

Impact of changing educational policies due to COVID-19 on the role of school principals in Dubai

أثر التغير في السياسات التعليمية بسبب فيروس كورونا على دور مديري المدارس في دبي

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Abstract

Keeping in view the fact that COVID-19 has transformed the education system, current study intends to explore the attitude of principals and administrators towards educational reforms and their upgradation in reference to crisis in educational sector. Moreover, the study also explored the role of principals and administration in effective implementation of educational reforms at the time of crisis. The relationship between the positive school performance, educational reforms, and significance of principals and administration in this regard was also scrutinized. To achieve the objective of the study mixed-method research design was employed where quantitative data were collected through questionnaire based survey and qualitative data were collected through interviews. The sample of the study was principals, leaders, and administrative unit in educational institutes of Dubai. The results of the study revealed that educational reforms are direly needed to deal with the issues occurred in educational system as a result of shifting to online educational system. Moreover, results also revealed that educational reforms need to be updated keeping in view the external circumstances that are quite novel in nature. Findings of the study supported the notion that principals and administration are the better position to mitigate the adversities caused by COVID-19 in educational sector. School performance and effectiveness of educational reforms were significantly positively related with the positive performance of the principals and administrators. The main limitation of the study is that the sample size is not the true representative of the targeted population and also the instruments used were not validated. In future, sequential mixed-method research design is suggested to employ in scrutinizing the educational reforms in context of Hybrid education system. Future studies should focus on formulating educational reforms in reference to hybrid education system and attitude of principals and administration towards it should also be explored.

مع الأخذ في الاعتبار حقيقة أن فيروس كورونا قد غير في نظام التعليم ، تهدف الدراسة الحالية إلى استكشاف موقف المديرين والإداريين تجاه الإصلاحات التعليمية وترقيتها في إشارة إلى الأزمة في قطاع التعليم. وعلاوة على ذلك ، بحثت الدراسة أيضا دور مديري المدارس والإدارة في التنفيذ الفعال للإصلاحات التعليمية في وقت الأزمة . كما و تم التدقيق في العلاقة بين الأداء المدرسي الإيجابي والإصلاحات التعليمية وأهمية مديري المدارس والإدارة في هذا الصدد. لتحقيق هدف الدراسة تم استخدام تصميم البحث متعدد الطرق حيث تم جمع البيانات الكمية من خلال المسح القائم على الاستبيان وتم جمع البيانات النوعية من خلال المقابلات. وكانت عينة الدراسة من مديري المدارس والقادة والاداريين في المعاهد التعليمية في دبي.

كشفت نتائج الدراسة أن هناك حاجة ماسة إلى الإصلاحات التعليمية للتعامل مع القضايا التي حدثت في النظام التعليمي نتيجة للتحول إلى النظام التعليمي عبر الإنترنت. علاوة على ذلك ، كشفت النتائج أيضًا أنه يجب تحديث الإصلاحات التعليمية مع مراعاة الظروف الخارجية الجديدة تمامًا بطبيعتها. دعمت نتائج الدراسة فكرة أن مديري المدارس والإدارة هم أفضل من يساعد للتخفيف من المحن الناجمة عن فيروس كورورنا في القطاع التعليمي. ارتبط بشكل كبير الأداء المدرسي وفعالية الإصلاحات التعليمية بشكل إيجابي بالأداء الإيجابي والفعال لمديري المدارس والإداريين. القيد الرئيسي للدراسة هو أن حجم العينة ليس الممثل الحقيقي للمستهدفين وكذلك الأدوات المستخدمة لم يتم التحقق منها كما يجب. في المستقبل ، يُقترح تصميم بحث متسلسل متعدد الأساليب لتوظيفه في التدقيق في الإصلاحات التعليمية في سياق نظام التعليم الهجين. يجب أن تركز الدراسات المستقبلية على صياغة الإصلاحات التعليمية في الشارة إلى نظام التعليم الهجين وموقف المديرين والإدارة تجاهه.....

Dedication

TO MY FATHER MAY HIS SOUL REST IN PEACE

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Chapter 1: Introduction

1.1 Background

The education system is a system that required continuous up-gradation to maintain its quality and effectiveness. Developmental educational policies are always based on reforms because it is highly required to alter the education system according to new scenarios' requirements. In 2019 the pandemic of covid-19 broke out (Reimers, & Schleicher, 2020). It has shifted the world from social gathering to social distancing that affect the way of functioning. This situation has also affected the education system because of the lockdown of all the educational institutes were closed. It was the high requirement of the time to bring reform in the education system to ensure its continuity. Therefore, the leaders of the education system at their institute have adopted many policies and reforms to continue their education system with effectiveness. In the case of Dubai, the required reforms have also been taken by the educational leaders in the institutes to maintain the quality of the education system. However, the impact of covid-19 that lead to bringing reform in the education system has several positive and negative sides. The education system after these reforms has turned into a new era; however, this change must be implemented effectively by the leaders of the school (Alkutich, 2021).

