

Palestinian Mothers' Perceptions about Online Learning at Public and Private Elementary Schools during COVID-19: Challenges and Recommendations

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ABSTRACT

This research study investigated Palestinian mothers' perceptions about online learning due to the sudden shift to online learning under COVID-19. The study focuses on the time period: March 5, 2020 to August, 2020 before the new school year 2020/2021 began. The primary purpose was to reveal the challenges mothers of children in grades 1-4 faced while helping their children learn at home. The researcher distributed an online questionnaire to a sample of mothers in Ramallah area, Palestine to which 131 mothers responded. Out of that sample, 8 mothers were interviewed. Results indicate that mothers found online learning extremely challenging, especially mothers who worked. Although they realized this was an emergency situation, they recounted a lack of preparation, a lack of technology, ineffective, uninteresting, and demotivating online instruction, and a lack of overall Ministry preparation for such a crisis. Recommendations are offered to minimize such challenges in the future under the same or similar situations.

Keywords: COVID-19, mothers' perceptions, online learning, Palestinian education

INTRODUCTION

COVID-19 has led to the closure of most schools worldwide eliminating face-to-face instruction for more than 1.5 billion students in 186 countries (UNESCO, 2020) and resulting in a major shift to online learning. In the current context, this sudden shift has generated less than desirable consequences for stakeholders. Untrained to provide virtual learning and unprepared for the pandemic, principals, teachers, students and parents are frustrated and overwhelmed. Emerging research (Bhamani et al., 2020; Ferri, Grifoni, & Guzzo, 2020; Friedman et al, 2020) suggests that remote learning has led to diminished or limited learning especially for the poor and marginalized who cannot afford technology, have limited access to the internet, families where one device must serve all members, or adults who must work and cannot supervise or essentially teach their children in this virtual context. Statistically, The United Nations International Children's Emergency Fund (UNESCO, 2020) has reported that "31 per cent – of schoolchildren worldwide cannot be reached by digital and broadcast remote learning programs enacted to counter school closures" (p. 8).

Although some believe that the benefits of remote learning outweigh the disadvantages, this has yet to be documented in a crisis situation. While some research shows that some children learn more efficiently online, younger children need a structured environment because they are easily distracted (Li & Lalani, 2020). In light of the continuing pandemic and in preparation for other crises that may emerge, exploring the implications and consequences of remote learning is essential, especially in contexts where access, availability, and human resources are limited or nonexistent to support virtual learning. Palestine like most countries throughout the world was forced to react immediately. In most cases, mothers across the world have become the primary "educator" responsible for monitoring, structuring or even providing instruction to their children. Palestinian mothers are no exception. Thus, their perceptions and experiences of the consequences of this immediate shift to remote teaching and learning adds another perspective to this global dialogue.

On March 5th, 2020 the Ministry of Education and Higher Education in Palestine "launched its National Response Plan for COVID 19 where distance learning was highlighted as an alternative solution to ensure the continuation of learning to their students" (UNESCO, 2020) closing all schools and universities. This was the first time Palestine used remote learning as a substitute for face-to-face instruction, posing serious challenges as most public and private schools had very few Information Communication Technologies (ICTs) and limited or no internet access.

Most private school teachers responded immediately, creating social media groups such as Messenger and WhatsApp to support mothers, who were primarily responsible for providing home instruction, especially for younger children. Generally, most mothers and children had never experienced distance learning or virtual classrooms and had never even heard of Zoom or other meeting platforms. Unequipped and unprepared to train teachers, schools' attempts at online learning became no more than sending daily online assignments and instructional videos to mothers who worked diligently to teach the content, and help children complete and return assignments for correction. Despite significant changes, parents paid full tuition as if schooling was business as usual.

Private schools fared better than public schools as public schools did not take online learning seriously, contacting students only 1-2 times/week through Messenger and WhatsApp, school Facebook pages and/or infrequent interactive communication. Such interventions occurred in only a few schools, as most schools posted few assignments and educational videos on Facebook and required exams to be completed without significant notification. As a result, final grades were based *only* on the previous semester's work which was provided face-to-face.

Private and public school families faced numerous obstacles around issues of technology, either not owning a computer or sharing one computer for all members or not having internet access. Of course, the Education sector worked diligently to develop the infrastructure, but progress was slow. One of the main goals of the Ministry of Education was to develop the technology sector, administer surveys, and run statistics as part of its strategic plan for innovation to evaluate the situation before proceeding. According to the Ministry's Strategic Plan 2017-2022 report (2017), in 2013, the average number of children (10 years and older) using computers and internet was 53.7 % in the West Bank and 39.6% in the Gaza Strip. By 2020 the situation had not changed, with "the percentage of households with children (10-17 years old) currently enrolled in education and who have a computer (desktop, laptop or tablet) at 44% in Palestine, 50% in the West Bank and 36% in Gaza Strip" Palestinian Central Bureau of Statistics (PCBS, 2020). Although well-intentioned, the government had not implemented the necessary interventions to prepare for remote learning.

Overall, elementary school students were not educated to communicate with teachers online due to age, culture, availability of technology, and ICT tools. Most did not have personal computers or cell-phones or were not trained to use them for educational purposes. Their technological competence did not go beyond playing games on their I-pads or mothers' cell-phones.

Even if all teachers, parents, and children had computers and internet access, how competent and ready were parents to use online tools such as Zoom, Google Meet, Go To Meeting, and other video conferencing tools? One of the Palestinian educators compared our situation to a plane that had a technical failure while flying with no one to fix it except a technical engineer who was a passenger. Although the engineer might be skilled in the field with the right equipment, tools, assistants, and supervisors, he is not equipped, trained or experienced in repairing an aircraft in flight. Furthermore, the choice was imposed on him and not his own (Assaf, *Alayyam Newspaper*, 2020). The engineer's plight resembles that of teachers, parents, and students: the government informed the ministry, the ministry ordered schools, the schools required teachers to teach remotely, and the situation demanded mothers assume responsibility for instruction. Ultimately, the government, ministry, teachers, students, and parents were not prepared to implement virtual teaching and learning.

As a result of the pandemic, mothers were primarily responsible for teaching their children as no other choice remained; otherwise, their children would be left behind due to decreasing academic achievement. This is not to say that fathers did not assume responsibility for mediating online learning, but the majority of tasks fell on mothers.

The researcher chose to investigate mothers' perceptions separately to better understand the nature of challenges facing mothers while teaching their kids learn online. Unfortunately, few studies have been done to collect information on school involvement separately for mothers and fathers all over the world. It is also noticed that mothers in the Arab World are highly involved in helping their kids more than fathers. This is not surprising especially at the time of the pandemic where mothers found themselves primarily responsible for teaching their children either because most fathers work outside or because of Arab traditions and customs that accept this job for the mother more than the father. On a worldwide level, this might be also true and existed. For example, in a statistical Analysis Report for Nord and West (2001), some researchers even theorize that women are socialized to meet the needs of their offspring, to show warmth and love unlike fathers who are socialized to be the main source of income and authoritarian parenting and thus they are less likely to be involved than mothers. This was one of the few studies conducted on mothers and indeed, we need further research studies that explore the situation deeply during and after the pandemic. I, like most mothers in my country, was involved alone in helping my two kids learn online. Thus and in an initial effort to address this point, the researcher conducted interviews and an internet-based questionnaire over mothers. 95.4% of mothers reported that they were responsible to teach their kids in this virtual context.

This research seeks to address the significant burden remote learning placed on mothers during this crisis. The following questions guide this research:

- 1) What were the challenges mothers faced while providing online instruction to their children?
- 2) What are Palestinian mothers' perceptions of online learning during the immediate and subsequent transition to remote instruction?
- 3) What are some recommendations for following up and preparing students to deal with online learning?

Given the lack of preparedness of all constituencies and stakeholders for addressing this pandemic, the current state of educational technology in our schools, the uncertain ramifications of COVID-19, and the plausibility of other biological crises, this research can identify a) problems and issues specific to the challenges mothers faced in providing remote instruction; b) insight into the current state of teaching and learning during this crisis; and c) offer important data that can inform current and future educational planning.

