



Returning to Schools After COVID-19: Identifying Factors of Distance Learning Failure in Jordan from Parents' Perspectives

Hamed Mubarak Al-Awidi ^{1*}

 0000-0002-0012-1000

Ayat Mohammad Al-Mughrabi ²

 0000-0003-1777-6553

¹ College of Educational Science, Arab Open University/Jordan Branch, Amman, JORDAN

² Faculty of Arts and Educational Sciences, Middle East University, Amman, JORDAN

* Corresponding author: hamedalawidi@gmail.com

Citation: Al-Awidi, H. M., & Al-Mughrabi, A. M. (2022). Returning to Schools After COVID-19: Identifying Factors of Distance Learning Failure in Jordan from Parents' Perspectives. *Online Journal of Communication and Media Technologies*, 12(4), e202232. <https://doi.org/10.30935/ojcm/12451>

ARTICLE INFO

Received: 15 Jun 2022

Accepted: 5 Sep 2022

ABSTRACT

This study aimed to evaluate the distance learning experiences of Jordanian parents after their children returned to school due to the COVID-19 pandemic. A survey was completed by 1,675 parents from across Jordan and the vast majority of the respondents (86.31%) agreed that distance learning failed to achieve its goals. This study also investigated the differences among parents' demographic characteristics (area of living and type of school their children attend) and parents' perceptions of the factors that caused the failure of distance learning. The study found a significant difference between parents based on the area of living (urban and rural) and the type of school their children attend. Parents who live in rural areas and parents who send their children to public schools have a higher perception of the factors that caused the failure of distance learning than parents who live in urban areas and parents who send their children to private schools. To explore why parents' distance learning failed, parents answered open-ended questions and attributed this failure to many factors. Parents believe that distance learning failed due to many factors, and the most common factors are low learning motivation among students, poor accessibility to electronic devices required for distance learning and a poor internet connection, family related issues like economic status, large family size, and lifestyle, the last factor related to a distance learning culture. The findings of the study suggest some implications and recommendations for teachers and policymakers.

Keywords: distance learning, educational technology, online learning, education in Jordan, COVID-19

INTRODUCTION

The COVID-19 pandemic caused severe economic and social disruption across the world. It has been classified as one of the most dangerous, global pandemics that humanity has faced in a hundred years (Van Overmeire, 2020). The World Health Organization (WHO) called on all countries to take preventive measures and procedures to try to alleviate the severity of the epidemic. Due to the total lockdown measures and closures, all sectors of life have been negatively affected, including the social, economic, political, and educational sectors (WHO, 2020). However, education is the most affected sector by this crisis (Masry-Herzallah & Stavisky, 2021).

The COVID-19 pandemic has resulted in school closures around the world and more than 1.6 billion children have become out of school (Donnelly & Patrinos, 2021). Most countries around the world have suspended face-to-face classes and school activities. It caused the greatest disruption to education systems

in a hundred years. According to UNESCO (2020), closures of schools and educational institutions have impacted around 94% of the world's student population. To ensure continuity of learning during the time of school closures, most schools around the world turned to ICT, requiring teachers to move to distance learning to help students learn while staying at home. Due to this sudden shift and the challenges it presents, teachers have been adjusting their curriculum and teaching methods to meet the requirements of distance learning (König et al., 2020).

Due to school closures, children in Jordan lost up to two school years of formal. After students returned to school in September 2021, teachers were shocked by the low academic and behavioral levels of the students. There was a common complaint among teachers that students' learning levels were below those typical for their age and they did not acquire the knowledge and skills that they were supposed to gain during the distance learning period. According to the Amman Group for the Future Dialogues in Jordan (2022), educators in Jordan unanimously agreed on the failure of the distance education experience, as applied by the Ministry of Education during the COVID-19 pandemic. According to some policymakers in Jordan, there was a significant decline in the level of education in Jordan due to school closures during the COVID-19 pandemic and online learning failing to achieve its goals. They claim that Jordan needs two decades to compensate for the educational loss and return to its level before the pandemic (Jordan Strategy Forum, 2022). However, until recently, the factors that caused the failure of the distance learning experiences in Jordan during the pandemic have not been evaluated. Therefore, this research will investigate parents' evaluation of their children's distance learning experiences during the COVID-19 school closure.

LITERATURE REVIEW

Jordan's Responses to COVID-19 Challenges

The COVID-19 pandemic is negatively affecting children's education in most countries around the world. In Jordan, every aspect of life was affected, including several social and economic sectors. Education is the most affected sector by this crisis. Most schools' closures around the world are forced to close. This closure caused negative effects on learning loss and drop-out rates (Hevia et al., 2022). The challenges of the coronavirus pandemic have a negative effect on primary school children's literacy and numeracy skills. Before the pandemic, it was estimated that over 52% of Jordanian children could not read an age-appropriate text. It is anticipated that learning loss has been significant for those children unable to participate in their distance learning and that school closures could worsen more than they were before the pandemic (UNICEF, 2020).

The challenges of the COVID-19 pandemic have a negative effect on primary school children's literacy and numeracy skills in Jordan. Before the pandemic, it was estimated that over 52% of Jordanian children could not read an age-appropriate text. It is anticipated that learning loss has been significant for those children unable to participate in their distance learning and that school closures could worsen more than they were before the pandemic (UNDP, 2020).

Effective Distance Learning

Distance education is defined as a teaching approach in which the student and teacher are in different places and not necessarily tied to a specific time. In other words, students learn without having to come to school or attend any physical classes (Dhawan, 2020). It can make use of a variety of technologies, including email, audio, video, computers, and the Internet (Chang & Smith, 2008). The current version of distance education is online education, which uses a variety of digital devices (laptops, smartphones, tablets, etc.) and Internet applications as the mode of distribution of the curriculum content provided online (Kentnor, 2015).

Research has identified several factors for the success of distance learning. These factors include Learners' characteristics including computer self-efficacy, Internet experience, computer anxiety, and attitude toward e-learning (Bhuasiri et al., 2012; Chu & Chu, 2010; Sun et al., 2008). E-learning environment factors related to the e-learning environment include learners' perceived interactions with peers and teachers, variety in assessment, and autonomy support (Roca & Gagné, 2008; Sun et al., 2008). Infrastructure and system quality include Internet quality, reliability, ease of use, system functionality, system interactivity, equipment accessibility (Bhuasiri et al., 2012), course and information quality, and students' motivation. Factors that are

crucial to gaining learning motivation include students' attitudes and expectations, perceived enjoyment, perceived usefulness, reward and recognition, social pressure, and competition (Roca & Gagné, 2008).

