Goba and Lincoln criteria	Goba and Lincoln make use of reliability or trustworthiness criterion to evaluate the quality of qualitative data. Reliability is simply the extent to which the findings of a qualitative research can be relied upon or trusted. They believe that the reliability criterion includes four separate but inter-related criteria as follows:	Reliability criterion
Credibility	In a credible research, the data are consistent and correlated, and not scattered and contradictory.	Using the triangulation techniques like confirmatory sources
Reliability	The ability to identify the origin of the data of a particular study, the way of their collection and the way they are used.	Using the structured processes of convergent interviewing for data recording and interpretation / Using a steering committee to evaluate and implement the interview plan
Confirmability	The researcher must show that the findings are both actually and really based on data.	Long-time contact with the research setting, continuous observation and exchange of opinions with peers
Transferability	Transferability deals with the applicability of research findings. Transferability is the degree in which the findings of a qualitative study can be transferred to a different environment and applied for a different population.	Using special procedures of data coding and analysis of symbols/Development and full description of the desired research dataset during the data collection stages

The content has been summarized from Abbaszadeh. J Appl Sociol 2012;23:19-34 [33].

COVID-19 and Parent-Child Interactions

Table 3. Parenting challenges of parents

Main concept	Subtopics	Example responses
Changes in parental support	Filling up children's free time	"They get tired frequently… When I run out of idea, I get tired. I have to constantly tell them let's make a craft or cook food."
Changes in parental support	Taking teachers' role	"I decided to teach him myself at home."
Changes in parental support	Maintaining children's emotional well-being	"I have to make him happy, change his mood, he feels depressed."
Attachment challenges	Increase of dependency in children	"Dependencies have also increased a lot. My son was very dependent, I tried very, very hard, but Corona brought me back to my previous state."
Attachment challenges	The child's asking for the mother's approval and decrease of accountability	"Always asks for my approval, is this fine? Shall I send this? Is this correct?" "She wants the responsibility to be with me so that is if something happens, I would be held accountable for the problem."

Table 4. Educational challenges of parents

Main concept	Subtopics	Example responses
Attachment challenges	Increase in educational dependency	"My daughter has become very dependent. She thinks that if I'm not there, she can't study."
Changes in school-related parental controls	Increase in the use of electronic devices and the Internet	"At first, she was at home doing nothing but playing with the tablet; however, later she used it for her school works. Whenever you tell her to put it aside, she says: 'Now, I should send my homework'."
Changes in school-related parental controls	The possibility not attending and paying due attention in the class by the child	"I have to ask: 'Are you in class now?' They can easily ditch the online classes."
Parents' challenges due to macro systemic changes	Doing homework is time-consuming for parents	"Because I have to prepare the things that the teacher has asked to prepare... I can't do other chores."
Parents' challenges due to macro systemic changes	Lack of time for personal tasks	"I don't have any free time for myself. I used to do sport but now I can't do anything."

Table 5. Upbringing opportunities of parents

Subtopics	Example responses
Getting to know the teaching method and the materials taught	" In some lessons, I couldn't help my son because his teacher taught differently. But now we have the files and we can play them multiple times."
Adapting the education to the individual needs of the child	"I feel that her education is a bit more in my control; that is, I have adapted it to her individual needs."
Increase in the child's self-confidence	"His academic self-confidence has increased considerably because as soon as the teacher asks a question, he quickly searches the Internet for the possible answer."

DISCUSSION

The present research was conducted with the aim of identifying the challenges, opportunities and educational transformations of parents during the COVID-19 pandemic. The findings indicated that the pandemic had a significant effect on interactions amongst almost all family members, including parenting, attachment, and communication with the school.

Opportunities

New opportunities have been created for some parents in their relation to their children that were not possible before the pandemic. For example, some parents mentioned that due to their children not attending schools and classes being recorded, they have found the opportunity of comprehending the teacher's teaching method so that they can facilitate the children's education, and help them in case they need further ex-

planation or revision. On the other hand, according to some participants whose children had special education needs, after the virtualization of education, the role of parents has become more bold, enabling them to align education with the needs of their children, which has improved their children's educational status.

