

Classroom Management in Virtual Learning: A Perceptions Study with School Teachers in Qatar

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Abstract

The aim of the study is to analyze the issue of virtual classroom management throughout the COVID-19 pandemic using a case study approach in a descriptive analytical method. Participants in this study are 110 teachers currently engaged in preparatory and secondary schools in different parts of Qatar. The data collection instrument used was a 4 point Likert Scale based questionnaire targeted to elicit respondents' attitudes and opinions towards virtual classroom management, challenges faced in this, and the most suitable strategies to overcome these challenges. Descriptive statistics, frequencies, and percentages were used to analyze the data. Results based on the findings show three axes: teachers' challenges, beliefs, and attitudes. Findings indicate that teachers face difficulty in virtual classroom management and attribute the biggest challenge to their inability to check distractions in the home-based learning environment. Another significant finding is that classroom management is marginalized given the extremely limited teacher-student contact in the virtual education mode. Lastly, learner interaction is drastically stunted in virtual mode bringing the teachers to the conclusion that teaching in the physical mode is the only way to ensure classroom management.

Keywords: COVID-19 pandemic, challenges of teaching virtually, virtual classroom management

1. Introduction

The teaching and learning process has a big revolution since Corona Virus Disease 19 (COVID19) has spread out to the world. Education is one of the sectors that have a mostly big impact on its condition. COVID 19 changes everything in the education system.

The process of teaching learning underwent a revolution as a result of the Covid19 pandemic which redefined all aspects of modern life, education being a sector deeply affected. Being a sector that pervades all societies, the social impact of this has also been deep and long-lasting with every sub-process of the system getting touched by change, mostly the reliance on technology to ensure smooth conduct of the educational process. Beggs (2000) found that the deficiency of effective teaching was one of the top three obstacles to the use of ICT by teachers across board. The integration of ICT into the pedagogical framework has not been a small or quick step (Coutinho, 2010, as cited in Coutinho & Lisboa, 2013).

It is fraught with obstacles and challenges that are as gigantic as they are novel. It is similarly supported by Schoepp (2005) as he stated that integrating ICT into teaching and learning is a lively process that may face a range of difficulties. The recent switch to technology has been literally an overnight event, with virtual educational platforms reducing the vital teacher-student contact. Concomitant to this, it has been the question of class control and classroom management in the virtual mode with non-linguistic communication being almost completely discounted. What added to teachers' challenges has been the stress that learners encountered in the new dispensation. The end result is that managing classrooms virtually has come to be one of the hardest parts of teaching, more so because pre or in-service teacher education has not so far geared the curriculum to nurturing virtual soft skills amongst the teachers. In the current changed circumstances, however, it is considered as one of instructors' top continuous professional development needs. While teaching in the virtual mode, teachers sometimes are unable to check distractions, especially if they spring from students' use of technology for non-academic purposes such as communicating with friends on the mobile phones, playing games on these, checking social media communication, and other similar distractions that have their root in technology abuse in class time. Thus, there is one primary axis along which

teachers' challenges lie: Classroom management and control in the virtual mode, and other disciplinary issues that lie along this axis. As compared to the physical classroom, teachers' verbal and physical cues are limited in the virtual mode. Al-Ahdal and Al-Awaid (2014) stated that a reflective teacher needs to find out the different classroom problems either in physical or virtual types of classroom, invite peer participation in evolving viable/feasible solutions and experiments with new ideas.

Disruptive students can make learning impossible for the rest of the class. Adding visual cues in a virtual classroom to control what students are looking at is certainly more direct in the physical class. Moreover, teachers need to decide on signals to manage the classrooms as a result of decreased teacher-student contact. Discipline is ensured in physical classes because the well-established system has so far ingrained in them the penalties and punishments they may face if found disrupting learning. This is missing in virtual classes given their baby years in the education sector. Research and application are both nascent in formulation and implementation of virtual education disciplinary measures.

1.1 Objectives of the Study

This research paper aims to guide the researchers and policymakers in education to devise measures to enhance classroom management and control in the virtual mode of education since subsequent waves of the Covid19 pandemic have necessitated continuing education in the online mode in Qatar as much as in the rest of the world.