Parents' Perceptions of Distance Learning

The pandemic outbreak forced parents to stay home, which led them to adapt to new routines and take on different responsibilities. The main responsibility was to involve their children in distance learning (Han et al., 2022). Teaching children at home is an additional duty for parents, and they need to make sure their children will get a high-quality education and make up for the face-to-face experience they get at school. Parents become temporary teachers and provide educational assistants and support for their children when they need it. According to Carrión-Martínez et al. (2021), parents take four roles at home in relation to distance learning such as a teacher, a facilitator, a motivator, and a director. Parents as teachers at home manage the child's time and method of learning, keep an eye on the child's learning regularly and create a comfortable learning environment. As a facilitator, parents provide the resources and devices for their children to engage in distance learning. When parents are motivators, they encourage and support their children's learning so that they'll be motivated to learn and do well. And finally, as directors' parents, they can direct their children's online learning from home.

Based on the results of the research conducted during the COVID-19 pandemic (Gyeltshen, 2022; Liu et al., 2022), parents' perceptions of their children's use of distance learning during the COVID-19 pandemic are mixed. Parents have both negative and positive perceptions of distance learning. The positive perceptions are associated with keeping children engaged in the learning process. It also sometimes helps students to understand some of the unclear concepts in a more effective manner and allows them to express their thoughts in better ways. Moreover, online learning during the pandemic encouraged students to use information and communication technology (ICT), which improved their competency to explore a wide range of learning resources. In addition, parents become more aware of their children's education, and they become more appreciative of the value of the teacher and school (Demir & Demir, 2021). The negative perceptions were because parents take the responsibility of teaching their children. Without training and preparation, they faced many problems and obstacles in the process. From the beginning to the end of the home-schooling period, parents provide stress and worry were the dominant emotions among parents (Rousoulioti et al., 2022). These negative perceptions were due to the lack of the ability to provide online learning facilities for children (Herliandry et al., 2020). Researchers reported some factors that affect teachers' intention to choose online learning. These factors are lack of support for technology use, lack of training in online learning, and lack of pedagogical knowledge and experience to deal with problems related to online learning (Han et al., 2022). Other issues had a negative effect on teachers. Perceptions were related to the technical problems and the parents' inability to deal with these problems. parents' concerns about the quality of the online classes during the COVID-19 pandemic, the bad network connectivity, and that some of the children may engage in other activities such as watching movies on YouTube or playing online games. A study carried out by Spinelli et al. (2020) found that parents who had higher levels of difficulties in supporting their children's learning were more stressed.

Online Learning and its Challenge to Parents

In response to the COVID-19 pandemic, the Jordanian government urged parents to get engaged in distance learning with their children to ensure learning continuity efforts to guarantee its success. Parental involvement is an important factor for student achievement in traditional school settings. Parent support has demonstrated significant contributions to the success of learners in a virtual learning environment (Tajuddin et al., 2022; Woofter, 2019). However, because parents are generally not ready to support their children's online learning and they are unfamiliar with the new roles' responsibilities of their child learning (Lau et al., 2021), they struggle with understanding their new responsibilities and encounter a range of challenges, making them unable to provide essential support to their children. Research has revealed that parents experienced different challenges in their engagement with their children's online learning experiences during the pandemic. Parents have to take on new responsibilities to respond to this challenge (Rousoulioti et al., 2022). They had to perform multiple tasks, such as providing help for their children's learning and doing household tasks. Garbe et al. (2020) have identified many challenges parents encountered with their

children's distance learning during the COVID-19 pandemic. Some of these difficulties include struggling to balance their job obligations and the learners' needs for their children; struggling to accommodate multiple children at different grade levels in the family; lack of students' motivation toward distance learning; and lack of content knowledge of the subject being taught (Agaton & Cueto, 2021; OECD, 2020). Another challenge identified by researchers was a lack of technological devices or access to the internet. According to some researchers (Spinelli et al., 2020), if parents cannot provide their children with the tools for distance learning, both children and parents will have a high level of stress and frustration.

Accordingly, parents have been engaged in distance learning with their children for about two years without any readiness for this kind of learning experience. The implementation of distance learning under unique and special circumstances may limit or reduce the desired outcomes of this learning experience and make it unable to compensate for the learning experience that children miss from face-to-face learning in schools. Since this experience has ended and the children have returned to school, it is crucial to evaluate this experience. This evaluation will determine the effectiveness of this type of learning and to what extent children have benefited from it. This study attempts to address the following research questions:

1. To what extent were Jordanian families ready to provide support to their children through distance learning?
2. How do Jordanian parents evaluate the quality of their children's distance learning experiences?
3. Are there statistically significant differences in the Jordanian parents' perceptions toward the factors that cause the failure of the distance learning experience attributed to parents' demographic characteristics (area of living and type of schools their children attend)?

METHODS

In order to explore how Jordanian parents, evaluate their experiences with their children during their online learning, it was advantageous to gather a large dataset that helped to obtain a deep understanding of this experience. The researchers developed a survey to collect demographic information and to explore the factors that affect their experiences. Participants were requested to respond to open-ended questions within the survey. The purpose of the open-ended questions is to gain insight into the experiences of parents and understand their perceived knowledge of known evidence-based practices.

Instrumentation

The researchers developed a parent survey to collect the data. The survey consisted of 18 items spread into three sections. The first section consisted of eight items related to parent demographics: the number of children in schools and their classes; the parents' level of education; employment; and income. The second section consisted of five items focusing on the availability of technology at home, access to technology resources, and the quality of the internet. The third section was to measure parents' perceptions about the factors that caused the failure of the distance learning experience. Parents were asked to give their perceptions of the five statements. The survey statement focused on parents' abilities to help their children in their learning, communication with teachers, the quality of the Internet connection, the lack of ability to use various types of technology, and the lack of digital devices. A three-point Likert scale was applied to the first three questions, with response options of yes, no, and to some extent. A five-point scale was applied to two questions (with response options as strongly disagree, disagree, neutral, agree, and strongly agree). The three-point scale with a midpoint was used because it can help to assess the direction and neutrality (DeCastellarnau, 2018), while the five-point scale was used because it allows the participants to express how much they agree or disagree with the given statement and express the strength of feelings regarding the question or statement (McLeod, 2019). An open-ended question was added to the survey. The inclusion of an open question at the end of a questionnaire may prompt respondents to elaborate on their answers to closed questions and enable them to uncover new topics that the closed questions did not cover (O'Cathain & Thomas, 2004). The open-ended question was based on a participant's response to the following question: "Do you believe that the distance learning experience was successful?" If "yes," why not? And if "no," why not?