LITERATURE REVIEW

The following review first defines e-learning. Next advantages and disadvantages of online learning are presented. Alternatives to online learning are offered. Finally, a description of the impact of COVID-19-related remote instruction globally and on the Palestinian context is provided.

Distance Learning, Online Learning and E-learning

Distance learning, online learning, and e-learning are used interchangeably. Moore et al. (2011) define distance education as a way of providing instruction to learners who are geographically distant. Distance learning and distance education are synonyms for online learning, as are “online course/learning, web-based learning, web-based training, learning objects or distance learning” (p. 2). Cojocariu et al. (2014) view e-learning as a process implemented through internet in any time or place.

According to Barbour (2020), online learning, e-learning, electronic learning, distance education, and virtual learning are used synonymously for online learning which basically occurs when teaching and content are delivered via the internet. However, Hodges et al. (2020) and O’Keefe et al. (2020) note a distinction between online learning and Emergency Remote Teaching (ERT) since intended online learning is different from online courses in response to a crisis. These differences should be considered when evaluating this kind of teaching or what is called (ERT) which is certainly different from an online course.

For the purpose of this research, instructional e-learning/distance learning and/or online learning are defined as a model similar to Emergency Remote Teaching (ERT) that was used as a learning process during COVID-19 where students learn at home from teachers who are also teaching from their homes using the internet.

Distance, online, and e-learning provide teaching and learning experiences through synchronous or asynchronous environments. In synchronous learning, students hear live lectures, interact with instructors, and are provided immediate feedback. Virtual classrooms and chat rooms allow synchronous participation and interaction. In asynchronous learning, lectures are not live (usually prerecorded) and immediate teacher-student interaction and instant feedback are not available. A learner might use blogs, forums, wikis, discussions, and questions on their own time (Dhawan, 2020; Ogbonna et al., 2019). Therefore, “Online learning emphasizes Internet-based courses offered synchronously and asynchronously” (Aliyyah et al., 2020, p. 3). In Palestine teaching online during COVID-19 occurred asynchronously using Messenger and WhatsApp platforms.

Advantages of Online Learning

Of course, there are benefits and drawbacks of online learning. Several researchers considered online learning a successful alternative during the pandemic. Basilaia et al. (2020) assert that students’ performance is a little better than face-to-face courses. In universities for example, lectures can be played to accommodate students’ reading fluency as they can be watched offline, paused, and replayed. Google Classroom and other free tools improve teacher’s workflow, save time, and are available for education projects. According to Fauzi and Khusuma (2020), online learning has been found effective for elementary schools and greatly helps students use personal, environmental and behavioral self-regulation strategies. According to Mirkholikova (2020), online learning has advantages in terms of availability, flexibility, affording time and money sometimes, providing specific sets of knowledge and skills, relevance of lessons, being more prestigious, and improving technical skills.

Disadvantages of Online Learning

Online learning has great disadvantages as well. For example, not everything can be studied remotely, and unlike face-to-face communication, private communication is limited. Unexpected circumstances such as the internet going offline during an important seminar is also a challenge.

The teacher’s competence in monitoring the class is another disadvantage of distance learning. If there is no active participation during and after the online period, e-learning is not effective. In Narita and Ueda’s (2020) study of 24 Japanese students’ responses after finishing an online distance program in Principles and Practice of Clinical Research (PPCR) at Harvard University, the main factor that led to remarkable success was that Japanese students maintained active participation during and after the online period of distance learning. When online learning includes immediate feedback and interaction, it can be as effective as traditional learning methods in a class.

If planning for online learning has not occurred, the sudden shift to distance education can lead to shock and pressure among students and instructors demanding extra hard work, in addition to obstacles like lack of time and digital content, poor technology infrastructure, and reliability (Lassoued et al., 2020). In a review of 14 studies, Garcia and Weiss (2020) reported that “research on home-schooling [online] makes it clear that it works well under narrow circumstances” (p. 11). Without appropriate technology and access to the internet, competence in using technology’s arrays of platforms, and parents trained in instruction success is unlikely. They note that “parents who were suddenly thrust into the role of home-schoolers had no such preparation; most are taking on that new task while juggling the full range of other home-care responsibilities as well as, in many cases, full-time remote jobs” (p. 11).

Alternatives to Online Learning

Distance learning during crisis is a promising solution if families have good internet access, enough appropriate technology, and can monitor or provide instruction but is it a panacea? During the pandemic 96 countries used other alternatives such as online channels and libraries, TV broadcasts, and video lectures. The situation continues to be immensely complicated, however, as nearly half of the students in all classes are struggling with online learning, intimating the need for other options (Basilaia & Kvavadze, 2020).

In Jordan, the Ministry used televised lessons, activating two new television channels to on March 22nd for grades 1-11 (Weldali, 2020). In New Jersey and metropolitan Washington D. C., public television and local cable stations established learning programs from home (Rauf, 2020). Another alternative for online learning is *Radio Lessons* which played a major role in keeping teachers and students connected during the lockdown in Latin America (*Teach for All*, 2020). Several countries announced face-to-face learning as the only learning that could occur during the subsequent semester, even as the disease spread. However, “As businesses and other organizations gradually open after the COVID-19-related slowdown, they will need to consider a variety of measures for keeping people safe” (US Department of Health and Human Services, 2020).

Impact on the Global Context

Globally, many countries are essentially in the same boat—or building the boat as they are sailing it. Johnson, Veletsianos, and Seaman (2020) label current research on the implications of the sudden shift to online learning as “gray literature” as it “affirms the upheaval in higher education arising from COVID-19, reveals that the impacts for institutions, faculty, and students alike have been pervasive, and highlights experiences ‘on the ground’” (p. 8). In their study of 900 U.S. higher education institutions, they found that most were providing emergency remote teaching and that creating a comprehensive plan for effective future remote teaching was imperative. In his qualitative analysis of selected chapters from *Coronavirus (COVID-19) and Global Higher Education: Opportunities and Challenges* representing 147 contributors worldwide Chan (2020) echoes the need to develop a systematic plan “to support students and families from a distance, [noting that] higher education scholars and advanced practitioners must lead the way as institutions pivot from crisis management to planning for the longer term” (p. 12). Accommodating students’ needs, addressing inequities particularly for students from marginalized contexts, poverty, or low-technology geographic (rural) areas, assuring access to technology and internet, and supporting faculty who are teaching online for the first time are among the issues higher education is facing (Baker, 2020; DePietro, 2020; Govindarajan & Srivastava, 2020).

These issues are only exacerbated in K-12 education contexts. Mondul and Mohiuddin (2020) observe that “COVID-19 pandemic has come up with challenges never imagined before and the international interactions and collaborations in education sector are at challenge and the growth has come to a stalemate which is quite visible” (p. 234). Their investigation of parents and students in Bangladesh overwhelmingly revealed the lack of strong and uninterrupted strong internet access and untrained faculty. In reviewing the global educational landscape, Boskurt et al, (2020) observed that “students in the basic education public school system lost at least 200 days of schooling” and “students were pretty much left to their own devices to learn” (p. 99). Their research representing more than 31 countries observed several pervasive themes: 1) lack of preparation of teachers and students in “pedagogical virtuality” (p. 97); 2) limited or no access to technology and internet; 3) issues with time management for teachers and students; and 4) overwhelmed families who must manage children’s academic activities. They also noted the larger emotional impact of COVID-19 and how such consequences demand a pedagogy of care:

Everybody, at a global scale, encountered difficulties and faced traumatic issues caused by the digital divide, social injustice, and inequality, and in some cases, doubled by physical or social loneliness. Such a view reminds us of the importance of pedagogy of care. Whether in K12 or Higher Education, pedagogy of care is needed in these traumatic times because care is one of the basic needs when we navigate on unknown territories, experience new approaches and stick to our lives during the lockdown days. (p. 11)

Across the world, factors of race, ethnicity, SES, and geography which have consistently impacted learning (Attebery & McEachin, 2016; Nájuez, Kaur, & Chavez, 2018) especially for children from high-poverty contexts, have only been exacerbated by COVID-19, which has magnified educational inequity. Nájuez, Holloway, Jarrett, and Ryan (2020) emphasize that “Now is an opportune time to assess academic challenges that arise from random environmental events and to develop intervention strategies to successfully mitigate their negative impact on education” (p. 5).

