Research Article

How Do Parents and Teachers Perceive Psychological Well-Being and Social Identity in Association With Students' Emergency E-learning?

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Exposure to emergency e-learning has affected the psychological well-being of educational stockholders while also changing the view of people toward the identity of those involved in education. The present qualitative study aimed to investigate how teachers and parents perceived their psychological well-being after the students had to learn through online platforms. Accordingly, 21 participants were interviewed in 3 focus groups. The obtained data were analyzed by means of reflexive thematic analysis (Braun & Clarke, 2006; Braun, Clarke, Hayfield, & Terry, 2019). The results revealed four themes of *psychological impact, teacher realization, digital literacy,* and *learners' online behavior*. The findings also reflected the amount of stress and negative impact of the online courses on both teachers' and parents' feelings. The current study has some implications for educational policy-makers.

1. Introduction

The sharp move to online teaching during the COVID-19 pandemic was the source of depressive symptoms for both parents (Francisco et al., 2020; Spinelli et al., 2020) and teachers (Herman et al., 2018; Kim & Asbury, 2020(. Transition to distance learning through old and recently innovated platforms and the lack of adequate digital literacy to run online classes was the underlying source of teachers' stress (Kim & Asbury, 2020; UNESCO, 2020b). The source of teachers' stress multiplied as they had to deliver the course material online, while they were not well-prepared to use online platforms (MacIntyre et al., 2020). The teachers had to imply strategies to cope with possible online

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teaching problems to better load the work for students, effectuating negative psychological well-being.

Meanwhile, the educational role of parents as home-schooling caregivers to support children's homework during emergency online learning not only put an extra burden on the parents' shoulders but also increased their feeling of negative emotions among them (Spinelli et al., 2020; Sprang & Silman, 2013). The psychological effect of parents' communication during emergency e-learning was perceived negatively when they had to mediate the children's media use, internet browsing, and cell phone behaviors like joining social networking (Eastin et al., 2006; Lee et al., 2016; Warren, 2001; Westcott et al., 2017). Furthermore, the abrupt changes in the educational system yielded some understanding difficulties for children to overcome; thus, parents had to discuss and explain the information, which could bring about negative psychological outcomes (Dalton et al., 2020).

Many studies have investigated the psychological features of teachers, parents, and children involved in e-learning during the pandemic. Some studies, for example, evaluated parents' views toward e-learning among kindergarten students (Dong et al., 2020), focused on parents' and children's reactions (Brown et al., 2020), studied the psychological well-being of college students (Dodd et al., 2021), examined psychological benefits (Barreda-Angeles & Hartmann, 2022), showed high school teachers' experience of using social virtual reality platforms (Truzoli et al., 2021), and addressed factors underlying teachers' technostress (Chou & Chou, 2021). However, to the best of our knowledge, no qualitative study has probed the psychological impacts of emergency e-learning on both parents and teachers in interaction with children. Thus, this study tries to reflect on how the psychological well-being and identity perception of both parents and teachers have been affected while negotiating and dealing with online learning of the students by means of the SHAD platform, which is newly innovated by the Educational Ministry of Iran.

2. Literature Review

Various platforms (e.g., Zoom, Google Meet, Sky Room) facilitated online learning for millions of learners worldwide during the COVID-19 pandemic. The ministry of education in Iran innovated an online platform for school students called SHAD. The platform represented a virtual school with different facilities and features updated during the pandemic. Meanwhile, the process of adaption to the emergency e-learning imposed negative psychological well-being impacts on both parents and teachers (Abbasi et al., 2020; Mohammadi et al., 2020). The negative emotions (e.g., stress, anxiety)

resulted from numerous factors such as the low speed of the internet, the lack of adequate digital literacy, improper use of media, poor interaction among families and teachers, and uncertainty about students' performance. These feelings can be relieved if parents contribute to assessing the children learning through close interaction with teachers. This could be attributed to considering positive social identity for teachers from parents since the parents experienced informational and emotional support from the teachers (Huang et al., 2019).