Participants and Data Collection

An online survey was created using the Survey Monkey platform (www.surveymonkey.com). 35 elementary public and private schools (grade K-6) were invited to participate in the study from the three major cities in Jordan (Amman, Zarqa, and Irbid) and the rural areas that belong to these cities. 18 schools were accepted to participate in the study. Researchers selected only 12 schools, four schools (one public, one private, one located in an urban area, and one located in a rural area) from each city that has the largest number of students. All parents had at least one child who attended school during the COVID-19 pandemic and had distance learning experiences with their children. The schools' administrations help to distribute the link to the survey to parents of the children who are enrolled in these schools through social media (WhatsApp). In addition, the link to the survey was posted on the Facebook page for each school and the schools' administration encouraged parents to fill out the survey. The survey was administered over two months (October and November 2021), when in-person school resumed, and children fully returned to schools after a year and a half of lockdowns due to the COVID-19 outbreak. The survey was anonymous, and participation in it was voluntary. All participants were guaranteed that their responses would remain confidential.

Context of the Study

Jordan is a small country located in the Middle East. It has limited natural resources (Assaf, 2014) and a population of more than 10 million people (UN, 2020). According to the Jordanian Statistics Department (Department of General Statistics, 2020), it is estimated that more than 40% of the population in Jordan is under the age of 18. Education is the most valuable resource in the country to promote income prosperity and foster economic growth. Despite Jordan's limited resources, it has succeeded in developing a highly ranked education system that is the best one among Arab states in terms of educational outcomes (World Bank, 2008). The structure of the educational system in Jordan consists of two main stages: basic (grades 1-10) and secondary (grades 11 and 12). The basic stage is compulsory for all students and consists of primary school for children ages 6-12 (grades 1-6), and preparatory school (grades 7-10) for children ages 12-15. In the secondary stage, students can choose to enroll in academic or vocational education. Parents can choose to enroll their young children in kindergarten if they are under the age of six (Fayez et al., 2016).

Prior to the COVID-19 pandemic, Jordan was encountering difficult economic and social challenges. Growth rates have dropped, and unemployment and poverty rates have increased significantly. Jordan's overall poverty rate was estimated to be 15.7% in 2018 (Aljbour & Al-Wraikat, 2022). The COVID-19 outbreak made this situation worse, and it had severe negative effects on people. The COVID-19 lockdown in the country left many families way below the poverty line, and other particularly vulnerable families have fallen below the absolute poverty line.

As in all countries, COVID-19 pandemic had a significant impact on the education system. In the middle of March 2020, the Jordanian government announced that all educational institutions (private and public) were closed, affecting 2.37 million students. At the start of the 2021-2022 academic year, about 2.174 million students returned to school to resume in-class education.

Data Analysis

Both quantitative and qualitative methods were utilized in analyzing the data. Descriptive statistics were used to reveal the frequencies, means, and standard deviation (SD) of the parent's responses to the survey.

Thematic analysis was employed for analyzing the data collected from the open-ended question. This is a sophisticated qualitative tool that helps to conduct research in a precise, consistent, and exhaustive manner through recording, systematizing, and disclosing the methods of analysis and the study results with enough detail to enable the reader to determine the credibility and validity of the process (Nowell et al., 2017). Thematic analysis is a useful and effective research tool that offers rich and robust results (Farber et al., 2018). Braun and Clarke's (2006) six-step guide was employed in this study to analyze qualitative data. The guide involves six steps: getting familiar with the data through transcription; generating initial codes; searching for themes; reviewing themes; defining and naming themes and producing the final written output. The study follows this guide step by step, as follows:

Pre-coding and familiarization

The researchers read the responses several times to become more familiar with the content and understand deeply the overall data.

Data analysis: Generating initial codes

This stage included initial coding for the whole set of data. In order to find common codes that could lead to emerging themes, the researchers reviewed the responses word by word and grouped the codes that referred to the same idea into categories. The data set's codes were listed at the end of this stage. Researchers attempted to find as many possible codes as well as themes in this step and then grouped the data identified by the same code.

Data analysis: Searching for themes

A long list of several codes was presented. The focus was on the wider level of themes as they categorized these different codes under possible themes. A table was created to sort codes and search for potential themes.

Data analysis: Reviewing potential themes

Two levels of review for possible themes, the first level is validating that the themes operate in connection to the data, that is, ensuring that the themes capture the important qualities of the coded data relevant to the research questions; the second level of review is validating that the themes work over the entire data set. The dataset was re-examined for this research study to ensure that each theme was coherent and essential, with clear boundaries and a well-defined central concept related to the research topics. Themes were fine-tuned in this step, and some were collapsed right into other themes when some of the themes needed to be broken down into smaller components. As a result, each topic could stand alone, and the themes could effectively address the study objectives in a meaningful way.

Defining and naming themes

In this step, an ongoing analysis was performed to ensure that each theme is defined and labeled. It was acquired to find the essence of what each theme was about as well as the component of data that each theme captures. A comprehensive story was created using all of the data and assessed each topic and its particular narrative to see whether it matched with the overall narratives or not, and to see if any of the themes had sub-themes. At this point, themes were given names that were concise and descriptive of what the theme was about.

Producing the report

The final report was written after examining the final themes. During the report's writing, the themes that contributed the most to answering the study questions were chosen. The purpose of this procedure, according to Braun and Clarke (2006), is to compose the theme analysis and tell a story by presenting the facts in a way that convinces the reader of the validity and significance of the analysis. The report provided sufficient evidence to show that the data's themes were relevant to the given dataset. Furthermore, extracts and quotes were included in the narration to provide and capture the meaning of the analyses' important points.

FINDINGS

Demographic Characteristics of Participants

A total of 1,683 parents responded to the survey. The vast majority of the respondent parents (95.7%) were mothers. The high participation of mothers is expected because, in the Middle Eastern context in general and Jordan in particular, mothers are the primary caregivers of children (Gharaibeh & Gharaibeh, 2021). The number of children attending schools from K-12 ranged from 1-4 in the majority of the families. Some families have a large number of children in school, and it reached 12 children, and they enrolled in grades. The

Table 1. Demographic variables of study population (n=1,683)

Variables		n	%
Number of children in schools	1	358	21.27
	2	535	31.79
	3	440	26.14
	4	223	13.25
	5	80	4.75
	>6	47	2.79
Type of kindergarten attended	Public	1051	62.45
	Private	632	37.19
Employment	Unemployed father	140	8.32
	Unemployed mother	933	55.44
Family monthly income (in Jordanian Dinar)*	<700 USD	813	48.31
	700-1,410 USD	616	36.60
	1,410-2,821 USD	185	10.99
	>2,821 USD	69	4.10
Level of education/fathers	No education	54	3.21
	Basic education (1-9 grade)	258	15.33
	High school	491	29.17
	BA	667	39.63
	Graduate studies	213	12.66
Level of education/mothers	No education	45	2.67
	Basic education (1-9 grade)	164	9.74
	High school	394	23.41
	BA	826	49.08
	Graduate studies	254	15.09

Note. Jordanian Dinar=1.41 USD

highest% of the participants (62.91%) send their children to government schools, and other participants (37.19%) send their children to private schools. A high percentage of parents have a high level of education (B.A. and graduate studies), but the study discovered that a significant percentage of parents (2.29% of mothers and 2.90% of fathers) are illiterate.