Globally parents have experienced immense stress as a result of the abrupt transition to online learning. In addition to suddenly assuming responsibility for monitoring, supervising, and even teaching their children in the context of virtual learning, researchers cite other issues for this difficulty. In their examination of parents’ reactions to their children’s use of smartphones in school, Hadad, Meishar-Tal, and Blau (2020) observed several kinds of resistance: social, environmental, pedagogical, and economic. They noted that parents were concerned that “excessive use of smartphones that may lead to loneliness, social segregation, insufficient social competence, and poor communication skills” (p. 157) which is supported by other research. Environmental issues such as too much screen time which can lead to difficulties with posture, headaches, etc. were also problematic. Naturally parents viewed the economic costs of such devices, technology that could easily be damaged or stolen. As noted earlier, the cost of such devices is prohibitive especially for students from urban and rural, high-poverty contexts. In terms of pedagogical resistance, Haddad et al, noted that research has found technological devices without sufficient monitoring can distract students and that students find multitasking on such devices difficult, resulting in problems in controlling digital learning as opposed to face-to-face instruction.

Although parents may possess preconceived resistance to digital learning, current research reveals numerous difficulties for parents in this age of COVID-19. In a study exploring the transition to remote learning in the U.K. and the U.S., Greenhow, Lewin, and Willet (2020) noted that 42% of parents did not feel confident in teaching their children at home, found it “difficult to undertake this new role” (p. 9), and experienced a new “division of labour” (p. 9) at home, especially for families with several children. As reflected in other research, the disparities between the affluent and the poor were further elaborated, as parents in low SES contexts experienced significant issues; in many cases, teachers could not reach 15% of such parents, resulting in children being left behind during this process. Garber, Ogurlu, Logan, and Cook (2020) observed similar issues parents faced, with findings confirming balancing parental responsibilities which includes negotiating employment demands and parental needs, a lack of

positive motivation related to digital learner, accessibility, and concerns of students' academic progress, socio-emotional development, and understanding of curriculum.

The Palestinian Context

According to Aliyyah et al. (2020), UNESCO reported that 67.7% of schools in 144 countries transitioned to emergency remote teaching and learning due to the pandemic. Palestine was no exception! Yet current research presents conflicting results. In their qualitative study of 20 participants including parents and teachers, Shraim and Compton (2020) found that for these participants, appropriate technologies were available to Palestinian students, that their students found using technology to complete school work was boring, that there was a "high level of interaction among different stakeholders on the Ministry Facebook page during the school closures," (p. 11) but there was "no consensus among teachers regarding the usefulness of online education" (p. 11). While these parents perceived online education as a vehicle for making students potentially more independent, they acknowledged that such an outcome depended on the teacher.

In their research of three developing countries including Palestine, Afghanistan, and Libya, however, Khlaif et al. (2020) observed that the pandemic not only deprived children from important social-emotional interaction with peers normally present in face-to-face schooling, but also diminished scaffolding present in such instruction. Results further confirmed that children from lower SES suffered more because parents in these contexts were more unlikely to have the time to spend monitoring their children's learning and noted that these students often received extra academic supports on weekends and holidays which quarantines now prohibited. Some Palestinian teachers shared that they had increased communication with parents through home visits etc., but this was not the case for parents in Libya and Afghanistan. The limitation of these studies is that they drew from a small number of participants.

Proliferation of research studies on online learning during COVID-19 have called for the necessity of looking deeply before we leap. Serpa and Sá (2020) urge questioning the efficacy and reliability of this new system. Are we prepared enough to address the complete closure of all schools? Do all students have internet access? Are parents always available and capable of providing appropriate instruction to their children? Are e-learning tools and platforms safe? Are teachers trained to teach online?

RESEARCH METHODOLOGY

Research Design and Theoretical Framework

This research employs case study methodology using mixed methods. Case study methodology allows for in-depth study of a person or a group of people to reveal insights and perceptions about a particular phenomenon, in this research Palestinian mothers' perceptions of remote emergency teaching and learning. Case study allows the researcher to focus on a specific population rather than a random selection of participants. The specific population under study are Palestinian mothers who agreed to participate in this study. Furthermore, case study methodology allows exploration of complex issues in real-life settings. The abrupt transition to remote learning as a result of the COVID-19 pandemic is a complex issue, that has posed significant challenges for educators and parents throughout the world.

As this research is interested in the lived experiences of mothers as they grappled with impacts of having to provide online instruction to their children, a phenomenological approach allows the researcher to listen, hear, understand, and interpret the mothers' experiences. It is critical to listening to mothers' difficulties, challenges, and struggles in trying to help their children learn online, but unfortunately no one is listening to their struggles. This research provides an in-depth examination of mothers' challenges in order to recommend applicable solutions (Martin et al., 1992). Phenomenography (Morton, 1986) is a theoretical framework that allows the researcher to answer questions about one's thinking. Walker (1998) identifies phenomenography as a way to understand how people experience, see, distinguish, navigate, negotiate different phenomena. As I am interested in how Palestinian mothers distinguish, experience, and respond to the intrusion of emergency remote teaching on their lives, this framework is suitable.

Mixed methods are a useful approach because it can uncover information that is both specific and general, recognize context and recurring patterns, and offer insights and perceptions that are unique to or reflect trends in participants' perceptions or experiences. (Greene, 2008). While the questionnaire offers a larger picture of mothers' experiences during this crisis, interviews provide richer detail, examples, and illustrations of these experiences.

Participants

The study investigates the challenges Palestinian students and their parents experienced as a result of the sudden transition to online learning during COVID-19. Since students in grades from 1-4 are the focus of our study and since the majority of Palestinian mothers are responsible for monitoring their children's learning, the online questionnaire was distributed randomly to mothers who live only in the Ramallah district. The researcher employed a cluster sampling method in which cluster units were selected carefully to avoid bias and to make sure the sample represented the intended population. Therefore, the researcher sent the questionnaire to individual and groups of mothers in different areas in Ramallah and its towns, villages, and camps.

One hundred thirty-one (131) mothers completed the questionnaire. Mothers who responded to the questionnaire came from different places in Ramallah, with some living in the city itself and others from Ramallah towns, villages, and camps. Since some had children in the first and other grades or a mixture, mothers were asked to fill out a different questionnaire for each child. Eight mothers out of 131 were randomly selected to be interviewed. Three are teachers; two are pharmacists; one is an instructional supervisor; and the remaining two are housewives.

Table 1. Research Questions and Related Data Sources

Research Question	Questionnaire	Interview
1. What were the challenges mothers faced while providing online instruction to their children?	Sections 2, 3, and 4	All Interview Questions
2. What are Palestinian mothers' perceptions of online learning during the immediate and subsequent transition to remote instruction?	Sections 2, 3, and 5	All Interview Questions
3. What are some recommendations for following up and preparing students to deal with online learning?	Section 5	All Interview Questions

Of the 3,037 schools in Palestine, 2,234 public schools, 370 United Nations Relief and Work Agency schools, and 433 private schools closed during the pandemic leaving 1,430,000 children affected, with 51% being females. Of the participants in this research, 70 (54%) mothers had children enrolled in private schools, 59 (45%) mothers had children enrolled in public schools, and only 2 (<1%) mothers had children enrolled in UNRWA schools.

Data Sources and Data Collection

The researcher used two instruments. The first was the questionnaire designed to get sense of the larger picture of how mothers perceived the phenomenon of emergency remote teaching and learning. The questionnaire was written in Arabic designed for native speakers. Two professors from Birzeit University validated it, providing feedback and suggesting modifications that were made. The first draft was piloted with seven mothers outside the sample, who completed it and added notes. For example, one of the mothers suggested that some questions were too long and took too much time to answer. Others suggested that some questions should be modified for clarity. Clarifications and modifications were made based on their feedback. To ensure confidentiality and reliability and the given complications from COVID-19, the author formulated and administered the questionnaire online via Google forms in order to guarantee the questionnaire's return.