When the working environment is degrading, and the relationship among its members is not satisfying, the psychological well-being is affected adversely (Rook, 1984). Recent progress in technology has partly shifted the working environment into online interaction. The arrival of COVID-19 boosted the online interaction among teachers, students, and parents through e-learning platforms. In their study, Rachmadtullah et al. (2020) found that the challenges such as technical barriers, students' involvement, and new experience of online teaching and learning negatively impacted the motivation among teachers and parents. Given the same challenges, the interviewees of the study by Saha et al. (2021) reflected their negative beliefs about the amount of learners' involvement in digital classes and teachers' methodology in online platforms, which were in close connection to the severity of psychological distress.

Digital literacy and social media use are two components tied to e-learning. Dhir et al. (2018) examined whether compulsive media use brought fatigue to its users. They found that media use led to negative consequences in mental and behavioral conditions, including anxiety and depression. Many studies have also probed parents' psychological well-being and emotions during emergency online learning. The parents may lack the adequate digital knowledge to support and mediate the children's usage of media, which increases the stress among parents to cope with students' online learning. These parents were studied by Lau and Lee (2021), who found that the parents expected the teachers to provide the children with prerecorded material to better mediate the children and reduce the stress of online learning. Similarly, Sciacca et al. (2022) found that the parents with lower digital literacy, whose children were exposed to the emergency e-learning, were more worried about the harmful side of the internet use, highly mediated the children's use of the internet, and discussed more with children.

In addition, teachers, as the main stakeholders of online teaching, may feel psychological pressure while facing emergency e-learning. Chou and Chou (2021) investigated in-service teachers in Taiwan and found that compared to university professors, K-12 teachers felt technostress related to data

protection, controlling the quality of the internet and learning facilities. The teachers required more online pedagogy to overcome their stress and improve their online teaching skills. Also, Özgür (2020) examined the causal relationship of variables such as gender, age, and pedagogical knowledge with teachers' technostress level, indicating that the teachers' technostress increased if they were less supported by factors like technology, parents, and community. However, the psychological well-being of both parents and teachers in interaction with students and digital performance via the e-learning platform of SHAD has not been investigated yet. Thus, the present study tries to fill the gap by answering the following research questions:

1. How is teachers' and parents' psychological well-being affected during online classes?
2. How did parents perceive the teachers' identity after the students' classes turned online?
3. How were teachers and parents forced to prompt their digital literacy during the pandemic?

3. Theoretical Framework

Coping is any cognitive and behavioral attempt a person makes to control the environmental demands and evaluate whether they hold any threat to one's well-being (Lazarus & Folkman, 1984; Folkman et al., 1986). The coping theory suggests two types of strategies to deal with the threat, including *situation-focused* and *emotion-focused* (Folkman & Lazarus, 1980). The former aims to alter or solve the problems (Folkman et al., 1986), while the latter confines to not only lower the negative effect of the problem but also add to the faculty of the well-being (Folkman & Lazarus, 1980).

