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# Factors Related to Performance Problems of Distance Education Among Primary School Pupils Under COVID-19 and Confrontation Mechanisms (A Field Study)

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**Abstract:** The present research paper aims to identify the factors related to performance problems of distance education among primary school pupils under COVID-19 and their confrontation mechanisms. It adopted the descriptive analytical method and applied a questionnaire to collect data. The population of the search covered all primary school teachers numbered (13364) in (487) primary public schools in Riyadh, whereas the sample included (695) teachers in public schools in Riyadh. The results showed that the high effect size of the problems-related social factors scored (4.18), the high effect size of the problems-related economic factors scored (4.09), the high effect size of the problems-related cultural factors scored (4.18). Moreover, the arithmetic means of the most significant confrontation mechanisms of the social factors ranged (4.30:4.87), the economic factors ranged (4.26:4.69), and the cultural factors ranged (4.22:4.80). The study recommends highlighting the means of getting alternatives of the comprehensive vision required for decision-makers when developing planning scenarios for confronting the social, economic, and cultural factors related to the performance problems of distance education among primary school pupils under COVID-19.

**Keywords:** COVID-19, Distance education, Performance problems.

## 1 Introduction

Knowledge progress has revolutionized education, paving the way for unlimited uses of education technology, such as distance education, during crises. Unlike traditional education, distance education separates the student from the source of education and the acquisition of different educational expertise [1]. Educational technology experts report that distance education is characterized by flexibility and free choice. Distance education is flexible and gets rid of the restrictions and duties of traditional education. A student does not have to attend an educational institution and can follow a self-paced manner [2]. Therefore, Saudi Vision 2030 stresses the important role of educational technology. Because of the importance of society in education, the positive and negative impacts of digital information and communication technology on all members and categories of society cannot be overlooked. This technology is an important tool that helps people and communities fulfill basic needs by facilitating daily life and promoting scientific and knowledge achievement [3].

Several education methods and systems have been developed at times of crisis. For instance, distance education has been adopted worldwide during COVID-19 as it relies on having a student away from the learning source [4]. It was motivated during COVID-19 because of closure and seeking solutions and methods for continuing education by relocating classrooms, limiting existence in physical classrooms, and providing distance education resources. Educational institutions had to shift to distance education, and teachers had to utilize distance education platforms and software for teaching [5].

COVID-19 has imposed several means of distance education, allowing the students to learn independently based on their tendencies and levels. For instance, distance education can be offered via several programs and portals, such as School Madrasati, Microsoft Teams, Microsoft Forms, Blackboard, Classeta, Zoom, GoToWebinar, Google Classroom, Edmodo, and Ain Channels. Therefore, distance education is the most effective and nearest to reality means of education [6]. Because Corona is a pandemic, it has enforced educational institutions to shift from traditional education, which increases infection, to distance education, as reported by Abu Al-Nasr [7], Alasmary et al. [8], Alhaj and Abu Rawy [9], Almalki and Daghestan [10], Alqahtani [6], Dhawan [11], Alobthany [12], and Alqawaq [13]. Like the tremendous effect of COVID-19, distance education has crossed the spatial and temporal limitations by being delivered online (spatially) and using the tools of getting rid of going to educational institutions and quick access to the content without the need for physical engagement (temporally) [14-17].

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The literature reported educational, cultural, social, and economic impacts of natural disasters, especially COVID-2019, causing several social problems. For instance, COVID-19 has caused isolation among families, increased stressed family situations, and weakened the family structure. In the same context, some studies indicated the psychological impacts of such crises. For example, Dong and Bouey [18] reported several psychological and behavioral disorders during and after the crisis, causing stress. In addition, social and health issues result from natural crises, as reported by Alzahid [19]. The literature reported impacts of disasters that may be crises that all members and institutions should confront because they affect society.

The author has been motivated by the current evolving international interest in education in the family in a systematic and accredited manner by the educational bodies in these states. For example, Tipton [20] examined twenty-first-century skill building for homeschooled students. Zaemia [21] indicated the considerable importance of the family in equipping children with the basic social values and characteristics of personality. Therefore, modern educators stress the importance of understanding the earliest experience of children and understanding its impact on their different attitudes and behaviors to adjust the educational process according to these factors. Yahyawey [22] reported that the family role in education is essential to achieve better education. Ballard et al. [23] explored family life education in the United States. Moreover, Awad [24] investigated the family role in high-school education. The literature also illustrates the impacts of economic, technological, cultural, and information transformations on education, resulting in the shift to distance education to confront COVID-19. This shift originates from the educational responsibility to balance past originality, present requirements, and future potentials. It also relies on the ability of distance education to achieve the aspirations of the educational system by making educational institutions able to fulfill the age needs and build creative students who excel and learn freely [25].

Therefore, the present study aims to identify the factors related to performance problems of distance education among primary school pupils under COVID-19 and their confrontation mechanisms. The author shows several (social, cultural, and economic) factors related to these problems. Thus, the problem of the study has been defined in asking the following question: What are the factors related to performance problems of distance education among primary school pupils under COVID-19 and their confrontation mechanisms?