The monthly income for almost half of the participants is below 700 USD, which represents around 9,771 USD per family annually. According to the Jordanian Census and Statistics Department (2021), the poverty line in Jordan is JD 814 (1,148 USD) per person annually, which represents about JD 5,700 (8,050 USD) per year for a family of seven members. More than half of the participating mothers (56.7%) are unemployed. On the other hand, a considerable percentage (8.53 %) of the fathers are unemployed. The demographic information of the participants is presented in [Table 1](#).

Jordanian Families' Readiness to Provide Support to Their Children Through Distance Learning

To investigate the Jordanian parents' level of readiness to provide support to their children through distance learning, the second part of the survey focused on the availability of distance learning devices. The main distance learning tools owned by parents (smartphones, laptops, tablets, and the Internet) were presented to participants to check the availability and quantity of these devices. The smartphone is the most common device owned by parents (89.17%) and the quantity of this device varied among them (11.69% owned one smartphone, 36.98% owned two, 18.11 owned three, and 22.79% owned more than three). The tablet is the least owned device, only (32.92%) own this device. Regarding the internet connection, the vast majority of the participants (93.79%) have an internet connection and the quality of the internet varied among respondents (excellent 24.61%, good 47.80%, and weak 21.38%). Parents' responses about the availability of distance learning devices are presented in [Table 2](#).

Impact of Parents' Demographic Characteristics on Their Perceptions

To identify the possible impact of some of the major demographic variables of the parents (type of school and area of living) on their perceptions the following research question was raised "Are there statistically significant differences in the Jordanian parents' perceptions toward the factors that cause the failure of the

Table 2. The availability of distance learning devices

Variable	Ownership	Frequency	%
Number of smartphones at home	Do not have	125	10.43
	1	140	11.69
	2	443	36.98
	3	217	18.11
	More than 3	293	22.79
	Total	1,218	100.00
Laptop	None	522	43.32
	1	445	36.93
	2	150	12.45
	3 or more	86	7.30
	Total	1,203	100.00
Tablet	None	807	67.08
	1	255	21.20
	2	106	8.81
	2 or more	35	2.92
	Total	1,203	100.00
The quality of the Internet	Excellent	297	24.61
	Good	577	47.80
	Weak	258	21.38
	No internet	75	6.21
	Total	1,207	100.00

Table 3. Perception factor scores by type of school attended by children

Statement	Public (n=1,044)		Private (n=639)		t	Sig.
	Mean	SD	Mean	SD		
I was able to assist my children in their learning.	1.52	0.50	1.64	0.48	5.00	0.00**
My children's lack of communication with their teachers was a barrier for them to participating in distance learning.	1.99	0.58	1.78	0.71	6.80	0.00**
The Internet connection was a barrier for my children to participate in distance learning.	1.25	0.61	1.18	0.53	2.69	0.00**
The lack of ability to use various types of technology was a barrier for my children to participate in distance learning.	3.54	1.03	3.00	1.04	10.42	0.00**
The lack of digital is a barrier for my children to participate in distance learning.	2.54	1.07	2.15	0.95	7.71	0.00**

Note. **Significant at $\alpha=0.05$

distance learning experience attributed to parents' demographic characteristics (area of living and type of schools the send their children to)?". To answer this question a t-test was performed to compare parents' responses to the five items that measure perceptions.

The results of the t-tests are presented in **Table 3**, and it shows a statistically significant difference between parents who send their children to public schools and those who send their children to private schools in all the items of the scale. Parents of students enrolled in public schools reported significantly higher than parents of children enrolled in private schools on the four items indicating barriers to their children's engaging in distance learning (lack of pedagogical skills, lack of technology skills, lack of digital devices, lack of communication with their schoolteachers, and lack of internet connection). Regarding the ability to help children in their distance learning, parents of children who are enrolled in private schools have a more significant level of perception than parents of children who are enrolled in public schools.

With regard to the area of living, the results of the t-test revealed a statistically significant difference in parents' perceptions in two of the items (lack of skills to use technology and lack of digital devices (**Table 4**). Parents of children who live in rural areas had more difficulties during their children's distance learning experience than parents of children who live in urban areas.

Results were sorted into four themes: *attitudes toward distance learning*, *lack of motivation to learn*, *family related issues*, and *accessibility*. Additional sub-themes within each of the themes were identified. **Table 5** presents the frequencies and percentages of each theme with subcategories. These themes are clarified in the following.

Table 4. Perception factor scores by area of living (urban & rural)

Statement	Urban (n=807)		Rural (n=876)		t	Sig.
	Mean	SD	Mean	SD		
I was able to assist my children in their learning.	1.58	0.49	1.55	0.49	1.43	0.15
My children's lack of communication with their teachers was a barrier for them to participating in distance learning.	1.89	0.67	1.92	0.60	1.11	0.26
The Internet connection was a barrier for my children to participate in distance learning.	1.20	0.56	1.24	0.60	1.32	0.18
The lack of ability to use various types of technology was a barrier for my children to participate in distance learning.	3.23	1.06	3.43	1.06	3.90	0.00**
The lack of digital is a barrier for my children to participate in distance learning.	2.20	0.98	2.55	1.06	6.75	0.00**

Note. **Significant at $\alpha=0.05$

Table 5. Frequencies and percentages of each theme with subcategories (n=413)

Themes	Subthemes	Frequency	%
Learning motivation	Low motivation for learning among students	264	64
	Negative attitudes toward distance learning	189	46
	The attractiveness of the learning environment	154	37
Accessibility	Lack of technological devices	255	62
	Poor internet connection	223	54
	Lack of pedagogical skills	157	38
Educational platform	Lack of Interactivity	118	29
	Lack of reliability of evaluation methods	94	23
Family related Issues	Large family size	248	60
	Low family income	216	52
	Lifestyle	56	14
Distance learning culture	Lack of self-regulation	83	20

Jordanian Parents' Evaluation of the Quality of Their Children's Distance Learning Experiences

Another question included in the survey stated that "Do you believe that the distance learning experience was successful?" if "yes", why? And if "no", why? The vast majority of the respondents (86.31%) answered "no", and only a small% (5.31%) answered "yes". The rest of the respondents "8.37%" believe that the distance learning experience was successful to some extent. The total respondents who answered "no" and explained why it was not successful were 413 parents. The responses of participants who answered "no" and believe that distance learning was not successful, were analyzed by researchers using thematic analysis methodologies.