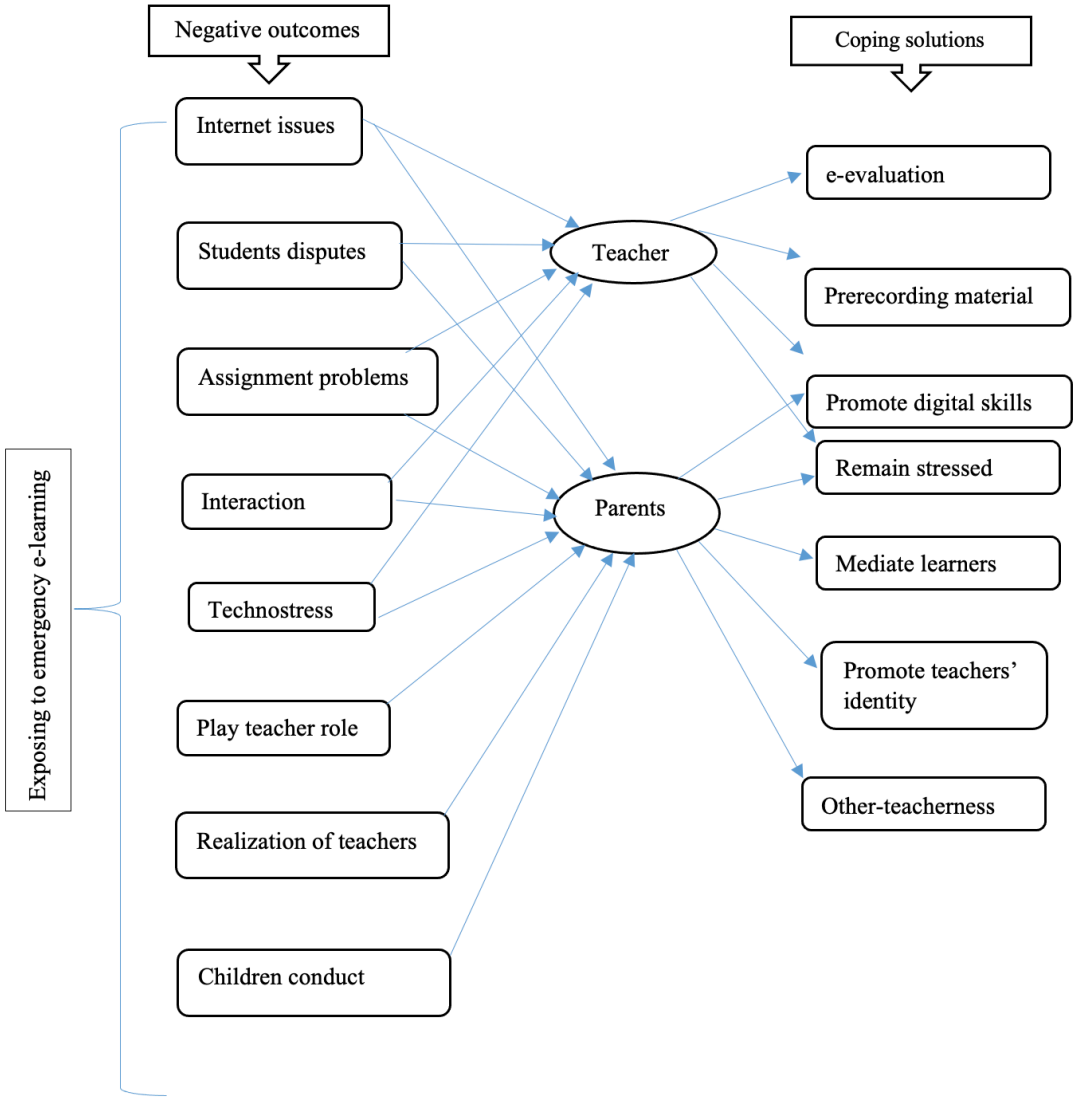
Stress and coping are conceptualized in the educational context through the transactional theory of stress by Lazarus and Folkman (1984), in which coping is realized as an effort to manage the stress and environmental demands beyond one's psychological ability. The way teachers cope with the stressor is a significant feature in psychological well-being regulation (Pyhältö et al., 2020). Individuals cope with the source of stress cognitively (emotion-focused) or behaviorally (situation-focused). First, one identifies the extent, to which an event is threatening, after which psychological and emotional reactions are set based on coping strategies (Goh, Sawang, & Oei, 2010; Lazarus, 1990). Teachers may feel stress, anxiety, sadness, loneliness, and negative emotions when they fail to use coping strategies (MacIntyre et al., 2020). Anxiety was considered the primary concern during the COVID-19 pandemic since the teachers had to adapt to a new digital context, new methods of teaching, and unfamiliar media (Hiver, 2016; MacIntyre et al., 2020). On the other hand, the stress mindset theory has taken a meta-cognitive attitude in which individuals take positive outcomes of the stress

into account (Crum et al., 2017). The prosocial classroom model was provided by Jennings and Greenberg (2009) to catch the sight of teachers' stress. The model emphasizes the social-emotional competence of the teachers in both creating a positive environment in the class and making the teacher-student relationship better. Not only does the prosocial classroom model improve the students' socio-emotional sense but also it prevents the negative effect of teachers' stress on students feeling (Herman et al., 2020).

