Parent's Perceptions of Online Learning during COVID-19 Pandemic: The Road Ahead

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Abstract
This study explored parents' perceptions pertaining to online learning in the state of Qatar during COVID-19 pandemic. Six hundred and eighty-eight parents were surveyed, and data was analyzed statistically using SPSS 28.0. Findings suggest that parents perceived online learning positively only when a set of conditions coexisted, including parental readiness, school support, and abundance of online resources. Moreover, parents viewed in-person learning to be of higher quality than remote learning, believing that academic progress and well-being were stymied through online learning. Moreover, parents suggested a road map for leveraging the quality of online learning, which sheds light on the importance of a solution that is family-centered, accounting for parental multitasking; apprehending economic and social pressures; responding to the cultural context; and securing student well-being.

Keywords: online learning, distance learning, blended learning, parents' perceptions, school improvement

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Introduction

COVID-19 has altered the face of education globally, impacting the lives of students, their teachers, and their families. UNESCO (2020) estimated that over 90% of students in 200 countries rapidly transitioned from physical schools to online distance learning without access to sports or social events in March 2020. In reality, the pandemic put 1.6 billion learners, along a large number of teachers and educators, behind screens. Information and communication technology became the essential element in the learning process, without which learning would have been interrupted (Ghamrawi et al., 2020; Ghamrawi, 2022). Schools found themselves urged to move from face-to-face teaching to distance learning, which forced schools into new learning processes filled with complexities and limitations (Mailizar et al., 2020; Rasmitadila, 2020).

Moreover, the lack of experienced teachers with online teaching techniques was one of the major challenges they confronted during the pandemic (Bao, 2020). In fact, they were dubious about distance learning in general and the effectiveness of online assessment particularly (Karthik et al., 2015). Likewise, as in the case of teachers, the lack of technical infrastructure at home, dearth of human interaction, and costly internet connection augmented their struggle with online learning (Bao, 2020).

Research revealed that school closure, the lack of equipment to participate in distance learning, difficulties in accessing online materials from home, and isolation at home for a long time had great impact on the mental and physical well-being of students (Apriyanti, 2020). No one was prepared for this, including schools, administrators, educators, students, and parents.

As such, the stress exerted on teachers and students overburdened parents, as their involvement in their children's daily education became essential. Findings from previous studies during COVID-19 have shown that the daily life routines and functioning of parents have changed, and their involvement in their children's learning has markedly increased (Toran et al., 2021; Viner et al., 2020). In fact, parents who were either unemployed or working remotely from home expected to play a pivotal role in the education of their children (Cusinato et al., 2020).

Despite the wealth of research studies that addressed students (Daniel, 2020), teachers (Huang et al., 2022), and education in general (Schleicher, 2020), fewer research studies addressed parents' experiences in responding to online learning needs of their children during the pandemic (Chen et al., 2022). The majority of the published work addressing parents during COVID-19 focused on the struggle of parents as caregivers for children with learning disabilities (Cahapay, 2020), or their struggle to secure the infrastructure needed to start online learning for their children (Ghamrawi et al., 2020). Yet, few studies elicited parents' opinions addressing their perceptions pertaining to their overall personal experience with online learning. This is particularly what this study aims to explore.

Literature review

Education disruption by COVID-19

The global spread of COVID-19 worldwide affected all countries and territories, influencing every aspect of human lives. The first case of COVID-19 was detected in December 2019 in Wuhan, China. Consequently, and in order to contain the pandemic spread, countries around the globe put in place lockdown measures, urging people to stay at home in order to flatten the infection curve and control the transmission of the disease

(Pokhrel et al., 2021). All educational entities, including universities, colleges, training institutes, and higher education facilities were fully closed in most countries. Education systems worldwide had to react fast, with very little time to make optimal decisions, with no other options other than adopting distance learning to mitigate the crisis (Dreesen et al., 2020; Looi, 2022). Few countries tried using the radio or television as an educational tool (Dreesen et al., 2020).

As a result, education witnessed a paradigm shift in the delivery model of teaching and learning and adopted various online platforms (Ghamrawi et al., 2020). Online learning and distance education became a panacea during the pandemic (Looi, 2022). This transition from traditional face-to-face learning to online learning was very challenging for teachers, students, and parents (Espino-Diaz et al., 2020). In fact, countries faced massive and various challenges, such as internet access, the availability of digital devices, availability of e-learning materials, the availability of parental support for students, and teachers' readiness (Ghamrawi et al., 2020; Besser et al., 2022; Lin and Yeh, 2022; Looi, 2022). Despite these challenges, distance and online learning became the significant education savior for educational communities in most countries (Soland, 2020).

Distance learning and its terminologies

The progressive advancement of education technology and its associated fields and tools led to the use of different terminologies pertaining to distance learning by practitioners and researchers. The use of online learning, virtual learning, e-learning, distance learning, blended learning and other terms have been used interchangeably. Ghamrawi et al. (2020) addressed the differences among these terms, as shown in Table 1.

Table 1

Terminologies of Remote Learning

Name	**Description**				
	Mandatory Features				
	Technology	Real Time	Internet	Classroom	Anywhere
Online Learning	X	X	X		X
Virtual Learning	X		X		X
E-Learning	X		X		X
Distance Learning	X		X		X
Blended Learning	X		X	X	X

Source: Ghamrawi, 2020

Table 1 clarifies the common features amongst the different terminologies that are used to describe the different forms of distance learning. The commonalities shown in the table above explain clearly why people use these terminologies interchangeably.