## 2 Literature Review and Theoretical Framework

### 1. Modern technology and distance education in the primary school

Technology means of distance education programs have evolved significantly, causing the spread of distance education and enforcement of technological means programs. Currently, the educational content is accessible by the target groups with accessing feedback while interacting and communicating between the teacher and learner and the easy assessment of student performance because education is self-paced [26]. Because of its enforcement in public life, modern technology is necessary for the primary stage. In this sensitive stage, technology is not only tools and devices, but it is a comprehensive and complicated system of tools, ideas, individuals, and operations. According to Alsatouf [27], successful communication can achieve various inputs related to educational or daily life contexts, such as linking the child to the environment, promoting child awareness to interact with current events based on behavioral practices acquired from general or private knowledge messages, enhancing achievement, and modifying child behavior for the best. Almohandes [28] recommends keeping pace with international orientations to utilize modern technology. Additionally, Alqahtani [29] reports the need to utilize technology in child education and make use of their opportunities to achieve learning opportunities, and choosing and designing applications appropriate to the educational objectives and target groups.

According to Alqahtani [29], using contemporary technology for the primary stage students provides many advantages, such as:

- Access to the content and cooperative learning: Children experiment and discover when using educational entertainment methods that provide information or basic concepts in games, competitions, and interactive discussion between the child and some modern technology devices.
- Learning and entertainment: The selected technology applications should promote discovery, visualization, problem-solving, and supporting ideas and physical and mental needs.
- Providing tools of teaching reading and writing: Various experiences acquired when using technology develop the oral and written language early. Hence, developing language, reading, and writing is a strength of using technology with children.

### 2. Importance of contemporary educational technology for distance education among primary school pupils

According to Alghadeer [30], contemporary educational technology is important for primary stage students, as follows

- Sensual awareness: Illustrations and figures help illustrate the topic to the student.
  - Understanding: Educational technology helps students identify things.
  - Skills: Educational technology promotes certain skills, such as correct pronunciation.
  - Thinking: Educational technology helps train students in organized thinking and problem-solving.
  - Variety of skills: Educational technology develops language, builds correct concepts, develops taste, diversifies assessment to consider students' individual differences, retains the impact of learning, develops student orientation to learning, and promotes positive attitudes.
3. Factors related to the performance problems of distance education in the primary stage
- a. Social factors

As a form of educational innovation, distance education with all educational forms that do not depend on the direct teacher-student relationship fulfills the evolving demand for education and achieves equal educational opportunities. Distance education offers a desired educational community service, using methods that adjust education, facilitates access to knowledge regardless of spatial and temporal boundaries, develops education, keeps pace with global developments, offers several educational resources, and develops the student culturally, academically, and socially [31], especially in socialization institutions. A family, as a socialization institution, promotes the social aspect of the child and plays a significant role in acquiring knowledge, persuasion, and social customs related to education and readiness to adapt to education imposed by the nature of the age or circumstances, including distance education. Alrabghy [32] reports the need to provide a democratic family environment and train students in family affairs and autonomous work and thinking. A family should utilize this issue because it is aware that the current age is the age of digital learning and education and developing the reported items in this approach. Furthermore, family is the frame that defines the individuals' behaviors, forms their lives, and shapes their characteristics and nature. Therefore, the author argues that if the family has values, ethics, skills, and educational techniques of the digital and electronic field, children can grasp such values and concepts and overcome the resulting obstacles and problems.

b. Cultural factors

Evolving information and communication technology and its impact on life, especially educational institutions, have led to adopting new technology-based educational policies to make critical changes to keep pace with the digital age and shift to online platforms, courses, and learner-oriented instructional methods [33]. A human acquires culture through socialization using many methods, tools, and bodies, especially the family because it is the primary structure of society. Sayed [34] mentions the importance of family culture for the child who acquires many standards and attitudes affecting attitudes towards different situations. The cultural changes of the family have increased parents' education and provided cultural means, including books, journals, and mass media. Some studies reported that the family cultural level relates to child education. Regarding mass media, Alrabghy [32] argues that they help form the general cultural environment of society and instill values of work, success, and competition.

Some studies reported the negative media impact. For instance, Alsharary [35] concluded that (67%) of high school students in Saudi Arabia do not use social media for academic purposes, and (78%) of the respondents reported the negative impact of social media on achievement. Awad [36] showed that social media and modern technology directly affected the achievement of students because of their excessive use of these sites and lack of reviewing lessons and doing homework. Qarnany [37] illustrated that information explosion and revolution negatively affect the political, economic, and social levels, as well as the value system of people. However, these cultural means have several advantages, such as enhancing achievement, motivation, and educational environment. The Internet is used as a means of improving the academic aspects, looking for information and research, changing the traditional into distance education, fast learning, helping students build relations, improving student skills, and easy access to the online material.

c. Economic factors

Economic factors play a considerable role in social life. They integrate with all affairs and social phenomena. Therefore, the stability of the economic factors affects social life, in general, and education, in particular. The literature illustrates that education is the means to preparing qualified human cadres for economic development. The economic factors include household income and education costs. At the state level, they include recurring expenses, current expenses, educational activities, and investment [34].

According to Alsamaady and Jarrah [38], distance education has a high impact on education economics. Alfallah [39] reports that distance education helps achieve economic revenues. Moreover, the Saudi Ministry of Education [40] argues that distance education promotes the digital economy, improves equal educational opportunities, provides long-life

education, enhances educational outcomes, provides education and training opportunities, improves the financial efficiency of education, ensures matching between educational outcomes and labor market needs, and creates new and innovative orientations in education. Therefore, some educational opinions perceive distance education as a renovation of education as it grows in the future because of flexibility and quick response to student needs, age requirements, and social requirements [41].

Achievement motivation, including distance education, is a must to achieve development in the social and economic life fields, including increasing production, better work management, and a feeling of success [32]. Alshara et al. [42] determine the following four factors affecting work achievement:

1. **Mainstream culture:** It forms behavior and encourages commitment to regulations, punctuality, productivity, and providing developed services. In contrast, a culture may trigger chaos, laziness, and lacking development.
2. **Family and parenting:** They affect child behavior, either encouragement or bullying, resulting in anxiety, stress, and failure of mental operations.
3. **Educational institutions in society:** They prepare human cadres that promote development; thus, any failure decreases their effectiveness.
4. **Social class:** Economists and sociologists categorize social class levels based on family income, parents' positions and education, residence, cultural facilities, amenities, and family size.