The Coping-Competence-Context (3C) Theory of Teacher Stress is a recent framework innovated by Herman et al. (2020) to interconnect the three pathways of coping, competence, and context to teacher stress. In their theory, the coping pathway includes teachers' perceptions of their quality, coping skills, and strategies. Teachers perceive the stress through a metacognitive facet of coping, which indirectly affects their turnover and negatively impacts teachers' subset. Competence, another pathway of 3C theory, involves the connection between stress, classroom, and teacher practice. Accordingly, stress moderates the teacher practice and classroom management, while teacher and class practices influence students' behavior, and ultimately, learners' behavior leaves a negative impact on teachers' psychological features. Similarly, context describes the link between school {or digital platform}, administrative, policy, and evaluation systems as the sources of stress with a negative impact on teacher stress, burnout, and attrition (Herman et al., 2020; Ryan et al., 2017).

Parental mediation theory (Clark, 2011) points to interpersonal communication strategies that parents employ to relieve their children of the negative impact of media use. Engagement in children's use of technology leads to the experience of several emotions by parents, such as anxiety about the risk of connection with others. In contrast, children are pleased with the new relationship through technology (Livingstone, 2009), resulting in parent-child arguments over a conflicting goal (Silverstone et al., 1990, 1991). The lack of self-regulated behaviors among children, which leads to negative feedback from teachers, necessitates the parents' mediation role to force their children to internalize their social values and regulate their behaviors (Grusec & Davidov, 2007; Padilla-Walker & Coyne, 2011; Padilla-Walker et al., 2012). Digital literacy is a factor that calls for parents' mediation. The parents with lower digital skills experience low self-efficacy in controlling their children's online schooling, reported as a source of stress for the parents (Sciacca et al., 2022). The low self-efficacy of parents to cope with technology issues and information overload brought about an unhealthy state, referred to as technostress (Ayyagari et al., 2011; Brod, 1984). From the psychological view, technostress stimulates physical problems because of the inability to adapt to working with new

technology (Arnetz & Wiholm, 1997). As is reflected in Figure 1, the emergency online teaching prompted undesirable outcomes for teachers and parents and subsequently effected their psychological well-being negatively. Both teachers and parents tried to adopt strategies and cope with the unwelcomed issues. In line with the mentioned theories, the parents and teachers applied methods and mediated the students learning, although they remained stressed up to the time of the interview.



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4. Method

4.1. Participants

Focus group participants were recruited from the teachers and parents of a girl primary school and a boy secondary school in Baneh city in Iran. A focus group may be viewed as a certain type of interactive group discussion (Ho, 2012). Focus group interview has the advantage of using group interaction as a direct data collection method (Stewart & Shamdasani, 2015). In the same vein, a focus group has "the primary aim of describing and understanding perceptions, interpretations, and beliefs of a select population to gain understanding of a particular issue from the perspectives of the group's participants" (Kahn & Manderson, 1992, p. 57).

Overall, 21 participants were asked to participate in the interviews (Table 1). Three focus group interviews were held at a private language institute that belonged to the lead researcher. The participants were selected using the convenience sampling method, after which they were contacted individually to see whether they liked to attend focus group research concerning the discussion on students' on-line classes during the COVID-19 pandemic. The first focus group included six female teachers teaching primary school girls, while the second focus group consisted of parents of boys or girls from both primary and secondary schools. Finally, the third focus group included 5 teachers teaching secondary school boys. The teachers and students attended online classes through an on-line platform, called SHAD, designed by the ministry of education of Iran. The participants expressed their willingness to do the interviews, and no invitation was rejected.

Group	Description of participants	Number	Gender
Focus group 1	Primary school teachers	6	Female
Focus group 2	Parents	12	Blended
Focus group 3	Secondary school teachers	5	Male

Table 1. Demographic of focus group data

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4.2. Data Collection

Interviews were conducted with three homogenous groups, including primary school teachers, secondary school teachers, and parents. Concerning the interview guide, several open-ended questions were developed to set the scene for the group discussion. Following Ho (2012), more specific questions were posed later in the focus group interviews, in which the lead researcher played the role of the moderator, setting "the common communicative ground" (Hyden & Bülow, 2003) and guiding the interactions concerning the objectives of the study.