Impact on students

During the crisis, students were unable to go to school, which is generally recognized as being integral for children to acquire skills, have fun, and socialize. While relatively a short period in school supports this, a relatively short period of missed school leaves an impact on children's skill development and well-being (Hoffman et al., 2020). Several studies suggest that students' well-being during the pandemic was at high risk (Flack et al., 2020). In fact, many concepts were addressed in the literature more than ever, such as isolation, dropout, sense of purpose, belonging, mindfulness, social-emotional learning, and emotional safety (Dudovitz et al., 2022; Flack et al., 2020; Soneson et al., 2022; Squires et al., 2022).

While assessment remains an integral part of any learning process, conducting internal (at the school level) and external (at the national/country level) assessments were canceled or postponed during the pandemic. One potential alternative for the cancelled assessments was to use "predicted grades" by teachers, which Murphy and Wyness (2020) criticized as being imprecise. As a result, some countries decided to shift their examination system from offline to online. This divergence in students' online assessments caused caution and uncertainty among teachers, students, and parents; further, the approach to adopting online examination varied from one country to another. It was mainly a function of the context's convenience, the know-how of educators, and compatibility of learners. Checking plagiarism of online assessments was hard, and consequently the reliability of the assessments was problematic (Pokhrel et al., 2021).

Impact on teachers

The COVID-19 pandemic required radical changes in teaching practices (Reimers and Schleicher, 2020). In fact, teachers were not prepared to make a paradigm shift in their daily routines (Loot, 2022). In fact, prior to the pandemic, a study conducted in 2018 across all countries participating in the Program for Student International Assessment (PISA), showed that teachers lacked the relevant instructional and technical skills to use digital devices inside classrooms (OECD, 2020b). Moreover, the study distinguished between teachers' digital skills based on the socio-economic statuses of the countries they came from, suggesting that teachers' pedagogical and technical skills from higher socio-economic countries were considerably higher than those of low socio-economic countries (OECD, 2020b). In fact, online teaching witnessed additional complications in disadvantaged communities where a huge number of students were left behind, due to the lack of internet and computer devices (OECD, 2022a, 2022b).

During COVID-19, teachers handled unprecedented workloads. In fact, while online learning required them to acquire new skills and develop new learning materials, they also had to take care of their families, which increased their overall stress and impacted negatively on their well-being (Hong et al., 2021). Some teachers had to offer care to family members who had fallen ill, or had to mourn the death of family members, friends, or colleagues (Jalongo, 2021).

All these factors and others resulting from the pandemic and its compulsory lockdown impacted the quality of online learning, which was not always deemed good (Nugroho et al., 2021). For example, parents in many European countries reported their dissatisfaction with the poor quality of online learning offered to their children (Thorell et al., 2021). Consequently, many teachers faced complex situations and received negative feedback from their students and parents. In short, the pandemic era was a hassle to teachers, who had to face massive challenges, which intensified their stress and even caused burnout (Pressley, 2021).

Impacts on parents

As in the case of teachers and students, COVID-19 overburdened parents and caregivers. Parents were struggling to manage their time, seeking a balance between their work, the supervision of their children, and their daily house chores (Michelson et al., 2021). Some countries, such as China, Italy, Spain, and Guatemala provided online pedagogical

support to parents and caregivers, supporting them in the education of their children during confinement (Chang et al., 2020).

Nonetheless, confinement increased the risk of trauma, immobility, and detachment and led to a loss of the sense of time and security (Feeney and Fitzgerald, 2022). Challenges were further exacerbated in the case of low-income parents, who had pre-existing health problems or families having children with disabilities or with special needs, who required special attention and care (Fontanesi et al., 2020). Also, the pandemic amplified the qualms of parents pertaining to the effect of desocialization on their children's health (Feeney and Fitzgerald, 2022). In the midst of this, parents were overwhelmed with the management of the learning of their children at home. This was happening in the absence of any governmental support in many countries (Beckmann, 2021).

Methodology

Research Design

This study was guided by Morse's (1991) convergent mixed methods design, whereby quantitative and qualitative data are collected simultaneously on the same topic to better understand the researched problem. As such, the study benefits from the strengths of both research paradigms (Patton, 1990) and supports in developing a deeper and comprehensive understanding of the phenomenon being explored (Creswell and Clark, 2017). As such, a survey instrument was designed bearing 29 closed questions and 1 open-ended question.

The study was guided by the following research questions:

(1) What are parents' perceptions pertaining the provision of online learning in the State of Qatar during COVID-19 pandemic?
(2) What factors contribute to improved parents' experiences with online learning in case of future learning disruptions?

Research Instrument

An online survey was developed and conducted by the Social and Economic Survey Research Institute (SESRI) at Qatar University. It consisted of four sections (A, B, C, & D) that included 29 closed questions, besides one open-ended question, allowing parents to suggest how the provision of online learning can be improved in case of future learning disruptions. Section A collected socio-demographic information and included 14 items. Section B included 10 items that elicited parents' experiences with online education. Moreover, section C included three items that tapped on the different challenges that confronted parents during online education in terms of balancing their various duties. In addition, section D requested parents to suggest the most preferred learning modes for their children. Finally, the survey included one open-ended question pertaining to the factors that would improve parents' experiences with online learning. The survey, developed by SESRI's research team, was validated by two external experts and was piloted on a group of respondents (N = 24) that were not part of the study.

Sampling and Data Analysis

The sample was a non-probability random sample; it targeted Qatari and non-Qatari parents, as well as government and non-government schools. Data was collected online via the SESRI's Qualtrics web-based survey tool. Participants were asked to e-sign a consent form attached to the survey. The sample size of 688 parents were selected randomly.

