The Impact of COVID-19 on the Education Routines of Students of Determination (SOD) and their Family Members

تأثير فيروس كورونا على الروتين التعليمي لطلاب أصحاب الهمم وأفراد أسرهم

by

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Abstract

Covid-19 has impacted virtually every life segment including the normal educational routines. Students, teachers, and parents across the world have faced plenty of emotional and psychological problems because of the ongoing pandemic. Special education or inclusive education is one sector in which the Covid-19 has brought significant problems. Students of Determination (SOD) or students with Special Education Needs (SEN), students with Special Education Needs with Disabilities (SEND), their parents and teachers struggle a lot in conducting the online education smoothly for the aforementioned student community that needs special attention. Teachers have little idea regarding how to teach effectively these student communities online. Parents struggle a lot in making sure that their children with disabilities attend the online classes comfortably. Students with disabilities on the other hand develop plenty of emotional problems because of them being unable to fulfill the challenges of remote learning.

The purpose of this study is to identify how educational routines have been affected due to the pandemic and to what extent and mitigation measures are put in place to deal with the new challenges in inclusive education. A mixed-method of research has been used for the collection of data for this study. The study has collected data from SOD, their parents, and teachers working in the private schools in Dubai.

الملخص (باللغة العربية)

لقد أثرت جائحة كوفيد-19 فعليًا على جميع قطاعات الحياة بما في ذلك الروتين التعليمي العادي. لقد واجه الطلاب والمعلمون وأولياء الأمور في جميع أنحاء العالم الكثير من المشاكل العاطفية والنفسية بسبب استمرار هذه الجائحة. يُعد التعليم الخاص أو التعليم الشامل أحد القطاعات التي تأثرت تأثرًا شديدًا بجائحة كوفيد-19. الطلاب أصحاب الهمم أو الطلاب ذوو الاحتياجات التعليمية الخاصة والطلاب ذوو الاحتياجات التعليمية الخاصة والإعاقة وأولياء أمورهم ومعلموهم يتكبدون شق الأنفس في أداء العملية التعليمية عبر الانترنت بسلاسة لمجتمع الطلاب المذكور أعلاه والذين يحتاجون إلى عناية خاصة. لا يحظى المعلمون بالمعرفة الكافية فيما يتعلق بكيفية التدريس لمجتمع الطلاب هؤلاء عبر الانترنت، كما يكافح أولياء الأمور كثيرًا للتأكد من حضور أطفالهم ذوي الإحتياجات الخاصة للدروس عبر الانترنت بشكل مريح. من ناحية أخرى، يعاني طلاب أصحاب الهمم من الكثير من المشاكل العاطفية بسبب عدم قدرتهم على مواكبة متطلبات التعليم عبر الإنترنت.

الغرض من هذه الدراسة هو تحديد كيف تأثر الروتين التعليمي بسبب الجائحة وإلى أي مدى يتم وضع تدابير التخفيف للتعامل مع التحديات الجديدة في التعليم الشامل. تُستخدم طريقة بحث مختلطة لجمع البيانات المطلوبة لهذه الدراسة. جمعت بيانات هذه الدراسة من الطلاب أصحاب الهمم وأولياء أمورهم والمعلمين العاملين في المدارس الخاصة في دبي.

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Dedication

I wholeheartedly dedicate this dissertation to my parents who always inspired and encouraged me in my studies. They believed in my abilities and have given me all the resources necessary for completing my studies. Likewise, I want to thank my ever-supportive husband who always encouraged me. I dedicate it to my brothers, sisters, and friends who always communicated with me and provided tips for completing this paper. Above all, my teachers showed no reluctance in providing their valuable feedback whenever I approach them for guidance. So, I dedicate this paper to them as well.

Acknowledgments

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A LIST OF ABBREVIATIONS USED

SEN	Special Educational Needs
SEND	Special Education Needs with Disabilities
SOD	Students of Determination
UNICEF	United Nations International Children's Emergency Fund
UNESCO	United Nations Educational, Scientific and Cultural Organization
UAE	The United Arab Emirates
CoV	Corona Virus
MERS	Middle East Respiratory Syndrome
SARS	Severe Acute Respiratory Syndrome
BC	Before Covid 19
DC	During Covid 19
AC	After Covid 19
ADHD	Attention Deficit Hyperactivity Disorder
CXC	Caribbean Examinations Council

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The Impact of Covid-19 on the Education Routines of Students of Determination (SOD) and their Family Members

1.0 Introduction

1.1 Background of the Study

COVID-19 is an infection transmitted by the Coronavirus family of viruses (CoV). It has the potential to cause health issues such as the simple cold and the well-known Middle East Respiratory Syndrome (MERS-CoV). Although many strains of coronaviruses were identified in the past, new strains like novel coronavirus (nCoV) have been identified only in the recent past or only after the disease spread of the COVID-19 during the latter months of 2019 (World Health Organization, 2020). The advent of COVID-19 has brought huge changes to the world. Some people believe that the ongoing pandemic has divided the history of the world into three segments: BC (Before COVID-19), DC (During COVID-19), and AC (After COVID-19). However, nobody has any idea about how long will the COVID-19 pandemic lasts although the injections against the coronavirus started to use in different parts of the world at present. Virtually, there were no sectors that escaped from the striking power of the coronavirus. Economic, employment, and educational sectors seem to be the worst affected areas in this regard. Instead of the traditional offline classes, educational activities across the world currently function through online channels because of the ongoing pandemic.

As social distancing is necessary for the fight against the COVID-19, offline classes cannot be resumed until the pandemic ends. The COVID-19 pandemic has adversely affected not only the inclusive education sector but the global education sector as a whole. Inclusive education refers to an educational system in which it allows students to be welcomed by their neighboring school to attend the latter's regular classes irrespective of their difficulties or

disabilities. Inclusive classrooms are strategically designed so students will get equal opportunities and participate together in their learning and development (Inclusive Education Canada, 2020). UNICEF has recently conducted a study that has an extensive understanding of the COVID-19 effects on the global education sector that includes inclusive education. Some of the findings of the aforementioned study are 1) more than 90% of the countries have already adopted remote education or online education, 2) globally 31% of schoolchildren (463 million) do not have access to online education, 3) more than 83% of the countries have adopted online education, 4) at least one (1) billion children are left behind as a result of school closures, 5) 3 out of 4 student do not have means to attend online education belong to the poorest households (UNICEF, 2020). The aforementioned statistics are quite alarming and they reveal the problems facing by school children and their parents as part of the ongoing pandemic.

According to Nelson (2020), the structured routine used in special education has been disturbed considerably after the outbreak of the ongoing pandemic. During the pre-COVID-19 era, it was the teachers who established the routine of studies in the special education sector. However, during the pandemic era, parents were forced to undertake that responsibility which was done earlier by the teachers. It should be noted that parents of special needs children may not have ample awareness regarding how the education of their children can be conducted during the pandemic era. They may experience immense stress while seeing their handicapped children failed to cope with the ongoing situation. They need to use the trial-and-error method on a repeated basis to see what strategies work or not work for their children with disabilities

1.2 The Problem Statement

The ongoing pandemic has increased the scope and popularity of online education across the world. Parents are reluctant in sending their children to traditional offline

classrooms. Today, parents across the world show more interest in online education and ask industry participants of the educational sector to further widen their operations. Before, parents were reluctant in using online channels for the educational purpose of their children. However, after the onset of the COVID-19 pandemic, the situation has dramatically changed. The lack of facilities at home for online education is a big problem for many students and parents across the world. It should be noted that computers, television, mobile phones, and the internet are required at home if parents want their children to use online educational channels effectively. Although these facilities are available in rich families, poor families may struggle to arrange such facilities at home to expedite their child's development.

Although the adverse outcomes of the pandemic have impacted all students including those with disabilities, students with Special Education Needs (SEN) and those with Special Education Needs with Disabilities (SEND) seem to be the worst affected ones. The pandemic has affected the SEN and SEND students psychologically as these students are forced to spend many months in isolation at their homes. Prolonged stay at home without communicating with peers may develop fear, anger, and other emotional problems among such students. These students may develop discomfort when their daily routines get interrupted for some reason. According to Kadabashy (2020), the temporary closure and limitations of public spaces and social functions respectively, have affected the socializing of the aforementioned group of students with their peers.

1.3 Aim and Objectives

This study aims to generate insights into the global effects of COVID-19 pandemics on the educator sector. The study aims to investigate how students and parents cope up with the changing trends in the educational sector as part of the ongoing pandemic. Specifically, this study seeks to attain the following objectives:

i. To analyze the effects of COVID-19 on educational routines and how both students and parents were affected.

ii. To identify how COVID-19 specifically impacted those with special education needs (SEN) and those with special education needs and/or with disabilities (SEND).

iii. To get the views of those affected and what proposals they would give to improve the situation.

1.4 Research Questions

i. What is the impact of covid-19 on educational routines, and how are students and parents affected?

ii. How has covid-19 specifically impacted children with special needs and/or disabilities?

iii. What are the views of those affected, and how would they propose the situation is improved?

1.5 Research Hypotheses

The current study tests the following hypotheses:

➢ COVID-19 has not affected the inclusive educational sector very much

➢ COVID-19 negatively affected the inclusive educational sector across the world

1.6 Significance of the Study

The aim of this study is to determine the effect of COVID-19 on different components of the educational system. Since the pandemic's advent, the normal going to

school and attendance of classes to be taught by a teacher became untenable. This is because the coronavirus is an airborne disease that spreads via respiratory droplets (Wiersinga et al., 2020). Sun and Zhai (2020) note that infected respiratory droplets can spread as far as 1.6 meters, and therefore efficacious social distancing should have intervals of 1.6-3.0m. Since this could not be controlled for school buses, classes, locker rooms, gymnastic rooms, and playing fields, the children had to study from home. This severely disrupted the normal routine of learning that has existed since the advent of formal schooling. This study identifies these disruptions and analyzes their impact comprehensively.