The lead researcher held the interviews personally as the participants lived in the same city. Focus groups are helpful for data collection as they encourage participants to talk about their emotions and experiences through group interactions and dynamics (Krueger, 2014). Although the interviewees spoke individually at the beginning, they were encouraged to elaborate more on their perspectives while interacting with the group members (Morgan, 1988). The moderator applied the extended focus group technique, in which the participants were provided with the materials that would be discussed at the interview session (Lune, 2017). The initial icebreaker questions focused on the participants' expectations and opinions of such a pandemic. Then, the moderator gradually prepared the atmosphere for the main discussion. Each focus group discussion was digitally recorded and lasted between 75 to 100 minutes.

4.3. Data Analysis

This qualitative study applied reflexive thematic analysis (RTA) (Braun & Clarke, 2006; Braun, Clarke, Hayfield, & Terry, 2019) to analyze focus group transcription. In RTA, themes are generated objectively due to the researchers' reflexivity and subjectivity at the intersection of the data (Braun & Clarke, 2019). Having transcribed the interviews, the lead researcher initiated the development of the codes and themes from the explicit content at the semantic level. The coder applied the six phases of thematic analysis developed by Braun and Clarke (2006) (Table 2).

Phase of data analysis	Description of the actions
Familiarization with data	Listen and transcribing audio files, reread focus group transcript, add analytical notes, add interviewer's annotations such as group members interactions and body language
Code generation	Read transcript and annotation, attribute codes to thought-provoking features of the data, assign data to formed codes
Theme construction	Look for patterns, organize and categorize the patterns, identify central concepts, ascribe themes to grouped codes, test the themes in relation to research questions
Themes develop and review	Develop the themes, check if the themes 'good fit' the codes, check if the focus groups data fit the themes, check if any data not reflected through themes, provide coherent and compelling interpretation
Theme definition	Find the appropriate names for themes that reflect the story of the data, share with teacher participants for comments and validation
Report production	Make further analyses to make a persuasive report the fit the extracted data. Recheck and give feedback by co-authors. Confirm the final report.

Table 2. The six stages of reflexive thematic analysis

The researchers analyzed the data inductively, according to which they did not base the analysis on any pre-assumed theoretical framework. The four themes of *psychological impact, teacher realization, digital literacy,* and *learners' online behavior* are developed from the six phases of RTA (Table 3). Each participant was allocated a number, such as P = participant number and FG = focus group, to clearly reflect the participants' narration from the specific group.

Themes	Codes	Examples
Psychological impact	1. Internet irritation 2. Homework irritation 3. Students irritation 4. Forced by students 5. Interaction headaches	1. internet is interrupting. 2. students nag while doing the homework. 3. students send irrelevant files. 4. students call for tiny problems. 5. less interaction with parents.
Digital literacy	1. Application engagement 2. Prompt digital literacy 3. Software courses 4. Internet involvement	1. parents have to learn to work with SHAD application. 2. we are learning new online points. 3. I have to take MS office course. 4. I surf in internet more than before.
Realization of teachers	1. Perceive teachers' responsibilities 2. Play teachers' role 3. Appreciate teachers positions	1. I understand how hard teachers work. 2. I follow teachers' instructions and teach my daughter 3. we consider a higher identity for teachers
Learners' online behavior	1. Students online treatment 2. False presentation at classes 3. Fake online exams	1. my child use VPN to open some sites. 2. sometimes I ask a question but I see he is not at class 3. students share their answers.

Table 3. Identifies themes, codes, and examples

5. Results

The findings of the current study represent the teachers' and parents' perceptions concerning the shift in interaction and learning style. At the same time, the students are forced to learn through application-mediated classes due to the COVID-19 pandemic. Four themes, including *psychological impact*, *digital literacy*, *teachers' realizations*, and *learners' online behavior*, were developed from the

collected data employing interviews and narrations. These themes served to meet the objectives of the study.