Data derived from closed-ended items were analyzed using the Statistical Package for Social Sciences (SPSS 28.0) for Windows. Descriptive statistics were used to describe and summarize the characteristics and properties of the data collected. Percentages were calculated for each item of the survey instrument. Bivariate analysis was used to assess the parents' perceptions against online learning. On the other hand, qualitative data derived from the open-ended question was analyzed using theme-based analysis.

Results

Socio-demographics

The sample of the study consisted of 688 parents divided between 632 (91.9%) females and 56 (8.1%) males, with an average age of 37.25 ± 6.32 years (Table 2). The majority of the parents surveyed were non-Qataris (92.7%). Among those 22.3% had been living in Qatar for more than 2 to 5 years, and 27.6% had been living in Qatar for more than 10 years. As for marital status, data showed that 95.6% of the parents were married, 2.3% were divorced, and 2% were separated.

In addition, 52% of the sample were employed and 79.4% of their spouses were employed. Finally, 45.6% of the sample had graduated with a university degree, 38.1% had master's or PhD degrees, and 16.3% had a diploma or secondary degrees.

Table 2

Sociodemographic Characteristics of Sample

		Frequency	Percent
Gender	Male	56	8.1
	Female	632	91.9
Nationality	Qataris	50	7.3
	Non-Qataris	638	92.7
How Long	Less than one year	6	0.9
	More than one year to two years	50	7.9
	More than two years to five years	142	22.3
	More than five years to ten years	232	36.5
	More than ten years to twenty years	158	24.8
	More than twenty years	18	2.8
	All my life/I was born in Qatar	30	4.7
Age	Mean (SD)	37.25 (6.32)	
	Min. to Max.	29 to 59	
Marital Status	Married	658	95.6
	Separated	14	2.0
	Divorced	16	2.3
Employment Status	Unemployed	330	48.0
	Employed	358	52.0
Spouse Employment Status	Unemployed	142	20.6
	Employed	546	79.4
Educational Level	Secondary or less	20	2.9
	Diploma (After secondary but no university)	92	13.4
	University Graduate/BA/BCOM/BSc	314	45.6

	Master's Degree	222	32.3
	PhD	40	5.8
Spouse Educational Level	Secondary or less	22	3.2
	Diploma (After secondary but no university)	94	13.7
	University Graduate/BA/BCOM/BSc	296	43.0
	Master's Degree	246	35.8
	PhD	296	43.0

On the other hand, Table 3 presents data pertaining the educational characteristics of children. In fact, 39.8% of parents had one child enrolled in school, 44.8% had two, and 15.3% had three or more enrollees. Furthermore, 71.5% of the children were enrolled in government schools, 23.27% were enrolled in international schools and 5.23% were enrolled in other schools (community schools and schools run by the embassies).

As far as the preferences of mode of learning by parents is concerned, data showed that 67.7% of parents favored blended learning; 20.9% preferred online learning only; 6.4% favored in-school learning; and 4.9% preferred different learning approaches. Moreover, 91.9% of parents contended that they followed up on their children's education, while 8.1% depended on private tutors in one or more of the subjects taught to their children.

Table 3

Educational Characteristics of the Children

		Frequency	Percent
Number of Children in School	One only	274	39.8
	Two	308	44.8
	Three	74	10.8
	More than three	30	4.4
	I don't have children registered in school	2	0.3
School Type	Government schools	492	71.5
	International schools	160	23.27
	Other schools (community/embassy schools, others..)	36	5.23
Current mode of learning	In-school learning only	44	6.4
	Online learning only	144	20.9
	Blended learning: A mix of in-school and online learning	466	67.7
	Different learning systems for different children	34	4.9
Family role	I do the follow-up with my child/ren education	406	59.0
	My spouse does the follow-up with our child/ren education	32	4.7
	My spouse and I do the follow-up with our child/ren education	194	28.2
	We have a tutor doing the follow-up with the child/ren regarding one of the school subjects	30	4.4
	We have a tutor doing the follow-up with the child/ren regarding most of the school subjects	8	1.2
	We have a tutor/s doing the follow-up with the child/ren regarding all school subjects	6	0.9
	Not applicable	12	1.7

Parents' experiences with online learning

The study researched parents' opinion pertaining to how their children's schools coped with online learning. The results are presented in Table 4: 73.9% of parents conveyed that schools coped well; 18% were neutral; and 8.1% suggested that schools' coping skills with remote learning were poor.

In the same line, 30.8% of parents stated that their communication with schools during the pandemic was very easy, 35.8% said somewhat easy, and 19.8% said it was somewhat hard to very hard. Parallel to that, the communication between parents and teachers during the pandemic was very easy for 34.6% of the parents; somewhat easy for 33.4% of parents; and was somewhat hard to very hard for 15.7% of parents.

Moreover, 22.1% of parents described school support to be very satisfactory, 38.4% thought it was satisfactory, and 21.2% believed it was not satisfactory. In fact, from the 688 surveyed parents, only 32.3% confirmed that their children's teachers contacted them to check on student workload. Likewise, 12.2% of parents stated that the follow-up provided by teachers during school closures was very satisfactory, 43.6% suggested that it was not satisfactory, and 19.2% believed it was not satisfactory.

Nevertheless, 60.5% of parents contended that the required educational resources for the online provision were made available during the schools' closure; yet it was not available for 39.5% of parents. Furthermore, 77.9% of parents were satisfied with the steps taken by schools to prevent the spread of COVID-19. Lastly, 11.9% of parents thought that their children were able to adapt very well to online learning; 32.8% thought that their children were able to adapt well; while 38.4% of parents stated that their children were unable to cope well.