1.2 Problem Statement

As the covid-19 is a significant threat to the world's stability that has affected the operation and functioning of all organizations and institutes around the world. Several researches have been conducted to identify the impact of covid-19 on organizations around the world and effective strategies to encounter that negative impact. Education is among one of the major sectors that are affected by the covid-19 (Burwell, 2021). It is highly required to bring the necessary changes in

that can be played to bring the necessary is by School leaders because they are the main authority who make policies. The role of principals of schools in Dubai is getting impact due to changes and reforms in the whole system and the changes made due to the threat of COVID -19 (Masoud, & Bohra, 2020). The responsibilities of school principals have increased with the changes in the policies of the educational system along with adaptation of essential safety measures. It is essential to explore the significance of that impact to enhance the effectiveness of principals' role in schools. Therefore this research has been conducted to identify the need for educational reforms and how the school principals can effectively manage these reforms during the era of the covid-19 to derive positive outcomes.

1.3 Research Objectives

Therefore this research has been conducted keeping in view the following objectives:

- To investigate the impact of changing in the educational policies due to COVID-19 on school principals' role in Dubai.
- To examine the role of school principals in Dubai.
- To identify the effective step that the school principals should take for the implementation of these educational reforms.
- To examine the overall impact of Covid- 19 on the educational leadership in Dubai.

1.4 Research Questions:

The objectives of the research lead to the following research question that is required to be identified:

- 1. What is the impact of changing educational policies due to COVID-19 on school principals' role in Dubai?
 - a. What is the role of school principals in Dubai to implement educational reforms successfully during the course of covid-19?
 - b. How can the school leader manage the implementation of educational changes policies in Dubai?
 - c. What is the overall impact of COVID- 19 on the educational leadership in Dubai?

1.5 Research hypothesis

Based on these research questions following hypothesis has been made will guide the direction of the research:

H1: the educational reforms positively impact the educational institutes during covid-19 in Dubai.

H2: School principals positively impact the implementation of reforms in the educational institutes in Dubai.

1.6 Significance of research

During the covid-19, it has become crucial for all the organizations to manage their continuity with effectiveness. Hence the policies are being made to bring the changes by the authorities, especially in the departments of education (Burwell, 2021). This research will be very helpful for the educational policymakers of Dubai and also for the school principals. This is because they can gain an understanding of the requirement of the educational reforms and how to make

effective policies to implement these reforms successfully. The school principal can take the direction from this research to manage a reform process successfully.

1.7 Theoretical implications

Theoretically, this research is very important, and it possesses many implications. As the notion of the covid-19 is a novel idea upon which very less literature is available. Especially in the perspective of the education sector in the case of Dubai, there is an unavailability of theoretical work. This research will add to the available literature of the covid-19, its impact, required reforms, and role of the school principals to manage this whole process successfully.

1.8 Organization

This study has been organized in the following way: after the introduction, the next section comprises the literature review. The section of the literature review discusses the work of the previous researches related to the topic. After the literature review, the next section is methodology. The methodology section explains how the research has been conducted simply the procedure of the research. After methodology, the next section is results and analysis that show the results of the data that have been processed for the research. Finally, after the methodology section, the following section has a discussion and conclusion that concludes the overall research. It further added the limitations and recommendations of the research to lead the direction of future research.

Chapter 2: Literature Review

2.1 Introduction

New modes of education have been introduced in this COVID-19 pandemic era which requires ensuring that students and teachers are well prepared with the necessary tools to shift to online learning. It, therefore, raised the requirement that the teacher should gain the support of school leaders in providing them digital training to be able to use up-to-date technology to facilitate effective online learning and teaching. The school leader should also ensure that all students have the required devices that provide them access to online learning. This scenario leads to innovation in the education system (Matsumoto, 2019). The school leader should enable the student to develop their innovativeness and creativity online. Also, they should enhance the technology program to motivate students to become creators and innovators. The school leader must ensure regular connectivity among the teacher, parents, and students where online education is still prevailing after covid-19. In upcoming future years, it is expected that a new state of art campus will be developed in the schools with the best technology, which is required to be effectively handled by the school leaders and other educational leaders in the phase of post-pandemic (Warner and Burton, 2017).

This section is consists of reviewing the available literature based on the changing educational structure and policies, the impact of COVID-19 on educational system, and role of school principals during these changes. The section is organized in the following manner:

- The changing global educational policies due to COVID-19
- The changing educational policies in the UAE due to COVID-19
- Effects of changing educational policy in the global context on educational leadership

- Effects of changing educational policy in the UAE on educational leadership
- Theories of leadership which are effective in managing crisis

2.2 Changing educational policies due to COID-19

The present circumstances are changing from the past, requiring all the students to have an internet connection so that access to online learning can be made easily and without any hurdle. It is the professional duty of the school principals and the others who are leading the education system to provide internet connectivity to all the teachers as well as students as a priority so that online learning can be equally accessible by all (Dolph, 2017).

The most crucial need is to create a model that combined remote learning and school learning system to make a new successful hybrid model. This hybrid model should concept digital technology, speed up the learning process, connect all the learners and focus on global competencies to match the academic standards.

Covid-19 has also enlightened the education system's fault line from the perspective of commodification, commercialization, and privatization. It has shown how these education forms function to identify the poorest, vulnerable, and weak learners. Covid-19 had negatively affected the communities and put significant effects on them in the form of inequality in the perspective of educational provision. It has demonstrated that schools show support to most disadvantaged young people who cannot respond appropriately in the present crisis (Hallinger et al., 2018).

As covid-19 has moved away from the veneer from education privatization in such a situation, education's marketization has been threatened. This pandemic is disastrous for the world's health that results in the instability of economic globalization and ultimately adversely affects the whole world's education system. Currently, the schools that are running for-profit have to worry about

their survival. Educational leaders must make great efforts to remain connected with the parents and the students so that they do not lose their admissions that ultimately affect their profitability in the long run. As educational leaders, they must respond with the determination to do their best to focus on all the weak and strong students so that their survival and continuity should not be threatened (Harris and Jones, 2018).