Questionnaire

Since the study addressed online learning from the perspectives of mothers who have children in grades 1-4, a link was sent to mothers whose children study at private or public schools using emails and social media networks such as WhatsApp and Messenger. The same link was used to send reminder messages. The online questionnaire was accessible for three weeks. Sending the link to enough mothers proved difficult, so the researcher asked help from friends who knew mothers in their area and who recommended teachers who sent links to mothers of their students.

The questionnaire consisted of 5 sections that related to the research questions. For research and publication purposes, the questionnaire was translated into the English language.

Section 1 of the questionnaire addressed information about student's academic grades, place of living, type of school, and student's academic level. Section 2 included questions about the nature of communication between schools and families. These questions considered the types of tools available at homes, methods the school used to communicate with students during online, the kinds of subjects the school focused on, feedback, obligations, and students' interests. Section 3 addressed general questions about internet service and connection problems and the family member mostly responsible for following up the kid at home. In Section 4, mothers were asked to agree or disagree with statements that described potential experiences: i.e., Mothers faced difficulties trying to manage outside and in-home work and teaching their children at home simultaneously. In Section 5 mothers were asked to provide suggestions and recommendations in case online learning continued through the next school year.

Interview

The second instrument was a semi-structured interview. In phenomenography, the semi-structured interview is a preferred method for collecting data as it allows the participant to identify, reflect, and communicate experience in a way that leads to the researcher's understanding (Orgill, 2002). The last question on the online questionnaire asked mothers willing to be interviewed to leave cell phone numbers. Eight mothers were interviewed in person or via the telephone. Of the 131 respondents, 16 were interested in being interviewed and 115 were not. We also received screenshot images and posts on social media from several mothers which were used in this study. Part of the sample was drawn from the private school where one of my children is enrolled. Later I (researcher) will share my experience helping my two children learn online during COVID-19. Face-to-face interviews lasted longer than phone calls due to the nature of each individual interview. The interview included 5 questions posed in each participant's native language, Arabic.

- Question 1: No one can doubt that the sudden shift from face-to-face learning to e-learning has taken a toll on the family dynamic while providing online instruction to children. For example, some mothers found it difficult to monitor their children's learning at home and so they spent more hours helping their children. In other words, there was an addition to the role of a parent that not every parent was equipped to handle, as not all parents were able to educate their child\children. A mother's role is expansive and this additional role was burdensome. How much has this change been relevant to you?
- Question 2: If you were asked to determine the percentage of your child's benefit from e-learning in the previous semester compared to face-to-face learning before COVID-19, what the percentage would you estimate?
- Question 3: Compare your child's commitment to learning with e-learning vs. face-to-face learning before COVID-19.
- Question 4: Please explain the most important difficulties with e-learning you experienced and why.
- Question 5: What are recommendations and suggestions to improve e-learning if it continues to be implemented in the future? What suggestions and recommendations do you have for both the school and the Ministry?

Table 2. Demographic Background of the Participants

Variable	Count	%	
Child grade "last semester"	First grade	48	36.6%
	Second grade	22	16.8%
	Third grade	35	26.7%
	Fourth grade	26	19.8%
School location	Village	33	25.2%
	Town	8	6.1%
	Camp	2	1.5%
	City	88	67.2%
Kind of school the child was enrolled in last semester	Public	59	45.0%
	UNRWA	2	1.5%
	Private	70	53.4%
	Good	2	1.5%
The academic level of the child at the end of the first semester.	Very good	24	18.3%
	Mid	1	0.8%
	Excellent	104	79.4%

Table 3. The Available Tools the Child Used in Online Learning

Tool	Count	Percentage
Tablet	5	3.8%
TV	1	0.8%
Desktop	8	6.1%
Laptop	34	26.0%
Cellphones	83	63.4%

FINDINGS

The data were cleaned, coded, and analyzed using SPSS (Version 25) to generate descriptive statistics of demographic variables (frequencies, percentages) represented by the child's grade, school location, school supervision authority, academic level of the child. The Kruskal Wallis test was conducted to examine differences in mothers' perceptions about online learning according to supervision authority, and child academic level.

This section presents quantitative survey results and qualitative interviews results.

Quantitative Results

Questionnaire: Section 1-Demographic background of participants

One hundred and thirty-one mothers of 160 responded to the questionnaire (response rate=81%); the demographic background of these participating mothers is presented in both **Tables 2** and **3**.

About 37% of mothers were mothers of 1st graders; 17% of them were mothers of 2nd graders; 27% were mothers of third graders and 20% were mothers of 4th graders. The majority of mothers reported that their child's school was located in cities; however, about 25% of them lived in villages, 1.5% lived in camps, and 67% lived in cities. Of respondents 53% were mothers whose children studied at private schools, while 45% were mothers whose children were enrolled in public schools. About 79% reported that their children had excellent academic achievement.

Table 3 shows the participant distribution according to the tools the child used in online learning. Of the participants 63.4% reported that their child used cellphones in online learning, while (26%) used laptops, and just about 1% used TV in online learning.

Questionnaire: Section 2-Challenges mothers faced while providing online instruction to their children

This section presents the findings that will determine the challenges mothers faced while providing online instruction to their children. Firstly, the responses regard a group of indicators related to the child and to the internet quality are shown in **Table 4**.

Results in **Table 4** indicate that almost all mothers (98.5%) reported that their children need help while learning online at home, and about 81% of the respondents reported they had suitable internet network for their child during distance learning. Around 46% of them reported that their internet connection was at least good. However, around 89% of them had no alternative internet connection when the main internet network got disconnected.

Table 4. Internet Connection Used for E-learning

Indicator		Count	%
Child need help when learning online from home.	No	2	1.5%
	Yes	128	98.5%
Mothers who help their children	Yes	125	95.4%
	No	25	19.1%
Have a suitable internet network	Yes	106	80.9%
	Good	40	30.5%
The internet speed and quality	Very good	21	16.0%
	Weak	20	15.3%
	Mild	39	29.8%
Have another alternative when the internet network got disconnected.	No	116	88.5%
	Yes	15	11.5%

Table 5. Challenges Mothers Faced Related to School

Challenge	Disagree	Neutral	Agree
The school did not take into account the difficulties you might face while working and teaching your children at the same time.	32.1%	35.9%	32.1%
The school did not take into account your child's and your family's social emotional well-being and its main interest was to send assignments.	26.7%	25.2%	48.1%
I faced a lot of difficulties in managing between my work outside/ inside house and teaching my kid at the same time	13.7%	13.7%	72.5%

Table 6. Some of the Difficulties Mothers Faced During Electronic Learning

Difficulty	Count	%
Sending too many assignments	66	50.4
Uploading the recorded videos	62	47.3
Videotaping child while doing his\her homework	77	58.8
Lack of printers at home	74	56.5
Not taking the psychological conditions of students	53	40.5

Table 7. The Learning Platform the Child was Asked to Use in Online Learning

Learning style	Count	%
Through electronic learning platforms such as zoom meetings and so on.	19	14.5%
Through private groups such as the WhatsApp and the messenger.	81	61.8%
Through the school face book page or its Instagram accounts.	39	29.8%
Through the school's portal and its email	14	10.7%
Through educational television channels.	3	2.3%

Another group of challenges related to mother are shown in **Table 5** where the results represent mothers' agreement level about a group of difficulties they faced while providing instruction to their children. About 73% of mothers agreed they faced many difficulties in managing work outside/inside house and teaching their child at home. About 48% of the mothers agreed that the school did not consider the need to accommodate her child's responsibilities and her family's social emotional well-being since its main interest was to send assignments. About one-third of mothers agreed that the school did not consider the difficulties mothers might face while working and teaching their children at the same time.

The results in **Table 6** show that about 59% of the participants faced a difficulty in videotaping their child while doing his\her homework, and about 57% faced a difficulty of lacking a printer at home. About 50% of the participants reported that sending too many assignments was a difficulty that a mother faced during electronic learning, and about 47% of the mothers faced a difficulty in uploading the recorded videos, while about 41% of the participants reported that not taking the psychological conditions of students was a difficulty they faced during electronic learning.