Because of the fear of the spreading of coronavirus, parents show more readiness to use online channels for the education of their children. The hegemonic goal of online studies is to ensure that learning continues uninterrupted for all students. It is, therefore, important that regular assessments are made to determine if this is so. As full-time online learning across all educational levels is an unchartered path, there are many lessons to be learned along the way. The results of this study will aid both the students and their parents in gaining a better understanding of the advantages and disadvantages of online education.

Students with SEN and SEND will likely be disproportionately more adversely affected. Disorders like autism, ADHD, dyslexia, and emotional and behavioral disorders usually require individual-focused teaching that necessitates a teacher's presence with expertise on their condition. The same is true for SEND disorders like deafness, being blind, or inability to speak. This recommendation of this study will be useful for Students with SEN and SEND as the findings of this research contain a thorough evaluation of disturbances to the educational routine and their impact on students with and without special needs and/or disabilities.

1.7 Research Structure

The details of the current study have been arranged under five distinct chapters. Chapter one is the section that introduces the topic. The background information regarding the COVID-19's bearing on learners in diverse academic settings and parents in general and that on the students with SEN and SEND in particular were tackled in this chapter. Moreover, the goal of the study, research issues, hypotheses, and importance have all been discussed in this chapter under various subsections.

The second chapter of this study reviews the necessary and related literature and studies concerning the global effects of the COVID-19 pandemic on the education sector. It utilizes the results of the previous studies to get more insights regarding how students and parents adjust to the challenges raised by the pandemic. For convenience, different themes of the topic have been organized into various subheadings within chapter two. The methodology for this dissertation is addressed in the third chapter. It discusses the research nature, research strategy, research philosophy, data collection methods, data analysis techniques, research limitations, and ethical concerns of this study.

Meanwhile, chapter four of this study discusses its findings. Chapter four explains the study results, as well as the related outcomes of former academics who conducted similar researches. Lastly, the fifth chapter of this study explains the findings while chapter six provides the conclusion and recommendation to eradicate the concerns of students (including students with SEN and SEND), parents, and teachers during a crisis like the ongoing pandemic.

<center>**2.0 Literature Review**</center>

2.1 Introduction

The integrity and consistency of the information obtained are critical to the effectiveness of a research report. The author must obtain secondary data in addition to primary data while conducting an extensive study like this. The review of existing literature helps the researcher get more insights regarding what previous scholars have identified or said regarding the current research issue. This section aims to probe through the related literature pertinent to the current study. For convenience, different themes were arranged under different subheadings in this chapter.

2.2 COVID-19 and Learning

Virtually, there are no educational segments that are free from the bad effects of COVID-19. According to a recent study by UNESCO Bangkok, disabled students are hindered by various education barriers such as the lack of adequately trained teachers, resources, equipment, specially designed materials, and internet access. Moreover, these students lose access to school meals due to school shutdown and the opportunity to play with their friends (UNESCO Bangkok, 2020a).

Although some countries did appropriately succeed in managing distance learning, many struggles to do so because of various problems. For example, Thailand is one country that was able to taste success in distance learning. In Thailand, student-centered online education is provided for everyone even during the pandemic. The country was able to distribute equitable education opportunities in cities, rural, and outreached areas (UNESCO Bangkok, 2020b).

At the same time, in heavily populated countries like India, students, teachers, and parents face obstacles when using e-learning platforms. Numerous students across the country are unable to surf the content or use electrical gadgets such as a computer, mobile,

<center>7</center>

tablet, radio, or television due to budget reasons. The dilemma of who can use television and computers in residences where they are convenient is significant. An average family in the country may have only one TV or computer. When online education for different classes occurs at the same time, the fight for the control of this equipment in such families will be increased (Singh, 2020).

In several nations, the COVID-19 infection curve has flattened or declined as 2020 approaches. This has led to the easing of restrictions. Some countries have allowed the phased reopening of schools. Denmark has already opened schools for allowing students to attend major examinations (Ziauddeen et al., 2020). Das et al. (2020) stated that Germany, Japan, Israel, and Denmark had already reopened schools. They state that school-going children are three times less likely to be admitted to hospital with COVID-19 complications, and theirs was a more asymptomatic discourse. The grim reality is that they may transmit this to older family members who may not be so lucky (Das et al., 2020).

2.3 COVID-19 and Online Learning

According to Carey (2020), the majority of the world population undergo quarantine due to the COVID-19 pandemic outbreak. In his opinion, the Corona Virus has transformed educational institutions from traditional to the virtual mode of pedagogy. Even institutions that were reluctant to accept the online mode earlier, forced to opt for it at present because of the serious challenges raised by the pandemic. The pandemic has unveiled the hidden potential of online teaching and learning. The major concern at present is not about the ability of online teaching and learning in ensuring quality education, but about how academic institutions will be able to adapt to such an environment (Carey, 2020).

COVID-19 necessitated a transition from physical learning to online learning. According to Basilaia & Kvavadze (2020), online learning occurs in five forms: knowledge-based, synchronous and asynchronous trainings, hybrid training, and online support. In the

knowledge-based form, the course is outlined on the website with instructions to follow. The student has to learn with only the outline and instructions given autonomously. In the case of online support, students get assistance and notes from the teachers and a way to communicate with other students and the instructors. In asynchronous training, teachers post pre-recorded lessons for students to watch. The students can provide feedback or request help from teachers after going through learning materials posted by the teacher. Synchronous training uses applications such as Zoom to offer real-time lessons. This form closely mimics classroom lessons. The only difference is that this is done virtually or online. Hybrid learning, on the other hand, combines e-learning and physical face-to-face learning (Basilaia & Kvavadze, 2020).

According to Tanis (2020), synchronous learning is the best form of online learning to facilitate real-time feedback dispensations among students or between students and their instructors. It demands that teachers be meticulously organized before the commencement of the classes and ensure students concentrate on the topic as much as possible. Finally, it upholds fidelity during examinations as the teacher oversees the examinations. All these advantages accrued while maintaining COVID-19 prevention norms like social distancing (Tanis, 2020).

2.4 Benefits and Problems of Online Education During COVID-19

According to Zhou et al. (2020), online education can break the limitation of study time and space. In their opinion, teachers can provide high-quality, non-delayed, and multi-person online classes to students using cutting-edge Internet technology. Moreover, teachers can enrich the contents with the help of massive electronic teaching resources.

In a study conducted by Dai & Lin (2020), China presented the "School's Out, But Class's On" concept as part of its effort to deal with the problems generated in the educational sector due to the COVID-19 pandemic. This strategy helps China, secure the

health of both its students and teachers during the COVID-19 outbreak. Virtual world communication helps teachers communicate with the students properly and provide them the necessary learning tips (Dai & Lin, 2020).

Sun et al. (2020) conducted a study to know more about what students say about online classes. They have used the interview method for data gathering. After analyzing the collected data, they found that 50% of students were of the view that the teaching goals can be fully achieved and 46% felt that only the objectives can be met with minimum standards through online learning. The students admitted that they were unable to pay enough attention to online lessons due to slow internet speeds, noise, movement distractions in the house, and lack of reliable laptops, computers, or mobile devices (Sun et al., 2020).

A study conducted by Unger & Meiran (2020) supported the findings of Sun et al. (2020). Their study revealed that 50% of students were anxious about studying online. They concluded that although online learning is the best option during this pandemic, it is not as effective as classroom learning. The mental stress developed by online students is more compared to that developed by students who attend classroom classes. The devices or technologies used for online learning may malfunction at times. As a result that, online students lose continuity in their learning. Such a scenario will increase the mental stress, agony, and frustrations of online students (Unger & Meiran, 2020).

COVID-19 has also disrupted learning routines by affecting the mental health of students or by infecting them. Indeed, one cannot learn when they were neither healthy nor mentally okay. COVID-19 has had more deleterious effects on children and young adolescents' mental health compared to that of adults. Singh et al. (2020) note that young children become fearful and anxious when a family member becomes infected. On the other hand, older children exhibit attention deficits and become preoccupied with their kin's well-being. Some of the parents have reported that their children felt loneliness, developed fear

and nightmares, and manifested anorexic tendencies due to online classes. The reason for these problems could be the reduced opportunities for socializing and interaction with other students and teachers (Singh et al., 2020).

COVID-19 has significantly disrupted examinations, with those bearing the most brunt being students transitioning from one level to another. The World Bank identified three approaches taken by different countries for conducting examinations. The Caribbean Examinations Council (CXC) chose to conduct its examinations online. The British canceled their GCSE exams, whereas Hong Kong, Kenya, and many other countries postponed their tests (Cairns, 2019).

The postponement of examination has created another avenue of stress for students. A study by Lee (2020) reveals that students have been mentally disturbed by uncertainties surrounding their examinations. Many of them have big concerns regarding how their future could be. When asked to identify their mental stress on a scale of one to ten, the majority chose ten. In other words --- a large number of students are against the idea of postponing their examination dates. They want examinations to be taken place as previously scheduled to avoid uncertainties in their future career (Lee, 2020).

Importantly, Xie & Yang (2020) researched at the Second Elementary School in Daxie, Ningbo City, China, to understand more about how remote e-learning benefits students. After reviewing the data, they came to the conclusion that 1) attributed to differing in family circumstances, all participants cannot deliver higher web-based learning, and 2) there is a deficiency in the availability of autonomous learning materials. Some of the other findings of the aforementioned study are 1) 18.7% of the students do not have mobile phones, iPods, or computers, 2) 38.79% have problems with signal strength, 3) 22.41% have poor signal data, 4) 31.03% have problems associated with conflict of time, 5) 37.07% have problems in

operating mobile computers and 6) 39.66% do not have access to city or district digital TV (Xie & Yang, 2020).