It is required that school leader should ensure that pandemic has only disturbed this schooling but not the learning. The education structures of the school have been replaced with new ways to continue learning. The new education system can be taken place in the gardens, bedrooms, streets, and so on. Therefore, a new online learning system that has blended both remote learning and physical learning is the best option in the pandemic and post-pandemic situation to be adopted by the school principals to continue the school system's effectiveness (Warner and Burton, 2017).

2.3 Impact of covid-19 on UAE education system

When it comes to the implementation of COVID-19 sop's, the UAE government has taken several measures regarding this pandemic so that it can be controlled. One of the essential measures regarding private and public schools is that they have strictly implemented distance learning in private and public institutions of UAE. It involves primary schools, colleges, and universities. These precautionary measures aim to protect students from the current pandemic of COVID-19. To have a proper system of social distancing, the institutions and their management conducted professional training for the students and teachers of the institutions to adapt and develop their distance learning system. The UAE government has also introduced smart learning platforms along with the measures and instructions that can manually manage the behavior of students regarding the implementation of distance learning (El-Saharty et al., 2020). Another

vital step that the UAE government takes is that they offer free satellite internet services to students living in side-areas where standard internet connectivity is not up to the mark. It also involves free internet home connection for the families having no internet access at their home (Schechter, & Shaked, 2017).

Conferring the statistics of UNESCO, the closure of institutions including schools, colleges, and universities around the globe to control the epidemic of COVID-19 has affected 91% of the population of students. Transferring classes from face-to-face to online has occurred; many exams, including national exams of schools, colleges, and universities, are either cancelled or postponed for a more extended period. The responsibilities of parents have increased as well. Now they must provide home-schooling to their children by using the means of technologies, computers for their education (Stone-Johnson, & Weiner, 2020). Various institutions and study platforms of Dubai and Abu Dhabi have adopted an online education system that allows students to continue their studies through online mediums (Weiner et al., 2021). This platform aims to facilitate the learning of students in the best way in these circumstances. Now it is easier for families to have access to their children's progress reports, the timing and schedule of their classes, and communication with their teachers online. Students can also communicate with their teachers regarding any difficulty in their course of study. The assignment is given and submitted online. However, the schools had a 'first-mover advantage' when this current pandemic demanded a move of education to totally digital delivery (Harris and Jones, 2018).

Nevertheless, the move to web-based learning has not been frictionless. Admittance to internet learning across numerous tuition-based schools was contingent on the installments of term charges. A few families confronting financial pressing factors because of the Covid-19 emergency thought it was hard to pay. School administrators revealed that the move to e-learning

implied expanded operational expenses – for computerized preparing bestowed to teachers and buying e-learning stage licenses (Weiner et al., 2021).

The circumstance came about into a showdown among guardians and schools, requiring the education authority, Knowledge and Human Development Authority (KHDA), to step in and require a trade-off from both sides. Private school administrators reacted by offering expense decreases and adaptable installments intend to hold understudies and guarantee business coherence (Carvalho et al., 2020). The scene underscored how online education could enlarge the computerized hole. For students who don't approach online assets and gadgets or the individuals who require learning support, it tends to be an estranging encounter, adding to higher dropout rates. With schools shut, we need to consider the individuals who are generally helpless yet additionally scholastically and mentally. Online learning might be intended to try not to develop this separation. At the point when the Covid-19 lockdown was reported, UAE telecom supplier du broadened uphold by forgoing extra charges on information so clients could get to school sites and schoolwork. Measures, for example, this assistance makes education open, in any event, when it is on the web (Carvalho et al., 2020).

Before the Covid-19 pandemic, self-teaching was not a favored alternative in the UAE. Under lockdown, self-teaching has been the only choice for students to keep learning. Very much like in the UAE, schools everywhere in the world have utilized essential stages, for example, those given by Google and Microsoft, just as e-meeting applications like Zoom, to convey online figuring out how to students in their homes (Kapasia et al., 2020).

The current pandemic has offered a chance for all partners to revaluate how education is overseen and conveyed. Moving from conventional figuring out how to a more adaptable style that fits the current emergency and past requires redevelopment of the education framework and

its apparatuses, particularly the strengthening of teachers. Schools and teachers ought not to be seen similarly as vehicles for information conveyance yet ought to likewise have the option to control what they instruct and how to educate it. Technology can likewise hoist teachers' jobs from just being information transmitters to effectively functioning as co-makers of information for their students (Stone-Johnson, & Weiner, 2020).

2.4 Effectiveness of education leadership during pandemic

The role of schools is not only limited to the providing of literacy and education, but schools are also an important place to nurture and develop the social skills of students and provide them a chance to develop social skills that can help them for building a better career and getting better opportunities in future. One of the significant and very crucial provisions that can be offered and provided to the students by the schools is Pastoral care. As human is a social animal and it is in his nature to live, work, and stay with other humans as a society. Humans learn and grow more effectively while living in a social structure and sharing information and skills that help them grow mentally and emotionally more effectively. Humans must stay connected with each other and build positive and strong relationships that would be beneficial for them at work, at home, and in society. Similarly, it is very important for the students of schools to stay connected with other students and teachers for their emotional and mental well-being. The current situation is more demanding in this context in which the students are experiencing isolation and lack of social contacts and interactions that could be harmful to their wellbeing (Schechter and Shaked, 2017).