Questionnaire: Section 3-Palestinian mothers' perceptions of online learning during the immediate and subsequent transition to remote instruction

This section presents the results related to online learning according to Palestinian mothers' perceptions of online learning during the immediate and subsequent transition to remote instruction.

Table 7 shows mothers' responses about the learning platforms the child was asked to use during online learning. About 62% of the respondents reported that their child was asked to use private groups such as the WhatsApp and Messenger; around 30% were asked to use the school Facebook page or its Instagram account; while almost 11% of them were asked to use the school's portal and emails. Only 14.5 % were asked to use electronic learning platforms such as Zoom meetings, and about 2% were asked to use educational television channels.

Table 8 shows the distribution of the participants' responses according to the online learning styles the school implemented during COVID-19. The majority of the mothers (79.4%) reported that schools sent "assignments and lesson explanations through short videos via the WhatsApp, Messenger, and the like" whereas about 26% replied that their schools conducted online learning by "Posting the teachers' lessons to watch and listen only," and about 1% conducted interactive classes. Finally, only about 14% conducted exams.

Table 8. Learning Styles the School Implemented in Online Learning During COVID-19

Style	Count	%
Posting the teachers' lessons to watch and listen only.	34	26%
Interactive classes where there was a clear interaction between the teacher and his\her students.	1	0.8%
Assignments and lesson explanations through short videos sent via the WhatsApp and the messenger and the like.	104	79.4%
Exams	18	13.7%

Table 9. School Communication with Parents in order to Direct Distance Learning

Communication degree	Count	%
Always	38	29.0
Sometimes	58	44.3
Never	35	26.7
Total	131	100.0

Table 10. Teacher's Feedback about the Child's Tasks during Online Learning

Indicator	Count	%
Teachers send feedback on your kid's work.	No	55
	Yes	76
The most subjects the school focused on during online learning.	All subjects without any exceptions	28
	Core subjects only: math, Arabic and English	78
	Main skills: reading, writing and mathematics	8
	Each teacher used his\her own method and teaching style: nothing was specifically concentrated on	17

Table 11. Mothers' Satisfaction about Online Learning

Indicator	Count	%
Distance learning made learning acceptable for your child and it took into account your child's abilities and learning speeds.	Strongly disagree	23
	Disagree	56
	Neutral	26
	Agree	22
Your child found learning online interesting.	Strongly agree	4
	Strongly disagree	26
	Disagree	67
	Neutral	23
Online learning included projects and learning effectively.	Agree	15
	Agree	13.0%
	Neutral	30.5%
	Disagree	56.5%

Table 12. Parents' Perceptions about School Role in Online Learning Effectiveness

School role	Disagree	Neutral	Agree
Supporting the family while helping its child during online learning.	48.1%	27.5%	24.4%
Building good relationships between your child and his\her teachers.	53.4%	35.1%	11.5%
Motivating and entertaining your child.	55.0%	29.0%	16.0%
Covering the main educational content.	38.9%	36.6%	24.4%
Sending intensive daily assignments and short videos to your child.	19.8%	25.2%	55.0%
Evaluating and assessing online assignments, worksheets and exams.	36.6%	32.1%	31.3%
Training the mothers ahead of time on how to communicate with the school electronically.	82.4%	14.5%	3.1%

Regarding school communication with parents to direct distance learning, about 44% of the parents reported that the school "sometimes communicated with parents in order to direct distance learning," while about 27% of parents reported that schools never communicated with them.

Results show that 58% of the mothers reported that schools gave them feedback on their child's work, and about 60% reported that schools focused mostly on core subjects: only "math, Arabic, English" while 21% reported that schools focused on all subjects without exceptions. About 13% reported that each teacher used his\her own method and teaching style, and about 6% reported that schools focused on main skills: reading, writing and mathematics.

Table 11 shows distribution of mothers' perceptions towards distance learning: 71% of the mothers disagreed that their child found online learning interesting, while about 60% of them disagreed that distance learning made learning acceptable for their child and considered their child's abilities and learning speeds, and about 57% of them disagreed that online learning included projects and learning effectively.

Overall, results show that 82.4% of mothers did not receive training "ahead of time on how to communicate with the school electronically during COVID-19" with the majority observing that the school did take an active role in "building good relationships

Table 13. Mothers' Recommendations for Online Learning

Recommendation	Disagree	Neutral	Agree
Full time online learning	73.3%	18.3%	8.4%
A hybrid learning with both face to face meetings and learning from home.	32.1%	26.0%	42.0%
Reducing each semester period into three months instead of four.	23.7%	23.7%	52.7%
Full-time return to school taking into account the needed precautions.	9.2%	12.2%	78.6%

between your child and his\her teachers" and "motivating and entertaining their child" while 55% agreed about the school "sending intensive daily assignments and short videos to their child."

Questionnaire: Section 4- Mothers' recommendations for online learning if the spread of COVID-19 virus continues

Mothers were asked about their recommendations and suggestions for online learning in case the virus continues.

The results in **Table 13** shows that about 79% recommended "full-time return to school, taking into account the needed precautions" while about 53% recommended "reducing each semester period into three months instead of four." About 42% recommended "a hybrid learning with both face-to-face meetings and learning from home, while just 8% recommended "full time online learning."

Qualitative Results

Interview results

Interview findings addressed all research questions:

- 1) What were the challenges mothers faced while providing online instruction to their children?
- 2) What are Palestinian mothers' perceptions of online learning during the immediate and subsequent transition to remote instruction?
- 3) What were some recommendations for following up and preparing students to deal with online learning?

Overall, the transition to remote teaching and learning created numerous challenges for mothers, which resulted in unfavorable perceptions of online learning. These challenges included a) observations that teachers were unprepared to deliver online instruction effectively and/or routinely support or interact with parents about instruction which led to mothers feeling inadequate and unprepared to teach their children effectively; b) difficulty managing the extra time required to teach, monitor, and supervise the child's learning in addition to existing home and work responsibilities; c) inadequate or inconsistent access to internet and technology; and d) observations that their children were not learning or that their child's needs were not being met. Only one mother evaluated online learning as very useful giving it 70%-- 80% rating. This is because the family had only one child studying at a private school, the mother did not work, and access to internet and technology were not an issue.

Teacher unpreparedness and mothers' feelings of inadequacy

Perceived teacher unpreparedness and lack of teacher-mother interactions contributed to mother's feelings of inadequacy in teaching their children, with ~82% of mothers indicating that they were untrained and unprepared to provide instruction to their children. First, it was clear that mothers were not at all prepared to provide online instruction as they were untrained to play the role of academic teacher. Generally, mothers observed a lack of encouragement and motivation from teachers, with most complaining about receiving no feedback or support. Very few school principals and teachers communicated daily with the child's family. Nearly half did not send feedback on students' work which focused only on core subjects. Mothers noted that they "needed feedback to know if their child was learning." If students and parents had been given feedback frequently, students would have potentially learned more, parents would have developed better communication skills with teachers, and parents would have acquired better understanding of the content and medium they were to deliver. One mother noted that this online learning resulted in her child learning material "by heart" [memorizing] rather than learning for understanding and application.

Generally, educational materials posted on the school's Facebook page, on Messenger or WhatsApp groups, were not sufficient to help mothers and children achieve the main goals of each curriculum. In efforts to support their children, most joined WhatsApp and Messenger groups to help their children complete assignments after watching short videos that explained the related educational content. Mothers had to study the material first before teaching it to their child. Science subjects were taught in English with the teacher sending short videos explaining the material in English, which made difficult content more challenging. Mothers found it easier to deal with hard copy textbooks than electronic copies. Almost all mothers spent a great deal of time educating or helping their children with remote learning during the pandemic, observing that this period was abnormal and that it was something they were not accustomed to. One mother noted that this was due to the fact that "in face-to-face learning, students return home with enough background knowledge unlike staying at home and learning from there." Another mother reported that "Online learning was a burden because not all parents were educated and were able to explain and clarify the lessons to their children which might result in explaining them incorrectly." Another crucial point added by those mothers was that "Mothers had to explain the concepts and the basics to their children and so those mothers would never explain as effectively as teachers who had unique methods and better knowledge, of course." As one mother noted, "At first, we used to spend more than two hours helping our children do their assignments, but after almost a month, we got so bored especially that we couldn't always afford enough time explaining the educational material."