The specific objectives of this study are:

- 1- To investigate the efficacy of teachers in managing the classrooms virtually.
- 2- To analyze how teachers overcome the challenges in the way of virtual classroom management.
- 3- To evaluate the pros and cons of the implementation of virtual classroom management in synchronous learning.

1.2 Questions of the Study

The researcher attempts to answer certain questions to enlighten the goals beyond using the virtual classroom management. The questions are:

- 1- What are the factors that influenced teachers' ability to manage the classroom virtually?
- 2- What kind of support do teachers need to manage the classroom virtually?
- 3- What are the teachers' beliefs towards their virtual interaction with the students?

1.3 The Virtual Classroom

The term 'virtual classroom' has been used to include in its definition a range of online learning settings. These range from asynchronous systems which refer to simultaneous teaching-learning with no recorded back-up available for the students, and interactive learning spaces established in virtual worlds such as Second Life (Masters & Gregory, 2010), and synchronous systems where contributors have the ability to engage in 'live' virtual conferences, and connect using multimedia services such as live-streamed video and audio. Al-Ahdal (2020) declared that mistakes, misinterpretations, and errors reflect a significant part of virtual learning skills in EFL classrooms. Whatever the classification is, a virtual classroom is a boon in the current times as it not only makes course properties reachable to the students, but also delivers a live, background and collaborative atmosphere for them. Additionally, teachers can denominate the learning and teaching process as they did in the old-style classroom. However, there is no one, single way to implement effective teaching-learning in a virtual classroom.

1.4 Virtual Classroom Implementation

There are endless devices that can be utilized to execute a virtual homeroom as done by teachers. Thicket (2006) utilized the Macromedia Breeze meeting stage to execute the virtual homeroom. The stage gives the following accompanying offices:

- General Presentation Delivery – Power Points, general reports changed over to Flash
- Player design;
- Screen Sharing – all viewers connected to the link share the entire work area, application or window, with controller capacities;
- Webcam – available in different ranges and capacities to stream;
- VoIP – movable transmission quality to suit association;

- Text Chat – a way in which several internet users can send messages to each other immediately, it involves two or more individuals;
- Whiteboard – different tones/text styles/straightforwardness levels, simplified, fix, archive;
- File Upload/Download – chose from PC or Breeze content store;
- Polling – with moderator admittance to individual reactions;
- Attendee List – including status pointer ('fine', 'more slow', and so forth);
- Web Launcher – dispatches all clients to a similar URL;
- Notepad – to sum up and give guidelines.

1.5 Virtual Classroom Management

Iverson (2003) characterized classroom as "the demonstration of administering connections, practices, and educational settings and exercises for networks of students" (p. 4). He considered study hall the executives as a preventive action which will decrease indiscipline. Based on Iverson's view it can be extracted that preventive administration is the idea that many classroom problems can be solved by an acceptable arrangement, fascinating and important exercises and convincing instructions.. Thus, it has become basic that the instructor is largely accountable for educating using the essential learning pedagogy (i.e. the mix of information and abilities for compelling instructing).

Virtual Classroom versus Physical Classroom

Jain (2020) claimed that regularly, schools have been where understudies and educators meet with a modest collection of books. Individuals have begun embracing innovative apparatuses that are compelling and easy to use. Virtual study halls likewise have a few inconveniences, for example, correspondence holes or low web association. On the other hand, numerous individuals believe that virtual study halls can never happen in an actual homeroom. Actually, when COVID-19 has influenced every last one of us, online classes have assisted educators with finishing the syllabus which was not conceivable in any other manner.

1.6 Asynchronous Learning Networks and the virtual classroom

Hiltz and Wellman (1997) utilized offbeat learning organizations (ALNs) to carry out the virtual homeroom. Then again, Koppelman and Vranken (2008) utilized simultaneous innovation to execute the virtual study hall. Hiltz (1988) stressed collective learning in executing her virtual study hall. Sending bunch work exercises in simultaneous online homeroom spaces has been examined by Bower (2007). Virtual homeroom could likewise be shown as shared 3D virtual universes (Bailey & Moar, 2002).