Many researchers explore the relationship between social class and work motivation, which, in turn, affects student motivation to education, especially online education based on contemporary technology. Alshara et al. [42] argue that several studies concluded that the well-situated class is more oriented to achievement and success. Additionally, family parenting defines the level of achievement motivation among children. Sayed [34] concludes that educational achievement relates to income. However, it is not always clear that social class affects achievement.

#### ***COVID-19 Crisis and Distance Education in Saudi Arabia***

Since the end of 2019, the world has experienced extraordinary circumstances related to the spread of COVID-19. Educational institutions have been affected and closed [43]. Moreover, most countries have shifted to distance education. In Saudi Arabia, education has shifted to distance education according to the decree of the Minister of Education no. 79300 dated March 8<sup>th</sup>, 2020, regarding suspending education in educational institutions until further notice and activating virtual classrooms and distance education. Several decisions were taken to regulate work until the end of 2020, as shown in the manual of examinations, assessment, and works of the semester for universities during suspension to prevent COVID-19. Therefore, distance education has become a must during the emerging conditions of the pandemic [44].

Some official reports of the Saudi Ministry of Education indicate the success of distance education in compensating the closing of schools and achieving the targeted learning outcomes, especially with the available modern techniques and capabilities in Saudi schools. However, a comprehensive and practical assessment of all items of distance education across schools, including school administration, course, communication technology, teacher, student, and guardian, should be carried out. This assessment helps promote the quality of the distance education system, continuous improvement of standards and tools, quick response and good treatment of schools, identifying strengths and weaknesses by educational decision-makers, and sustainable education [45].

Since the spread of COVID-19, press and news reports have indicated that Saudi Arabia has shifted to distance education and providing courses for students anytime and anywhere online, suggesting that the measures taken by the Ministry of Education help continue education. At the beginning of the pandemic, the Ministry of Education broadcasted educational content from a school in Riyadh directly to all Saudi regions and governorates according to a timetable consistent with the study plan. According to the Saudi Press Agency [46], the Ministry of Education has diversified the sources of distance education and provided six educational platforms, as follows:

1. Future Gate receives 12 million visits, over a million assignments for students, 432,000 tests. Over 220,000 students and 94,000 thousand teachers for the intermediate and high schools use its services.
2. Satellite channels (N= 11) for all stages broadcasted 24/7 provides more than 4,000 live broadcasts and receive 91 million viewers.
3. Ain (Eye) YouTube channel has 320,000 subscribers and provides over 5,422 recorded lessons and more than 4,000 hours of live broadcasting. It has received 91 million views.
4. Ain (Eye) enrichment portal includes over 45,000 enrichment educational materials and more than 1,222 digital textbooks.

5. The Unified Education System receives more than 51 million visits, over 602,000 assignments, and more than 332,000 tests. Over one million students and 122,000 teachers use its services.
6. Virtual Kindergarten

With the prevalence of the pandemic, causing massive social and economic disorders, education systems worldwide quickly responded and adjusted. The governments quickly responded to ensure education continuity and protecting students and relevant bodies by closing schools and other educational institutions and adopting distance education, including online platforms, web seminars, television and radio broadcasts. They also support teachers, students, parents, and care providers. The comprehensive distance education strategies should be quick and panned responses for solving urgent problems. However, they require reformulating future visions on the way of ensuring the continuity of learning and the steps taken to employ new techniques and methods for more effective and just learning opportunities in the future [47].

### 3 Questions

1. What are the social factors related to performance problems of distance education among primary school pupils during COVID-19 from teachers' perspective?
2. What are the economic factors related to performance problems of distance education among primary school pupils during COVID-19 from teachers' perspective?
3. What are the cultural factors related to performance problems of distance education among primary school pupils during COVID-19 from teachers' perspective?
4. What are confrontation mechanisms for the (social, economic, and cultural) factors related to performance problems of distance education among primary school pupils during COVID-19 from teachers' perspective?

### 4 Objectives

The study aims to

1. Define the social factors related to performance problems of distance education among primary school pupils during COVID-19 from teachers' perspective.
2. Define the economic factors related to performance problems of distance education among primary school pupils during COVID-19 from teachers' perspective.
3. Define the cultural factors related to performance problems of distance education among primary school pupils during COVID-19 from teachers' perspective.
4. Suggest confrontation mechanisms for the (social, economic, and cultural) factors related to performance problems of distance education among primary school pupils during COVID-19 from teachers' perspective.

### *Statistical Methods*

Using the Statistical Package for the Social Sciences (SPSS), the author utilized the following methods:

- Pearson correlation coefficient to estimate validity
- Cronbach's alpha to calculate reliability
- Frequencies and percentages
- Ranks
- Arithmetic mean
- Standard deviation

### 5 Methodology

#### *Method*

The study adopted the descriptive analytical approach because it is the most relevant to the nature of the study. Based on qualitative expression, this approach studies reality and describes, accurately studies, and illustrates the characteristics of the phenomenon. The study also used the questionnaire for the collection and digital description of data to show the size of the phenomenon to conclude results, draw conclusions, and make new generalizations and relationships [48-50]. The



author reviewed the literature, collected and analyzed data, used a questionnaire to explore the social, economic, and cultural factors related to performance problems of distance education among primary school pupils during COVID-19, used the same questionnaire to survey teachers' opinions on the suggested confrontation mechanisms, statistically processed data, and discussed results.