In the case when there is a situation of lockdown and social distance. The students are facing isolation from social contacts and interactions while staying at home; it is very challenging for the teachers and management of the schools to provide Pastoral care to the students under these

difficult circumstances. The present situation is very challenging for students as well, and they are experiencing much adaptability and resilience. The management along with the parents and teachers of the school are playing a vital role in supporting and encouraging students in these difficult times. Pastoral care is very important for the students, and these requirements' unavailability can negatively impact the students' learning process. Teachers and parents are playing a very crucial and vital role that requires a tremendous amount of attention and awareness for effective results and outcomes. In the lockdown situation, these roles are becoming more complex and challenging for the management of schools, teachers, and parents. To support and assist the parents and teachers government should also play an influential role in this situation. The ministry of education can use mass media to provide adequate support and assistance to the parents and teachers to help them perform their roles more effectively and efficiently. Several types of media can be used to provide valuable and effective information, including advisors and suggestions to the parents and teachers from the government. Those mediums may include SMS messages, television, the internet, social media, radio, etc. (Stone-Johnson and Weiner, 2020).

It has become more crucial for students to participate in the learning activities and be motivated to learn under these difficult circumstances, especially the students in the secondary level education. They require much attention and focus not to get negatively impacted by these circumstances. According to some statistics around the globe, among 184 countries around the world are facing lockdown situation and negative impact on the education system, it affects almost 1.53 billion learners around the world that are not going to school under these circumstances, the continuation of the current situation may increase the dropout rate among the

students from the schools that ultimately putting pressure on the economic conditions of the countries in a significant way (Weiner et al., 2021).

At the present time, it is highly demanding that the negative impact of the pandemic has to be reduced and overcome, especially in the education sector. It is time to learn from these challenging experiences and find a solution to make a better environment and system to educate the students more effectively and improve the learning experience for them and also develop a sustainable education system for the future to avoid these kinds of adverse effects on the learning process of the students. In this context, there are school leaders who can perform a positive role in providing a solution for these issues. The education authorities have a responsibility to overcome this crisis effectively and in time to provide better opportunities to the students for getting better and high-quality education and recover the loss they experienced in the period of lockdown (Hayes, 2018).

It is also observed that the impact of a pandemic would be long-lasting on education and might negatively affect the learning process of students in the future. However, it is also an opportunity for all the education systems and schools to enhance their education system positively and develop a sustainable learning process for students to provide them better opportunities and high-quality education in the future (Schechter, & Shaked, 2017).

2.5 Changes in ways of leading schools

It is observed that the COVID-19 is negatively impacting the modern world significantly (Kapasia et al., 2020). The economy across the globe is affected by the effects of this pandemic, and along with many devastating changes in society, it is also putting a negative impact on the education system around the world (Carvalho et al., 2020). The adverse effects of the COVID-19

also include the limitations and restrictions in society that were impossible to imagine before the world's pandemic period. The education system is transformed radically during the pandemic and is now majorly based on technology, online activities, and the concept of work from home. There is a significant change in the learning and teaching practices, the whole system and culture of schools had been changed, and the leadership of the education system is tested to their limits (Stone-Johnson and Weiner, 2020).

In short, the overall impact of the COVID-19 on the education and schooling system is disrupting across the globe. Almost every country is facing this challenging time due to pandemics, and as a result, almost 1.6 billion students are not going to school. Almost all educational institutes and schools are reached limits, and they must reorganize and adjust according to the situation. However, it would also be a better opportunity to restructure and improve the education systems by taking the crisis of COVID-19 as a short-term challenge and lesson. The leadership of education and schools can learn from these challenging experiences and fix the lack in the education system and build a better and sustainable education system for the future that would be more beneficial for society. The leadership in the educational institutes and schools was mostly best on typical and traditional methods and approaches before the period of a pandemic (Ganon-Shilon, & Schechter, 2019).

The focus of the head of the school or educational institute was used to be merely running the processes and functions of the school according to the schedule and produce some productive results. At present, there are no corridor chats, coffee catchups, lunch breaks, and staff meetings. These activities are based on formal and informal events that are useful in building a solid relationship among employees and leadership that is gone suddenly with the pandemic. Now, educational institutes and schools' leadership is mainly connected and communicated with other

people over the Internet and telephone all around the world. The leadership practices are now limited on the laptop screens and digital world using different software and technology that provide a minimal approach and opportunities to the leadership (Schechter and Shaked, 2017).

Most of this leadership is expressing their views and opinions about remodeling and repositioning the education system by using the opportunity brought by covid-19. However, there are also some of the leading opinions and expressions which are anxious to get back to the regular routine as that was before the covid-19. These people are very keen to get back to the traditional and old methods and order of the education system with some blend of new educational practices (Hallinger et al., 2018).

Mostly, the people found it in between the reality of the negative impact of COVID-19 and their regular daily routine. These circumstances that impact the whole world with their effects make it realize that there are no certainties and fixed routines in the world, and humans should be prepared for any sudden change and uncertainties. It is not certain at this point about the education system due to the fewer data and insufficient information and future certainty, that either the new education would be applicable and replace the old one now or the old education system is just on a break and would be resume after the pandemic. However, one thing is almost certain that in history, the COVID-19 would be recorded as a massive change and disruption in human lives that had an impact on every possible aspect of human life. In the context of the education system and students' learning process around the world, it is very hard to predict or assume what kind of education system it would be applicable and developed in the future. Still, there is hope for the betterment and positive aspects of all these changes (Ganon-Shilon and Schechter, 2019).