2. Approaches to Developing Students' Virtual Classroom Competencies

With the goal for understudies to work successfully in an online homeroom being clear, it is vital for them to obtain some key virtual study hall skills. These incorporate having the option to: logon, change their setup to suit their data transfer capacity, demonstrate their status, utilize the content talk, utilize the whiteboard devices, broadcast their voice/webcam, document download, record transfer, share their screen, and controller the screen of others. Be that as it may, attempting to foster these abilities in understudies' first online exercise would cheapen learning real course content as well as spot psychological over-burden upon the understudies. In this scenario, a slow and normal way to deal with creating virtual study hall abilities is suggested (Thicket, 2006).

2.1 Challenges of Teaching Virtually

Biswas and Nandi (2020) stated that the difficulties in a virtual learning environment might be interior/emotional and outer/objective according to the point of view of the educator and the instructed. Being educators, maybe it is smarter to test into the inward difficulties first, so we can introspect into these to make better learning circumstance for all. Some components of the difficulties/obstructions inside are:

- 1- Lack of premium inside instructors to learn and adjust to new learning circumstances it has been seen that there is an absence of inspiration and premium among certain educators to learn new things, as they frequently feel that ICT based learning is just for the understudies of science stream.
- 2- Unwillingness to learn and apply ICT in study hall – regardless of whether the procedures are learnt, there is hindrance in applying these in the homeroom. Educators feel awkward in introducing it before understudies/ class.

- 3- Age old conviction into the viability of chalk and talk strategy for educating – instructors reluctant to adjust to this innovation regularly refer to the adequacy of the deep-rooted technique for instructing.
- 4- Time devouring concerning planning of verbal materials – instructors frequently feel that getting ready for virtual homeroom, particularly in the underlying stages, is wastage of time.
- 5- Grasp over language frequently goes about as an obstruction in virtual homerooms. An instructor might be scholastically strong yet may not be communicative enough with the understudies. Relational abilities of the instructor assume a significant part in this regard as it is fundamental to support the interest of the understudies in the virtual homeroom, so they are additionally inspired to associate with the educator and among themselves.
- 6- Difficulty in setting up the examination material concerning the mechanism of guidance, for instance, planning virtual learning materials in vernaculars.
- 7- Inability to propel the understudies to utilize virtual learning mode.
- 8- Due to nonattendance of up close and personal contact, the connection between educator and instructed is not formatted.

3. Methodology

3.1 Research Design

The research design is defined as the "methods for gathering, dissecting, deciphering, and announcing information in research studies" (Creswell & Plano Clark 2007, p. 58). The current study investigates the teachers' challenges in managing the classroom virtually. The researcher intends to figure out these challenges and lay the foundation of possible solutions to support teachers to manage the classrooms virtually in the time of COVID-19 pandemic, as in all educational settings measures are being taken to optimize learning among the students. Keeping social distancing and decreased student-teacher contact have considerable consequences which have led to the inevitable virtual education globally. In addition, many empirical studies have shown many pros and cons of the virtual classroom and its implementation, but apparently, classroom management has not been investigated so far. Consequently, this study shows a comparative point of view between the gains and losses of physical classroom and the virtual one. Apart from this, the study sheds light on the asynchronous learning networks and the virtual classroom.

3.2 Sampling & Instrument

The study group of the study consists of 110 teachers engaged with teaching different syllabi at secondary and preparatory schools across the state of Qatar. The sample was purposive and only the teachers who have been teaching in the virtual mode since the closure of physical campuses were invited to participate. However, the researcher ensured that participants were chosen in such a way that every region of the country found representation in the study. The study adopted the descriptive, analytical research methodology by using SPSS program to analyze data collected using a questionnaire that was designed upon the four-point Likert-type scale used to measure attitudes with choices ranging from Strongly Agree to Strongly Disagree. The questionnaire items centered mostly on the teachers' overall perceptions towards challenges, beliefs, and attitudes towards the issue of virtual classroom management, and the issue of discipline in virtual learning. Further, the questionnaire instrument was designed to gather responses whether the app platform is challenging, attractive, and motivated students to interact synchronously or asynchronously.