### **Population of the search**

The population of the search covered all female primary school teachers numbered (13,364) in (487) public primary schools in Riyadh, Saudi Arabia in 2020/2021.

### **Sampling of the search**

The sample comprised (695) randomly selected female teachers (rating 5.2% of the population of the search) in some schools in Riyadh distributed to the five regions of Riyadh. Table (1) shows the distribution of the participants according to the five regions of Riyadh.

**Table (1):** Description of the sample according to region

Variables	Frequency	Percentage %	
Distribution of teachers according to the supervision offices	Central and North Riyadh	183	26.3%
	South Riyadh	162	23.3%
	West Riyadh	155	22.3%
	East Riyadh	195	28.1%
	Total	695	100%

Table (1) illustrates that the distribution of the participants according to the sample was balanced between schools and offices.

### **Tool**

Preparing the tool was as follows:

#### a. Defining the aim

The questionnaire aimed to define the most significant social, economic, and cultural factors related to performance problems of distance education among primary school pupils during COVID-19 from teachers' perspectives and suggest confrontation mechanisms.

#### b. Developing the preliminary draft

- Reviewing the relevant literature and interviewing specialists to help define the domains of the questionnaire and phrasing items
- Studying the characteristics and problems of primary stage students during distance education
- Preparing the preliminary draft of the questionnaire: (8) items in the 1<sup>st</sup> domain, 8 items in the 2<sup>nd</sup>, (8) items in the 3<sup>rd</sup>, and (12) items in the 4<sup>th</sup> one, considering that items should be concise, accurate, and clear

#### c. Developing the final (two-section) questionnaire:

- Section One included the preliminary data and the office the teacher's school is affiliated with.
- Section Two contained four domains and their items based on a five-point Likert scale: Strongly agree (5), agree (4), undecided (3), disagree (2), and strongly disagree (1), as shown in table (2).

**Table (2):** Distributing the scores of the questionnaire

Response	Strongly agree	Agree	Undecided	Disagree	Strongly disagree
Score	5	4	3	2	1

### **Questionnaire setting**

#### a. Reviewer's (face) validity

The preliminary draft was presented to (11) reviewers of the faculty members at Saudi universities and specialists at the Ministry of Education to estimate the relevance, appropriateness, phrasing, and clarity of the items. The reviewers suggested some modifications, such as deleting, modifying, or rephrasing some items. Accordingly, modifications

were made, and the final questionnaire was developed.

b. Internal consistency

The internal consistency was calculated between each item and the total score of the domain and between the domain and the total score of the questionnaire on a pilot sample of (30) female teachers, as shown in table (3).

**Table (3):** Correlation coefficients between the score of each item and the total score of the domain and between the domain and the total score of the questionnaire

Social factors		Economic factors		Cultural factors		Suggestions	
Item No.	Correlation coefficient	Item No.	Correlation coefficient	Item No.	Correlation coefficient	Item No.	Correlation coefficient
1	**0.55	1	**0.58	1	**0.67	1	**0.71
2	**0.56	2	**0.62	2	**0.71	2	**0.83
3	**0.63	3	**0.72	3	**0.66	3	**0.84
4	**0.68	4	**0.71	4	**0.61	4	**0.82
5	**0.67	5	**0.64	5	**0.50	5	**0.84
6	**0.63	6	**0.63	6	**0.56	6	**0.63
7	**0.61	7	**0.50	7	**0.68	7	**0.74
8	**0.65	8	**0.54	8	**0.58	8	**0.82
						9	**0.82
						10	**0.83
						11	**0.84
						12	**0.82
Correlation to the total score	**0.70	Correlation to the total score	**0.76	Correlation to the total score	**0.72	Correlation to the total score	**0.84

\*\*Statistically significant at the level of 0.01 or less

Table (3) shows that all correlation coefficients between the score of each item and its domain were significant at the level of (0.01). The correlation coefficients scored (0.70) between the first domain (social factors) and the total score of the questionnaire, (0.76) between the second domain (economic factors) and the total score of the questionnaire, (0.72) between the third domain (cultural factors) and the total score of the questionnaire, and (0.84) between the fourth domain (suggestions) and the total score of the questionnaire. These findings suggest the internal consistency of the questionnaire and domains.

**Reliability**

Reliability was estimated using Cronbach’s alpha, as shown in table (4).

**Table (4):** Reliability coefficients between the domains and the total questionnaire

Tool	No. of items	Cronbach’s alpha
Social factors	8	0.78
Economic factors	8	0.77
Cultural factors	8	0.77
Suggestions	12	0.84
Total	36	0.88

Table (4) illustrates that all reliability correlation coefficients of the questionnaire were significant and ranged (0.77-0.84). The total reliability coefficient scored (0.88), indicating high reliability.

The questionnaires were distributed online via Google Drive in coordination with supervision offices that provided the schools and contact details of the participants.



## 6 Results and Discussion

- To answer the first question, frequencies, arithmetic means, and standard deviations of the responses to the social factors related to the performance problems of distance education during COVID-19 among primary stage students were calculated, as shown in table (5).