Furthermore, mothers felt unqualified to deal with new technological applications. Even when qualified, they noted that *“the apps depend on the ability to understand the technology... and most technologies were in English and not everyone has strong English language skills.”*

One mother complained that explanations were inadequate and unclear and asked the teacher to add Arabic translation, but the teacher did not oblige offering no reason. Most mothers suffered technical and software problems downloading and uploading videos. They texted messages via the mother group to explain lateness which was usually due to no computers or dead cell-phones from too many downloaded materials. Others just could not balance outside work responsibilities with homeschooling, especially having several kids at the same school and too many tasks and assignments that were part of the teaching.

My seventh-grade daughter attends public school in Ramallah City. The best public schools began by creating messenger groups for each class and were excited to start effective online teaching. Messenger group dialogues between students and teachers made it clear that public school students found it hard to deal with online learning. Frustrated and overwhelmed one mother of a public-school student shared a March 6th conversation that occurred between her child, several peers, and the teacher:

(Teacher: T): *You will take a math lesson online.*

(Student 1: S1): *Not all students are in this messenger group. We are originally 45 students and there are just 30 students here.*

T : *Contact them and ask them to create a messenger.*

S2 : *Some of them do not have cell-phones.*

T : *Call their mothers or their sisters.*

S3 : *When is our online class?*

T : *On Monday. Tell everyone to create Messenger groups or to join from their mothers' and to get ready on Monday..... Download Zoom cloud meeting.*

S3 : *Are you going to teach using this software?*

T : *Yes.*

S4 : *I understand nothing.*

S5 : *This is because the teacher is going to call us using this application in order to start teaching the lesson.*

S4 : *Can I download it on my cell-phone?*

S5 : *Yes.*

T : *Again, download Zoom application. Your lesson will be tomorrow at 8:00 PM. I will send you an invitation with a number to join in. The password is from 1-6.*

S7 : *Does it mean that the password should include at least six numbers?*

S8 : *No. The password is from 1-6.*

S7 : *I can't open it. I could tell my mother to open it for me.*

S10 : *I don't have an email account and I can't create one.*

S5 : *I sent you everything in detail step-by-step and you are still unable to do anything. I feel I am going to have a heart attack. It's not that complicated. Let someone help you or watch videos on YouTube.*

S11 : *What about other subjects?*

S12 : *Math classes are going to be via Zoom. Concerning other subjects, teachers will send YouTube videos or their recorded videos to watch them and get ready for the midterm exams...*

Hundreds of messages followed—about 500—with 100 between 3 students who were bullying another student and whom the teacher threatened to remove from the group. In the end, only 20/45 students participated in the class. They experienced too many problems such as sound disruptions, noise, too much talking, and internet connection problems. Most of them reported that they understood nothing and the class ended suddenly.

After the first Zoom class, this conversation followed.

S 12 : *Do we have another class tomorrow?*

T : *I gave 8th and 9th grades Zoom classes and none of them behaved like this. You made me feel that you have never heard of educational groups and conversations. As a result, there will be no Zoom classes unless you put mute and just listen to me. Follow up the school Facebook page and watch the videos there.*

S4 : *We are so sorry teacher. Having 89 students make noises and so what happened is normal.*

S5 : *89?*

S4 : *The teacher sent the invitation for 2 sections. Section 1 is 44 and our section is 45. From both sections less than 40 students were able to attend.*

S4 : *I meant if all of us were present. I wish we were alone and not with the other section. We would have benefited better.*

S6 : *The whole school keeps accusing the 7th graders as the naughtiest class all the time. They have to encourage us at least.*

Another invitation sent on March 14th...

T : *Why didn't all of you log in? I don't care and you will have an exam on the material next Monday.*

The situation continued with only ten Zoom classes provided throughout the entire semester in addition to some YouTube videos, and this was only for half of the class.

Moreover, instruction required either fewer or more assignments than what students experienced during face-to-face instruction. Some noted that there were “*only one or two required assignments per week.*” While others complained about the school requiring too many assignments, asking mothers to video-tape their child while doing his/her homework. Mothers also found it difficult to submit tasks on time because teachers failed to send clear plans during the pandemic made the situation even worse. Mothers reported “*crying, asking for solutions, but no one was seriously listening or taking serious actions to address the issue.*” Mothers also shared that, “*their children were often bored with and by the ways they were learning. Online videos and assignments the school sent were demotivating and unattractive.*” One of the most painful and shocking answers was when one of the mothers, who was asked about the heavy burden of online learning, replied that “*I did not teach my children at all. As a working mother who continued working outside even under the pandemic, I did not help or follow up my children during online learning. There were few assignments from the school (public school) and they only focused on the core subjects. Online learning added no burden to me.*” The situation was not better for mothers who had a different experience with online learning. For example, some noted that

My child did not want to watch the videos or the lessons sent by their teachers to carry out some tasks. They considered them boring and they wanted to submit the tasks quickly. My child did not benefit from online learning and he did not allow me to video-tape him while performing tasks such as reciting surah from the holy Quran especially because they were not graded. As for me, following up with the groups, the school's (private school) portal and teachers' demands was a big responsibility as a working mother.

Time

A major factor for mothers was time, especially for those who worked inside or outside the house, had several children, and were responsible for the typical “wifely” and “motherly” caregiving duties were at times overwhelmed. Some mothers were housewives; others worked outside as teachers, engineers, secretaries, pharmacists, etc. In most cases, families had more than one child which made it hard to create a suitable environment for online learning. One mother rated online learning at only 2% because she is a working mother who returned home late from work. This made it impossible for her to help her child complete his/her tasks since most schools interact in the morning and give students a limited period of time to submit tasks. Another mother was blatantly honest about her experience:

This (situation) does not apply to me a lot because I actually don't help my children during online simply because I am a working mother and I go to work every day (She is a pharmacist.). The school used to send some assignments only for the core subjects, but I ignored them all. There is no time, even at this public school as online learning at this school is in a form of sending few assignments on the school Facebook page once a week in the best situations.

One mother shared

I am a health care worker and this negatively affects my ability to work with my kids. I go to work and my kids stay at home and I am not able to take a holiday or days off to stay with them. All these things are a big challenge to me. Several mothers noted the extensive time it took to upload recorded videos of their children's work. A lack of time exacerbated mother-teacher communication, when such communication occurred.

My own experiences mirrored those of other mothers. I have two children, a first-grader studying at a private school and a seventh-grader studying at a public school which complicates the task. Managing my duties as a university instructor, as a wife and mother, and teaching my children were more than challenging. My first grader was obligated to study online and like other mothers, I joined a mother's group who discussed problems. The private school created several groups for mothers who in turn created mother groups to discuss problems and challenges. We were 28 mothers of 28 first-grade children. Explaining endless worksheets, monitoring him while he completed homework, taking pictures of all his work, videotaping him while reading aloud, during dictation, or presenting information before sending the final work to his teacher required immense diligence and time. Several times I had to attend to my own work and submit my son's work late; at other times I had to leave work to assure that he submitted work on time. Most importantly, the school did not require interactive online classrooms, and instead asked teachers to create groups via WhatsApp and Messenger. As a result, online learning became no more than sending instructional videos and assignments via the mothers' groups who in turn helped their children complete assignments. Therefore, mothers and I faced myriad challenges.

Access to Internet and technology

Mothers recounted the obstacles and difficulties they faced during online learning as a result of access to the internet and technology. Of all mothers surveyed, ~64% relied only on cell phones as the primary learning device. As more than 87% of the mothers interviewed had more than one child learning online, issues emerged about number and type of devices. Some reported having only one device available to use.

We only have one laptop and my husband is a PhD student and uses it to study online, too. If there are interactive classes, it is so difficult to follow up and help my kids learn online because there is only one laptop and I have two sons and my husband and there is no time because I am a working mother and my husband works and studies, too.