Theme 1: Learning Motivation

Lack of motivation to learn

Motivation to learn is associated with an individual's cognitive and affective processes in relation to the interactive connection between students and their learning environment, as well as environmental and social factors that function as enhancers or barriers (Schuck et al., 2014). The vast majority of respondents (64%) reported that lack of motivation among students toward online learning was the most common factor that extremely affected the success of this distance learning experience. affect the success of distance learning. Respondents declared that with so many possible distractions in the home setting, keeping children engaged, motivated, and interested in their online lessons was very difficult and challenging. It can be inferred from the responses that a lack of motivation for online learning Four subthemes were identified by parents as causing the lack of motivation among students.

Attitudes toward distance learning

A large number of participants (46%) expressed negative attitudes toward distance learning and believed that learning happens only in schools. They indicated that distance learning was a failure, and it could not

replace in-class learning. "It was not a distance from education, but rather a distance from learning," one parent said, while another said, "My children saw the distance as an open holiday. "Most of those participants were parents of children in early grades. The responses showed opposition to distance learning, as one participant simply responded, "I do not believe in distance learning at all." Another respondent stated, "My children did not accept the idea of distance learning. It is considered a strange idea and does not believe in it. It is impossible for learning to take place without being in the classroom and meeting teachers face-to-face." Another respondent reported, "it's impossible for my child to learn through the internet; he cannot concentrate on the learning activities."

Some participants reported that distance learning was not effective at all, especially for children in early grades. Many respondents (27) reported that their children did not learn anything. One respondent stated that "the time my childhood spent in front of the screen was a waste". Some parents (11) suggested that children should repeat their classes. "If I were a policymaker," one respondent said, "I would require students across the country to repeat the classes they had during the pandemic. "Another issue raised by a considerable number of respondents was the low level of their children's learning in acquiring the basic skills. In particular, writing skills. One respondent stated, "my child started his formal education. When he started in-class learning, he was in the second grade. It was a challenge for me and for his teachers to teach him how to hold the pencil.

The attractiveness of the learning environment

A large number of participants (37%) reported that the distance learning classes were boring, and the content was not appealing to students. One participant reported that "distance learning made my children feel irresponsible and unappreciated for the value of learning." That's mainly because they deal with the intangible experience. The policies of MOE some parents declared that the ministry of education focused on the major subjects (language, math, science, and social studies) and ignored physical education and art lessons, so children were less motivated to attend online classes. In addition, some parents (nine) mentioned that students were not given the chance to participate in extracurricular activities. The teaching methods and strategies used were boring and students could not concentrate. One respondent stated that "what was presented on the screen was only a teacher setting and speaking all the time." Another respondent stated, "Before the pandemic, my child used to come back very happy from school because she played games to learn, or he heard a story from the teacher. None of these were implemented during the online learning."

Theme 2: Accessibility

Lack of access to electronic devices or internet quality

A high percentage of participants (62%) reported that they were unable to buy the devices and could not afford their high-speed internet bills. The lack of electronic devices made children unable to access educational platforms, which made the problem worse, to the high price of these devices. One participant reported, "Traders took advantage of the pandemic and the high demand for electronic devices to raise prices insanely which made low-income people unable to own these devices". Poor internet connection made students be unenthusiastic to follow up on lessons on the platform. One participant reported, "my child got frustrated when whenever she lost connection with the Internet". Many parents (13) stated that their children struggled in uploading assignments as an image on the platform.

Lack of content knowledge or pedagogy

Since a high percentage of parents are not well educated (high school or less) as appeared from the quantitative results, a considerable percentage of the participants (38%) were not able to provide help and support for their children. Survey respondents identified their predominant struggles as content knowledge or pedagogy and discussed their lack of training to become an educator. Examples of what parents stated are, "after corona, my children should start learning from zero and I was not qualified to teach them"; "I realized how hard it's to be a teacher, I will never be able to replace her, and I truly appreciated what teachers are doing".

Lack of self-regulation

Participants feel that the success of the evaluation of students learning in a distance learning environment depends on the self-regulation that most students do not have. This factor was identified by (29%) of the respondents. One participant explained that our children were not raised to be self-regulated. He stated, "In our culture, everybody breaks the law if he or she knows that he will not be caught." Another participant added, "The evaluation of students' learning was not fair and did not show the actual level of students because it was parents who study and take the exams, not children." Another participant added, "I answer the questions on the exam while my child is playing in the yard." One participant complained and said, "I encouraged my kids to answer the exam on their own. Every time they get good grades but not perfect, at the end of the semester, I found that most of my peers got full grades and my kids were the lowest in their classes. That was very disappointing for me and for my kids. That was because the school did not monitor students while they were taking the exam. Students were getting help from their parents on the exam or searching for answers from the books.

Theme 3: Educational Platform

Lack of interactivity

Interactivity is the most essential element for successful distance learning, and the lack of interactivity in distance learning influences its effectiveness. A considerable number of participants (29%) reported that the distance learning environment lacked interactivity. The educational platforms that were used during the pandemic were not well designed to allow students to interact effectively with the learning environment. The educational platform did not help students to interact easily with the online lessons. The responses revealed that teachers did incorporate active learning during classes and did not use effective teaching strategies to make their lessons interactive and actively engage students in the learning process. Moreover, there was no direct communication between students and teachers. A large number of respondents (31) indicated that their children did not have the chance to interact with their peers and that teachers did not engage them in learning activities during the lesson. Many respondents (13) reported that teachers never asked questions of students. One respondent stated, "During distance learning, my child used to open two screens, one to follow the teacher if it happened and the teacher called his name, and the other to play games not related to class objectives." I never saw him do it. One of the respondents stated that "My child falls asleep during the lessons because he did not find anything interesting in the lessons." Some parents (nine) reported that it was hard for students to understand some subjects like math and language arts in the absence of interaction with teachers in the classroom.

Quality of learning evaluation

The educational platform was not effective. Platforms did not include the appropriate tools to evaluate students learning effectively; therefore, the assessment was unfair and unreliable as reported by about one-fourth (23%) of the respondents. There was no way to control students during the exams and the way students were evaluated was poor. One participant stated, "Teachers used to send the exams via WhatsApp, after my child answer the questions on the paper were copied it and sent it to the teacher". Some parents answer the questions on the exams instead of their children, and when the good students answer the exam questions on their own, they feel frustrated when they get the same grade as their peers who low-achievers are and did not put any effort into answering the exam." Another parent reported that "I was taking my child's exam while he was sleeping".

Theme 4: Family-Related Issues

Family size

The average size of the family of the respondents was a little bit high (4.71), which affected the ability of the family to provide learning for all their children. The more children the family has, the harder it is to provide devices for all the kids, and the fewer times parents can spend with each child. One mother stated, "I am an employee and I have six children to teach, and they all need intensive teaching support because they are in

the early grades." Another mother stated, "I have four kids at school, and we have only one smartphone. It was very hard for me to deal with this situation."