Our findings revealed that children's mental health had also an impact on the research results. Moreover, special needs and mental disorders were considered a risk factor before the pandemic; however, parent-child interaction has reportedly been a supportive factor against anxiety and depression [14]. In contrast, some parents stated that the COVID-19 pandemic has created more effective conditions for children with learning disorders and attention deficits, enabling them to receive suitable education at home according to their individual needs and conditions through greater interaction with their parents.

Children with learning disabilities and attention deficits need more attention and consideration from their teachers, which is difficult during in-person classes because of the large number of students and lack of time. Meanwhile, children experiencing better academic conditions in the pandemic era, as compared to the past, gain more confidence in their academic abilities, and participate more in Q&A sessions. On the other hand, some parents stated that now they are more aware of their children's communication issues, and thus, are better equipped to help them in communicating with their peers.

Transformation of parenting

Based on the statements of the participants, the pandemic has transformed parenting over time. When the pandemic began, changes in people's lifestyles led to many parents facing new challenges; solving which required making changes in the way they interacted with their children. After the pandemic, new issues and challenges have been raised in families with no known ways to monitor and control them. On the other hand, challenges faced by children require different kind of parental support.

Changes in school-related parental controls

According to the participants' views, the pandemic created significant challenges for the parents regarding school education. In the past, many children did not have access to the Internet, or had limited access. With the virtualization of schools and children staying at home, parents are obliged to provide more internet access for their children to attend online classrooms, and submit their homework online; however, this caused many concerns for the parents. Some parents are worried citing that their children do not attend the classes, or pay enough attention to the lessons; since it is not possible for teachers to monitor the students as in the past, it is up to them to take

proper action to resolve this problem. In addition, some children spend a considerable amount of time after school hours, watching shows over the Internet and playing electronic games; this worries some parents about their access to some content, inappropriate to their age. All these cause parents to consider exerting new controlling measures. Corroborating this finding, Vejmelka and Matković [15] reported that compared to the pre-pandemic period, children devote more time to using the Internet, and their digital well-being depends on ensuring their security against all kinds of dangers: online games, online gambling, online shopping, addictive behaviors, pornography, and so on (problematic use of the Internet). According to a study conducted in Switzerland, during the pandemic, more than 30% of children met the criteria of problematic use of the Internet [16]. On the other hand, creating rules and strict monitoring are not easy. Research shows that implementing strict parental controls for the Internet usage such as creating rules about contact or permission to access the Internet, and setting up a global positioning system to track children's activities has negatively impacted parent-child relationships [17]. The above studies highlight the importance of developing new monitoring and controlling methods for parents.

Changes in parental supports

The statements of the participants show that due to the changes during the pandemic, children need more support from their parents, especially in distance learning. During this period, parents played many roles in the field of education. For example, they took the teacher's place and taught the lesson content, assisted the children with their homework, or monitored the children's performance during the evaluation. All these activities are very time-consuming, and sometimes, confusing for parents. These statements are in agreement with the findings of Masry-Herzallah and Stavissky [18], who stated that online learning relies on more parental participation at a young age, as well as the ability to learn independently at an older age. Online education for elementary school children requires the help and full supervision of parents. The success of virtual education depends to a significant extent on the motivation of students and the participation of parents [19]. Parents face difficulties in participating in their children's education for being busy with their work [20]. Moreover, during this period, children are given a huge burden of various tasks, which may be difficult for the parents to understand and solve easily and quickly. As a result, parents feel depressed and disappointed about the demands of the school.

Additionally, the parents stated that during this period, children experienced many negative feelings due to the school closure, being away from their peers, and having limited contact with close relatives like grandparents. Based on another

study, children who had stronger relationships with their peers before the pandemic were more vulnerable to the changes, which occurred in their friendships [21].

The parents added that in this pandemic era, there was more need for empathy and conversation. They spent more time talking to and understanding their children's feelings. Consistent with this finding, McArthur et al. [22] believe that although communication with peers plays an important role in middle childhood development, closeness to peers is not considered a significant predictor of children's well-being and mental health; rather, factors that are closer and more accessible to children such as close communication with parents and caregivers are considered more important predictors. Similarly, another study reported that conversation time between parents and children has increased during the pandemic, and children who converse more with their parents have higher levels of mental well-being [21].