Most mothers depended on one or two Smart phones for the entire family. Armed with only cell phones, following up on their children's learning was at best difficult. Furthermore, mothers struggled to afford a device, leaving cell phones as the essential device for instruction. In most cases the internet speed was not suitable for carrying out activities and most of the time the internet or the network was disconnected or not fast enough. One mother remarked how her child easily lost focus on the anticipated goal while holding an electronic device.

Overall, there was a lack of computers, poor internet connection, and no training on how to fix technical issues. Several mothers were unable to submit anything for their children for more than two weeks. Access to devices and internet was a major obstacle that exacerbated an already difficult situation, consuming more time especially when more than one child was learning online.

Children were not learning or children's needs were not being met

While instructional unpreparedness, mothers' sense of inadequacy, time constraints, and limited or no access to internet and devices certainly detracted from learning, children were not learning for other reasons. Almost 60% of all surveyed mothers reported that they did not believe that their children's learning needs were being addressed which is confirmed by interview results. Responses provided interesting but expected results. Since the study focused on ages 6-10, children in this stage are usually active and love playing. As a result, all mothers reported that their children were not willing to complete their tasks especially in the morning because they did not want to wake up as early as they did during face-to-face learning and other reasons that contributed to children's boredom with lessons.

Also, mothers blamed the Ministry of Education for contributing to this problem when it decided to consider first-semester grades only. On May, 2020 towards the end of the school year, the Ministry of Education announced that there would be no online classes for public schools, no exams, and that second semester grades would be estimated according to previous semester grades. This was typical of most public schools in Palestine.

During interviews some mothers reported their children's responses when asked to talk about their experiences and/or opinions on online learning. They reported that their children did not want to go back to school. The following excerpt captures the dialogue between a second-grade child, who had a high ranking at her school in the first semester of the school year 2019\2020, and her mother.

Mother : *What did you think of online learning during last semester? Did you like it? Why\Why not?*

Child : *Staying at home was better than going to school because we got bored at the school and because our teacher used to yell at us and we had to stand in the queue during the recess in order to buy from the school canteen.*

Mother : *But in face-to-face learning, you used to learn more, do less homework, learn all subjects unlike online learning: weren't you afraid of becoming illiterate?"*

Child : *No, because our male classmates used to make us crazy and the teacher used to punish us. I prefer polishing my nails to doing assignments.*

Another mother reported what her fourth grade child said about online learning: *"School is disgusting and staying at home makes it more fun."*

Other mothers reiterated similar reactions reporting that their children preferred online learning because they generally did not learn anything during the online time period which they discerned was easier and less stressful. The new method of learning was not attractive to students at all. *"In face-to-face learning, my daughter used to go home, review, and do her homework. However, during online learning she was not committed and she used to spend time playing, polishing her nails and playing with her clothes. She used to cry when asking her to do her assignment."* Another observed that her *"son was not committed to online learning. I tried one or two times, but he refused. Teaching online was not obligatory as in private schools especially because it was not assessed. In other words, my son did not study at all and he even forgot "Surah Al-Fatiha."*

Almost all mothers indicated that distance learning did not make learning easy for their children and that distance learning did not effectively or adequately consider their children's abilities, learning styles, and needs.

Mothers' recommendations

The majority of the Palestinian mothers perceived online learning as difficult and too unreliable to assure that their children were learning. Both mothers and children thought that online learning was uninteresting and boring. Furthermore, schools did not play a strong role in achieving effective online learning. The sudden shift from face-to-face to online learning and the use of new methods and Information Communication Technologies ICTs made adjustment difficult.

Mothers posed several recommendations. Mothers strongly recommended that the Ministry of Education must take families' needs into serious consideration and prepare its staff especially teachers and students in order to transition into remote learning in emergency situations effectively and efficiently. Mothers recommended that the Ministry should gradually qualify both teachers and students for online learning in order to prepare them for such crisis. Some suggested that *"teachers should be certified to teach online."* They also suggested that the Ministry should also financially support families to acquire at least one electronic device that was not a cell phone. If families were going to be responsible for effective teaching, they needed adequate technology. Furthermore, the Palestinian Authority had not afforded wages to employees since May, which led to increased poverty in already poor families. Mothers suggested establishing TV channels as a good alternative for online learning. They also emphasized that the Ministry should consider that most families have more than one child but only one available electronic device and that instructional time provided by teachers should be managed and adjusted to facilitate parents' capacity to follow-up on their children's learning more easily. Mothers indicated that teachers should use variable methods and strategies to make learning

online more interesting, limit the number of assignments during online teaching, and encourage students to learn. Overall, most mothers preferred face-to-face learning to learning online, as long as all the necessary precautions were followed.

DISCUSSION

What pervades questionnaire and interview results is frustration, anger, confusion, dissonance, and chaos, which inevitably led to public schools' canceling classes and overall diminished learning for students in private and public contexts. Given the frustration teachers and students experienced, it is no surprise that mothers experienced these emotions tenfold. A major difference between private and public contexts is that learning, however limited, continued to occur in the private context, while teaching and learning was canceled altogether in the public context, elevating concerns about educational equity and access. These responses overwhelmingly suggest that the Ministry was not prepared nor had the appropriate infrastructure in place to support even a gradual transition to remote instruction. This situation has emerged as a common occurrence throughout the world during this pandemic. Hebebcı et al. (2020) share a number of studies from different regions around the world that showed that lack of infrastructure, technical support and network problems, economic problems and lack of technological and education awareness among society have proven to be obstacles to e-learning. This was dominant in almost all Palestinian houses even in middle and upper classes. Parents struggled to afford electronic devices to their offspring and if provided, following up with all of them at the same time was almost impossible. For example, we know mothers whose kids ignored interactive classes and they pretended to be available while attending online classes. They did so by keeping their class open but muted themselves and turned off their cameras to play video games such as PUBG, Fortnite and Call of Duty or to watch Tik Tok and YouTube videos...etc. Their mothers were either working outside, working from home or monitoring other children.

Mothers' responses affirm Johnson, Veletsianos and Seaman's (2020) research on the implications of the sudden shift to online learning which note "the upheaval in higher education arising from COVID-19, [and] the impacts for institutions, faculty, and students alike have been pervasive, and highlights experiences 'on the ground'" (p. 8). These researchers assert that global efforts have focused on providing emergency remote teaching and learning, but that creating a comprehensive plan for effective future remote teaching is imperative. Chan (2020) echoes the need for governments to develop a systematic plan to ensure that the next time a crisis occurs, institutions are not in crisis mode, emphasizing the need to support families and students in the process. This need supports Palestinian mothers' calls where almost half of the participants suggested a hybrid learning with both face to face meetings and learning from home if the crisis continues. The big challenges they faced in online learning even made around 78 % of them prefer full-time return to school, taking into account the needed precautions. Undeniably, this is dangerous and The Ministry must seriously work on an effective and a systematic plan to support the Palestinian families.

Although much of Baker's (2020) research focuses on higher education contexts, the impacts of the transition to online mirror those found in Palestine and other regions of the world: accommodating students' needs, addressing inequities particularly for students from marginalized contexts, poverty, or low-technology geographic (rural) areas, assuring access to technology and internet, and supporting faculty who are teaching online. These issues are only exacerbated in K-12 education contexts. Mondul and Mohiuddin (2020) observe that "COVID-19 pandemic has come up with challenges never imagined before and the international interactions and collaborations in education sector are at challenge and the growth has come to a stalemate which is quite visible" (p. 234).

Mothers shared difficulties in purchasing devices for their children due to finances. In most cases students relied on cell phones with ~81% using cell phones as their primary device. The cost of such devices, especially laptops and tablets, is prohibitive especially for students from urban and rural, high-poverty contexts. As reflected in other research (Greenhow, Lewin, & Willet, 2020), the disparities between the affluent and the poor were further elaborated, as parents in low SES contexts experienced significant issues; in many cases, teachers could not reach 15% of such parents, resulting in children being left behind during this process. Khlaif et al. (2020) also confirmed that children from lower SES suffered more because parents in these contexts were more unlikely to have the time to spend monitoring their children's learning and noted that these students often received extra academic supports on weekends and holidays which quarantines now prohibited. Mothers noted how children were easily distracted when using cell phones, which is supported by research. Hadad, Meishar-Tal, and Blau (2020) observed several kinds of resistance: social, environmental, pedagogical, and economic noting that technological devices without sufficient monitoring can distract students and that students find multitasking on such devices difficult, resulting in problems in controlling digital learning as opposed to face-to-face instruction.