Table 4

Experiences With Education Disruption Due To COVID-19

		Frequency	Percent
School cope with emergency remote education	The school coped very well	222	32.3
	The school coped well	286	41.6
	Neutral	124	18.0
	The school did not cope well	40	5.8
	The school did not cope well at all	16	2.3
Communication Parent and School	The communication was very easy	212	30.8
	The communication was somewhat easy	246	35.8
	Neutral	94	13.7
	The communication was somewhat hard	112	16.3
	The communication was very hard	24	3.5
Communication Parent and Teachers	The communication was very easy	238	34.6
	The communication was somewhat easy	230	33.4
	Neutral	112	16.3
	The communication was somewhat hard	82	11.9
	The communication was very hard	26	3.8
School support	The support is very satisfactory	152	22.1
	The support is satisfactory	264	38.4
	Neutral	126	18.3

	The support is not satisfactory	106	15.4
	The support is not satisfactory at all	40	5.8
Workload	Yes, my child's teacher contacted us to check the amount of work	222	32.3
	No, my child's teacher did not contact us to check the amount of work	466	67.7
Educational resources for online learning	I had too many resources available	92	13.4
	I had just the right number of resources available	324	47.1
	I had few resources available	238	34.6
	I had no resources at all	34	4.9
Follow-up of school and teachers	Very satisfactory	84	12.2
	Satisfactory	300	43.6
	Neutral	172	25.0
	Not satisfactory	104	15.1
	Not satisfactory at all	28	4.1
School's steps to prevent covid	Very satisfied	232	33.7
	Satisfied	304	44.2
	Neutral	106	15.4
	Dissatisfied	36	5.2
	Very dissatisfied	10	1.5
Children cope with online	My child/ren coped very well	82	11.9
	My child/ren coped well	226	32.8
	Neutral	116	16.9
	My child/ren did not cope well	198	28.8
	My child/ren did not cope well at all	66	9.6

On the other hand, data suggests that in-school learning was still the most preferable mode of learning for parents (79.4%), which was followed by blended learning (10.8%), online learning (4.9%), homeschooling (1.5%), and finally "different learning system for different children" (3.5%).

Challenges confronting parents and children during online learning

The unexpected shift from in-person to online learning imposed massive challenges on parents, as well as children. Table 5 presents these challenges. First, the challenges that parents faced during online learning were tested against 12 items measured using a five-point Likert scale ranging from 1 = "Not challenging at all" to 5 = "Very challenging."

Data showed that the highest four scored challenges were: (1) parents feel overwhelmed (average score 4.29 ± 0.99 over 5); (2) balancing parent's employment demands and child learning needs (average score 4.21 ± 1.11 over 5); (3) children's motivation specifically related to online learning (average score 4.14 ± 1.03 over 5); and (4) balancing requirements of different children's school work (average score 4.03 ± 1.16 over 5).

A score was computed to assess each of the challenges faced by parents, and then these scores were added to calculate the average score. The validation of this score was done using Cronbach's alpha $\alpha = 0.814$ (> 0.7) meaning that the items addressing challenges faced

by parents fitted well together. The average score of challenges faced by parents was 39.69 ± 8.65 over 60, with a minimum of 12 over 65 and a maximum of 60 over 60.

The challenges that children faced during online learning were explored via five items measured on a five-point Likert scale varying from 1 "Not challenging at all" to 5 "Very challenging." As such, "Having too much screen time" was the highest scored challenge (average score 4.54 ± 0.83 over 5); followed by "Maintaining social connection and friendships" (average score 4.26 ± 1.10 over 5); and then "Maintaining mental health" (average score 3.95 ± 1.15 over 5). A score was computed to assess the overall challenges for children and the scores of the five items were added all together. The validation of this score was done using Cronbach's alpha α =0.774 (> 0.7). The average score of challenges faced by children was 19.45 ± 4.20 over 25, with a minimum of 5 over 25 and a maximum of 25 over 25.