Unlike offline learning, online learning has the potential to develop plenty of challenges related to learners' issues, educators' issues, and content issues. The institutions that offer online learning will face the issues like how to help students engage properly with the learning process. Teachers will face many issues related to changes in teaching methodology and the management of time while they switch from offline mode to online mode. Content development is another major challenge facing by teachers when they change the offline mode to online mode. Teachers are well accustomed to the methodologies that help them engage the students properly while conducting classes in offline mode. But they are not much familiar with such strategies while conducting classes online (Kebritchi et al., 2017).

According to Cojocariu et al. (2014), ensuring the quality of e-learning is another major challenge in online education. Governments across the world have not developed any clear guidelines or stipulations for their educational policies about e-learning programs before the arrival of the COVID-19 pandemic. To improve the quality of e-learning, governments need to address the aforementioned challenges with immediate priority (Cojocariu et al., 2014).

2.5 Inclusive Education and COVID-19

According to a recent report by UNESCO around 15% of the entirety of the world's population is disabled in certain ways. Moreover, the Asia and the Pacific region alone have about 690 million people with disabilities. The ongoing COVID-19 pandemic has isolated at least 190 million disable people and children from quality learning and their school community. Although all students face the problems related to the ongoing pandemic, SOD students with disabilities face more problems like the threats of being left behind and exclusion from the virtual world. In developing countries, only around 0.5% of books are available in accessible formats for students with SEN or SEND (UNESCO, 2020).

Umesh Sharma and Fiona May from Monash University, an Australia-based institution, conducted a study to expand their understanding of the COVID-19 pandemic to inclusive education. As part of their data gathering for their report, they interviewed teachers, school administrators, education support workers, learners, and parents. They discovered obstacles to using technology, a lack of educational resources and individual learning strategies, and a disruption of social ties, among other things to be the three major negative impacts of COVID-19 on inclusive education. At the same time, the above study has identified certain positive elements also. For example, schools and teachers are forced to strengthen their partnership with parents of students with SEN or SEND during the pandemic period. Greater communication between parents, teachers, and students with SEN or SEND has improved the engagement of students with SEN and SEND. Such a scenario helped these children improve their social and emotional wellbeing further. Furthermore, these students could develop their technological skills because online learning necessitates the use of devices such as personal computers, the internet, and smartphones (Sharma & May, 2020)

2.6 Inclusive Education in UAE

The United Arab Emirates has a comprehensive policy for accommodating special needs children in the mainstreams of the educational sector. The Ministry of Education provides ample help and educational opportunities to students with SEN and SEND. Moreover, a project has been initiated by the Ministry of Community Development called 'School of All' in 2008 to integrate special education children into the government education system. As part of this campaign plenty of children with disabilities in the country have received a quality education and some of these children have received even PhDs. Another campaign launched in 2008 itself in the country in the name of Our Life is in Our Integration. This campaign aims to provide the required atmosphere and amenities for motivated individuals and to assist them in effectively accessing the learning environment. The National

Project for Inclusion is functioning under H. H. Sheikha Fatima bin Mubarak, (the Supreme Chairperson of the Family Development Foundation and Chairwoman of General Women's Union) for meeting the educational needs of children with disabilities. Until 2014-2015, around 156 public schools across the UAE have implemented the aforementioned project (UAE, 2021).

Dubai, one of the major emirates of the UAE, has a special policy framework for prospering inclusive education. Some of the major principles of the Dubai inclusive education policy framework are given below:

- View and honor student diversity as integral to the human condition

- Recognize the learning potential of all including students with SEN and SEND

- Implement child-centered and differentiated approaches to teaching and learning

- Accept the right of all children to have education

- Avoid marginalization and discrimination in the educational sector based on SEN or SEND

- Reduce barriers to the participation in learning of students with SEN or SEND

- Remove all barriers to learning by modifying curricula, teaching and learning strategies

- Reject the idea that some learners cannot learn a particular topic because of their disability

- Develop an inclusive culture within the educational sectors and settings

- Be accountable for all the educational programs included in the inclusive educational sector

(Knowledge And Human Development Authority, 2017).

2.7 The Impact of School Disruptions on Children Living with Disabilities (SEN and SEND)

As mentioned by Singh (2020), among children aged 2-8 years, approximately one in six has special educational needs. When schools were in session, these children were surrounded by teachers who know how to handle them and their peers who face the same problems. Such a surrounding gave them comfort and they were used to it. With the lockdowns and isolation measures, their daily lives and routines have been disrupted. Children with special needs find it more challenging to adjust to new environments and routines. Moreover, they may not understand why their movements and freedoms are now restricted. This may result in the relapse of their symptoms, which their parents or other family members may not know how to handle (Singh, 2020).

Human Rights Watch surveyed teachers, guardians, and caregivers in May 2020 to determine the effects of the COVID-19 pandemic. One of the main results of the survey shows that remote learning or educational technology programs for children with disabilities are frequently neglected. In normal classrooms, such children received one-on-one support from teachers. However, in online classrooms, the facility for such support is not available. Moreover, schools offered other professional services and programs to such children. However, online classrooms cannot offer such things to students with SEN or SEND (Barr, 2020).

According to Burdette et al. (2013), children with disabilities may not be comfortable with their online education due to the negligence of their teachers with the former's needs. The difficulties in understanding the actual needs of children with special needs will force teachers to conduct online teaching passively. In real classrooms, teachers can identify those children who are not attending properly to the lectures delivered. But in online classrooms, teachers may face difficulties in identifying which students are concentrating more in the

class and which are not. Moreover, the online educational environment is less accessible to children with special needs compared to normal children. In short, the possibility of getting individual attention is denied to children with disabilities through online classes (Burdette et al., 2013).

Many teachers have reported that they have no idea to implement the principles of inclusiveness within online learning since they were not trained to deal with this new scenario. The resources needed to implement inclusive teaching online are limited for many teachers (Pugach, 2005; Young, 2008). Moreover, student engagement levels of online education are less compared to those in traditional learning. Even in traditional classrooms, teachers struggle a lot to keep the children with special needs attentive in the class for a prolonged period. In online classes, such a struggle will be intensified further. Less stimulus to learn, technical issues, space and time separation from educators, and a lack of parental encouragement is noted as a few of the other problems facing by children with disabilities while attending online classes (De la Varre et al., 2014). A study by Rice & Carter (2016) revealed that a student's impairment is a predictor of poor e-learning grades. Children with disabilities know this fact well and that is why they show less motivation for attending online classes (Rice & Carter, 2016).

2.8 The Impact of School Disruptions on Parents

As per Anderson (2020), the majority of parents in various nations have become educators. Earlier, the parents did not need to take more care about the education of their children as teachers were able to provide the necessary educational tips to the students. Today, the services of teachers are not available directly although it is available online. As a result that parents are forced to spend more time with their children to make sure that they are progressing in the right direction. Parents are forced to take such an additional responsibility along with their normal duties and responsibilities. Many of the parents are working

professionals and they may struggle to allocate enough time for educating their children. Such a scenario will develop more pressure on parents (Anderson, 2020).

As pointed out by Xia (2020), the home study of students needs the cooperation of homeroom teachers, classroom teachers, and parents. In normal classrooms, teachers give lessons directly to students and there is no need for the participation of others. However, in terms of online education, parental involvement in their children's studies is inevitable. Not all children need to be comfortable in using new technologies and educational applications such as Zoom. Parents need to help them out in this regard (Xia, 2020).

Although employers were ready to provide flexibility in jobs to working parents during the beginning of the pandemic, they are not ready to do so at present. As a result of that, many parents struggle to spend more time with their children who are struggling with their studies. Working women were struggling a lot compared to working men since the responsibility to educate the children mostly lies on the shoulder of mothers. "Globally, women do two-and-a-half times as much unpaid care and domestic work as men, and 84 percent of lone-parent households are headed by women" (Barr, 2020, p.1).

During the COVID-19 pandemic, as an assistant professor in McMaster University's School of Rehabilitation Science, a Can Child Scientist, and an adjunct scientist at Bloorview Research Institute Phoenix (2020), I performed research to better understand the difficulties that children with disabilities and their families encounter. The study found that the effects of school closures, medical equipment shortages, and social distancing have adverse effects on children with disabilities and their families. Parents who have COVID-19 may struggle a lot to manage their children who have some kind of disabilities as social distancing protocols are necessary to prevent such children from getting infected by their parents. Many such children require medication, personal protective equipment, home care, respite, and rehabilitation services. However, parents who have

COVID-19 may struggle to provide such things to their children with disabilities. Above all the balancing act of childcare, child education, and work demands cause plenty of pressure upon parents. Such parents cannot provide specialized care that was available to their children from schools. For example, the services of speech-language pathologists are available in schools for children with speech difficulties. Parents may struggle a lot to provide such services to their children at home. Some online educational channels avoid children with learning difficulties. In such cases, parents are forced to undertake the full responsibility of the education of their children. Children with disabilities may develop mental health challenges such as loneliness, depression, and anxiety if they failed to get enough socializing from peers for a prolonged period. The consequences of these problems will affect the parents very much (Phoenix, 2020).

As noted by Smith et al. (2016), parental involvement is unavoidable in the online learning of children with disabilities. In their opinion, teachers and parents change their roles in online learning. In normal learning teachers have an active role and parents function as facilitators. But in online learning, teachers act as a facilitator and parents take charge of the actual roles of the teachers. Many parents do not have awareness regarding such a role change while trying to educate their children online. The level of parental engagement required for online learning is more compared to that in offline learning (Borup et al., 2015). Such an increasing level of engagement in the study of children is challenging for parents who have the responsibility of a larger family. Low income will also prevent parents from concentrating more on the studies of their children. Low income, forces parents to look for more options to earn more income instead of concentrating more on the learning of their children (Cluver et al. 2020; Harper et al., 2013).