The leadership of education institutes and ministries needs to make positive and rational decisions and do not rush to avoid any confusion or irrational decisions in this shifting paradigm. In difficult and challenging times, the leadership should act wisely and swiftly with consideration of the future consequences and outputs. The present actions should be carefully implemented and planned accordingly. These are very crucial moments in which there is a high potential of making mistakes from the leadership. However, there is a need to make an effective strategy and plans to overcome the negative impact of the current situation and make better ground for the future (Stone-Johnson and Weiner, 2020).

In this short period, the people experts in and related to education started to get connected and share the opinions and suggestions as per their knowledge and experience to find out the best possible solutions for the current problems and issues in the education sector. Every education system and structure is affected by the negative impact of COVID-19 all around the globe. The impact of covid-19 has forced the education system to bring rapid changes and reforms that were so great compared to all the reforms and changes made in the past few decades in the education system all around the globe (Almeida and da Costa, 2019). The current situation made by the pandemic has highlighted some previous faults and issues in the education system that were unobserved before the COVID-19. One of the major faults and issues that is highlighted is regarding the assessment system of the previous education system. Now, this is a debatable point that the assessment systems of the education system should be changed for the future or remain the same. The overall system and structure of education and learning have changed drastically. Likewise, many other factors and elements of the education system's previous assessment system are no longer part of the current change in the education system and replaced with the

introduction of technology-based and innovative assessment tools and techniques (Schechter and Shaked, 2017).

2.6 The effective role of School Leadership during pandemic

In the whole world, covid-19 has proved evolution which has to be adopted by the leaders to survive in the market. Before the covid-19, those schools who were leading for the decades have hardly thought to bring a change in their system and the leadership role for a long time. Educational leadership is only associated with the role of having authority with clear responsibilities and professional support. Principles and the headteachers must ensure that their schools are functioning properly and efficiently and going on the right track. They are answerable to the parents and governors about their school performance. The conventional leaders of the school were accountable for their few actions however distributed leadership, on the other hand, has a much broader scope (Carvalho et al., 2020).

Covid-19 has brought a dramatic change in the notion of leadership and the practices of the leaders. While the principals of the schools and the headteachers are performing leading activities but they must do this in a completely new way which was not even imagined by them several months ago. They must lead from their laptop instead of leading through their school building with a considerable decrease in students' number. They must lead in the community by involving the parents and support group by providing them online help.

The school leaders have now become remote leaders who are physically disconnected from the people to whom they are leading and estranged from the learners who are used to be in their school. This time is strange, unpredictable, and stressful for the school leaders when there is separation from the students and from the very painful staff (Warner, & Burton, 2017).

In this time of crisis, the best school leaders ought to develop a positive culture where the skills and professional capabilities of all the people who are part of the system can be enhanced and enlarged up to a great extent. This is not impossible to achieve this in the virtual world; however, it required extra efforts by the school leaders and to develop a sustainable and meaningful relationship with the people they have to deal with (Schechter, & Shaked, 2017). From one angle, this is a very critical situation full of crisis for the school leadership. The present situation needs mess, butterflies-in-the-stomach leadership, and trial-and-error in the absence of predictability, certainty, and end. It is very exhausting ultimately that can negatively affect the performance of school leaders. While from the other angles, the school leaders who are responding positively to this crisis have become successful in continuing the learning in their schools. Teachers and leaders have put their effort into preparing virtual teaching and planning the new education system successfully. With virtual communication, the terrain of leadership has been changed dramatically and irrecoverably. School leaders must remain positive in continuing the education system in this crisis by bringing necessary changes according to the need of time (Ng, 2017).

2.7 Distributed, collaborative, and networked leadership

As the evidence related to the school leadership within the current pandemic situation is non-existent, still few patterns of emerging practices offer insight about how the school leaders are performing in the covid-19 situation. It has been suggested that in this challenging time, the principles of the school are required to establish a collaborative culture where the people work in the connected networks with the corporation (Shaked and Schechter, 2017).

The global response towards pandemic has consequently resulted in the creation of new networks and the collaborative group that performs the networking practices. School principals are trying to influence others and implementing leadership by using multiple platforms and networks. The network leadership activities are highly distributed and collaborative that support all people's cooperation for continuing the education system (Park et al., 2019). It has become a high necessity that distributed leadership should be adopted as a need of the current time. Distributed leadership has shifted the attention that is just focused on the school principal's activities only to the practices of the group and their joint efforts (Hayes, 2018).

At present School, principals are paying attention to investing their leadership energies in

involving the students, teachers, and others in the co-operative group to perform the collective work. In this regard, significant reforms have been brought into the policy-making system of the schools also. Distributive leaders are filtering the noise and focusing on implementing a new cooperative structure to continue the success of the education system. As the school principals are not viewing themselves differently but they have changed their leadership practices according to the need of the time by compromising their authority (Almeida and da Costa, 2019). Distributed leadership has all the weaken the notion of the traditional leadership roles by bringing a drastic change in the form of decentralization and network leadership culture. Distributed leadership is highly dependent on the leadership connections rather than the activities that show the new problem facing by the whole education system, not just the school principals. Distributed leadership activities are related to capacity building instead of controlling other people like teachers and students. It highly depends upon the mobilization of teachers and students and other policymakers of the education with the collective engagement to successfully implement the new educational system. In this case, if in the post-pandemic time the school return to their regular routine still it is suggested that school principal should adopt new technology and new reforms of the leadership practices because they have many fruitful

outcomes. It is also required that leadership skills should be extended that have been refined in the pandemic even it is over (Park et al., 2019).