Our study further findings showed that physical contact between parents and children such as kissing and hugging has increased, and this need has been felt more by children. In explaining this finding, we can refer to Morrison [23], who reported that social touch can eliminate stress responses. Social touch for children involves exploring objects, extending the range of social touch to friends, school, and strangers, and physical play like tickling and huddling. But after the emergence of the pandemic and social distancing, social touch has become very limited or lost. This can justify the increase in the children's desire to have physical contact with their parents [24].

Based on the participants' responses, filling children's free time is also important. In this era, due to the closure of many public places or the existence of social distancing rules, children were unable to spend their free time as they would do in the past; many others discontinued their sports, music and art classes. Therefore, the supportive role of parents was prominent in response to this need, and many parents tried to start new joint activities with their children during this period. In accordance with the above results, Zartler et al. [25] found that there was a disturbance in the normal flow of extracurricular activities such as sports and music, which can be used as a coping mechanism in stressful situations.

Attachment challenges

Increase in dependency

The participating parents believed that some children have become more dependent on them since the beginning of the pandemic such that they are unwilling to stay at home alone, and show behaviors like clinging to their parents and difficulty in sleeping alone. According to the National Child Traumatic Stress Network [26], children's psychological response

to the pandemic between the ages 6–12 years can include high levels of irritability, nightmares, sleep problems, loss of interest in peers, and excessive dependence on parents. Another research shows that during the pandemic, internalized and externalized behavioral problems in children were associated with their security of attachment to parents [27]. The above findings imply that the presence of an external threat and behavioral disorders such as irritability and clinging to parents can be seen in children with insecure attachment, indicating the activation of the attachment system [28].

Increase in academic dependence (decrease in taking responsibility)

The statements of the participants made it clear that many children do not take the expected responsibility for educational matters; rather, they share them with their parents. Previously, during in-person education, children more responsible towards the teachers and were obliged to take accountability for assignments, evaluation and learning, in general. Now they rely more on their parents, look for their parents' approval in doing homework, and sending answers; thus, they are less self-sufficient.

Parents' challenges due to macro-systemic changes

According to the participants, other environmental structures and micro-systems have also undergone changes as a result of macro-systemic changes such as quarantine laws, teleworking of jobs, and others. Within the family micro-system, mothers need to spend more time on household chores. On the other hand, despite some jobs being teleworked and having shortened working hours, the participants stated that there has not been much change in the roles or working hours of fathers compared to the past. In contrast, according to a research conducted in Italy, in cases where the mothers contributed to the family income by 50%, little or no amount, her household duties have decreased. This may be due to the fact that fathers, who were traditionally responsible for performing duties outside the home, were forced to stop working outside and spend more time in doing household chores during the quarantine [29]. Hence, based on some participants' statements, mothers are responsible for the majority of the child-rearing roles. This causes them to serve several, and sometimes, conflicting roles at home.

A mother, for example, stated: "Sometimes I think I have distanced from my maternal responsibilities. It means that I am a teacher rather than a mother."

Mothers are forced to perform some of the teacher's duties during the day. Previously, the teacher was responsible for supervising the student during in-person classes; now with the house turning into a classroom during school hours, moth-

ers are forced to play a supervisory as well as an educational role, which negatively affects the intimacy between her and the child. According to a mixed study conducted in Germany, parents experience difficulties when undertaking the role of a teacher. Arguments at home can cause stress and provoke a negative atmosphere during home education [30]. In addition, some of the participating mothers stated that they do not have enough time to do their personal tasks due to the multiple responsibilities assigned to them. Consistent with this finding, Garbe et al. [31] reported that it has been difficult for some parents to balance multiple roles in relation to their children, and allocate time to their personal work.

Finally, it can be concluded that among the prominent features of the COVID-19 and the virtualization of schools are the compulsion to stay at home and the subsequent reduction in the use of sports and recreational facilities in the city. Similar conditions may also be observed in other urban and social crises scenarios. For example, in industrial and polluted cities like Tehran, in the first quarter of the current academic year, children went to school for only 38 days, and the rest of the days they attended virtual schools. Similar to epidemic conditions, air pollution, in addition to causing non-attendance of schools, can also cause closure of sports, entertainment, art venues, and even banks.