The situation is not better in Palestine since according to The Palestinian Central Bureau of Statistics (PCBS, 2020), only 44% of Palestinian families currently have computers and internet access. Therefore, even if we supposedly have the most successful interactive and effective online learning for the 44% families, 56% of families are definitely deprived from continuing their education online during the pandemic. Unfortunately, those 44% families suffered and faced unexpected difficulties while helping their kids learn online just like other families around the entire world since globally parents have experienced immense stress as a result of the abrupt transition to online learning. In other words, Palestinian mothers are no exception as they suddenly assumed responsibility for monitoring, supervising, and even teaching their children in the context of virtual learning.

Exploring the transition to remote learning in the U.K. and the U.S., Greenhow, Lewin, and Willet (2020) noted that 42% of parents did not feel confident in teaching their children at home, especially in families with several children. Mothers' responses confirm Garber et al.'s (2020) and Boskurt et al.'s findings (2020) which include difficulties in balancing responsibilities, satisfying employment requirements, lack of learner's positive motivation, accessibility, and concerns of students' academic progress. In my research, about 82% of surveyed mothers and 8 interviewed mothers felt untrained to teach their children observing that

schools did not reach out to prepare them for this new responsibility. Garcia and Weiss (2020) reported that “research on home-schooling [online] makes it clear that it works well under narrow circumstances” (p. 11). Without appropriate technology and access to the internet, competence in using technology’s arrays of platforms, and parents trained in instruction success is unlikely. They note that “parents who were suddenly thrust into the role of home-schoolers had no such preparation; most are taking on that new task while juggling the full range of other home-care responsibilities as well as, in many cases, full-time remote jobs” (p. 11).

Boskurt et al. (2020) observed that “students in the basic education public school system lost at least 200 days of schooling” and “students were pretty much left to their own devices to learn” (p. 99). In this study virtual learning for children in public schools simply stopped and grades were based on the previous semester’s face-to-face instruction. This loss will certainly have significant ramifications for student learning. Kuhfeld and Tarasawa (2020) predicted that students returning in the fall will have only reached 70% of typical reading growth and 50% of typical math learning. Compounding this heightened sense of vulnerability is a severe economic disparity in impact on educational quality caused by this pandemic (World Bank, 2020). The world has only begun to see the implications for children living in high poverty villages, towns, cities, and countries worldwide. As a mother for a seventh grade daughter, I can foresee her losing more than 80% of the skills she acquired in face to face learning if the pandemic and online learning continued in this way for more than a year. My daughter was a typical example of Palestinian students who unluckily spent less than one hour in online learning during the last semester. Sometimes they spent more, but learning online was ineffective and a waste of time.

Like the mothers in Palestine, their research found teachers’ and students’ lack of proficiency in “pedagogical virtuality” (p. 97); limited or no access to technology and internet; time management issues for teachers, families, and students; and overwhelmed families who must manage children’s academic activities. In Khlaif, Salhaa, Affouneh, Rashed and Ali ElKimishyc’s work (2020) some Palestinian teachers shared that they had increased communication with parents through home visits etc., (not the case for parents in Libya and Afghanistan in the research sample), but about 48% of surveyed mothers and all interviewed mothers in this research noted limited teacher contact, as well as feedback on student work. Teacher contact and immediate feedback are critical to effective virtual learning (Narita & Ueda, 2020).

Mothers strongly supported the return to face-to-face instruction. Even when asked how to improve virtual learning, mothers suggested full-time return to school even with the continuous spread of the disease, but with taking the necessary precautions. While much research states the benefits and effectiveness of online learning (Fauzi & Khusuma, 2020; Mirkholikova, 2020) almost all mothers discerned this type of learning as ineffective, boring, and too easy. This was especially reflected in conversations mothers had with their children. As one mother shared “*In face-to-face learning, my daughter used to go home, review, and do her homework. However, during online learning she was not committed and she used to spend time playing, polishing her nails and playing with her clothes. She used to cry when asking her to do her assignment!*” Mothers reported little if any evidence that online learning afforded time and was flexible, and available; furthermore, they did not observe relevant and prestigious lessons that provided specific knowledge and skills nor did they note improved technical skills as Mirkholikova (2020) found.

The unpreparedness of teachers is certainly a major factor that influenced mothers’ perceptions. Although Shraim and Compton (2020) in their study of 20 participants found that appropriate technologies were available to Palestinian students unlike in this study, they also learned that students found using technology to complete school work boring, but that there was a “high level of interaction among different stakeholders on the Ministry Facebook page during the school closures,” (p. 11). While these parents believed that online education could make students independent learners, they noted that this depended on the teacher. Khlaif et al. (2020) observed that virtual teaching diminished scaffolding present in such instruction. This was painfully apparent in the discussions between the teacher and several students, presented earlier in this research. This outcome suggests that transitioning students back to face-to-face learning may result in unanticipated challenges, especially if remote instruction becomes the norm.

Limitations of the Present Study

There are several limitations of this study. Although the return rate of questionnaires was 81%, more questionnaires would have better confirmed results. Of course, only 8 mothers were interviewed; a larger sample would certainly yield more detailed and perhaps richer data. Increasing the number of responses from parents of children in public schools as well as recruiting mothers from other cities would also improve the data. Another limitation is a lack of educational data about the mothers. All but two of the mothers interviewed in this study are highly educated (college/university educated or professionals). Given that the literacy rate of females in Palestine (age 15-65) is 95.5% it is likely that the mothers who responded were also highly literate and educated, but this is speculation (Palestinian Central Bureau of Statistics, 2020).

Expanding participants to include fathers, teachers, and administrators would provide different perspectives about the impact of the COVID-19 on daily lives and children’s learning. A longitudinal study would also permit a deeper understanding of the impact on children’s learning as well as the capacity of mothers and others to adjust to and negotiate this shift to virtual learning. It would also provide data about whether or not systematic plans grounded in research-based recommendations are fully in place and institutions are prepared for the next crisis.

CONCLUSION

This study and other studies of online learning during COVID-19 have called for the necessity of looking deeply before we leap. Serpa and Sá (2020) urge stakeholders to question the reliability of this new system, overall preparedness of faculty to teach

online, availability of technology and internet for all students, and capacity of parents to provide appropriate instruction. Responding to these questions with recommendations for change are crucial as the pandemic virus variants occur.

First, those responsible for preparing and hiring teachers must educate and certify teachers in best practices for providing online teaching and learning and provide ongoing support. All the training possible however, will not help if families and schools do not have adequate technology and connectivity. Providing families with at least one electronic device and working internet is a start; of course, this will still leave families with several children with challenges. Perhaps governments can arrange for technology and internet to be rented at affordable cost. Another option is to organize instruction to meet family's needs, structuring different "teaching" times for different grade levels or even in the evening for working mothers. Finding other instructional practices would also improve the situation such as educational television. Ideally, educating parents about the content and delivery of instruction and more effective monitoring of online learning and demonstrating how to use different platforms and devices would improve the situation. Ultimately, a clear national and school plan for such emergency is essential. Although the virus took all by surprise, enduring its impact for almost one year should provide the impetus for assuring a working and effective plan for the future, which if the current situation persists, is right around the corner.

Náñez et al. (2020) emphasize that "Now is an opportune time to assess academic challenges that arise from random environmental events and to develop intervention strategies to successfully mitigate their negative impact on education" (p. 5). Although the impact of the pandemic on all the stakeholders in education is far-reaching and widespread, Serpa and Sá (2020) note that the larger emotional impact of COVID-19 demands a pedagogy of care. "Everybody, at a global scale, encountered difficulties and faced traumatic issues caused by the digital divide, social injustice, and inequality, and in some cases, doubled by physical or social loneliness" (p. 11). They remind us that a pedagogy of care is the one factor that helps navigate trauma and turmoil. They remind us that living such a pedagogy is essential to caring for what we have all created and to respecting the dignity and worth of every person.

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