According to Currie-Rubin & Smith (2014), parents will struggle a lot to find enough time for helping their children in their online learning process because of their other personal,

social, and professional commitments. Assuming the role of a teacher by parents would disturb the family dynamics, leading to agonies, frustrations, and dejections not only for parents but also for children with disabilities (Smith et al., 2016). A study by Grolnick et al. (2015) reported that parents develop less motivation to teach when they have problems in handling their children with disabilities. As pointed out by Hoover-Dempsey et al. (2005) not all parents give ample importance to the education of their children with disabilities. Several parents send their disabled children to conventional classrooms, not for schooling, but to keep them out of trouble at home. Such parents may not bother too much to educate their children using the facilities of online learning.

According to Al-Dababneh (2018), different teachers possess different attitudes, skills, knowledge, and willingness to cooperate. Not all teachers need to encourage parents to give more attention to the online learning of their children with disabilities. Parents may be less interested in or motivated to participate in their children's distance classes if teachers do not inspire and guide them. Parental perceptions of special schools are also important in influencing parents to fully engage in their children with disabilities' schooling (Darch et al., 2004; Rogers et al., 2009).

2.9 Theoretical Frameworks

2.9.1 Social Inclusion and Exclusion Model By Cunningham and Fleming (2009)

The current study has made use of the theoretical framework developed by Cunningham and Fleming in 2009 known as the Social Inclusion and Exclusion Model. It says that students from marginalized communities (Students with SEN and SEND) are currently denied access to be able to participate effectively and meaningfully during their everyday school activities. It argues that students with disabilities must enjoy the required social and support services within their school premises instead of offering them needed services in extraordinary circumstances. This model considers six aspects as most

important in the education of students with learning disabilities. They are teaching methods, skills of handling learners, the emotional life, communication medium, learning materials, and low acceptance rates of institutions (Cunningham & Fleming, 2009).

2.9.2 Twenty-First-Century Learning by McPhail (2016)

In 2016, McPhail created a learning framework that suits 21st-century learners. This framework is governed by six (6) main principles: (1) personalized learning, (2) equity, diversity, and inclusivity, (3) knowledge-based development of learning capacity, (4) revising students' and teachers' roles (5) creation of a culture for continuous learning and (6) new kinds of student-teacher partnerships and relationships.

<center>**3.0 Research Methodology**</center>

3.1 Introduction

The success or failure of any research study is largely determined by its methodology. Improper methodologies prevent researchers from making reliable, meaningful, and credible conclusions. On the other hand, the proper methodology helps researchers make meaningful conclusions with little effort. Moreover, the proper methodology enables researchers to strictly keep the focus on the topic throughout the entire course of the study. The aim of this study is to explore how COVID-19 affects the educational routines of Students Of Determination (SOD) and their families. It also helps to evaluate how they deal with these problems. Furthermore, the primary objective of this paper is to determine the influence of COVID-19 on the SOD's educational routines in terms of emotional support. This section focuses on the research methodology used, and other related aspects, such as research tools like research approach, research design, research philosophy, data gathering techniques, data analysis strategies, research limitations, ethics, etc.

3.2 Research Design

Research design, as described by Miller & Salkind (2002), is a structure that aids researchers in collecting and analyzing data. It identifies meaningful relationships among the research variables and gathered data which allows the researcher to generate relevant conclusions (Miller & Salkind, 2002). Initially, this study has not identified the research question properly, although the researcher decided to investigate some topics related to inclusive education. The exact research question of this study has been developed later after conducting extensive research. Exploratory research design is helpful when a researcher struggles to identify the appropriate research questions during the start of the study. As pointed out by Jupp (2006), according to previous research studies, an exploratory research design aids in better understanding the situation and identifying its key problems and

concepts. Another ground for choosing exploratory research design is its ability to help the researcher in deciding what type of research method is suitable for his/her studies. Initially, the researcher decided to base his data collection on quantitative research methods like surveys. However, later the researcher realized that conducting a survey is difficult during COVID-19 as social distancing protocols exist everywhere. So, the researcher decided to conduct some telephonic interviews and make the research qualitative instead of quantitative. Exploratory research provides enough flexibility to the researcher for switching through different research methods. A typical exploratory research design is well illustrated in the figure given below:
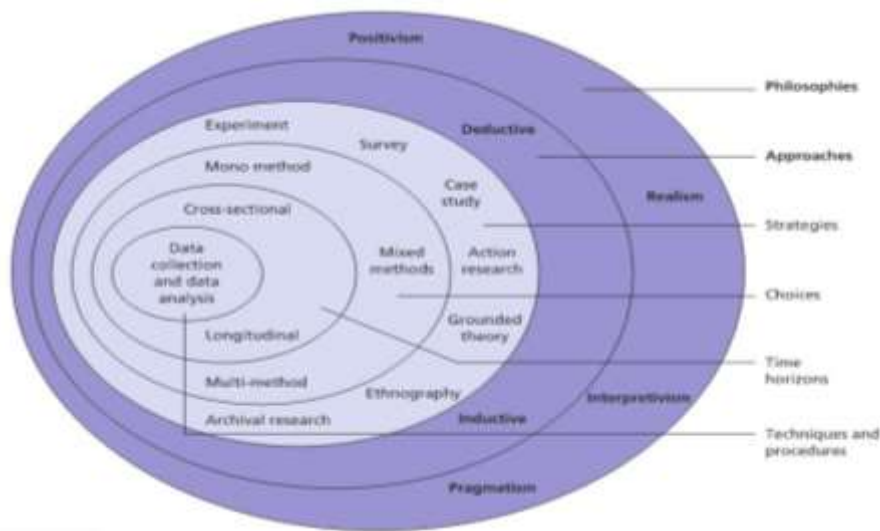
Figure 1

Research Onion (Saunders, Lewis, and Thornhill, 2009)

As evident from the above research onion, the methodology of the present study involves various elements like research philosophy, research approach, data collection techniques, analysis of data, research limitations, ethics, etc.

3.3 Research Philosophy

Any research study must have a well-defined philosophy to be considered successful. The current study has employed positivism and naturalism as the research philosophies. These two research philosophies function entirely on different principles and procedures.

"Researchers who make use of quantitative tools, techniques that emphasize measuring and counting, are called *positivists* whereas researchers who prefer the qualitative tools of observation, questioning, and description are called *naturalists"* (Sagepub, n.d., p.14).

Positivists usually use quantitative methods of research such as surveys for data collection. They are more interested in numbers and statistics. Positivists believe that the true source of knowledge is science. As per Gabriel (1996), such individuals accept that a theory is reliable only when it can provide the same result on different occasions of testing. As pointed out by Hallebone & Priest (2009), positivists argue that a methodology used for a research study should be free from the influence of the researcher's beliefs and attitudes. While using research philosophies other than positivism, the chances of interference of the prejudices and biases of the researcher during the different stages of the study cannot be ruled out.

In a study conducted by the University of Utah (2009), they found out that naturalists, on the other hand, depend primarily on qualitative research methods such as interviews because the perspectives and experiences of people in various contexts are relevant to them. Naturalism deals with probability and possibilities, while positivism works with evidence. People's analyses, assumptions, and opinions are given more weight. Positivists accept an argument only if it can be proved scientifically during different occasions of testing. However, naturalists do not have such compulsions. They accept possibilities and probabilities even if an argument does not have scientific backing. The naturalists' belief is such that there is nothing wrong with the opinions and perceptions of the public if the scientific method fails to explain data collected as part of the study. It should be noted that researchers usually come across many unexpected data during their study. In such cases, it is irrational to ignore such information due to the failure of experimental methods in interpreting those data. Naturalism says that such data should be

interpreted using methods of possibilities and probabilities. The aim of the naturalist research framework is to obtain an understanding of the nature of other people's perspectives in various ways, rather than to provide responses to put into a machine to generate numbers or statistics (Gabriel, 1990).

The current study investigates the problems faced by SOD and their parents because of education amid the COVID-19 pandemic. It is essential to collect the views and opinions of teachers, parents, and SOD to get more insights into the problem. Although surveys will be able to collect data from more people, they cannot collect more qualitative data because of the reluctance of the respondents in answering descriptive questions. At the same time, no such challenges will not be there when a researcher utilizes interviews are her primary data gathering technique. Interviews are capable of collecting more qualitative data although conducting a greater number of interviews requires more money and time. As qualitative data are more important than quantitative data for the successful completion of this project, the researcher decided to naturalism as the research philosophy and a qualitative method as the research method.

3.4 Research Approach

According to Burney (2008), the research approach helps a researcher collecting data in support of existing theories or to formulate new theories from collected data. The current thesis employed both inductive and deductive analysis methods. The inductive method aids researchers in developing new hypotheses based on the acquired data, while the deductive approach aids in collecting data to support current theories (Sekaran, 2006; Hyde 1998).

3.5 Data Collection Methods

This research included both primary and secondary sources of information. Secondary research was performed using secondary references such as textbooks, journals, blogs, the

internet, and newspapers. Likewise, it became simpler for researchers with the emergence of technology and the internet, since most secondary sources were accessible online (Jackson, 1994). Nonetheless, secondary research can gather information from the past but not from the present. Present data can be collected using primary research methods only. As mentioned earlier, a mixed method of research has been utilized in obtaining data for this study. The mixed research process, based on Saunders et al. (2009), combines quantitative and qualitative research strategies.

Quantitative research is logical and it is data-driven research that makes use of statistical and numerical tools (Easterby-Smith et al., 2012). It starts addressing queries with how many (quantitative) instead of why (qualitative) questions (Creswell, 2013). Quantitative analysis uses questionnaire forms, surveys, tests, and mathematical modeling, and econometrics to gather data (Easterby-Smith et al., 2012). Likewise, quantitative research is more flexible in terms of administration compared to qualitative research. For example, surveys can be conducted both online and offline. This form of study enables information gathering from a wider group of people (Bogdan & Biklen, 1998; Wu & Little, 2011). Above all, this form of study will classify relationships between different research variables, provide statistical explanations, create evidence, validate, forecast and monitor, and test hypotheses (Castellan, 2010; Neimark, 1995).