4. Data Analysis and Results

The data were collected from 110 teachers, using a Google forms-based questionnaire. It was posted as URL link to the participants through the social app WhatsApp. SPSS 22.00 program was used in the statistical analysis after a comprehensive review of the literature. The researcher analyzed the questionnaire data on a scale of three categories: teachers' challenges, teachers' beliefs and, teachers' attitudes. The data were subsequently presented in tables and figures for ease of use and interpretation.

Table 1. Descriptive Statistics of Teachers Challenges

Descriptive Statistics					
Teachers' Challenges	N	Minimum	Maximum	Mean	Std. Deviation
1. Teachers have difficulty to manage the classroom virtually.	110	1.00	4.00	2.2909	.89181
2. Teachers are unable to put away distractions made by students.	110	1.00	4.00	2.3636	.82091
3. The most challenging to manage the classroom virtually is a learning environment at home.	110	1.00	3.00	1.8909	.68195

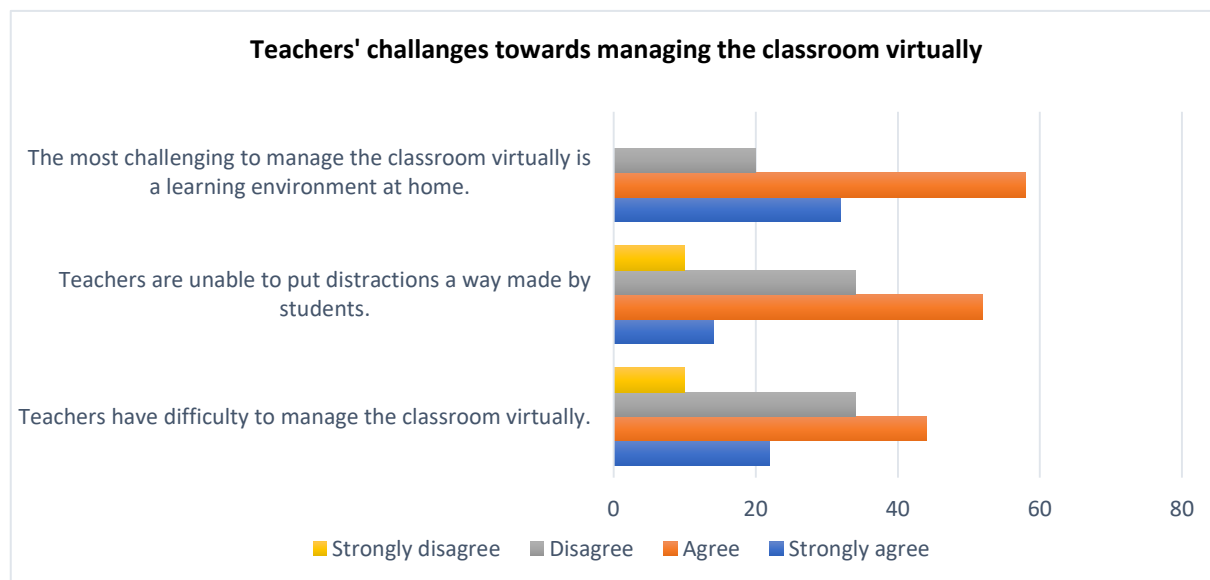


Figure 1. (Teachers' Challenges) frequencies

According to questionnaire statement no (1) “Teachers have difficulty to manage the classroom virtually”, exactly a fifth (20%) of the respondents selected "Strongly agree" and more than two fifths (45%) selected "Agree" that teachers have difficulty managing the classroom virtually. However, a small number of the respondents (10%) expressed their disagreement with the notion of having difficulty in managing the classroom in virtual learning. Concerning the second item, “Teachers are unable to put away distractions made by students”, a small number of the respondents (12.7%) preferred "Strongly agree" and approximately a half (47.3%) preferred "Agree" to express that they are incapable of controlling distractions made by students in the virtual classroom. However, just over a third (30.9%) selected "Disagree" with this perception. Regarding item no (3), “The most challenging to manage the classroom virtually is a learning environment at home”, just under a third (29.1%) chose "Strongly agree", and just over a half (52.7%) chose "Agree" to report that a learning environment at home is the most challenging issue for them as teachers in managing the virtual classrooms. Nevertheless, just under a fifth (18.2%) of the respondents disagreed with this perception.