Table 5

Parents and Children's Challenges with Online Learning

	Not challenging at all	Somewhat not challenging	Neutral	Somewhat Challenging	Very challenging	Mean (SD)
Parents challenges						
Balancing parent's employment demands and child learning needs	32 (4.7%)	42 (6.1%)	50 (7.3%)	192 (27.9%)	372 (54.1%)	4.21 (1.11)
Balancing requirements of different children's schoolwork	38 (5.5%)	52 (7.6%)	68 (9.9%)	222 (32.3%)	308 (44.8%)	4.03 (1.16)
Parents feel overwhelmed	18 (2.6%)	30 (4.4%)	70 (10.2%)	186 (27.0%)	384 (55.8%)	4.29 (0.99)
Child/ren's motivation specifically related to online learning	22 (3.2%)	46 (6.7%)	54 (7.8%)	256 (37.2%)	310 (45.1%)	4.14 (1.03)
Child/ren's motivation towards learning in general	76 (11.0%)	152 (22.1%)	108 (15.7%)	170 (24.7%)	182 (26.5%)	3.33 (1.36)
Access to technology hardware for online learning	190 (27.6%)	144 (20.9%)	106 (15.4%)	138 (20.1%)	110 (16.0%)	2.76 (1.45)
Internet quality	196 (28.5%)	176 (25.6%)	102 (14.8%)	136 (19.8%)	78 (11.3%)	2.60 (1.37)
Access to online educational resources provided by the school	160 (23.3%)	216 (31.4%)	134 (19.5%)	112 (16.3%)	66 (9.6%)	2.58 (1.27)
Teaching skills and level of parent's knowledge	132 (19.2%)	142 (20.6%)	124 (18.0%)	170 (24.7%)	120 (17.4%)	3.01 (1.39)
Parent's interest in using technology	200 (29.1%)	164 (23.8%)	154 (22.4%)	110 (16.0%)	60 (8.7%)	2.51 (1.29)
Parents-Teacher communication	174 (25.3%)	160 (23.3%)	146 (21.2%)	138 (20.1%)	70 (10.2%)	2.67 (1.32)
Child/ren acquisition of the required learning outcomes and skills	48 (7.0%)	112 (16.3%)	122 (17.7%)	216 (31.4%)	190 (27.6%)	3.56 (1.24)
Challenges faced by Parents	Mean (SD) = 39.69 (8.65)			Min.–Max.: 12–60		
Children challenges						
My child/ren adjusted quickly to online learning	74 (10.8%)	108 (15.7%)	86 (12.5%)	232 (33.7%)	188 (27.3%)	3.51 (1.33)
My child/ren adjusted quickly to blended learning	84 (12.2%)	158 (23.0%)	118 (17.2%)	198 (28.8%)	130 (18.9%)	3.19 (1.31)
Maintaining their mental health	28 (4.1%)	74 (10.8%)	86 (12.5%)	218 (31.7%)	282 (41.0%)	3.95 (1.15)
Maintaining social connection and friendships	22 (3.2%)	58 (8.4%)	40 (5.8%)	168 (24.4%)	400 (58.1%)	4.26 (1.10)
Having too much screen time	10 (1.5%)	18 (2.6%)	36 (5.2%)	150 (21.8%)	474 (68.9%)	4.54 (0.83)
Challenges faced by Children	Mean (SD) = 19.45 (4.20)			Min.–Max.: 5–25		

Parents' perceptions towards online learning

How parents perceived online learning was assessed using nine items measured using a four-point Likert scale, varying from 1 "Strongly Disagree" to 4 "Strongly Agree." Table 6 suggests that the highest three scored perceptions were: "The online learning is suitable for children without needing parents' supervision" (average score 3.23 ± 0.93 over 4), followed by "the blended learning is easy to deal with (average score 2.95 ± 0.83 over 4), and finally "the shift between traditional learning to online learning has been done smoothly" (average score 2.76 ± 0.89 over 4).

On the opposite side, the lowest three scored perceptions were "schools need to focus more on innovative ways of learning" (average score 1.84 ± 0.74 over 4); followed by "parents need to be more involved in their child's education" (average score 2.22 ± 0.85 over 4); and then "online learning gave new perspective to education (average score 2.36 ± 0.85 over 4).

Table 6

Parent's Perceptions Toward Online Learning

	Strongly Disagree	Disagree	Agree	Strongly Agree	Mean (SD)
The shift between traditional learning to online learning has been done smoothly	40 (5.8%)	250 (36.3%)	230 (33.4%)	168 (24.4%)	2.76 (0.89)
The online learning is suitable for children without needing parents' supervision	48 (7.0%)	92 (13.4%)	204 (29.7%)	344 (50.0%)	3.23 (0.93)
The blended learning is easy to deal with	18 (2.6%)	197 (28.6%)	271 (39.4%)	202 (29.4%)	2.95 (0.83)
Schools need to focus more on independent learning	104 (15.1%)	306 (44.5%)	186 (27.0%)	92 (13.4%)	2.39 (0.90)
Parents need to be more involved in their child's education	126 (18.3%)	342 (49.7%)	160 (23.3%)	60 (8.7%)	2.22 (0.85)
You were able to adjust to online learning quickly	46 (6.7%)	294 (42.7%)	240 (34.9%)	108 (15.7%)	2.60 (0.83)
You were able to adjust to blended learning quickly	56 (8.1%)	342 (49.7%)	194 (28.2%)	96 (14.0%)	2.48 (0.83)
Online learning gave new perspective to education	80 (11.6%)	366 (53.2%)	156 (22.7%)	86 (12.5%)	2.36 (0.85)
Schools need to focus more on innovative ways of learning	228 (33.1%)	364 (52.9%)	72 (10.5%)	24 (3.5%)	1.84 (0.74)

To assess the overall parents' perception towards online learning, the scores of the nine items were added up into one score. This score was validated in the study population using Cronbach's alpha $\alpha = 0.736$ (> 0.7). The average score of parents' perception towards online learning was 22.16 ± 4.33 over 36, with a median score of 22 over 36, a minimum of 10 over 36, and a maximum of 34 over 36 (Table 7).

Table 7

Score of Parents' Perception Toward Online Learning

Parents' Perception	
Analyzed N	688
Mean	22.16
Median	22.00
Std. Deviation	4.335

Minimum		10
Maximum		34
Percentiles	25	20.00
	50	22.00
	75	25.00

Correlation between parents' perceptions of online learning and the challenges faced by parents and children

Table 8 suggests that parents' perceptions of online learning was negatively associated with the challenges they faced using online learning ($p < 0.001$) with $r = -0.447$; meaning that online learning is perceived negatively by parents who were unable to overcome challenges. Similarly, testing the correlation between parents' perceptions of online learning and that of their children's ($p < 0.001$) showed that parents of children who suffered during online learning, exhibited low perceptions with $r = -0.552$.