Theme 1, psychological impact

This theme is the most significant one and represents how the teachers and parents were affected by and interacted with each other and with students. The psychological well-being of both teachers and parents was negatively influenced by several factors such as internet interruption, fighting with children to do their homework, the weak interaction between teachers and parents, etc. The internet stability and speed were among the issues about which almost every Iranian guy complained. A primary school teacher (P1FG1) stated:

> *Teachers are obliged to use the SHAD platform for teaching. It has millions of users, but it has rarely been updated. It does not fit the Iran's context because of the internet's lower speed. Sometimes, it takes one hour to upload a movie or a file for students to get involved. The students can receive the file at the end of the classes when there is no more time to continue. Then, students and parents start calling to ask about the file and homework, which is really irritating.*

The Shad platform was also criticized by parents as a source of stress that affected their emotional well-being negatively. A mother (P1FG2), whose daughter studied at second primary school declared:

> *My child was doing dictation when the internet interrupted. I called the teacher, but she did not reply. I did not know how to connect to other networks like cellular data. My child was crying and I felt anxious. Finally, she could connect to the online class, but the dictation time was over, and my daughter got negative feedback from the teacher.*

Additionally, some parents believed they played the teachers' role at home to control the students. They did not find themselves in the correct position to observe and evaluate their children's homework. A father of a secondary school student (P4FG2) stated:

> *Most of the time, teachers leave an instructional movie and ask the students to do the project or homework- based on the instructions. I am working outside and fearful of infection with the coronavirus. Meanwhile, I have to control my son to do the projects the best and send them back to the teacher, but I am not much knowledgeable or talented to instruct my son or force him to do his homework. He has not made any progress during this pandemic.*

On the other way, teacher-parent interaction was a matter realized by teachers as a tool to facilitate online learning. They believed less interaction with parents increased the burden of work and stress. A secondary school teacher (P5FG3) stated:

> *Some parents are reluctant to check their children's activities on the SHAD learning platform. They think when they have a mobile or tablet in their hand, they are on the learning platform. I asked a question in the class, but some students did not reply. When I checked with parents, they noticed their children were surfing the internet or doing online games. I know some parents do not have digital literacy, but they can follow their children's progress by following their children's educational activities through teachers. We need to check students' presence frequently, which is time-consuming for teachers.*

Both groups of teachers and parents claimed that if the culture of using media were paid due attention at schools, most of the current problems were not present. The teachers declared that they were more aggressive and less tolerant of the students than before.

Theme 2, digital literacy

This theme reflects the extent to which parents and teachers possessed knowledge, got involved in digital devices, and applied learning applications. This theme demonstrates how much the parents and teachers were irritated psychologically, and how much digital literacy contributed to improving their digital literacy and mental health. Moreover, some families did not have smartphones to install the related applications. A mother of a primary school student (P2FG2) proclaimed:

> *When the schools closed, we had to buy smartphones, but we could not afford them. After three months, a charity bought it for us, and I had to send my daughter to her classmate's home. It was too shameful.*

Although most parents announced that they did not know how to use applications or even could not search on the net, they could adapt themselves and learn the critical issues. Self-acceptance and happiness were among the emotions after they had to learn new data. Another parent (P6FG2) who had children in both primary and secondary schools stated:

> *We learned some points by error and trial. Then we decided to meet some friends who were good at working with electronic devices. We could learn many things from them on how to control children's work on the net and how they used the learning platform. We also learned*

how to solve the problem by googling the issues. Now we have other applications like Facebook and Instagram and enjoy the useful posts experts leave on the media.

The teachers were more literate than the parents, except for a small number of the teachers who were about to be retired and ignored learning IT and working with applications. They were under pressure at the beginning due to the new teaching method, but they were satisfied at the time of the interview. A secondary school teacher (P2FG3) expressed:

Although the net speed and the SHAD platform problems were annoying, I had to update myself to the latest developments in applying computers and applications. I took part in MS office courses that helped write and prepare worksheets better. I felt more confident afterward and tried to learn how to use digital portfolios to keep learners' assignments. I am more satisfied now with the improvement of my professional identity through exercising agency.

The teachers reached the opinion that they had to be more knowledgeable in the digital era; however, they blamed the government for such a lack of digital literacy, especially the low salary that deprived them of buying modern equipment.