Table 2. Descriptive Statistics of Teachers’ beliefs

Teachers’ beliefs	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
4. Teachers' beliefs in managing the classroom virtually than physically.	110	1.00	4.00	2.4364	.80739
5. Teachers’ concern about addressing the concept of clarity.	110	1.00	3.00	1.9273	.60136
6. Teachers think, their students interact virtually than physically.	110	1.00	4.00	2.9091	.92415
7. Effective teaching for handling virtual classroom challenges.	110	1.00	4.00	1.6182	.82375
Valid N (listwise)	110				

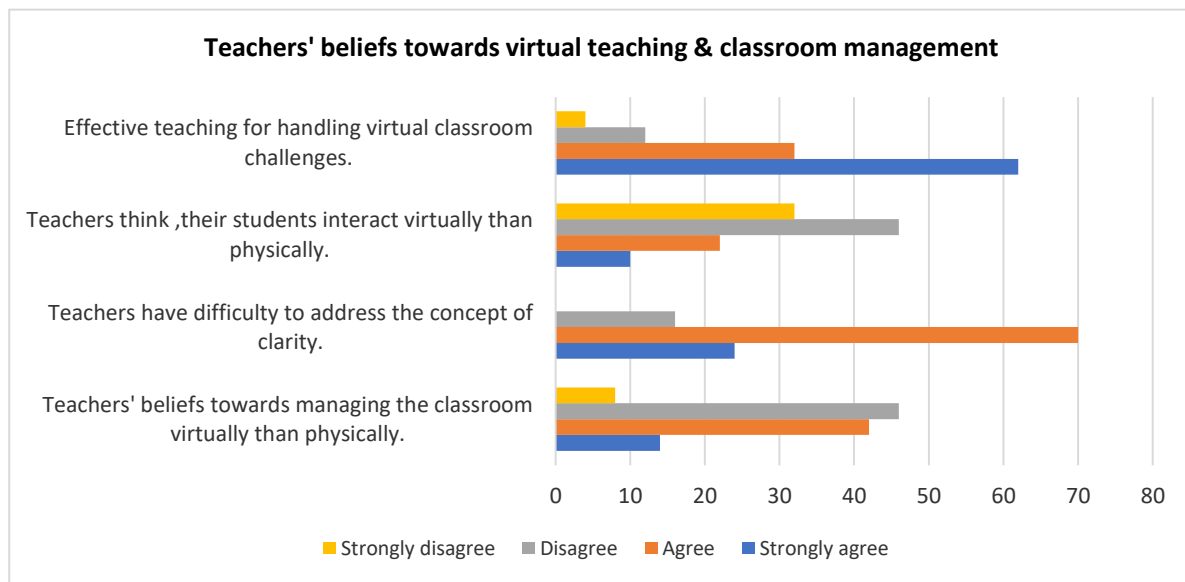


Figure 2. (Teachers’ beliefs towards virtual teaching & management) frequencies

In response to item no (4) “Teachers' beliefs are at play in managing the classroom virtually than physically”, more than two fifths (41%) of the respondents disagreed with the idea of teachers’ beliefs being a factor in managing the classroom virtually than physically. Though, other respondents equating to just over a third (38.2%) agree. With respect to item no (5) “Teachers’ concern about addressing the concept of clarity”, between two fifths to less than a fifth of the respondents totally agreed concerning the concept of clarity. Nonetheless, less than a fifth (14.5%) disagreed with a claim that there is no difficulty at all.