Although the reliability of quantitative research is extremely good, it has some limitations as well. According to Creswell (2013), conclusions from quantitative research have the potential to miss some essential factors. Moreover, the obtained conclusion from this type of research is inapplicable to a larger population. For example, the current study has collected data from Dubai schools, students, teachers, and parents. The impact of COVID-19 on SOD and their parents in Dubai need not be the same in another country. Being a well-developed state, SOD and their parents in UAE may not face much trouble compared to such people in an

underdeveloped country like Somalia or Ethiopia. That is why the researcher decided to use a qualitative method as the research method for this study.

As mentioned by Sykes (1990), illustrations of people, events, observed behaviors, and social interactions. Qualitative research focuses on obtaining an in-depth understanding of the concerned research problem (Bluhm et al., 2011). Hypotheses are at the core of this form of analysis. Qualitative research enables the manipulation of subjective data as well as improved contact between the researcher and the participants (Creswell, 2013). However, qualitative research, like quantitative research, has some drawbacks. Hard labor, time consumption, and technical issues are some of the major problems associated with this type of research (Creswell, 2013).

As noted by Bryman (1988), The quantitative portion of the sample is supported by qualitative approaches. Quantitative data is also used to describe research issues and these items are explained by qualitative results. In other words, the proper blending of qualitative data with quantitative data ensures the reliability and credibility of a research study. However, scholars such as Onwuegbuzie & Sutton (2006) have some concerns regarding the use of mixed methods of research in academic studies. In their opinion, the mixed research method cannot provide proper solutions to all research problems. In other words, the mixed method of research should be employed judiciously based on the nature of the problem under study. As pointed out by Bryman (1992), the success of the mixed research method depends heavily on the ability of the researcher to collect suitable data.

3.5.1 Interviews

Semi-structured telephonic interviews have been conducted as part of the current study for the collection of qualitative data. The samples for the telephonic interviews were collected from five private schools in Dubai, UAE. These schools accommodate normal students along with SOD. Due to the ongoing crisis of COVID-19, the majority of the schools in Dubai have

been closed for more than two months to contain the spread of infection. Therefore, the researcher could not collect data directly from the subjects. The researcher has taken permission from the school principals to conduct the telephonic interviews with the samples. All the ethical considerations were explained to the principal and the parents before sending interview questions to them. The telephonic interviews comprise of several questions which are given in the appendix.

Compared to interviews, surveys are capable of collecting information from a wider population and that also in quick time. It is difficult to interview more people and collect data from them because of time and budgetary constraints. However, since the internet and computers have made it possible to perform surveys with any sample size from anywhere in the world, it is simple to administer surveys with any number of participants. Although surveys are capable of collecting data from any number of people, they are incapable of collecting descriptive data. Most of the survey participants are reluctant in answering descriptive questions because of the concerns regarding time consumption. The reliability of the survey data depends on the attitudes and capabilities of the participants. Moreover, the chances of misunderstanding or misinterpretation of questions by the respondents are more while conducting a survey (Sincero, 2015). All the aforementioned disadvantages associated with the survey forced the researcher to collect data using only interviews although the researcher is aware of the fact that interviews are incapable of collecting data from a wider population as they are time-consuming and expensive.

In total, 9 interviews (3 each from parent, school management, and teacher communities) have been conducted as part of this study. Parents who participated in the interview were very happy to express their views and opinion. They told the researcher that they were waiting for an opportunity to share their opinion. Most of the school authorities or the teachers were also happy to assist the researcher in completing this study. They assured

the researcher that they are ready to provide any information that is necessary for the successful completion of the present study. At the same time, some school authorities and teachers were reluctant in cooperating with this study because of their concerns related to privacy violations.

3.5.2 Sampling

The materials for the teleconference interviews are chosen using purposive sampling. It is a sampling method in which authors choose components for their studies according to their opinion (Alchemer, 2020). The current study specifically investigates the problems of SOD and their parents during COVID-19. Therefore, it cannot use sampling methods such as random sampling that provides equal opportunities to all for being selected. The researcher aims to emphasize SOD's educational issues as well as their parents' emotional difficulties. Therefore, it was inevitable for the researcher to identify such students and parents before conducting the interviews.

Sample Group

- ➢ School authorities or management officials
- ➢ Parents of students with special needs and/or disabilities
- ➢ Teachers of students with special needs and/or disabilities

The sample group participation

Emails, requesting permission to conduct research have been sent to some private schools in Dubai. Five schools have permitted for conducting this study on their premises and they have provided a list of students including those with special needs and their parents. I sought the permission of these students and their parents before emailing the questionnaires to them and also for scheduling telephonic interviews. The sample group's main purpose was to provide their insights, experiences, and opinions on the influence of covid-19 on school

routines. This information is the major data used for answering the research problem of this study.

3.6 Data Analysis

Data analysis could be related to the processes involved in a production facility, where raw materials are processed into finished products through a series of steps. Researchers collect raw data that can be converted into meaningful data or findings or conclusions using various analysis or interpretation methods. Deduction, induction, and abduction are some of the common methods of data analysis in research studies. The researcher chose induction and deduction reasoning as the data analysis techniques for this study given that the research methodology is also inductive and deductive. Data processing approaches such as induction and inference can be represented using the following algorithms based on Apgaylard (2013):

$If X => Y$, and $Y => Z$, then $X => Z$ (deduction)

$If X => Y$, and $X => Z$, then $Y => Z$ (induction)

From the above algorithms, it is evident that deduction gives 100% right results all the time. But the same thing cannot be said about induction. As mentioned earlier, deduction makes use of scientific methods of data analysis where induction relies on possibilities and probabilities.

Schematically, deduction and induction can be represented as follows

Theory ⟶ observations/findings (Deduction)

Observations/findings ⟶ Theory/Induction (Bryman and Bell 2007, p.13). "There is no point in differentiating induction and deduction since theorizing will always involve the use of both the processes" (Partington, 2002, p.155).

The qualitative data from the interviews were analyzed using the thematic coding method. The responses of the interviewees were collected using the voice recording feature on the mobile phone. Thematic coding is capable of identifying the common themes from the

interview data. The common themes identified from primary data have been compared with the data collected through secondary research before making conclusions.

3.7 Research Limitations

During the study, the researcher has faced plenty of challenges. The collection of primary data was the major challenge in this regard. The COVID-19 pandemic prevented the researcher from directly interacting with the subjects selected for this study. The researcher was forced to communicate with them online only. As a result that, the researcher failed to conduct the interviews appropriately. The researcher could have improved the participation in the interviews, had the problems of the pandemic were not there. The current study failed to collect data from public schools in Dubai as these schools were reluctant in providing permission for conducting interviews during a pandemic like the present one. The educational climate in public schools is different from that in private schools. However, the researcher was forced to limit the scope of the study to private schools alone because of the lack of permission obtained from such schools. Some of the questions asked during the interviews to SEN have made them sad or emotionally tormented. To mitigate this situation, the researcher was forced to request their parents to answer those questions. In other words, the researcher failed to interview students with disabilities directly which is a limitation.

3.8 Ethical Considerations

Privacy is valued highly in the United Arab Emirates. Disclosing the names and other details of the interview participants is a violation of ethical principles. Therefore, the researcher has decided not to reveal the names of participants without their permission. If required the names of the participants will be disclosed only after taking the informed consent. The information gathered from the SEN teachers, parents and management will be kept confidential by respecting the anonymity of the participants. All the information from the recorded

interviews was destroyed after the completion of the research to ensure participants' confidentiality.

Plagiarism is another ethical concern in academic research projects. It is the usage of another person's idea in the paper without giving credit to that person. The current study has collected and used plenty of secondary data. The researcher took extreme care to cite all the information taken from outside sources in APA format in this paper to eliminate the plagiarism issue.

<center>**4.0 Findings & Discussion**</center>

4.1 Introduction

This chapter includes the results and the discussion of the results per the aims, objectives, and the research problem of this study. For convenience, the chapter has been arranged under different subheadings. Both the findings from secondary research and the primary research have been thoroughly discussed in this chapter.

4.2 Findings from Secondary Research

Fig. 2 given below gives some information regarding the staggering impact of COVID-19 on global education.

<center>*Figure 2*</center>

<center>(World Economic Forum, 2020)</center>

As evident from fig. 2, as of 23 March 2020, around 1.38 billion learners across the world suffered the negative impacts of COVID-19. Governments all over the world forced to close down the schools as a measure to prevent the spreading of this pandemic. The coronavirus can spread even through the air. Moreover, the infectivity rate of this virus is much more than that of many other known viruses. As a result of that social distancing and regular or frequent washing of hands is necessary for the prevention of spreading of this

<center>32</center>

pandemic. The aforementioned preventive measures are difficult to implement in a school setting since children need not have ample awareness regarding the seriousness of this pandemic. Therefore, the only option available in front of the authorities was to close down the schools and ask the students to continue their learning through online channels.

Countries such as Denmark have already started sending children under the age of 11 back to nurseries and schools although these countries have closed down these institutions earlier. At the same time, countries such as South Korea continue to close down schools and rely upon online channels for the education of their children (World Economic Forum, 2020). Many people have the illusion that online education has started just after the outbreak of the pandemic. However, the reality is that online education was there and it experienced high growth even years before the COVID-19 outbreak. The global investments in online education in the year 2019 were worth around US$18.66 billion. It is expected that this figure may reach $350 Billion by 2025 (World Economic Forum, 2020). The aforementioned estimate was made before the beginning of the pandemic. In all probabilities, the above projection or estimate may be significantly increased by 2025 since the pandemic has created a positive sense in favor of online education in the minds of parents and teachers.