Theme 3, the realization of teachers

This theme portrays the parents' perceptions of the teachers' identity after they had to interact with each other. Since the teachers were less connected with parents, their professional and social identities were not properly perceived. A father (P12FG2) stated in agreement with another group member:

Before the pandemic, I thought the teachers just read and reviewed the book material for students and clarified some points if necessary. I never thought about the matters such as class management. As I cannot control my son, I wonder how a teacher can control a class of 30. How can teachers check all the students' progress? I really appreciate the teachers' hardworking, which is more evident during the coronavirus pandemic. They answer the students' and parents' questions anytime, even at night. The teachers are more sympathetic than the parents.

Parents were also forced to teach their students by following the instructions. They considered teaching as a demanding but exciting job. A mother (P9FG2) was fascinated by playing the teacher's role and said: "*I followed the way the teacher was teaching, and then I played her role. I did it for three*

months regularly. Now I am better at helping my daughter. I see how teachers use different techniques to convey the meaning". The teachers' dignity and social positionality improved not only in the parents' view but also the whole society. The parents announced that they tried to reflect the teachers' hardworking in every meeting and appreciated their job.

Theme 4, learners' online behavior

This theme encompasses parents' concerns about students' surfing in non-academic websites or platforms and teachers' concerns about how students attend the classes. A mother (P6FG2) expressed:

> *Every day I had to check whether my son was in online class or searched other websites. After we had to connect to the net for online classes, my son installed communication applications like WhatsApp and Telegram. He chatted with his friends. He learned to use VPN to access unauthorized websites. He was more aggressive than before and said dirty words and jokes. I wish the education department had worked on the way students used media usefully and adequately.*

Both teachers and parents blamed the government for not preparing the students to use digital media properly. They claimed that using the internet needed acculturalization, and the students had to learn how to use online services appropriately. A primary school teacher (P3FG1) remarked,

> *When I am teaching, I do not know whether they are listening or not. There is no good way for the students' evaluation in the SHAD learning platform. I really do not care whether I am testing the students or others when they have a written test. I heard some parents helped their children to answer the test. It is not good for their future literacy and in terms of ethical considerations.*

As a secondary school teacher (P1FG3) declared, *some students paid money to others to reply the written tests. This behavior prepared students for cheating and dishonesty in their real-life in the future*. The teachers believed that the online classes would have a negative impact on students' behaviors and interactions with another gender. They hoped the pandemic went away soon to meet students in classes again.

6. Discussion

The primary objective of the current research was to investigate the psychological impact of interaction of students with both parents and teachers during emergency e-learning. The four themes of *psychological impact, teacher realization, digital literacy,* and *learners' online behavior* were discovered through reflexive thematic analysis.

The results confirmed the findings of Abbasi et al. (2020) and Mohammadi et al. (2020), according to whom Iranian parents and teachers experienced mainly the negative rather than positive emotions after shifting to the new environment of online learning. The internet speed and restrictions were the primary sources of stress, anxiety, and negative feelings for Iranian teachers and parents, especially those involved in e-learning during the COIVD-19 pandemic. This research confirmed the study by MacIntyre et al. (2020), indicating that less interaction with parents about how to control the learners' performance and assignments led to loneliness and anxiety among teachers and referring to the weak knowledge of exercising with digital devices, along with the internet speed, as the main reasons among parents and teachers. The lack of adequate digital literacy among parents resulted in the absence of control over children's media use, their progress in learning via online learning, discussions with children, and highly mediating children's internet use (Sciacca et al., 2022). The technostress, primarily because of the internet speed, affected the teachers' performance. Concerning digital literacy, teachers could perform and adapt themselves better than parents; however, they needed more pedagogical knowledge to think about innovative online methodologies (Chou & Chou, 2021; Özgür, 2020). In line with the coping theories of Folkman et al. (1986) and Folkman & Lazarus (1980), teachers improved their pedagogical knowledge, digital literacy, and online methods of teaching as the situation-focused techniques. Moreover, parents applied emotion-focused strategies more to relieve the negative impact of technology on their daily routines by learning how to act and control working with the SHAD platform of e-learning.