2.8 Theories of leadership; effective in managing crisis

The following are the theories of leadership which are effective in managing crisis such crisis caused by the COVID-19 pandemic.

2.8.1 Lewin's change theory

The Kurt Lewin change theory is based upon three steps that are being implemented to bring change successfully. These three steps include and unfreeze, change, and freeze that work to bring improvement. This is a practical framework for any manager to implement the change effort successfully. This theory can be linked in the perspective of educational reforms because change is required to bring in the education system. Based on the theory, educational leaders must take the step of unfreezing by communicating with the teachers and students in need of bringing reforms. Educational leaders should adopt a flexible attitude to prepare them for the change step. After introducing the requirement of change and elaborating its need, educational reforms should be practically implemented. Finally, the teachers and students should gain the support of the educational leader to accept the change permanently at the freezing step (Galli, 2018).

2.8.2 Kotter's change management theory

Kotter, who was a professor at Harvard Business School has introduced 8 step change model theory in 1995. This model consists of eight key processes or steps that are required to bring change in a successful manner. All these steps are very important, including creating urgency, understanding and communicating change, setting long in short and targets, managing the

change, and so on. This model can also be successfully implemented in the perspective of educational reforms to explain the role of the school leaders. The steps proposed by the theory can be used as a successful tool by this educational leader to bring the necessary educational reforms in the post-pandemic situation. The need and urgency of bringing reforms should be communicated by the school and educational leaders effectively. Also, the obstacles that are being confronted by the leaders in implementing the educational reforms from the teacher and student sides should be managed. Flexible and motivational strategies can be a powerful tool for the school leaders for preparing the students, as well as teachers for the educational reforms, need because of the pandemic (Rajan and Ganesan, 2017).

2.8.3 Nudge change theory

Nudge theory is a change model that advocates change in the form of the group by applying indirect methods instead of direct enforcement. This theory's central notion is that people should be assisted to think appropriately and make better decisions by offering them choices and solutions to their problems. This theory can also support the change in the education system because of the pandemic. As a facilitator of the education system, educational leaders can adopt this concept to facilitate the change in the system. Based on the theory, educational leadership should deliver the requirement of change in the education system because of covid-19 to the students as well as teachers. The flexible choices should also be provided to the students as well as teachers, and they should be set free in making their decisions regarding this change. Reform should not be enforced on the teachers and the students but should be implemented by gaining all stakeholders' support (Ebert and Freibichler, 2017).

Chapter 3: Research Methodology

3.1 Introduction

In this chapter, the techniques and research designs employed by the researcher will be discussed keeping in view the research objectives. The sample, sampling techniques, data collection and data analysis techniques will be discussed in detail. It will be short snap of the entire research process. One could have an idea of the authenticity of the research process and the extent to which it will be reliable and valid. The significance of the research is reflected by the methodology used in the research. Following section will discuss in detail the research methodology for the current study.

3.2 Exploratory Research

In order to achieve the objectives of the study, current study will be exploratory in nature. Exploratory research approach is employed to investigate a problem that is far from saturation point and in its preliminary stage (Moody, Kinderman, & Sinha, 2010). This research is suitable when the researcher intents to find the exact nature of the problem under consideration in order to find the most appropriate solution. In this vein, exploratory research design is implied the root cause of the problem is investigated rather than relying on the previous explanations on the topic of the study. COVID-19 has transformed the education system but how it has influenced the job roles of principal and other administrative heads is still to be explored. Considering it as a less explored area, exploratory research approach seems to be the most suitable for the current study. Researcher will have the grounds to acquire in-depth knowledge and understanding of the phenomenon under scrutiny. Additionally, it is found to be more flexible in nature and also it can adapt with the changes that occur during the process of the research. As the research is exploratory that offers first-hand information to the researcher, thus, a researcher is cable of

identifying if the topic is worth exploring and if it has any significant. Keeping in view these facts, current research has been planned to be exploratory.

3.3 Research Philosophy

Positivism claims that issues can be resolved and new phenomenon can be studied by focusing on the certain and natural phenomena. This research philosophy states that truth of our society or social issues are resolved by scrutinizing the sensory experiences of humans or the machines. The logical interpretation of the human observations pertaining to certain phenomenon offers amply information about the phenomenon under scrutiny. Observation assists us to discover facts that further need to be empirically explored and translated into meaning results. Positivism is a scientific study of a phenomenon. It is based on facts and figures rather relying on philosophical grounds. Align with positivism, current study has also taken into account an empirical approach to study the topic of the study. The observations made have been scientifically tested to infer valid and reliable results. Researcher did not adapt a philosophical approach to address the research question.