Family income

As reported by parents, the high cost to live in Jordan besides the low income of the family extremely affected the success of distance learning and caused its failure. Parents considered children staying at home a chance to save money because they could afford the high live expenses. Few respondents (three) asked their children to work instead of staying at home and studying online, one parent stated "I sent my son to work during the online period and he will attend school after school conventional learning" another parent stated, "I found a job for my child to help him learn a vocation and increase the family income at the same time." One respondent raised an issue that is very serious. She stated, "Instead of attending online learning, one of my neighbors sent their children to sell candy and gum in the streets to cover the needs of the family."

Lifestyle

During the emergency of the COVID-19 pandemic, millions of families were forced to drastically change their daily lives and routines. The COVID-19 pandemic altered people's daily routines and habits. As social distancing principles have led to a more virtual existence, both personally and professionally, the epidemic has transformed how people work, study, and communicate. Respondents indicated that during the lockdown, the whole lifestyle of their children was messed up (sleeping time, eating habits, social interaction with others, and other aspects) and that affected their learning. Parents reported that they could not control their children's sleeping times; they stayed awake until late at night, and it was hard to wake them up in the morning to attend classes. Even when they wake up and enter the e-learning platform, they do not engage in the learning activities because they are sleepy. One parent reported that "many times I found my child sleeping during online classes." Another participant indicated that "my child used to jump from bed to the tablet to join the class. He attended class without even washing his face." Many participants stated that their home environment is not suitable for students to learn remotely had a small home, one participant reported "it was hard to provide a quiet place for my children to during their online classes, I felt that did not help to focus on their learning.

DISCUSSION

This study aimed to evaluate the distance learning experiences in Jordan from parents' perspectives after returning to schools after about two years of school closures due to the COVID-19 pandemic. The study found that the vast majority of the respondents (86.31%) agreed that distance learning failed to achieve its goals. To explore why parents' distance learning failed, parents answered open-ended questions and attributed this failure to many factors. Parents believe that distance learning failed due to many factors, and the most common factors are low learning motivation among students, poor accessibility to electronic devices required for distance learning and poor internet connection, family-related issues like economic status, large family size, and lifestyle, the last factor related to a distance learning culture.

The inequality in the learning opportunities is a major finding of this study. The quantitative results revealed the quality of distance learning in the schools that located in urban areas and in private schools was significantly higher than that in rural areas and private schools. Private schools and urban schools were well equipped and had a higher level of readiness for distance learning than public schools. The differences between urban and rural areas may also cause differences in parents' perceptions of online learning. This finding shows an urgent need to reduce the gap between schools in urban areas and school in rural areas. Government should allocate more resources and funding for rural schools.

Although the government made great efforts to overcome the COVID-19 pandemic effects on education and allocated all the available resources to ensure continuity of learning during the lockdown, distance learning was not effective enough to compensate for face-to-face learning. The most common factor that is responsible for distance learning failure is a lack of motivation. Researchers (Bhuasiri et al., 2012; Schunk et al., 2014) reported that students' motivation to learn is a determinant factor for the success of the students' learning. The low level of motivation can be explained by the traditional learning culture in Jordan which is

based on the belief that learning occurs only in the classroom with the presence of the teacher. The learning platform used by the MOE was not effective, and students did not have the desire to use the platforms. The platform did not provide a variety of learning resources; it only provided videos. These videos include recorded lessons under the guidance of the MOE, with no chance for students to interact with these videos. During the online time, students and families were complaining all the time about the effectiveness of online learning to attract students to learn, but no one of the decision-makers listened to them. Parents also complained of the poor interaction of teachers with their children, which was mainly because teachers themselves lack the competencies to work. Research carried out in Jordan during the pandemic showed the teachers' low competencies in using technology were one of the main challenges for teachers (Abu-Rabba' et al., 2021). Low accessibility to learning devices, besides the poor internet connection, negatively affected students' motivation. According to Selvi (2010), all these factors affect students' motivation for online learning in a negative way.

Factors related to Jordanian families, such as low income, family size, and family culture, all contributed significantly to the failure of online learning. The low income for the families makes it harder for the families to meet the requirements of distance learning. The low income associated with the large family size made the problem worse. The United Nations Development Programme (UNDP) in Jordan (UNDP, 2020) reported that the national family size average in Jordan was 5.5 in 2020, which is quietly high. Consequently, parents were unable to provide electronic devices for their kids, and a large number of children did not attend online classes.

According to the minister of education in Jordan, more than 100,000 students did not engage in online classes, while only 62% attended online classes on a daily basis (Ghaith, 2021). The level of education for parents was also another factor that contributed to the failure of distance learning in Jordan. As the quantitative data shows, a high percentage of the participants in the study have a low level of education, which made parents unable to engage in their children's learning. Researchers assured that parents' support for their children in online learning significantly contributes to student success in their learning (Garbe et al., 2020).

The last factor was related to self-regulation among students, this study found that distance learning failed because students had no self-regulation as reported by parents. This finding supports empirical evidence that self-regulation is a prerequisite for successful online learning (Vlachopoulos & Chatzigianni, 2017). This is maybe related to the social culture in most developed countries where people If there is no authority to monitor the individual, he will be breaking the law. During online learning students used to work on their own and take the exams without any supervision from school. A number of parents admitted that they were taking exams instead of their children. This lack of self-regulation affected the quality of learning and evaluation. In spite of all the barriers that students encountered during online learning, students' achievement was very high. This high level of achievement did not reflect a high level of learning simply because children were taking the exams with the assistance of their parents or friends. It was possible to avoid this issue if the MOE utilized authentic strategies for assessment. Instead of giving students traditional exams, MOE could have used project-based assessment.

CONCLUSION AND IMPLICATIONS

There is a complete agreement among participants that distance learning during COVID-19 pandemic failed. The results of this study explained the factors that caused the failure of this experience. The participants provided qualitative comments that explain and provide a deep understanding of these factors. Their responses to the open-ended questions expressed the following themes that represent the factors of distance learning failure: factors related to students' learning motivation, factors related to accessibility to technological devices, the internet, and pedagogical skills; factors related to the ineffectiveness of the educational platforms, and family-related issues. From the parents' comments parents did the best they can do to help their children in their distance learning and performed their responsibilities, however, the factors that caused the failure of this experience were beyond their control and they were not able to overcome all the barriers they encountered. The findings of the study also found that parents who live in rural areas have low perception of distance learning than parents who live in urban areas. In addition, parents of children who

attend public schools have a lower level of perception than parents of children who attend private schools. The poor and limited resources in rural and public schools significantly affected parents' perceptions.

The research results suggest that financial support for education should be the main priority for the government in Jordan to foster the implementation of online learning in schools. Schools should be provided with the latest and most advanced technologies to integrate them into education. It seems that both parents and students have the intention of learning online, but a lack of financial support negatively affects their intentions. It can be inferred from the results that rural schools are neglected and do not get enough support as urban schools. The government support should ensure equality of opportunities in education, by providing more support to rural schools.