**Table (5):** Responses of the participants to the social factors related to the performance problems of distance education during COVID-19 among primary stage students

Items	Total sample							
	Frequency					Mean	Standard deviation	Rank
	Strongest agree	Agree	Undecided	Disagree	Strongly disagree			
Weak family role in introducing student role in online learning and distance education	478	141	65	7	4	4.56	0.75	1
Lack of family conviction of the importance of distance education and discouraging students to participate	481	129	74	6	5	4.55	0.77	2
Low electronic culture of distance education among student families and some primary school teachers	439	173	64	16	3	4.48	0.79	3
Negative attitude of the student's environment to online learning and distance education, promoting the lack of student's positive interaction	400	176	92	20	7	4.36	0.88	4
Preoccupation of students with other distractions during distance education, causing poor academic achievement	303	187	159	29	17	4.05	1.02	5
Student's need to intensify curricular and extracurricular activities to acquire many skills related to distance education	308	169	152	35	31	3.99	1.12	6
Discouraging family environment concerning providing motivating requirements and psychological and spiritual atmosphere	242	192	175	51	35	3.80	1.14	7
Lack of school and family motivation activities of achieving personal and academic objectives through distance education	204	187	200	63	41	3.65	1.16	8
Overall mean						4.18	0.606	

Table (5) shows that the arithmetic means of the social factors related to the performance problems of distance education during COVID-19 among primary school pupils from the teachers' perspective ranged (3.65:4.56). Item "weak family role in introducing student role in online learning and distance education" was ranked first. The author argues that distance education was sudden as an alternative plan of direct education. Moreover, this finding results from the lack of awareness of many Saudi families about interaction in distance education, hindering keeping pace with technology and their responsibility towards distance education. Item "lack of school and family motivation activities of achieving personal and academic objectives through distance education" was ranked last. The author argues that schools and families are aware of the nature of activities and programs that motivate students to achieve personal and academic objectives via distance education. The overall mean of the social factors scored (4.18) and suggested the high degree of these factors. The

participants agreed on this domain with means ranging from (4.18 to 5.00).

- To answer the second question, frequencies, arithmetic means, and standard deviations of the responses to the economic factors related to the performance problems of distance education during COVID-19 among primary stage students were calculated, as shown in table (6).

**Table (6):** Responses of the participants to the economic factors related to the performance problems of distance education during COVID-19 among primary stage students

Items	Total sample							
	Frequency					Mean	Standard deviation	Rank
	Strongly agree	Agree	Undecided	Disagree	Strongly disagree			
Distance education causes costs, e.g., buying devices for every child, which does not suit the income of most families.	454	147	80	12	2	4.49	0.78	1
Middle and low family income hinder providing academic requirements, including educational means related to distance education.	380	180	107	22	6	4.30	0.90	2
Middle and low family income cause poor interaction and lack of providing most distance education needs.	409	132	108	33	13	4.28	1.01	3
Residence does not provide a quiet and appropriate environment for distance education because the family can't provide a room for every child.	359	182	120	23	11	4.23	0.95	4
Distance education causes high Internet costs for large families.	308	180	144	52	11	4.04	1.04	5
Telecommunication companies in Saudi Arabia asks for high Internet costs.	314	151	149	47	34	3.96	1.17	6
The economic conditions of most families do not fulfill students' desire to continue distance education.	299	163	150	45	38	3.92	1.18	7
Limited income makes families believe there are basic needs rather than spending money to buy expensive devices for the success of distance education.	215	127	195	90	68	3.48	1.31	8
Overall mean						4.09	0.65	

Table (6) shows that the arithmetic means of the economic factors related to the performance problems of distance education during COVID-19 among primary school pupils from the teachers' perspective ranged (3.48:4.49). Item "distance education causes costs, e.g., buying devices for every child, which does not suit the income of most families" was ranked first. The author argues that distance education depends on technology in providing the educational content well and effectively. Thus, education's cost is high at home because of using the Internet. The family did not think about distance education because of COVID-19, increasing stress and anxiety, as distance education causes costs and financial burdens, such as paying expensive Internet bundles to ensure the students' ability to watch broadcasted videos and lessons

without problems or interruption, buying a computer device or laptop for each child, and extra costs, e.g., buying software, headphones, printers, and printing papers. Thus, costs should be reduced as possible to continue education and educational institutions to continue support without causing any economic burdens on families.

Item “limited income makes families believe that there are basic needs rather than spending money to buy expensive devices for the success of distance education” was ranked last. The author argues that this is a logical finding because families suddenly had the largest burden of educating children. To ensure their success, family basic needs and distance education requirements should be matched because some families have more than one child and do not provide a computer device or laptop for every child. The overall mean of the economic factors scored (4.09) and suggested the high degree of these factors. The participants agreed on this domain with means ranging from (4.09 to 5.00).

- To answer the third question, frequencies, arithmetic means, and standard deviations of the responses to the cultural factors related to the performance problems of distance education during COVID-19 among primary stage students were calculated, as shown in table (7).

**Table (7):** Responses of the participants to the cultural factors related to the performance problems of distance education during COVID-19 among primary stage students

Items	Total sample							
	Frequency					Means	Standard deviation	Rank
	Strongly agree	Agree	Undecided	Disagree	Strongly disagree			
Family cultural preparation in online learning and distance education is substandard.	472	146	61	13	3	4.54	0.76	1
The spread of the Internet and means of communication decreases the damage of the sudden suspension of face-to-face education and helps students get basic knowledge.	396	165	109	15	10	4.33	0.91	2
Posting sarcastic, humorous, and funny comments on social media on distance education platforms limits the achievement of learning goals.	376	175	106	26	12	4.26	0.96	3
Role models on social media and media focus on the disadvantages, not the advantages of distance education.	355	177	129	27	7	4.22	0.94	4
Official mass media have not effectively contributed to raising awareness about the importance and effectiveness of distance education.	352	177	125	27	14	4.19	0.99	5
Education programs via mass media during COVID-19 make the public opinion feel that it is a compulsory option to overcome the crisis.	289	205	143	41	17	4.02	1.03	6
The association of distance education with the lack of discipline makes families feel	347	133	120	52	43	3.99	1.23	7

the poor achievement of objectives.								
The association of distance education with home quarantine during the prevalence of a pandemic has psychological impacts on the student and family.	308	150	141	52	44	3.90	1.22	8
Overall mean						4.18	0.63	