Deductive Approach

Current study employed the deductive research approach as it is based upon already developed theories. In deductive approach the researcher investigates on what others have, studies existing theories on the phenomenon under scrutiny, and then tests research hypotheses that have emerged from the past theories and literature. Align with this, researcher in the current study did not develop a new theory rather addressed the research questions in the light of previously developed theories and the data collected. In the current study, the researcher has employed three theories that are Lewin's change theory, Kotter's change management theory, and

Nudge change theory. The research questions and the issue addressed have been guided by these theories. The data collected was also in accordance to the perspectives of the theories used in the study. It is more like testing the previously developed theories rather than developing a new theory. The answers will be deduced from the hypothesis testing, data collection, and data analysis. The acceptance or the rejection of the hypothesis will illustrate the results of the study as highlighted by Soiferman, (2010). This approach will allow the researcher to investigate in detail the impact of COVID-19 on the functioning and the roles of principles and higher administrative in context of the theories used in the study.

3.4 Research Design

Cross-sectional Research Design

Study will employ cross-sectional research design where researcher will collect and analyze the data in a pre-defined time period rather extended. It will reflect the extent to which the education system has been effected amid COVID-19 and the prevalence of these problems. As indicated in the cross-sectional research design, the researcher will not intervene in any setting rather he/she will just record and observe the attitudes and changes in the education sector amid pandemic with focus on the case of UAE (Sedgwick, 2014). This approach is most suitable for the research conducted in academic settings as researchers have limited time and resources to accomplish the research goals (Olsen & St George, 2004)

Mixed Method Research Design

Presently the experts in the field highlighted that mixed-method approach is the most suitable to study the less explored areas as it assists in justifying the flaws of qualitative and quantitative research methods and also increase the generalizability of the results (Abowitz &

Toole, 2010). Keeping in view this fact, current study has employed the mixed-method research design to achieve the objectives of the study. The research design was sequential where qualitative part of the study will be guiding the quantitative part. This will allow to acquire detail knowledge and the information over the topic of the study. The aim of the sequential mixed-method approach was to study the phenomena in indigenous context keeping in view the theoretical framework of the study. The qualitative part of the study was mainly guided by the theoretical framework of the study where 3 different theories was employed to study the topic under scrutiny. Based on the results of the qualitative part quantitative study will be guided. Researcher had no intention to develop a new theory rather it preferred to deduce result from the already established theories, thus it is more deductive in nature.

Qualitative Study

In the qualitative part of the study non-numerical and textual data have been collected in order to comprehend others' experiences, opinions, and concepts to get an insight into an issue that is newly emerged. It identifies gaps in the literature and highlight new research areas. It offers rich information over the topic of the study (Pathak, Jena, & Kalra, 2013). Keeping in view all these aspects, current study will gather qualitative data to get an insight how COVID-19 has influenced the functioning and roles of principals and other officials operating in education sector in UAE.

Data Collection-Interviews

Data for the qualitative study were collected by conducting interviews with the higher officials in the education sector of the UAE. This includes principals of the schools and colleges as well. Interviews were based upon the open ended questions as guided by the literature review

and the theoretical framework of the study. It was assured that interviews were based upon the questions that are non-leading, easy to comprehend, unbiased, and non-threatening. The questions included were open-ended offering ample space for the respondent to open up their mind on the topic of the study (Rowley, 2012). The interview guide was prepared beforehand in order to ease the process of data collection. In total 10 interviews were be conducted. The interviews were conducted by using online platforms in compliance with the ongoing policy of social distancing and lockdowns.

Thematic Analysis

The qualitative data collected_through interviews were subjected to thematic analysis in order to identify the common response patterns. Thematic analysis is the widely used data analysis technique in the academic settings. It is a reliable and valid technique requiring limited resources for analysis. It condenses the large qualitative data into meaningful response patterns that address the research objectives in the comprehensive manner (Clarke & Braun, 2014). Thematic analysis revealed the issues, roles, or the change in the functionality that principals or the officials operating in education sector have faced amid COVID-19 due to their shift to online educational mode. Initially, the interviews were transcribed and reviewed multiple time to check for errors. Out of the transcribed interviews the most relevant information pertaining to the research question were analyzed. Based on the commonality among the responses they were gathered to form a category. These categories were then scrutinized for identifying the common response patterns. These common response patterns were then merged to form major themes. The results of the qualitative study led to quantitative study.

Quantitative Study

In this part of the study, numeric or quantifiable data will be acquired from the targeted population by employing systematic process of data collection and analysis. This approach is used when the researcher intends to identify averages, data patterns, causal relationships, predictive relationships, and the relationships among the study variables, or to generalize the results of the study. The data collection in the quantitative study is relatively easy and can be gathered large data set in a short period of time (Omair, 2015). The quantitative study is employed to assure that the sample of the study represents the maximum part of the population and addresses the group differences. Keeping in view all these facts, current study has used quantitative research design for further validating the results achieved from the qualitative part of the study.

Data Collection- Survey

The numeric data will be collected by conducting survey with the targeted population where researcher will reach out the participants and after debriefing the purpose of the study seek their consent for the participation in the study. Survey method is employed when the researcher intends to have an insight over the opinions, beliefs, and understanding of the majority about the topic under scrutiny. It is a standard tool for data collection for quantitative studies in the academia (Klandermans & Smith, 2002). It is preferred for collecting quantifiable data because it requires limited resources and time and comparatively it is an easy approach for data collection. Moreover, it offers firsthand knowledge and information about the issue in hand. For all these reasons, researcher has preferred to employ survey for collection of quantitative data.