To acquire an extensive comprehension of the effects of COVID-19 on learners, parents, educators, and superintendents in both public and private schools, the *Sheik Saud Bin Saqr Al Qasimi Foundation for Policy Research* carried out a virtual survey during mid-April 2020 among the stakeholders of the educational sectors. Among the 700 samples who took part in the above survey, 77% were females. About 50% of the participants were Emirati and the rest were from other communities like South Asians, Europeans, North Americans, Africans, and others. Moreover, 25% of the participants were students, 25% were parents, 40% were teachers, and 10% school administrators. The survey made use of 49 questions that include both open-ended and closed-ended questions. Most of the teachers and

administrators who took part in the survey revealed that their work became more demanding and stressful because of online education. Many of them have complained about the long working days, the absence of breaks between lessons or meetings, and the huge amount of work in preparing and designing online lessons and activities (Erfurth & Ridge, 2020).

Many people have the belief that online teaching is easier compared to offline or classroom teaching. But in reality, online teaching is much more complicated than offline teaching. Most of the teachers have received training only for classroom teaching. Many of them have no idea how to increase the student's engagement in online classrooms. It is easy for a teacher to understand how well the students are grasping the lessons while teaching in a classroom. However, teachers may struggle a lot to understand such things while conducting classes online. Many schools have asked teachers to extend the duration of online classes. Teachers are forced to take online classes even at night. There is no fixed schedule for online classes and teachers struggled a lot to adjust to the busy teaching environment provided by the online classes.

The fig. 3 below explains the hours of distance learning classes per day by students who participated in the aforementioned survey.

Hours of Distance Learning Classes per Day (Students)
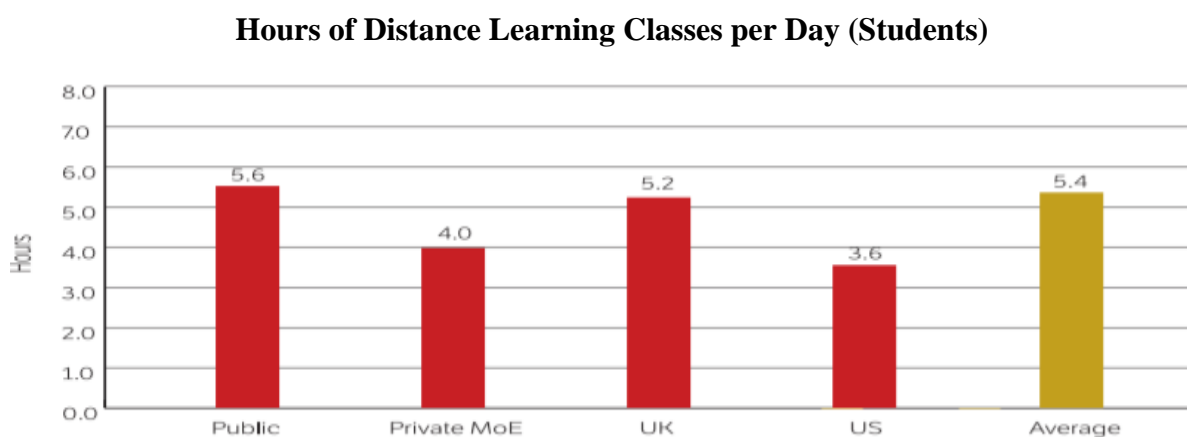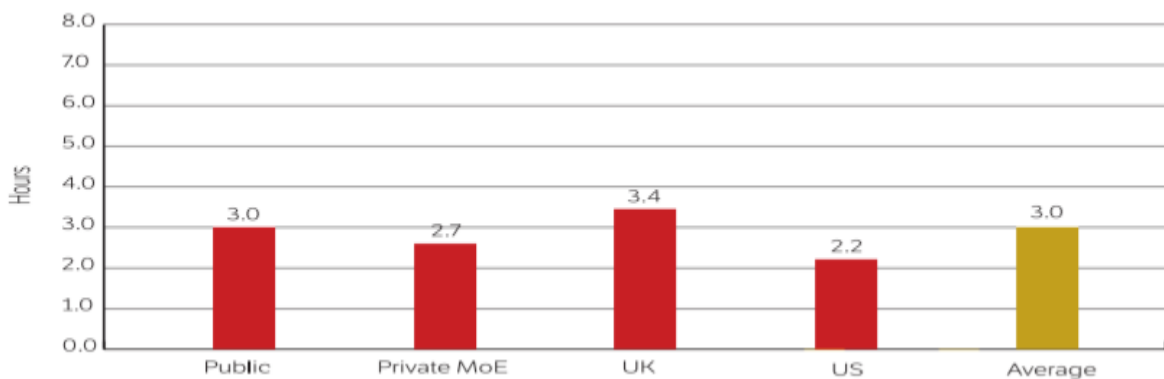

Figure 3

(Erfurth & Ridge, 2020)

As evident from fig. 3, globally students spend around 5.4 hours per day for online classes. In the case of UAE, the students in private schools and public schools spend 4 hours and 5.6 hours per day respectively for online classes. In other words, public schools are more interested in online teaching compared to private schools in UAE. Private schools in the country do not like to extend the number of hours of online classes beyond certain limits because of their readiness to consider the problems generated by such classes to the students, parents, and teachers. It should be noted that private schools will never engage in activities that cause problems to students and their parents as these schools are working following the profit-making motives alone. On the other hand, public schools need not worry too much about such things as their ambition is only to help students continue their learning process uninterruptedly even during a pandemic or crisis like the present one.

Fig. 4 below explains the hours of preparation and homework per day by students.

Hours of Preparation and Homework per Day (Students)
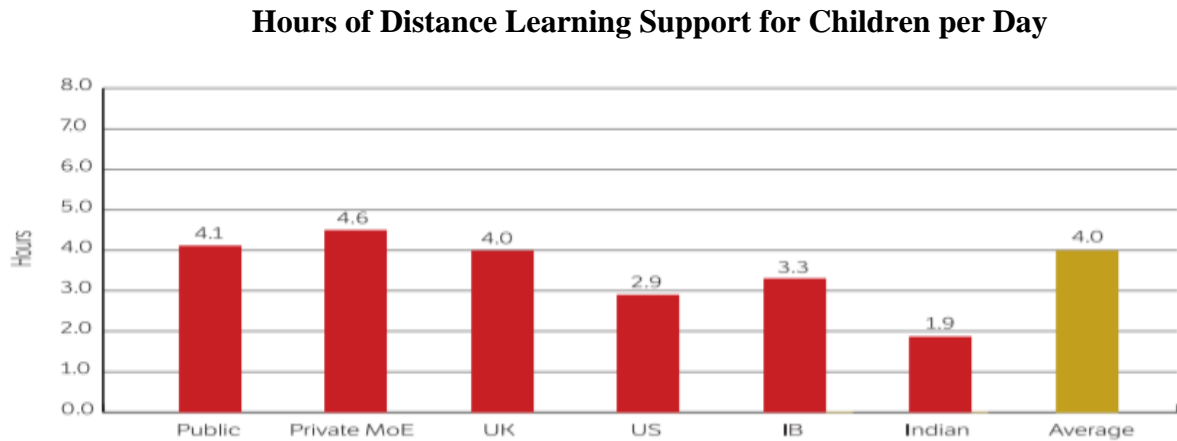

Figure 4

(Erfurth & Ridge, 2020)

As evident from fig. 4, the number of hours spent on homework by private school students in UAE is less compared to that spend by students in public schools in the country. The global average in this regard is 3 hours per day and the public schools in the UAE comply with this standard. As mentioned earlier, private schools in the UAE are not

interested in providing more workloads to their students. They want to keep the students comfortable even while attending online classes.

As evident from fig. 5, private schools in UAE extend more hours of distance learning support to students compared to public schools

Hours of Distance Learning Support for Children per Day

Figure 5

(Erfurth & Ridge, 2020)

While public schools in UAE provide only 4.1 hours per day as support for online students, private schools in the country provide support of around 4.6 hours per day. The global average in this regard is 4 hours per day. In other words, both private and public schools in UAE are above par in terms of providing distance learning support to their students. Therefore, it can be assumed that UAE students experience fewer problems compared to students in many other countries in terms of the problems generated by online education. It should be noted that UAE is a country that has good infrastructure facilities in terms of online communication. Computer and internet-related technologies have been developed in the country. The 4G technology has already been implemented in UAE and therefore, the students in the country need not worry too much about the internet speed while attending online classes. It is expected that the country will have full 5G coverage by 2025 (UAE targets full 5G coverage by 2025, 2020).

Although all students most of the students show readiness to learn online, normal students may exhibit better preparedness compared to students who have an intellectual disability. Fig. 6 below explains the preparedness of students with students who have intellectual disabilities.

Teachers' Perceptions of Learners with Intellectual Disabilities' Readiness
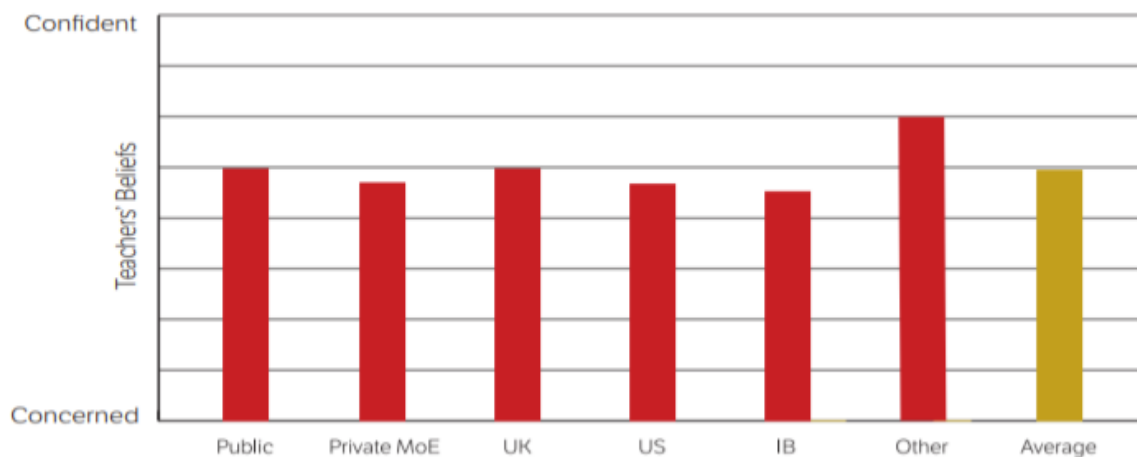
Figure 6

(Erfurth & Ridge, 2020)

As evident from fig. 6, teachers believe that the students in public schools in the UAE with learning difficulties are better prepared compared to their counterparts in private schools. As mentioned earlier, public schools in UAE spend more time on online education compared to private schools. As a result that students in public schools in the country get better support from teachers compared to their counterparts in private schools. As a result that, these students face fewer problems related to online education compared to those in private schools.