Looking at responses to item no. (6) “Teachers think, their students interact virtually than physically”, more than two fifths (41.8%) of the respondents disagreed and just under a third (29.1%) strongly disagreed that students interact virtually better than they do inside classrooms. Further, the respondents who agreed with the notion represent only a fifth of the sample (20%). With respect to item no. (7) “Effective teaching for handling virtual classroom challenges”, over a half (56%) of the sample strongly agreed that effective teaching is an ideal way to overcome the challenges of the virtual classrooms. On the other hand, a small number of the respondents (3.6%) strongly disagreed with this perception.

Table 3. Descriptive Statistics of Teachers’ attitudes

Teachers’ Attitudes	Descriptive Statistics				
	N	Minimum	Maximum	Mean	Std. Deviation
8. Teachers need to teach their students the polices of the virtual learning.	110	1.00	3.00	1.4364	.56710
9. Parent collaboration is highly demanded in the virtual learning.	110	1.00	4.00	1.3455	.58162
10. Teachers are supported to teach virtually.	110	1.00	4.00	2.2545	.77147
Valid N (listwise)	110				

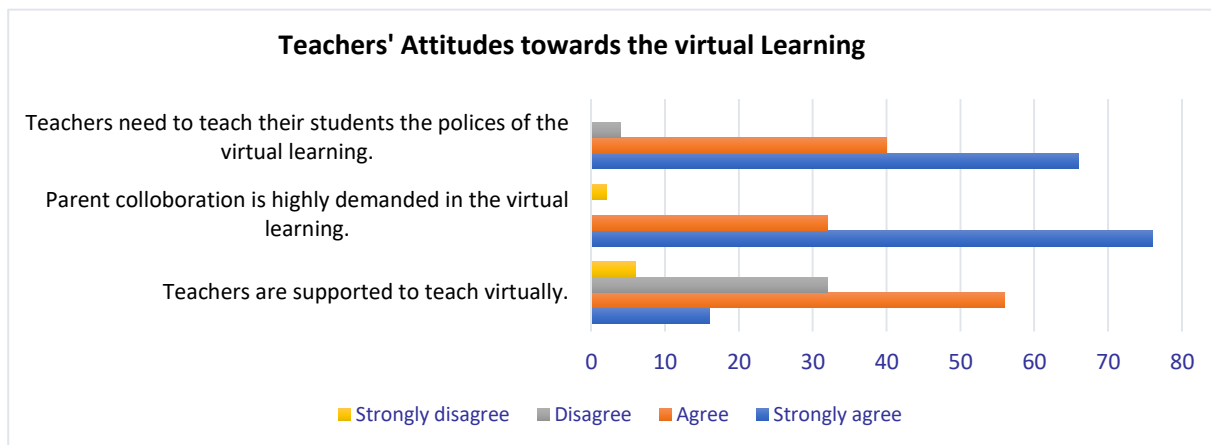


Figure 3. (Teachers’ attitudes towards the virtual learning) frequencies

In response to item no. (8) “Teachers need to teach their students the polices of the virtual learning”, a significant proportion of the respondents (i.e. more than three quarters) strongly agreed that there is the necessity of making students aware of the rules and regulations to be followed in the virtual classrooms to ensure that no disciplinary issues arise. On the other hand, an insignificant number of respondents at less than (5%) disagreed. Responding to item (9) “Parent collaboration is highly demanded in the virtual learning”, a large proportion of the respondents at around 70% strongly agreed that parents should have collaborative roles to make the mission of the virtual learning successful especially from a learning environment at home while there is a small minority of the respondents, around (2%), who disagreed with the notion of the significant role of parent collaboration. Finally, responding to item (10) “Teachers are supported to teach virtually”, a large number of the respondents at just over a half (51%) strongly agreed that support is available to assist them in teaching virtually. As a result, this contradicts totally with item (1) of the questionnaire in this study. However, other respondents at just under a third (29.1%) disagreed that teachers are provided adequate support in teaching virtually.