Furthermore, other social crises that happened this year throughout the country led to the closure of schools and universities. Presence of security forces enforced movement restrictions on citizens in some areas, and reduced cultural and recreational programs, including theaters and concerts. All these factors forced the children to stay at home and created COVID-19 epidemic-like conditions for them. This implies that the results achieved from the epidemic era can be applied to other comparable social conditions as well.

CONCLUSION

During the COVID-19 pandemic, social distancing and school closures have made major changes in people's lifestyles. Mothers have been forced to take on heavier responsibilities in relation to housework, making it necessary to create an environment to maintain mental security, emotional growth, and educational progress in children. For many children, adapting to virtual education has been challenging. As a result, parents need to make changes in their way of parenting control and support. Along with the emergence of these challenges, opportunities have also been created in the field of children's education. In this study, only the mothers' perception of the COVID-19-related conditions has been studied. The participants were residents of the municipal areas 1–13 of Tehran city; they had good access to the Internet and electronic devices, while the residents of other areas of Tehran or other cities may face different challenges in accessing the Internet, providing electronic devices, and thus, enjoying online learning. Considering the limitations of this research, the perception of children and fathers on COVID-19-related educational challenges should be evaluated. Since the main burden of education has been on the parents, school authorities need to examine the accuracy of learning in children during this period.

Availability of Data and Material

The dataset generated or analyzed during the study are available from the corresponding author upon reasonable request.

Conflicts of Interest

The authors have no potential conflicts of interest to disclose.

Author Contributions

ORCID iDs

Arefeh Shahali   https://orcid.org/0000-0002-4559-7168
Mansoureh HajHosseini   https://orcid.org/0000-0001-6937-1609
Reza Ghorban Jahromi   https://orcid.org/0000-0002-0295-5295

Funding Statement

REFERENCES

1) **Cheng TL, Moon M, Artman M; Pediatric Policy Council.** Shoring up the safety net for children in the COVID-19 pandemic. Pediatr Res 2020;88:349-351.
2) **Prime H, Wade M, Browne DT.** Risk and resilience in family well-being during the COVID-19 pandemic. Am Psychol 2020;75:631-643.
3) **Rosa EM, Tudge J.** Urie Bronfenbrenner's theory of human development: its evolution from ecology to bioecology. J Fam Theory Rev 2013;5:243-258.
4) **Asril NM, Mahayanti NW, Tirtayani LA, Adnyani KE, Astawan IG, Arthana IK.** Fatherhood & children's remote learning during COVID-19 pandemic. Proceedings of the 2nd International Conference on Technology and Educational Science (ICTES 2020); 2020 Nov 11-12; Bali, Indonesia: Atlantis Press;2021. p.60-65.
5) **Gassman-Pines A, Ananat EO, Fitz-Henley J 2nd.** COVID-19 and parent-child psychological well-being. Pediatrics 2020;146: e2020007294.
6) **Bowlby J.** Attachment and loss (Vol. 3). New York: Basic Books; 1980.
7) **Moccia L, Janiri D, Pepe M, Dattoli L, Molinaro M, De Martin V, et al.** Affective temperament, attachment style, and the psychological impact of the COVID-19 outbreak: an early report on the Italian general population. Brain Behav Immun 2020;87:75-79.
8) **Bosmans G, Bakermans-Kranenburg MJ, Vervliet B, Verhees MWFT, van IJzendoorn MH.** A learning theory of attachment: unraveling the black box of attachment development. Neurosci Biobehav Rev 2020;113:287-298.
9) **Gall M, Borg W, Gall J.** Quantitative and qualitative research methods in educational sciences and psychology. 1st ed. Tehran:

Shahid Beheshti University;2015. p.37.

10) **Strauss A, Corbin J.** Fundamentals of qualitative research, techniques and stages of production of grounded theory. Tehran: Ney; 2014. p.123.

11) **Sarmad Z, Bazargan A, Hejazi A.** Research methods in behavioral sciences. Tehran: Agah;2017. p.67.

12) **Patton MQ.** Qualitative evaluation and research methods. Beverly Hills, CA: Sage;1990.

13) **Guba EG, Lincoln YS.** Fourth generation evaluation. Newbury Park, CA: Sage;1989.