4.3 Findings from Primary Research or Interviews

4.3.1 Teacher Interviews

Questions	Res.1	Res.2	Res.3
What are the common challenges you face during online classes,	Technical difficulties Students unable to annotate	No face-to-face interaction, low motivation of the	Data usage It's 24/7 job Physical fatigue

including all aspects such as technical failures?	on the MS Teams platform Lessons are only using visual and auditory senses, unable to use the multi-sensory approach Caregivers accompanying the students tend to provide answers for the students, not giving them the option of thinking for themselves	student's technical issues	
How do schools ensure that every student can receive online learning classes?	Class teachers contact students and their parents through the telephone and make sure that every student attend the online classes properly	The user ID and password have been generated for each student on MS TEAMS, gadgets like tablets Rae being loaned to the students, time table has been scheduled in such that will flexible for the students to attend the session.	By making a suitable plan
How does the school accommodate distance learning? (New IEP, Curriculum modification, providing laptop, etc...)?	Providing laptops and touch-based resources Providing hard resources once a month to students Soft resources are shared with students weekly	By providing gadgets like tablet and laptop if the parents are ready to pay	Formulating a flexible daily /weekly /monthly plan keeping in mind the different factors
How you ensure students are motivated for online learning?	Using more apps for online learning accompanied by educational videos, gifs, memes, etc	By providing a variety of activities, customize the resources according to the students' needs	Keeping creativity and innovation in teaching methods and aids
What are your recommendations that can help reduce the burden of online classes on both students and teachers?	Online learning is here to stay, so it's best if teachers invest time in finding more sites and approaches to teach students	Chunk the content of the lesson, send reminders to parents to keep track, use a variety of Multimedia and modalities	It should be a friendly program designed in a way that it keeps the enthusiasm of virtual school going .. the hours

	while making learning more interesting and interactive		should be short durations to ensure appropriate attention and teachers should be appreciated well enough to keep their creative juices flowing

Table 1

As evident from the tab. 1, most of the respondents from the teaching community in the inclusive education sector cited the major problems facing them as technical difficulties. The Cunningham and Fleming model stresses the importance of teaching methods while teaching SOD. The lessons available on online platforms are unable to use the multi-sensory approach that is necessary for the effective teaching of SOD. The term multi-sensory approach in special education refers to a teaching method that helps students use more than one sense at a time. Teachers working in the special education sector use plenty of visual, auditory, and kinesthetic-tactile pathways, to help SOD learn their lessons properly. These pathways often include facilities for enhancing senses that help the taste, smell, touch, sight, hearing, and movement (The Gateway School, 2020). While SOD can experience lessons through multiple pathways, their learning will take place in the right direction. In online classes, SOD does not get the opportunity to use the aforementioned multiple pathways in their learning process. As a result of that, online learning becomes a boring affair for many of the SOD.

Another problem cited by the teacher respondents is the Caregiver's interference in the learning process. When students with SEN and SEND struggle to answer questions, caregivers usually tend to provide answers for the students. Instead of guiding these students towards the answer, caregivers provide the direct answer to the students with SEN and SEND. Teachers have some limitations in preventing these caregivers from answering the

questions. As a result of that, students in these communities failed to think properly and wake up the hidden faculties of their minds.

The Cunningham and Fleming model upholds the importance of communication, emotions, and feelings in the course of SOD classroom instruction. No real-life interaction and low motivation of the students are some of the other problems facing by teachers while conducting online classes for students with disabilities. Successful learning requires effective communication between the instructor and the students. Multiple research has shown that messages transmitted by behavioral methods of interaction are more effective than those communicated through verbal media. According to Kirch (1979), some of the major channels of nonverbal communication are body language, dress, eye contact, touching behavior, and proxemics. The use of the aforementioned nonverbal communication channels is difficult in online classes. In online classes, teachers usually sit somewhere and teach the lessons. In such classes, students can see only the faces of their teachers. Teachers cannot express their emotions or feelings clearly while conducting online classes. Even if they express some emotion, the students do not need to see it or grasp it properly.

According to many teachers who have been interviewed as part of this study, physical fatigue is more while conducting online classes than that in traditional classes. In traditional classes, teachers get more opportunities for relaxation. They do not need to speak continuously in offline classes. They can give some works or assignments to students when they feel fatigued while conducting offline classes. However, online classes will not provide such facilities. Many teachers were forced to conduct the lecture without any interruption. Moreover, between online classes, teachers get less time for breaks or relaxation. There are plenty of teachers who conduct online classes even at night. In offline education, teachers need to work only during day time and they can spend the entire evening and night time on their works. However, while conducting online classes, teachers forced to allocate little time

for their works. In other words, work-life balancing opportunities are less for instructors when they were compelled to implement e-learning classes regularly.

McPhail's learning framework stresses the importance of the creation of a culture for continuous learning and new kinds of student-teacher partnerships and relationships. Teachers struggle a lot to maintain a sound relationship with their students through the virtual world. In real classrooms, teachers get enough time for asking personal questions to students and build rapport between them. However, in online platforms, rapport building is difficult.

4.3.2 Parent Interviews

Questions	Res.1	Res.2	Res.3
Due to the COVID-19 crisis, the school started e-learning. How is this new process of learning received by your children?	Use the apps	its good but students can learn more at school	Slow
Do you have the necessary technological devices to support online learning?	By attending sheets	yes	yes
Does your child is regular and on time for the online classes?	By online meetings	yes	No
How do you think this new approach to learning will impact the child's routine?	It's not a warranty	its good but now students are using more iPad and laptops which not much good for their eye sights	It will decrease the learning
What are the challenges you are facing in this changed routine?	By attending the classroom Lack of personalized learning	very difficult to get them focused Lack of personalized learning	Behavioral Lack of personalized learning
What is your contribution to help your child meet the challenges of this routine change?	Respondent skipped this question	I am fully aware of what my child is doing because keep eye on him during online studies	Switches on the PC technical difficulties
Are you aware of any UNESCO guidelines on supporting	Respondent skipped this question	No	No

families like yours during these times?			
Are there any challenges that your child is facing due to the current situation? If yes, please state	Respondent skipped this question	yes he is getting away from his school friends	Behavioral
Do you have enough time to follow your child's classes during the distance learning period?	Respondent skipped this question	yes he is getting away from his school friends	No
What is the number of hours spent by you helping your child with online education?	Respondent skipped this question	5 to 6 hours	1 hour
What are the issues faced by the students while learning online from home?	Respondent skipped this question	focus is the main problem	Behavioral problems are difficult to solve
How do you balance work from home and a child's online classes?	Respondent skipped this question	I try to manage	Very difficult if I am working. It's impossible actually
Do the children get enough break time during online classes?	Respondent skipped this question	yes	Yes
Do the hours with the school have increased or decreased with online classes as compared to traditional classes?	Respondent skipped this question	it's same	Decreased
Is there any extra time allotted for resolving the doubts of the children?	Respondent skipped this question	sometimes	I am not sure
What are your recommendations for improving the distance learning process?	Respondent skipped this question	some special or extra classes for reading and writing	It doesn't work well with special need
Do you believe giving online support to the educational needs of the student of determination might help them to	Respondent skipped this question	maybe	No

face this situation effectively?			

Parents who have been interviewed as part of this study have responded to questions in different manners. Although most of the participants the concept of online learning in principle, many of them expressed concerns regarding the problems associated with this type of learning. Some parents believe that online learning is slow learning and their children with disabilities face a lot of troubles in adapting to it. Many of them believe that their children with disabilities can learn more at schools. As mentioned earlier, the lack of multi-sensory teaching is causing problems to SOD.

McPhail's learning framework stresses the importance of personalized learning, equity, diversity, inclusivity, and knowledge-based development of learning in the education of SOD. Many parents have informed the researcher that their children failed to receive personalized learning while attending online classes. Students with disabilities may have different types of disabilities and they need personalized training. For example, it is illogical to teach a blind child and a deaf child in the same manner. Both of them need different types of teaching and learning opportunities. On online platforms, teachers failed to provide such personalized teaching to SOD. In the same manner, the grasping capacity of different students with SEN and SEND need not be the same. In offline classes, teachers can take care of each student and provide the necessary lessons based on his/her disability. But on online platforms, such individualized teaching opportunities are less.

Most of the parents said that they have enough facilities to conduct their children's online learning smoothly. But many of them have concerns regarding how too much time spent in front of mobile phones and computers would affect the eyesight of their children. Prolonged blue light exposure emitted by electronic screens such as personal computer screens, smartphone screens, or iPad screens may cause eye damage and must be considered.

Another major concern expressed by the parents is concerning the additional burden they have to undertake because of the online classes. Most of the parents in a family are working professionals. The ongoing COVID-19 pandemic forced many of them to work from their homes. However, it is difficult for these parents to make sure that their children with disabilities appropriately attend online classes. It is stressful for these parents to allocate more time for an additional burden like the teaching of their children while working from home. Moreover, their work schedules may often clash with the timing of the online education of their children. Many parents are forced to look after their professional works and personal works like teaching their children at the same time. In short, the peace of mind for the working parents has been lost because of the online education of their children with disabilities.