There was no support for parents during the pandemic and they were left alone to face the unfamiliar experience. For future plans to implement online learning, parents must be educated on distance learning systems and platforms, including the tools, key pedagogical principles, and teacher-student-parent communication choices. Even though parents supported the school closure policy during the pandemic, school closures created challenges with remote learning at home among parents. This study emphasized that parents are a determinant factor in supporting their children's success in their learning and in the success of any educational innovation. Therefore, education policymakers need to arm parents with effective ways of caring for and protecting the world's future. Research and discussion of the impact of a pandemic on parents' perspectives would aid educators and policymakers in future academic preparation. The ministry of education has to build Plans to involve parents in all aspects of the educational process. The MOE should engage parents in curriculum planning and development and school activities. Schools can help workshops for parents to train them to help their children in their learning. Research and discussion of the impact of a pandemic on parents' perspectives would help educators and policymakers in future academic preparation.

Author contributions: All authors were involved in concept, design, collection of data, interpretation, writing, and critically revising the article. All authors approve final version of the article.

Funding: The authors received no financial support for the research and/or authorship of this article.

Declaration of interest: Authors declare no competing interest.

Data availability: Data generated or analyzed during this study are available from the authors on request.

REFERENCES

- Abu-Rabba', M., Al-Mughrabi, A., & Al-Awidi, H. (2021). Online Learning in the Jordanian kindergartens during COVID-19 pandemic. *Journal of E-Learning and Knowledge Society*, 17(3), 59-69. <https://doi.org/10.20368/1971-8829/1135534>
- Agaton, C. B., & Cueto, L. J. (2021). Learning at home: Parents' lived experiences on distance learning during COVID-19 pandemic in the Philippines. *International Journal of Evaluation and Research in Education*, 10(3), 901-911. <https://doi.org/10.11591/ijere.v10i3.21136>
- Aljbour, M., & Al-Wraikat, A. (2022). The effect of socioeconomic status and anomie on illegal behavior. *Jordan Journal of Social Sciences*, 15(1), 129-140.
- Amman Group for the Future Dialogues in Jordan. (2022). *Alrai Newspaper: Jordan News Agency-Petra*. <https://alrai.com/article/10544221/محليات/الميدان-التعليمي-يجمع-على-فشل-تجربة-التعليم-عن-بعد>
- Assaf, A. (2014). The effect of macroeconomic variables on Jordan's economic growth. *European Journal of Social Sciences*, 42(1), 101-111.
- Bhuasiri, W., Xaymoungkhoun, O., Zo, H., & Rho, J. (2012). Critical success factors for eLearning in developing countries: A comparative analysis between ICT experts and faculty. *Computers & Education*, 58, 843-855. <https://doi.org/10.1016/j.compedu.2011.10.010>
- Braun, V., & Clarke, V. (2008). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101. <https://doi.org/10.1191/1478088706qp0630a>
- Carrión-Martínez, J. J., Pinel-Martínez, C., Pérez-Esteban, M. D., & Román-Sánchez, I. M. (2021). Family and school relationship during COVID-19 pandemic: A systematic review. *International Journal of Environmental Research and Public Health*, 18(21), 11710. <https://doi.org/10.3390/ijerph182111710>

- Chang, H., & Smith, R. A. (2008). Effectiveness of personal interaction in a learner-centred paradigm distance education class based on student satisfaction. *Journal of Research on Technology in Education*, 40(4), 407-426. <https://doi.org/10.1080/15391523.2008.10782514>
- Chu, J., & Chu, Z. (2010). Multi-level analysis of peer support, Internet self efficacy and e-learning outcomes: The contextual effects of collectivism and group potency. *Computer & Education*, 55, 145-154. <https://doi.org/10.1016/j.compedu.2009.12.011>
- DeCastellarnau, A. (2018). A classification of response scale characteristics that affect data quality: A literature review. *Quality & Quantity*, 52(4), 1523-1559. <https://doi.org/10.1007/s11135-017-0533-4>
- Demir, E., & Demir, C. G. (2021). Investigation of parents' opinions about distance education during the COVID-19 pandemic. *Turkish Online Journal of Distance Education*, 22, 42-57. <https://doi.org/10.17718/tojde.906485>
- Department of General Statistics. (2020). Statistics: (40%) of Children in the Kingdom's population. *Jordan News Agency*. <https://www.petra.gov.jo/Include/InnerPage.jsp?ID=159482&lang=ar&name=news>
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49, 5-22. <https://doi.org/10.1177/0047239520934018>
- Donnelly, R., & Patrinos, H. (2021). Learning loss during COVID-19: An early systematic review. *Covid Economics*, 77, 145-153. <https://doi.org/10.21203/rs.3.rs-518655/v1>
- Farber, S., Mifsud, A., Allen, J., Widener, M. J., Newbold, K. B., & Moniruzzaman, M., (2018). Transportation barriers to Syrian newcomer participation and settlement in Durham region. *Journal of Transport Geography*, 68, 181-192. <https://doi.org/10.1016/j.jtrangeo.2018.03.014>
- Fayez, F., Ahmad, J., & Oliemat, E. (2016) Jordanian kindergarten and 1st-grade teachers' beliefs about child-based dimensions of school readiness. *Journal of Research in Childhood Education*, 30(3), 293-305. <https://doi.org/10.1080/02568543.2016.1178195>
- Garbe, A., Ogurlu, U., Logan, L., & Cook, P. (2020). COVID-19 and remote learning: Experiences of parents with children during the pandemic. *American Journal of Qualitative Research*, 4(3), 45-65. <https://doi.org/10.29333/ajqr/8471>
- Ghaith, B (2021). Around 100,000 students not engaged in remote education—Education Ministry. *The Jordan Times Newspaper*. <http://jordantimes.com/news/local/around-100000-students-not-engaged-remote-education-%E2%80%94education-ministry>
- Gharaibeh, A., & Gharaibeh, M. (2021). Quality of life of working and non-working Jordanian mothers caring for chronically ill child and its associated factors. *Heliyon*, 7(3), e06320. <https://doi.org/10.1016/j.heliyon.2021.e06320>
- Gyeltshen, T. (2022). The perception of the parents toward the online teaching and learning during the COVID-19 pandemic. *International Journal of Humanities and Education Development*, 4(2), 86-90. <https://doi.org/10.22161/jhed.4.2.12>
- Han, C., Liu, L., & Chen, S. (2022). Factors influencing parents' intention on primary school students' choices of online learning during and after the COVID-19 pandemic in China. *Sustainability*, 14(14), 8269. <https://doi.org/10.3390/su14148269>
- Herliandry, L. D., Nurhasanah, M. E., & Kuswanto, H. (2020). Pembelajaran pada masa pandemi COVID-19 [Lessons learned during the COVID-19 pandemic]. *Jurnal Teknologi Pendidikan [Journal of Educational Technology]*, 22(1), 65-70. <https://doi.org/10.21009/jtp.v22i1.15286>
- Hevia, F., Vergara-Lope, S., Velásquez-Durán, A., & Calderón, D. (2022). Estimation of the fundamental learning loss and learning poverty related to COVID-19 pandemic in Mexico. *International Journal of Educational Development*, 88(1), 102515. <https://doi.org/10.1016/j.ijedudev.2021.102515>
- Jordan Strategy Forum. (2022). Education and adaptation to the effects of COVID-19 in Jordan: How to minimize the repercussions of the virus on the education gap. *Jordan Strategy Forum*. [http://jsf.org/sites/default/files/Education%20and%20Adaptation%20to%20the%20Effects%20of%20COVID-19%20in%20Jordan%20\(1\).pdf](http://jsf.org/sites/default/files/Education%20and%20Adaptation%20to%20the%20Effects%20of%20COVID-19%20in%20Jordan%20(1).pdf)
- Kentnor, H. (2015). Distance education and the evolution of online learning in the United States. *Curriculum and Teaching Dialogue*, 17(1-2), 1-24.
- König, J., Daniela, J., & Glutsch, N. (2020). Adapting to online teaching during COVID-19 school closure: Teacher education and teacher competence effects among early career teachers in Germany. *European Journal of Teacher Education*, 43(4), 608-622. <https://doi.org/10.1080/02619768.2020.1809650>