Table 8

Correlation Between Perception and Challenges

		Parent's Perception	Challenges faced by Parents	Challenges faced by Children
Parents' Perception	Pearson Correlation	1	-0.447	-0.552
	P value		**<0.001**	**<0.001**
	N	688	688	688
Challenges faced by Parents	Pearson Correlation	-0.447	1	0.608
	Pvalue	**<0.001**		**<0.001**
	N	688	688	688
Challenges faced by Children	Pearson Correlation	-0.552	0.608	1
	P value	**<0.001**	**<0.001**	
	N	688	688	688

Note. Pearson Correlation test was used in the analysis. Bold = statistically significant correlation set at 5%.

Leveraging the Quality of the Provision of Online Learning

As stated earlier, the survey included one open-ended question: what factors could improve your experience with online learning in the future? Responses were analyzed thematically, and findings are presented in Table 9. For ethical reasons, participants will be denoted using the formula Px, where x stands for the number given for the survey.

Table 9

Themes Emerging From the Open-ended Item

Themes	***Approximate % of Responses****
Choosing a user-friendly platform	95%
Ensuring leaning is interactive	92%
Securing peer collaboration	67%
Fitting age level characteristics	84%
Providing a comprehensive curriculum (PE, Arts, etc.)	76%
Differentiation of learning	53%
Avoiding screen fatigue	90%
Offering remedial learning opportunities	83%
Catering for student well-being	81%
Revising assessment and evaluation protocols	72%
Accounting for Privacy of homes when used	71%

*Note. *Rounded figures*

As Table 9 suggests, parents believed that online learning is best facilitated when a user-friendly platform is in place.

> *Do not speak of any functional online learning if the platform you are using keeps on freezing or breaking down (P412).*

Moreover, parents suggested that efforts should be made to render future online learning interactive, believing that one of the key problems in their past-experience during COVID-19 related to the lack of student-teacher interactivity. In addition, it should allow for peer collaborative work on virtual projects.

> *Schools should offer learning that allow our children to interact with teachers, by allowing time for asking questions, indulge in discussions, and express themselves (P71).*
> *Online learning should continue to give students the opportunity to work with each other collaboratively (P113).*

That is to say, as many participants enunciated, online learning should be responsive to the age level of children and should provide learning opportunities accordingly.

> *Our children can sit and listen to a teacher who is delivering the same way a TV news anchor delivers. Children are children, be that in school or behind screens, and an effective online provision should account for that (P287).*

One way to achieve that would be the adoption of a comprehensive curriculum that does not exclude the subjects that are mostly liked by children such as physical education, arts, drama, etc. Moreover, parents hinted on differentiating learning without naming it, suggesting that children should not all be given the same tasks, but rather tasks that fitted their abilities and interests.

> *I think a key failure has been the exclusion of the subjects that kids mostly liked. Online learning can and should include Arts, sports and all the subjects that energize children (P11).*
> *Online learning should offer children different tasks and learning opportunities based on their strengths and weaknesses, as well as their interests (P402).*

In the same vein, parents thought that online experience could be improved by ensuring children are given the right balance between rest and screen time to avoid screen fatigue.

> *It ached my heart when I saw my son sleeping behind screen. This is not learning, this is torture. Children should be given enough breaks (P364).*

In addition, parents suggested academic remedial programs to accompany online learning as well as programs that caters for students' social and emotional well-being.

> *Online learning should include a component help in identifying and supporting struggling students in the various subjects (P133).*
> *Online learning should provide social and emotional support for children (P215).*

Furthermore, parents thought that online learning should be able to carry out student assessment and evaluation fairly and easily.

> *I suggest improving assessment and learning and making it professional, true and allow children learn how to improve (P324).*

Finally, parents were keen to mention the importance of not violating the privacy of their homes through online learning. As such, many suggested teaching children the appropriate methods of opening cameras, while maintaining privacy.

> *I think one reason for the failure of online learning is closing cameras to protect privacies, but I think what needs to be done is teaching kids how to open cameras while maintaining privacy such as those pictures they put behind [virtual backgrounds], or choosing corners, etc. (P98).*

Discussion

This study explored parents' perceptions pertaining online learning in the state of Qatar during COVID-19 pandemic. Findings suggest that parents believed that online

learning was highly challenging, yet they were able to respond to it efficiently, and were satisfied the way schools and teachers communicated with them during the pandemic. Furthermore, parents believed that their children were able to cope with the sudden shift from in-person to online learning. All these findings come in line with Ghamrawi et al. (2020) and Ghamrawi (2022) suggesting that despite the gross challenge incurred on them, parents were left with no option but to respond with all effort to support the learning of their children during online mode.

The study suggests that the challenges reported by parents in online learning were massive because they had to seek the right balance between their jobs, home duties, and catering for their children's learning. They had to motivate kids to learn online, allocate the appropriate digital devices, and ensure high quality internet of internet at home, given that with all their children were going online simultaneously. These findings come in parallel to the literature that suggests that parents encountered problems stemming from the availability of appropriate devices, the access to online resources, and the internet quality (Besser et al., 2022; Ghamrawi, 2022; Ghamrawi et al., 2020; Lin & Yeh, 2022; Looi (2022).

In the same vein, parents believed that shifting from traditional to online and blended learning was not easy at all. Children took time to adapt and reported that online learning might have affected them their mental health, due to isolation and disconnection from peers; a finding that comes parallel to Hoffman et al. (2020) who suggested that online learning left deep effects on students in terms of socializing and developing new skills.

Moreover, parents preferred in-school learning because they thought online and blended learning models added stress and pressure, making it difficult to balance their lives. This converges with Michelson et al. (2021), who elaborated that parents were struggling in balancing between their jobs and the supervision that online learning required.