Since the current qualitative research explored the psychological effect of e-learning on parents and teachers in interaction with children, the learners' behavior was the main factor leading to negative emotions. In line with Saha et al. (2020), the children left their main responsibility of online learning and interaction with teachers behind and were pleased to entertain with social media and games (Livingstone, 2009). It forced both parents to highly mediate children's performance (Clark, 2011) and teachers to check the students' presence on the platform of learning. The online evaluation of

students was not validated by teachers as they did not have any control over the students, and the reliability of the exam was under question. Following the Coping-Competence-Context (3C) Theory of teacher stress (Herman et al., 2020), teachers recorded the required material to be shared with students before starting teaching. This strategy contributed to more interaction of students with parents and relieved their stress and anxiety. Furthermore, the study showed that the teachers' and parents' psychological well-being decreased due to the online classes, and they experienced negative emotions such as stress and anxiety. On the contrary, teachers' social and professional identity was enhanced, and they positively perceived their professional identity. The parents, especially, perceived the teaching profession as not being a mundane career everyone could do effectively. The parents realized the challenge and difficulty inherited in teaching, and this, in turn, led to the positive professional identity of teachers in the society.

Other-teacher was a new concept that emerged from the findings. After the teachers put offline assignments and prerecorded materials for the students, the parents had better control over the children's learning. They played teachers' roles and guided the children according to the teaching methodology. They performed as *other-teachers, reflecting the fact* that they were not only the parent of the students but also the teacher of their children at home. The exercise of *other-teacher* prompted the positive identity of teachers in the view of the parents, because they connected more with teachers and maintained this connection (Huang et al., 2019). The social and professional identities of teachers were perceived higher than before as the parents and family members found teaching as a demanding job and could not play the teachers' role well.

7. Implications and Limitations

The current research has some implications for educational policy-makers. First of all, the contribution of technology to learning, e-learning, is immersed into the curriculum. The education department must provide teachers with the most related courses concerning the use of various platforms to teach online in the case of facing pandemics like COVID-19. Teachers must acquaint themselves with new methods of teaching online, such as how to take advantage of digital games in education (Mertala, 2019a). Second, the culture of media use has not received due attention, particularly in the Iranian context. The educational department must hold seminars for the students on the benefits, challenges, and threats of media use. Finally, the role of parents in the education of their children is not focused well. The related department must tighten the ties between parents and

schools. The parents need to realize their positions in developing children's progress and enhancing their mediation and literacy to better help teachers in the case of shifting to the new learning style.

Although this study attempted to explore the parents' and teachers' perceptions of the same school toward the psychological effects of emergency e-learning, it suffered some limitations. First, this research examined the parents and teachers' views, while future studies can broaden the scope of this study by investigating children's attitudes as well. This study was qualitative, whereas further research can be conducted experimentally by holding the related courses for teachers and parents and then exploring their new attitudes toward online learning. Finally, the education context in the current study was primary and secondary schools, while future studies can investigate the higher education during the pandemic.

8. Conclusion

This qualitative study probed the parents' and teachers' psychological well-being and social identity in interaction with students during emergency online learning. Concerning the first research question, the findings revealed that both parents and teachers experienced negative emotions during e-learning. At the beginning of online classes, internet speed was the main concern, and the permanent interruption of internet led to many unsent files, unclear voices of teachers, and long waiting time to receive replies from students. Parents were irritated by the issues related to children since they could not upload assignments, forced parents to call teachers, and were entertained by other social media networks and games. Concerning the second research question, *other-teacher* was a new concept exercised by parents during e-learning. The parents simulated teachers' roles at home by following the methodology applied by teachers on the platform. *Other-teacher* performance contributed to a better understanding of teachers' job and identity, regarding higher identity for teachers as they were capable of controlling 30 students in the class, while it was challenging for the parents to manage their children at home.

Regarding the last question, teachers possessed higher digital literacy than parents; however, they improved their computer and application knowledge by taking related courses. The teachers enhanced their pedagogical content knowledge and learned the last methods to teach online better. On the other hand, parents lacked adequate digital literacy to control their children's e-learning. They were on ongoing discussions with the children over the assignments and highly mediated their media use. The continuous interaction with children, teachers, and peers helped the parents to use media more

effectively and restrict their mediating role on children's media use. Overall, improving the interaction between teachers and parents, performing *other-teache*r, improving digital literacy, and observing children's performance were strategies adopted by parents to relieve the adverse effects of exposure to emergency e-learning.

Statements and Declarations

Competing interest

None.

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