14) **Panchal U, Salazar de Pablo G, Franco M, Moreno C, Parellada M, Arango C, et al.** The impact of COVID-19 lockdown on child and adolescent mental health: systematic review. Eur Child Adolesc Psychiatry 2021 Aug 18 [Epub]. Availble from: https://doi.org/10.1007/s00787-021-01856-w.

15) **Vejmelka L, Matković R.** Online interactions and problematic internet use of Croatian students during the COVID-19 pandemic. Information 2021;12:399.

16) **Mohler-Kuo M, Dzemaili S, Foster S, Werlen L, Walitza S.** Stress and mental health among children/adolescents, their parents, and young adults during the first COVID-19 lockdown in Switzerland. Int J Environ Res Public Health 2021;18:4668.

17) **Nguyen TTP, Nguyen TT, Do HN, Vu TBT, Vu KL, Do HM, et al.** Parent-child relationship quality and internet use in a developing country: adolescents' perspectives. Front Psychol 2022;13:847278.

18) **Masry-Herzallah A, Stavissky Y.** The attitudes of elementary and middle school students and teachers towards online learning during the corona pandemic outbreak. SN Soc Sci 2021;1:71.

19) **Harjule P, Rahman A, Agarwal B.** A cross-sectional study of anxiety, stress, perception and mental health towards online learning of school children in India during COVID-19. J Interdiscip Math 2021;24:411-424.

20) **Siahaan C, Murniarti E, Simbolon K.** Readiness level of parents as student guide in online learning. Psychol Educ 2021;58:5995-6007.

21) **Choi J, Park Y, Kim HE, Song J, Lee D, Lee E, et al.** Daily life changes and life satisfaction among Korean school-aged children in the COVID-19 pandemic. Int J Environ Res Public Health 2021; 18:3324.

22) **McArthur BA, Racine N, McDonald S, Tough S, Madigan S.** Child and family factors associated with child mental health and well-being during COVID-19. Eur Child Adolesc Psychiatry 2023;32: 223-233.

23) **Morrison I.** Keep calm and cuddle on: social touch as a stress buffer. Adapt Hum Behav Physiol 2016;2:344-362.

24) **Banerjee D, Vasquez V, Pecchio M, Hegde ML, Ks Jagannatha R, Rao TS.** RETRACTED: Biopsychosocial intersections of social/affective touch and psychiatry: Implications of 'touch hunger' during COVID-19. Int J Soc Psychiatry 2021 Feb 24 [Epub]. Availble from: https://doi.org/10.1177/0020764021997485.

25) **Zartler U, Dafert V, Dirnberger P.** What will the coronavirus do to our kids? Parents in Austria dealing with the effects of the COVID-19 pandemic on their children. J Fam Res 2022;34:367-393.

26) **Lavigne-Cerván R, Costa-López B, Juárez-Ruiz de Mier R, Real-Fernández M, Sánchez-Muñoz de León M, Navarro-Soria I.** Consequences of COVID-19 confinement on anxiety, sleep and executive functions of children and adolescents in Spain. Front Psychol 2021;12:565516.

27) **Dubois-Comtois K, Suffren S, St-Laurent D, Milot T, Lemelin JP.** Child psychological functioning during the COVID-19 lockdown: an ecological, family-centered approach. J Dev Behav Pediatr 2021;42:532-539.

28) **Rajkumar RP.** Attachment theory and psychological responses to the COVID-19 pandemic: a narrative review. Psychiatr Danub 2020;32:256-261.

29) **Mangiavacchi L, Piccoli L, Pieroni L.** Fathers matter: intrahousehold responsibilities and children's wellbeing during the COVID-19 lockdown in Italy. Econ Hum Biol 2021;42:101016.

30) **Letzel V, Pozas M, Schneider C.** Energetic students, stressed parents, and nervous teachers: a comprehensive exploration of inclusive homeschooling during the COVID-19 crisis. Open Educ Stud 2020;2:159-170.

31) **Garbe A, Ogurlu U, Logan N, Cook P.** COVID-19 and remote learning: experiences of parents with children during the pandemic. Am J Qual Res 2020;4:45-65.

32) **Mohammadpour A.** Quality assessment in qualitative research: principles and strategies for validation and generalizability. Soc Sci 2010;17:73-107.

33) **Abbaszadeh M.** [Validity and reliability in qualitative researches]. J Appl Sociol 2012;23:19-34. Persian

140