On the other hand, this study suggested several ideas for improving the provision of online learning, as perceived by parents. Some of these findings came parallel to the literature, while others were additions to it. In fact, parents suggested choosing a user-friendly platform (as in Ghamrawi, 2022), ensuring learning is interactive, securing peer collaboration, fitting age-level characteristics, providing a comprehensive curriculum (PE, arts, etc.), differentiation of learning, avoiding screen fatigue (as in Feeney & Fitzgerald, 2022; Flack et al., 2020), offering remedial learning opportunities, catering to student well-being (as in Hoffman et al., 2020; Hong et al., 2021), revising assessment and evaluation protocols (as in Murphy & Wyness, 2020; Pokhrel et al. 2021), and accounting for privacy of homes.

Conclusion

This study explored the parents' perceptions pertaining to online learning during the pandemic. It went beyond depicting what went well and what went wrong to draw a road map for leveraging the quality of online learning, should any learning disruption take place in the future. Findings illuminate the social context behind what might appear as a school challenge on a surface level. It is imperative for policymakers to understand that online learning is not only about using technology to engage in learning from home. It should offer a holistic approach, providing a family-centered solution accounting for the multitasking that is expected from parents, and apprehending economic and social pressures incurred on them.

Moreover, policymakers should understand that online learning should provide for student well-being. Behind screens, students are prone to anxiety, depression, and isolation.

Furthermore, online learning should be culturally responsive to norms and values of a given context. For example, while opening cameras is an international recommendation, it was considered a violation of privacy for parents in Qatar. Policymakers should ensure that solutions support a balance between parents' values around technology use and the desired vision for online learning.

References

Apriyanti, C. (2020). The parents role in guiding distance learning and the obstacle during COVID-19 outbreak. *Jurnal Ilmiah Pendidikan Dasar*, *7*(02).

Bao, W. (2020). COVID-19 and online teaching in higher education: A case study of Peking University. *Human Behavior and Emerging Technologies*, *2*(2), 113–115. https://doi.org/10.1002/hbe2.191

Beckmann, L. (2021). Does parental warmth buffer the relationship between parent-to-child physical and verbal aggression and adolescent behavioural and emotional adjustment? *Journal of Family Studies*, *27*(3), 366–387.

Besser, A., Flett, G. L., & Zeigler-Hill, V. (2022). Adaptability to a sudden transition to online learning during the COVID-19 pandemic: Understanding the challenges for students. *Scholarship of Teaching and Learning in Psychology*, *8*(2), 85.

Cahapay, M. B. (2020). Rethinking education in the new normal post-COVID-19 era: A curriculum studies perspective. *Aquademia*, *4*(2). doi: 10.29333/aquademia/8315

Chang, G. C., & Yano, S. (2020). *How are countries addressing the COVID-19 challenges in education? A snapshot of policy measure*s. UNESCO. Retrieved May 4, 2020, from https://gemreportunesco.wordpress.com/2020/03/24/how-are-countries-addressing-the-covid-19-challenges-in-education-a-snapshot-of-policy-measures/

Chen, C. Y. C., Byrne, E., & Vélez, T. (2022). Impact of the 2020 pandemic of COVID-19 on families with school-aged children in the United States: Roles of income level and race. *Journal of Family Issues*, *43*(3), 719–740.

Cresswell, J. W., & Plano Clark, V. L. (2017). *Designing and conducting mixed methods research* (3rd ed.). Sage.

Cusinato, M., Iannattone, S., Spoto, A., Poli, M., Moretti, C., Gatta, M., & Miscioscia, M. (2020). Stress, resilience, and well-being in Italian children and their parents during the COVID-19 pandemic. *International Journal of Environmental Research and Public Health, 17*(22), 82–97.

Daniel, S. J. (2020). Education and the COVID-19 pandemic. *Prospects*, *49*(1), 91–96.

Dreesen, T., Akseer, S., Brossard, M., Dewan, P., Giraldo, J. P., Kamei, A., & Ortiz, J. S. (2020). *Promising practices for equitable remote learning: Emerging lessons from COVID-19 education responses in 127 countries*. Innocenti Research Briefs no. 2020-10. UNICEF Office of Research.

Dudovitz, R. N., Thomas, K., Shah, M. D., Szilagyi, P. G., Vizueta, N., Vangala, S., Shetgiri, R. & Kapteyn, A. (2022). School-age children's wellbeing and school-related needs during the COVID-19 pandemic. *Academic Pediatrics*. doi: 10.1016/j.acap.2022.01.015.

Feeney, J. A., & Fitzgerald, J. (2022). Autonomy–connection tensions, stress, and attachment: The case of COVID-19. *Current Opinion in Psychology*, *43*, 18–23.

Flack, C. B., L. Walker, A. Bickerstaff, Earle, H., and Margetts, C. (2020). *Educator perspectives on the impact of COVID-19 on teaching and learning in Australia and New Zealand*. Pivot Professional Learning.

Fontanesi, L., Marchetti, D., Mazza, C., Di Giandomenico, S., Roma, P., & Verrocchio, M. C. (2020). The effect of the COVID-19 lockdown on parents: A call to adopt urgent measures. *Psychological Trauma: Theory, Research, Practice, and Policy*, *12*(S1), S79.

Ghamrawi, N. (2022). Teachers' virtual communities of practice: A strong response in times of crisis or just another fad? *Education and Information Technologies*, 1–27.

Ghamrawi, N., Shal, T., Machmouchi, I., & Ghamrawi, N. (2020). Education inequality revisited through the lived experiences of parents during virtual learning. *Advances in Social Sciences Research Journal*, *7*(11), 416–433.