- Lau, E., Li, J., & Lee, K. (2021). Online learning and parent satisfaction during COVID-19: Child competence in independent learning as a moderator. *Early Education and Development*, 32(6), 830-842. <https://doi.org/10.1080/10409289.2021.1950451>
- Liu, X., Zhao, L., & Su, Y.-S. (2022). Impact of parents' attitudes on learning ineffectiveness: The mediating role of parental self-efficacy. *International Journal of Environmental Research and Public Health*, 19(1), 615. <https://doi.org/10.3390/ijerph19010615>
- Masry-Herzallah, A., & Stavisky, Y. (2021). The attitudes of elementary and middle school students and teachers towards online learning during the corona pandemic outbreak. *SN Social Sciences*, 1(71), 1-23. <https://doi.org/10.1007/s43545-021-00083-z>
- McLeod, S. A. (2019). Likert scale definition, examples and analysis. *Simply Psychology*. <https://www.simplypsychology.org/likert-scale.html>
- Nowell, L. S., Norris, J. M., White, D. E., & Moules, N. J. (2017). Thematic analysis: Striving to meet the trustworthiness criteria. *International Journal of Qualitative Methods*, 16(1), 1-13. <https://doi.org/10.1177/1609406917733847>
- O'Cathain, A., & Thomas, K. J. (2004). 'Any other comments?' Open questions on questionnaires—A bane or a bonus to research? *BMC Medical Research Methodology*, 4, 25. <https://doi.org/10.1186/1471-2288-4-25>
- OECD. (2020). *Strengthening online learning when schools are closed: The role of families and teachers in supporting students during COVID-19 crisis*. OECD Publishing.
- Roca, J. C., & Gagné, M. (2008). Understanding e-Learning continuance Intention in the workplace: A self-determination theory perspective. *Computers in Human Behavior*, 24, 1585-1604. <https://doi.org/10.1016/j.chb.2007.06.001>
- Rousoulioti, T., Tzagari, D., & Giannikas, C. (2022). Parents' new role and needs during the COVID-19 educational emergency. *Interchange*. <https://doi.org/10.1007/s10780-022-09464-6>
- Schunk, D. H., Meece, J. L., & Pintrich, P. R. (2014). *Motivation in education: Theory, research, and applications*. Pearson.
- Selvi, T. (2010). Motivating factors in online courses. *Procedia-Social and Behavioral Sciences*, 2(2), 819-824. <https://doi.org/10.1016/j.sbspro.2010.03.110>
- Spinelli, M., Lionetti, F., Pastore, M., & Fasolo, M. (2020). Parents' stress and children's psychological problems in families facing the COVID-19 outbreak in Italy. *Frontiers in Psychology*, 11(1713), 1-7. <https://doi.org/10.3389/fpsyg.2020.01713>
- Sun, P.-C., Tsai, R. J., Finger, G., Chen, Y.-Y., & Yeh, D. (2008). What drives a successful e-Learning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education*, 50(4), 1183-1202. <https://doi.org/10.1016/j.compedu.2006.11.007>
- Tajuddin, J., Nazam, R., & Abu Bakar. S. (2022). Challenges of online learning faced by working parents in urban areas. *Journal of Contemporary Issues and Thought*, 12(1), 55-64.
- UNDP. (2020). *Poverty & equity brief Jordan Middle East & North Africa*. World Bank. https://databank.worldbank.org/data/download/poverty/33EF03BB-9722-4AE2-ABC7-AA2972D68AFE/Global_POVEQ_JOR.pdf
- UNESCO. (2020). UN Secretary-General warns of education catastrophe, pointing to UNESCO estimate of 24 million learners at risk of dropping out. *United Nations Educational, Scientific, and Cultural Organization*. <https://en.unesco.org/news/secretary-general-warns-education-catastrophe-pointing-unesco-estimate-24-million-learners-0>
- UNICEF. (2020). *Socio-economic assessment of children and youth in the time of COVID-19 Jordan*. United Nations Children's Fund Jordan.
- Van Overmeire, R. (2020). The methodological problem of identifying criterion a traumatic events during the COVID-19 era: A commentary on Karatzias et al. (2020). *Journal of Traumatic Stress*, 33(5), 864-865. <https://doi.org/10.1002/jts.22594>
- Vlachopoulos, P., & Chatzigianni, M. (2017). Online learning and self-regulation: Balancing between personal and social dimensions. In P. Anastasiades, & N. Zaranis (Eds.), *Research on e-learning and ICT in education: Technological, pedagogical and instructional perspectives* (pp. 177-188). Springer. https://doi.org/10.1007/978-3-319-34127-9_13
- WHO. (2020). Key messages and actions for COVID-19 prevention and control in schools. *World Health Organization*. <https://covid19-evidence.paho.org/handle/20.500.12663/792>

Woofter, S. (2019). Book Review: Building equity: Policies and practices to empower all learners. *American Journal of Qualitative Research*, 3(1), 136-139. <https://doi.org/10.29333/ajqr/5815>

World Bank. (2008). Resolving Jordan's labour market paradox of concurrent economic growth and high unemployment. <https://openknowledge.worldbank.org/handle/10986/18907?show=full>