Table (7) shows that the arithmetic means of the cultural factors related to the performance problems of distance education during COVID-19 among primary school pupils from the teachers’ perspective ranged (3.90:4.54). Item “family cultural preparation in online learning and distance education is substandard” was ranked first. The author argues that distance education requires technology literacy related to renewable variables. Parents are no longer able to follow up their children’s education because they have academic qualifications, but they need advanced skills and experiences because distance education requires modern communication, including computer devices, networks, means, research mechanisms, online libraries, and the Internet portals. Moreover, the family shares the socialization responsibility with school, especially in the primary stage, to enable the child to make right life decisions. The family even plays a greater role than the family in distance education during COVID-19.

Item “the association of distance education with home quarantine during the prevalence of a pandemic has psychological impacts on the student and family” was ranked last. The author argues that the success of education relates to many situations, including the seriousness of parents in handling emergencies by implementing all instructions, instilling the value of learning in children, and raising child awareness about the importance of commitment to the official regulations to protect children from Corona dangers. Additionally, future education requires further participation on the students’ part in course design, education and learning, and keeping pace with technological orientations and digitalization. The overall mean of the cultural factors scored (4.18) and suggested the high degree of these factors. The participants agreed on this domain with means ranging from (4.18 to 5.00).

Regarding the results of the three previous questions, the author perceives differences in the participants’ opinions on all social, economic, and cultural factors of distance education among students. The participants believe that all these factors are unsatisfactory. The participants’ responses were high. The authors argue that the Saudi community has not been prepared to confront these crises and caused application problems. The plans were not well-developed. The participants suggested that the family and schools were not prepared for the closing period and handling educational circumstances. They have experienced lack of communication in distance education, which requires integration from all relevant institutions because of the importance of social, economic, and cultural factors in distance education to study all relevant factors and consider the measures at the individual, group, and social levels.

This finding agrees with Alghadeer [30], Abdelmohsen [51], Sayed [34], Almohandes [28], Alqahtani [29], and Altwereqy [52] that indicated different factors of distance education imposed by COVID-19.

- To answer the fourth question, frequencies, arithmetic means, and standard deviations of the responses to the confrontation mechanisms of the social, economic, and cultural factors related to the performance problems of distance education during COVID-19 among primary stage students were calculated, as shown in table (8).

**Table (8):** Responses of the participants to the confrontation mechanisms of the social, economic, and cultural factors related to the performance problems of distance education during COVID-19 among primary stage students

Item		Total sample							
		Frequency					Means	Standard deviation	Rank
		Strongly agree	Agree	Undecided	Disagree	Strongly disagree			
Confrontation mechanisms of the social factors	Establishing centers supervised by the Ministry of Education for online social education, e.g., promoting the culture, benefit, and importance of distance education in the social and family environment	513	151	30	1	0	4.87	0.77	1
	Establishing specialized centers at the Ministry of Education to provide training courses for families	499	176	92	20	7	4.36	0.88	4

Establishing psychological and social consultation centers for the families suffering from social problems, which affect the success of distance education	380	180	107	22	6	4.30	0.90	5
Studying developing financial and moral motifs that support distance education in the family environment	521	100	61	7	6	4.81	0.76	2
Concluding partnerships with relevant institutions to provide support that enhance the quality of services to families	439	173	64	16	3	4.48	0.79	3
Total						4.56	0.82	1 <sup>st</sup>
Establishing affordable communication networks for students and members of middle and low income families by concluding partnerships between the Ministry of Education and telecommunication companies	400	167	100	22	6	4.35	0.91	2
Holding training courses on rationalizing consumption, income management, and focusing on basic issues, e.g., education	419	122	92	39	13	4.26	0.99	3
Total						4.43	0.89	3 <sup>rd</sup>
Developing laws and regulations of cybercrimes to include comic and humorous clips on distance education as they promote negative attitudes towards distance education	477	151	49	9	9	4.80	0.82	1
Intensifying the role of mass media in spreading the digital culture and promoting positiveness in interaction and utilization of the massive capabilities that serve distance education	376	175	106	26	12	4.26	0.96	3
Spreading culture between families and children that distance education is not applied to life-threatening situations, e.g., pandemics, diseases, and crises, but it is an age necessity.	470	156	53	13	3	4.54	0.76	2
Total						4.45	1.15	2 <sup>nd</sup>
Overall mean						4.48	0.95	

Table (8) shows that the arithmetic means of the most significant confrontation mechanisms of the social factors related to the performance problems of distance education during COVID-19 among primary school pupils from the teachers' perspective ranged (4.30: 4.87). Item "establishing centers supervised by the Ministry of Education for online social education, e.g., promoting the culture, benefit, and importance of distance education in the social and family environment" was ranked first. Item "establishing psychological and social consultation centers for the families suffering from social problems, which affect the success of distance education" was ranked last. The arithmetic means of the most significant confrontation mechanisms of the economic factors related to the performance problems of distance education during COVID-19 among primary school pupils from the teachers' perspective ranged (4.26: 4.69). Item "finding alternative financing options at the Ministry of Education to support families that cannot afford the requirements of distance education by concluding economic partnerships with computer companies to provide affordable companies to students" was ranked first. Item "holding training courses on rationalizing consumption, income management, and focusing on basic issues, e.g., education" was ranked last. Furthermore, the arithmetic means of the most significant confrontation mechanisms of the cultural factors related to the performance problems of distance education during COVID-19 among primary school pupils

from the teachers' perspective ranged (4.22: 4.80). Item "providing and publishing training courses and workshops to spread the culture of online learning and distance education in the centers, forums, and conferences to be accessed by students and parents anytime" was ranked first. Item "intensifying the role of mass media in spreading the digital culture and promoting positiveness in interaction and utilization of the massive capabilities that serve distance education" was ranked last.