4.3.3 Interviews with School Authorities or Management

Questions	Res.1	Res.2	Res.3
Did you train the teachers on how to handle the challenges of online classes?	Yes	No	Yes
What is the number of students attending classes online at any given time, and how do you manage to resolve everyone's query at that time?	20 students Through a question-and-answer strategy, continuous evaluation, and feedback	3 it's difficult to manage	We have 51 students and we divided them into groups based on their levels They all have IEPs and we modified the curriculum according to their needs
What do you think about this whole online learning situation? Is it better than the traditional approach?	Distance education is better and successful because it is based on the challenge and advancement of the educational process away	We should find a method to reduce the curriculum	Students of determination learn better while they are in class

Do you charge extra fees for online classes considering it utilizes additional elements such as the internet and devices?	Yes	No	No
Are you able to finish the curriculum within the allocated time?	Respondent skipped this question	No	No
Do you consider the involvement of parents as a benefit to the teacher during online classes?	yes	No	Yes

Table 3

The interviews with the school authorities have revealed that some teachers failed to receive adequate training for conducting online classes although many others have got such training. In the curricula of the teaching diploma or degree courses, nothing mentioned how to conduct online teaching. It should be acknowledged that online education is a relatively recent idea, and several current teachers have learned almost nothing about it during their education diploma or degree programs. Therefore, the school authorities must provide some training to their teachers regarding how to conduct online classes smoothly, especially to SOD.

As evident from the interviews with the school authorities, some schools have already modified their curricula based on the needs of online education. It is illogical for schools to wait for instructions from the government for modifying their curricula as most of the governments across the world currently focused on the fight against COVID-19 rather than the education of students.

Many of the respondents informed that they have doubts regarding the completion of the curricula as planned or within the scheduled period. Online teaching brings additional challenges to teachers and many teachers struggle to complete the syllabus as planned earlier.

As a result of that, many of the school authorities have stressed the necessity of reducing the syllabus.

5.0 Summary/Conclusion/and Recommendation

5.1 Introduction

This section discusses the study's interpretation of the results. It offers several suggestions for how to improve the online teaching standards, especially the teaching intended for SOD or students with SEN or SEND. For convenience, the chapter has been arranged under different subheadings.

5.2 Study Summary

The study was performed using a qualitative research approach. The researcher was forced to avoid the quantitative method of research mainly because of the prevailing circumstances pertinent to the COVID-19 disease spread. The researcher has conducted phone interviews with teachers, parents of SOD, and school authorities of some of the private schools in Dubai as part of primary data collection. Moreover, the researcher has collected a lot of secondary data as part of this study. Although the completion of the study was extended due to the difficult situations, the researcher was able to conduct it comprehensively, taking all precautions necessary at present for conducting a study like this. Even though lack of primary data or survey data is a limitation of this study, the researcher tried to overcome it with the help of secondary data collected from various scholarly sources.

5.3 Conclusion

The major finding or conclusion of this study is that SOD, teachers, and parents face plenty of problems with online education. Students with disabilities or special needs are not comfortable enough to attend online teaching. They have inadequate capabilities to operate electronic equipment that are necessary to learn lessons online. They need the support of their parents while trying to learn something online. The parents on the other hand have a lot of personal and professional commitments. The learning of their children with disabilities is an

additional burden for them. They struggle a lot to find enough time for completing their work and professional work along with the education of their children with disabilities.

Children with disabilities or SOD get few opportunities for socializing while continuing their education online. Socializing with peers is essential for cognitive and emotional development particularly for children with impairment. SOD learns plenty of things from their peers. However, online education prevents them from interacting properly with their peers or friends. Personalized education or individual care is necessary for most of the SOD. However, teachers failed to provide such care to students with SEN or SEND while teaching through online channels. A multi-sensory approach is necessary for the effective education of children with disabilities. However, such an approach is practically possible only in traditional classes. Online classes cannot promote multi-sensory teaching approaches.

Teachers also face a lot of problems while conducting online classes. The workload of teachers taking online classes is more compared to that of those who teach in traditional offline classes. Many teachers did not receive any training for conducting online classes. They are forced to develop their strategies while taking online classes. The break between periods and the time for relaxation in between different online classes are minimal for teachers.

5.4 Recommendations

The study urges school authorities to prepare well for future outbreaks. Coronavirus may disappear from the world one day. But other viruses may attack the world in the future and they may disrupt education more severely. Therefore, the school authorities and teachers must be well prepared to meet such panic situations that could be created in the educational sector in the future.

The syllabus of the teaching diploma and degree courses needs to be revised thoroughly. It is necessary to include the contents related to effective online educational

strategies in the curricula of teaching diploma and degree courses. Such a curriculum should address the problems of SOD, or students with SEN and SEND.

Policymakers need to address the educational needs of the most vulnerable groups comprehensively in the coming years. Although online education is advisable for normal students during crises like the present one, it may not help students with disabilities very much. The authorities must think about allowing children with disabilities to attend traditional classes even if they need to obey some strict protocols. They can reduce the number of students in a class and allow children with disabilities to learn in their traditional ways of learning that provides provision for a multi-sensory approach.

The timing of online classes needs to be rescheduled centered on the benefits of the parents of handicapped children. As most of the parents have professional commitments, they may struggle to attend online classes along with their children with disabilities. The teachers and school authorities need to get in touch with the parents to make sure that the timing of online classes is comfortable for them. In other words, greater parental involvement is crucial for the education system of handicapped children. The school authorities should make sure that all the children have proper access to computers and the internet and they can attend the online classes properly.

The teachers need to contact the parents of children with special needs regularly to make sure that the parents and the students are comfortable with the teaching and learning process. The feedback from the parents and students will help the teachers make changes in their online teaching strategies if necessary. For example, some teachers have the habit of speeding up the teaching process while conducting online classes. Children with special needs may struggle a lot to keep pace with the teacher. The teachers need to contact the students and their parents to make sure that they are not hurrying through the topics.

The syllabus of the online classes needs to be reduced considerably. It is difficult for teachers to complete a large number of topics within the stipulated time while conducting online classes. Difficult topics cannot be taught online. Such topics should be conserved for offline classes. The teachers should make sure that they are teaching only simple topics while taking classes for children with special needs through online channels.

5.5. Final Advice

After completing this study, the researcher wants to advise the teachers, students, and their parents that it is wise to use the online channels of education judiciously instead of leaving it out completely. The researcher believes that an extra effort taken from the side of educators and families of special needs children would make sure that the pandemic has not caused severe problems in the inclusive educational sector.

5.6. Epilogue

I expect that this study has not only revealed the extent of disruption of educational routine but also provided sturdy recommendations on how to deal with these challenges brought about by COVID-19. It has been revealed that online learning faces challenges of unsatisfactory objective attainment, diminished focus among students, and difficulty accessing classes due to not having a device to use or a slow network. The prevailing pandemic has adversely affected the mental health of children, making them fearful and anxious. Postponement or cancellation of exams leaves children with uncertainties about their future. Even though online learning has its shortcomings, it would not be wise to reopen schools when the threat of COVID-19 is still formidable.

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Appendices

Appendix 1

www.buid.ac.ae

March 15, 2020

To whom it may concern

This is to certify that **Mrs. Asma Khalaf Alzaabi** with student ID number 20183497 is a registered part-time student on the **Master of Education in Special and Inclusive Education programme** at **The British University in Dubai** since January 2019.

Mrs. Alzaabi is currently working on her dissertation. Dissertation submission deadline is May 15, 2021.

This letter is issued on student's request.

Yours sincerely,

Amer Alaya
Head of Student Administration

Appendix 2

Survey questions

Teacher Interviews

1.   What are the common challenges you face during online classes, including all aspects such as technical failures?

2.   How do schools ensure that every student can receive online learning classes?

3.   How does the school accommodate distance learning? (New IEP, Curriculum modification, providing laptop, etc...)?

4.   How you ensure students are motivated for online learning?

5.   What are your recommendations that can help reduce the burden of online classes on both students and teachers?

Parent's interview

1.   Due to the Covid-19 crisis, the school started e-learning. How is this new process of learning received by your children?

2.   Do you have the necessary technological devices to support online learning?

3.   Does your child is regular and on time for the online classes?

4.   How do you think this new approach of learning will impact the child's routine?

5.   What are the challenges you are facing in this changed routine?

6.   What is your contribution to help your child meet the challenges of this routine change?

7.   Are you aware of any UNESCO guidelines on supporting families like yours during these times?

8. Are there any challenges that your child is facing due to the current situation? If yes, please state

9. Do you have enough time to follow your child's classes during the distance learning period?

10. What is the number of hours spent by you helping your child with online education?

11. What are the issues faced by the students while learning online from home?

12. How do you balance work from home and a child's online classes?

13. Do the children get enough break time during online classes?

14. Do the hours with the school have increased or decreased with online classes as compared to traditional classes?

15. Is there any extra time allotted for resolving the doubts of the children?

16. What are your recommendations for improving the distance learning process?

17. Do you believe giving online support to the educational needs of the student of determination might help them to face this situation effectively?

Interviews with School Authorities or Management

6. Did you train the teachers on how to handle the challenges of online classes?

7. What is the number of students attending classes online at any given time, and how do you manage to resolve everyone's query at that time?

8. What do you think about this whole online learning situation? Is it better than the traditional approach?

9. Do you charge extra fees for online classes considering it utilizes additional elements such as the internet and devices?

10. Are you able to finish the curriculum within the allocated time?

11. Do you consider the involvement of parents as a benefit to the teacher during online classes?

Appendix 3

Permission for participation in research

As the parent/legal guardian, I authorize/do not authorize to take part in the research study explained in this letter.

Parent signature: …………………

Email: ……..………………………

Date: …………………………………..