5. Conclusion

The instrument sufficiently answered all the research questions of the study thoroughly highlighted with literature of the study and analysis of the data generated from the questionnaire. The point of inquiry of this study was whether teachers face difficulty managing the classrooms virtually. The result is obvious in response to item (1) of the questionnaire. The responses confirm Biswas and Nandi’s (2020) study which opined that the challenges of a virtual learning environment may be internal/subjective and external/objective from the perspective of the teacher. Further, other challenges like lack of interest within teachers to learn and adapt to new learning situations or unwillingness to apply ICT in the classrooms though they are fully equipped, have also been upheld in this study.

As a matter of fact, the factors that influenced teachers’ ability to manage the classroom virtually are reflected in questionnaire items (1) , (2) and (3) that have been discussed largely in the data analysis of teachers’ challenges such as difficulty to manage the classrooms, inability to put distractions away and the unconducive learning environment at home. Another question that the study raised was whether teachers are supported to manage the classroom virtually. Responses to item (10) of the questionnaire show that a large number of the respondents (just over a half at 51%) strongly agreed that teachers are supported to teach virtually. Davis and Roblyer (2005) stated that some of the skills necessary for teaching in an online environment are consistent with those provided by traditional teacher education programs, but there are other necessary skills that are largely absent from these. The last question has been addressed by findings of the study, what are teachers’ beliefs towards their interaction with students virtually. Item (6) discusses the issue of students’ interaction. The responses that disagree are more than two fifths (41.8%) and just under a third (29.1%) strongly disagreed that students adequately interact virtually with the teachers. This finding is also supported by Jain (2020) who claimed that virtual classrooms also have some disadvantages such as communication gaps or low-speed internet connection.

6. Significance of Findings

As numerous previous studies have reported poor learner engagement and distraction as some of the factors at play

in online learning platforms, this study is planned to investigate the perceptions of the preparatory and secondary school teachers in Qatar to the task of classroom management in virtual learning. The researcher firmly believes, however, that there is a dearth of such studies in the context of virtual learning in Qatar which implemented online learning on a nationwide scale as soon as Covid19 was declared a pandemic. Accordingly, a questionnaire duly validated by three distance education experts was designed with Cronbach alpha of 0.81 assured the internal consistency of the questionnaire items. The first item of the questionnaire emphasized that teachers faced difficulty managing the classrooms virtually due to internal /external factors. The respondents are exactly a fifth (20%) who strongly agreed and two fifths (45%) agreed. Finally, the study is well-thought-out as valued reference in addressing teachers' attitudes and experiences towards the virtual learning. It is an authenticated, factual document that would guide further studies related to distant learning barriers and students' interaction through the virtual world. In addition, the essential point that would track the effectiveness and interaction of the students is "parent collaboration" especially in learning through the virtual world. It is one of the backbones in supporting and achieving goals whether their children interact positively or facing challenges that would interfere their learning process appropriately at homes.

7. Recommendations

The recommendation below can be offered in line with the findings of this research:

- Enhancing the virtual learning through providing successive training for both teachers and students to have adaptability on app platforms.
- Innovating effective teaching strategies to increase students' interaction in the virtual learning environment.
- Ensuring that teachers are fully supported to overcome the challenges of virtual classroom management.
- Schools' administrations should incorporate parents' collaboration to support the most challenging factor like a learning environment at home.
- Supporting students to be autonomous learners and have unlimited access to the study materials on the app platform.

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Appendix

No	Statements	Strongly Agree	Agree	Disagree	Strongly Disagree
1	Teachers have difficulty to manage the classroom virtually.				
2	Teachers are unable to put distractions a way made by students.				
3	The most challenging to manage the classroom virtually is a learning environment at home.				
4	Teachers' beliefs in managing the classroom virtually than physically.				
5	Teachers' concern about addressing the concept of clarity.				
6	Teachers think, their students interact virtually than physically.				
7	Effective teaching for handling virtual classroom challenges.				
8	Teachers need to teach their students the polices of the virtual learning.				
9	Parent collaboration is highly demanded in the virtual learning.				
10	Teachers are supported to teach virtually.				

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