The author argues that distance education, especially during COVID-19, is a new field that requires interest that requires the collaboration of all Saudi institutions to confront the social, economic, and cultural factors related to performance problems of distance education during COVID-19. The diversity of options and suggestions to confront these factors can be ultimate and help resolve distance education problems. Finally, these suggestions highlight the means of getting alternatives for a comprehensive view required by decision-makers when developing the planning scenarios for confronting the social, economic, and cultural factors related to the performance problems of distance education among primary education students during COVID-19.

This result agrees with Alrabghy [32] and Abdelhaseeb [33] on providing some mechanisms and suggestions to confront the factors affecting distance education. It also matches the findings of Almaqaty [44] and Abu Abaa [45] regarding the importance of distance education during crises, such as COVID-19.

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### References

- [1] N. Alsalem, *Problems of distance education and continuous education (in Arabic)*, *Journal of Educational Technology*. **14**, 270-288 (2012).
- [2] O. Hejazia and E. Alkhamisi, *Some modern attitudes and experiences of distance education in graduate studies (in Arabic)*, *Culture and Development*. **20(152)**, 1-34 (2020).
- [3] *Document of Saudi Vision 2030 (in Arabic)*. Ministry of Media Press, Saudi Arabia, (2016).
- [4] Y. Nashwan, *Management of distance education and open university education (in Arabic)*. Jordanian Dar Press, Jordan, (2018).
- [5] Hasan, *Distance education and learning of mathematics during the Corona pandemic: Reality and aspirations (in Arabic)*, *International Journal of Research in Educational Sciences*. **3(4)**, 337-355 (2020).
- [6] B. Alqahtani, *The reality of using distance education during COVID-19 from the perspective of Islamic education teachers in the middle school (in Arabic)*, *Educational Sciences*. **28(3)**, 391-420 (2020).
- [7] M. Abu Al-Nasr, *Distance training: Your gateway to a better future*. Arab Group for Training and Publishing, Cairo, (2017).
- [8] D. Alasmay, H. Alatway, and S. Alasmay, *Reality of applying Classera eLearning management system in Talae Alghad Middle school students in Tabuk (in Arabic)*, *Journal of Educational and Psychological Sciences*. **24**, 1-24 (2020).
- [9] Alhaj and N. Abu Rawy, *Obstacles to distance education at university from the faculty perspective (in Arabic)*, *Studies of Human and Educational Sciences*. **3(4)**, 259-294 (2020).
- [10] H. Almalki and B. Daghestan, *Role of online educational platforms in the professional development of early childhood teachers: an evaluative study (in Arabic)*, *Educational Journal*. **73**, 1128-1156 (2020).
- [11] S. Dhawan, *Online learning: A panacea in the time of COVID-19 crisis*, *Journal of educational technology systems*. **49(1)**, 5-22 (2020).
- [12] F. Alobthany, *General Saudi education during COVID-19: Madrasti (in Arabic)*, *Faisal University Scientific Journal for Humanities and Administration*. **22(2)**, 316-324 (2021).
- [13] M. Alqawaq, *Distance education during COVID-19: Challenges and social responsibilities (in Arabic)*, *Albayan*. **407**, 72-76 (2021).