Hoffman, J. A., & Miller, E. A. (2020). Addressing the consequences of school closure due to COVID-19 on children's physical and mental well-being. *World Medical & Health Policy*, *12*(3), 300–310.

Hong, X., Liu, Q., & Zhang, M. (2021). Dual stressors and female pre-school teachers' job satisfaction during the COVID-19: The mediation of work-family conflict. *Frontiers in Psychology*, *12*, 691498.

Huang, X., Lai, M. Y., & Huang, R. (2022). Teachers' changes when addressing the challenges in unexpected migration to online mathematics teaching during the COVID-19 pandemic: A case study in Shanghai. *ZDM–Mathematics Education*, 1–14.

Jalongo, M. R. (2021). The effects of COVID-19 on early childhood education and care: Research and resources for children, families, teachers, and teacher educators. *Early Childhood Education Journal*, *49*(5), 763–774.

Karthik, B. S. S., Chandrasekhar, B. B., David, R., & Kumar, A. K. (2019). Identification of instructional design strategies for an effective e-learning experience. *The Qualitative Report*, *24*(7), 1537–1555.

Looi, K. H. (2022). Overcoming challenges to make e-learning a panacea for present and future crises. *The International Journal of Information and Learning Technology*, *39*(3), 227–239.

Mailizar, M., & Fan, L. (2020). Indonesian teachers' knowledge of ICT and the use of ICT in secondary mathematics teaching. *Eurasia Journal of Mathematics, Science and Technology Education*, *16*(1).

Dorn, E., Hancock, B., Sarakatsannis, J., & Viruleg, E. V. (2021). *COVID-19 and education: The lingering effects of unfinished learning.* McKinsey & Company.

Michelson, R., DeWitt, A., Nagar, R., Hiniker, A., Yip, J., Munson, S. A., & Kientz, J. A. (2021). Parenting in a pandemic: Juggling multiple roles and managing technology use in family life during COVID-19 in the United States. *Proceedings of the ACM on Human-Computer Interaction*, *5*(CSCW2), 1–39.

Morse, J. M. (1991). Approaches to qualitative-quantitative methodological triangulation. *Nursing Research, 40*(2), 120–123.

Murphy, R., & Wyness, G. (2020). Minority Report: The impact of predicted grades on university admissions of disadvantaged groups. *Education Economics*, *28*(4), 333–350.

Nugroho, Y. S., Anifah, L., Sulistiyo, E., Cahyaningtias, S., & Firmansyah, R. (2021). Analysis of learning quality with internet-based distance learning during the COVID-19 pandemic. *International Journal of Recent Educational Research*, *2*(1), 96–110.

OECD. (2020b). *PISA 2018 results: Vol. 5. Effective policies, successful schools*. OECD.

OECD. (2022a). *Access to computers from home (Indicator)*. OECD.

OECD. (2022b). *Internet access (Indicator)*. OECD.

Patton, M. Q. (1990). *Qualitative evaluation and research methods*. Sage.

Pokhrel, S., & Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, *8*(1), 133–141. https://doi.org/10.1177/2347631120983481

Pressley, T. (2021). Factors contributing to teacher burnout during COVID-19. *Educational Researcher*, *50*(5), 325–327.

Rasmitadila, R., Widyasari, W., Humaira, M., Tambunan, A., Rachmadtullah, R., & Samsudin, A. (2020). Using blended learning approach (BLA) in inclusive education course: A study investigating teacher students' perception. *International Journal of Emerging Technologies in Learning*, *15*(2), 72–85.

Reimers F. M., & Schleicher A. (2020). *Schooling disrupted, schooling rethought: How the COVID-19 pandemic is changing education*. OECD. https://read.oecd-ilibrary.org/view/?ref=133_133390-1rtuknc0hiandtitle=Schooling-disrupted-schooling-rethought-How-the-COVID-19-pandemic-is-changing-education.

Schleicher, A. (2020). *The Impact of COVID-19 on education: Insights from "Education at a Glance 2020."* OECD.

Soland, J. A. (2020). *The impact of COVID-19 on student achievement and what it may mean for educators.* Brookings Institute. https://www.brookings.edu/blog/brown-center-chalkboard/2020/05/27/the-impact-of-covid-19-on-studentachievement-and-what-it-may-mean-for-educators/

Soneson, E., Pantis, S., Chapman, N., Mansfield, K. L., Jones, P. B., & Fazel, M. (2022). Happier during lockdown: a descriptive analysis of self-reported well-being in 17,000 UK school students during COVID-19 lockdown. *European Child & Adolescent Psychiatry*, 1–16.

Squires, V., Walker, K., & Spurr, S. (2022). Understanding self-perceptions of well-being and resilience of preservice teachers. *Teaching and Teacher Education*, *118*, 103828.

Thorell, L. B., Skoglund, C., de la Peña, A. G., Baeyens, D., Fuermaier, A., Groom, M. J., ... & Christiansen, H. (2022). Parental experiences of homeschooling during the COVID-19 pandemic: Differences between seven European countries and between children with and without mental health conditions. *European Child & Adolescent Psychiatry*, *31*(4), 649–661.

Toran, M., Sak, R., Xu, Y., Şahin-Sak, İ. T., & Yu, Y. (2021). Parents and children during the COVID-19 quarantine process: Experiences from Turkey and China. *Journal of Early Childhood Research*, *19*(1), 21–39.

Viner, R. M., Russell, S. J., Croker, H., Packer, J., Ward, J., Stansfield, C., ... & Booy, R. (2020). School closure and management practices during coronavirus outbreaks including COVID-19: A rapid systematic review. *The Lancet Child & Adolescent Health*, *4*(5), 397–404.