- [14] Alkhrousy and N. Alameri, *Opinions of higher education students on distance education during COVID-19 in Oman (in Arabic)*, *Journal of the Association of Arab Universities for Research in Higher Education*. **40(4)**, 205-223 (2020).
- [15] A.A. Kamal, et al., *Transitioning to online learning during COVID-19 Pandemic: Case study of a Pre-University Centre in Malaysia*, *International Journal of Advanced Computer Science and Applications*. **11(6)**(2020).
- [16] R. McQuirter, *Lessons on Change: Shifting to online learning during COVID-19*, *Brock Education: A Journal of Educational Research and Practice*. **29(2)**, 47-51 (2020).
- [17] J. Saavedra. *Educational challenges and opportunities of the Coronavirus (COVID-19) pandemic*. 2020; Available from: <https://blogs.worldbank.org/education/educational-challenges-and-opportunities-covid-19-pandemic>.
- [18] L. Dong and J. Bouey, *Public mental health crisis during COVID-19 pandemic, China*, *Emerging infectious diseases*. **26(7)**, 1616 (2020).
- [19] Alzahid. *Natural disasters and their impacts in Egypt during the Ayyubid and Mamluk eras (in Arabic)*. Unpublished master's thesis, Kafrelsheikh University, (2016).
- [20] J.M. Tipton, *Twenty-First Century Skill Building for Homeschooled Students With Special Needs*, *Journal of Educational Research and Practice*. **11(1)**, 17 (2021).
- [21] M. Zaemia. *Family, school, and learning paths (relationship between parents' discourse and school instructions to children (in Arabic))*. Master's thesis, Constantine 1 University, (2013).
- [22] N. Yahyawey, *Family-school relationship in education (in Arabic)*, *Cahiers du Laboratoire*. **1(20)**, 4-17 (2018).
- [23] S.M. Ballard, et al., *Family life education in the United States*, in *Global perspectives on family life education*. Springer: Number of 195-215, (2018).
- [24] Awad, *Activating family role in high-school education based on partnership principle (in Arabic)*, *Al-Azhar Faculty of Education Journal*. **151(4)**, 453-509 (2012).
- [25] S. Altheweny, *Speculating the role of distance education at the University of Ha'il (in Arabic)*, *Journal of the Association of Arab Universities for Research in Higher Education*. **56(4)**, 213-232 (2010).
- [26] Alhassan, *Reality of using virtual classrooms in distance education programs from the faculty perspective: Sudan Open University as a model (in Arabic)*, *Journal of the Association of Arab Universities for Education and Psychology*. **15(1)**, 45-75 (2017).
- [27] M. Alsatouf, *Impact of using and obstacles to modern technology in education from the perspective of teachers in Damascus, Lazeqia, and Tartous (in Arabic)*, *Tishreen University Journal for Research and Scientific Studies*. **36(5)**, 273-293 (2014).
- [28] M. Almohandes, *A discovery-based educational program using hypermedia to develop kindergarteners (in Arabic)*, *Journal of Arts, Literature, Humanities, and Sociology*. **26**, 301-320 (2018).
- [29] Alqahtani, *Impact of using iPad on kindergarteners' achievement in Alhadara Private School in Riyadh (in Arabic)*, *Assiut Faculty of Education Journal*. **35(10)**, 559-588 (2019).
- [30] F. Alghadeer. *Utilizing modern methods of educational technology in teaching at Saudi schools (in Arabic)*. master's thesis, Cairo University, (2009).
- [31] S. Haamed, *Problems hindering the development of distance education in Sudanese universities: A field study from the perspective of distance education students in Sudanese university centers for the 2015-2016 academic year*, *Journal of Educational Sciences*. **20(1)**, 33-47 (2019).
- [32] K. Alrabghy, *Habits of mind and achievement motivation (in Arabic)*. De Bono Center for Teaching Thinking, Amman, (2015).
- [33] G. Abdelhaseeb, *Activating digital learning at Al-Azhar University during the 4th industrial revolution and COVID-19 (in Arabic)*, *The Educational Journal*. **91**, 1420-1852 (2021).
- [34] Sayed, *Social and cultural factors affecting education (in Arabic)*. Alalamia Press, Cairo, (2015).

- [35] H. Alsharary, *Uses and impacts of social media on achievement among high school students in Saudi Arabia: Facebook as a model (in Arabic)*. Unpublished master's thesis, Yarmouk University, (2013).
- [36] R. Awad, *Impacts of social media on student achievement in Tol Karm from the perspective of housewives (in Arabic)*. Al-Quds Open University, Palestine, (2014).
- [37] Y. Qarnany, *Youth and the Internet: A study on customs, patterns, motifs, and impacts (in Arabic)*. Alayam Press, Amman, (2016).
- [38] H. Alsamaady and A. Jarrah, *Impact of distance learning on education economics (in Arabic)*, *Mu'tah for Humanities and Social Sciences*. **35(2)**, 27-50 (2020).
- [39] Alfallah, *Future investments for distance education in Saudi universities: A proposal (in Arabic)*. Doctoral dissertation, King Saud University, (2016).
- [40] *Distance education: A gate for future generation (in Arabic)*. Ministry of Education, Saudi Arabia, (2019).
- [41] Khalaf, *A proposal to activate the role of distance education at Taif University in light of some contemporary global trends (In Arabic)*. *Sohag Educational Journal*. **40**, 223-258 (2015).
- [42] N. Alshara, B. Alrashedy, and H. Aloemeny, *Patterns of socialization in the Jordanian family and relationship to social, economic, and cultural factors (in Arabic)*, *Studies of Humanities and Social Sciences*. **46(1)**, 131-147 (2019).
- [43] S. Ghonim, *The reality of applying distance education during Corona pandemic in Egyptian schools and suggestions for development (in Arabic)*, *Educational Sciences*. **28(4)**, 1-73 (2020).
- [44] S. Almaqaty, *The reality of distance education during COVID-19 from the perspective of the faculty and graduate students in Shaqraa University (in Arabic)*, *Educational Sciences*. **28(3)**, 181-229 (2020).
- [45] Abu Abaa, *Evaluating the distance education experience of Saudi Arabia during COVID-19 from parents' perspective (in Arabic)*, *Islamic University Journal for Educational and Psychological Studies*. **29(3)**, 231-261 (2021).
- [46] *The Ministry of Education faces COVID-19 conditions and ends the school year successfully*. 2020 May 16]; Available from: <https://www.spa.gov.sa/2087173>.
- [47] UNESCO, *COVID-19 education response webinar distance learning strategies, what do we know about effectiveness?* UNESCO, Paris, (2020).
- [48] N. Ditchman, et al., *Stigma and intellectual disability: potential application of mental illness research, Rehabilitation psychology*. **58(2)**, 206 (2013).
- [49] Pandey, *Socio-occupational functioning, perceived stigma, stress and coping of caregivers of children with mental retardation and functional psychosis: a comparative study, Ranchi University, proquest*. **(10166070)**(2014).
- [50] Qandelji, *Scientific research and using traditional and electronic information resources (in Arabic)*. Dar Albazwy, Amman, (2008).
- [51] H. Abdelmohsen, *Domestic factors encouraging homeschooling (in Arabic)*. Middle East University, Amman, (2015).
- [52] T. Altwereqy, *Challenges facing teachers in applying augmented reality from the perspective of early childhood teachers (in Arabic)*, *Association of Arab Educators*. **115**, 119-142 (2019).