Questionnaire based survey will be conducted to explore the relationships between the study variables. Questionnaire will be short and in accordance to the comprehension level of the participants as guided by Roopa and Rani, (2012). It will be in English language, thus participants must be able to read and comprehend English Language. Questions included will directly address the study variables offering the most relevant information. This approach is preferred as it assist in gathering most relevant data by taping directly into the issue in hand in a short time and limited resources.

Questionnaire was developed by the researcher based on the results from the qualitative study. In order to further validate the results of the qualitative study, a questionnaire has been developed for the quantitative part. A pool of items has been developed based on qualitative part of the study. Items were presented to experts for their opinion and the most relevant items were retained for study purpose and rest were discarded.

Statistical Data Analysis

Data Cleaning

The acquire numeric data will be cleaned before conducting higher statistical analysis. Data cleaning will allow to minimize the chances of misinterpretation and enhances the validity and reliability of the results of the study. The incomplete questionnaire forms were discarded (Chu, Ilyas, Krishnan, & Wang, 2016). Moreover, questionnaires with a clear response pattern or those forming outliers were eliminated from the further analysis. Once the data is cleaned it was subjected to SPSS for further analysis. Data were manually cleaned by scrutinizing every single questionnaire filled by the respondents. It was important to clean the data as failure to do this

might lead to irrelevant or incorrect interpretations. Data cleaning enhances the efficiency of the results of the study and assist in inferring more valid and reliable results.

SPSS

The cleaned data were then subjected to descriptive analysis where percentage and frequencies of the response sets were calculated indicating the distribution of the data and also indicates the outliers if any remains. This has indicated the relationship between the variables. Correlational and regression analysis were also calculated to indicate the strength of relationship between the variables. Along with this, the reliability indices were also calculated in order to test the authenticity of the results of the study. The acquired quantitative results were presented in tabular and graphs to make them more reader friendly.

Descriptive analysis revealed what aspects of the phenomenon were most effecting the targeted population as indicated by frequencies and percentages. Along with this, the correlational analysis indicated that the relationship among the study variables and regression analysis facilitated in identifying the cause and effect relationships and explained variance in independent variable.

3.5 Research Site, Population and Sampling

Research Site

The research site for the current study was the educational institutes of the UAE and administrative units and principal offices more specifically.

Population

The targeted population of the current study was the principals and the senior administrating staff in the educational institutes of the UAE. The researcher has to reach out principals and other officials to scrutinize the change in their roles or the issues they have faced while pertaining amid COVID-19.

Sample. It is difficult to reach out the entire population thus for the study purposes a part of the population is selected that represents it referred as sample of the study. For the current study, the sample is based upon the principals operating in educational institutes of UAE and also the higher officials in the targeted sector. The sample of the study will be gender inclusive that is both males and females can take part in the study. The level of education, age, and job position will be kept in focus. It will also be assured that the participants of the study have access to the internet and can operate online meeting platforms that includes MS teams, Skype, or Zoom or any other. Researcher will approach them in accordance to their preferred platform.

Sample Size. Keeping in view the time and resources in hand, the sample size of the current study is small that may not be the true representative of the targeted population but potentially address the topic of the study. The total sample will be 50 where 40 participants will be in the quantitative study and 10 for the qualitative part of the study.

Convenient Sampling

Sampling is an important step in research design as it assists the researcher to get an insight of the beliefs, opinion, and understanding of the targeted population by studying a small part of it. There are different sampling techniques but for the current study non-probability sampling technique will be employed where members of the targeted population do not have the equal chances of selection. Rather selection is influenced by the researcher himself/herself. For

the current study, convenient sampling technique will be employed where researcher select participants of the study who are at the proximal distance and easy to approach. In this sampling technique researcher choose the participants based on his or her own understanding and experience of the targeted population (Taherdoost, 2016). Large data can be collected in a short time.

3.6 Ethical Consideration

There are set of principles that a researcher has to follow while conducting research. Keeping in view the different research approaches employed in the study following are the main ethical standards that the researcher will keep in focus throughout its research process:

Confidentiality

The first and the foremost ethical rule that researcher is bound to follow is that the information provided by the participants must be kept confidential. It must not be shared with any third party or disclosed. The information acquired must be used only for the research purposes.

Anonymity

The right to anonymity must be respected throughout the research process. Researcher must not disclose the participants name or identify throughout the research process.

Non-discriminatory

Keeping in focus the diversity in the UAE, it will be assured that the researcher remains unbiased throughout the research. The researcher biasness will be kept at minimal to assure the

reliability of the results. A standard procedure/guideline will be followed during the data collection and analysis. Every participant will be respected.

Consent

In order to assure that the participants have willingly took part in the study a verbal and written consent will be assured. Participants will be allowed to cancel their participation in the study at any time if felt uncomfortable or threatened. The purpose and process of the study will be debriefed to the participants and their queries will be addressed.

No Harm policy

No individual or animal will be harmed throughout the study purpose. The safety protocols will be strictly followed during the data collection process. The study will be collected in an environment that is perceived as safe and sound by the participants. It will be assured that environment is non-threatening and so is the content for the participants. Also, researcher will make sure that no participants get exhausted from the study process.

Permission

Researcher will acquire permission from the supervisor and the relevant department for the data collection. The permission letter along with the short description of the study and procedure for the data collection will be shared with the potential participants. They will be individually approached by the researcher in their respective educational institutes to build rapport and to assure them that data acquired will be entirely for the research purposes. The process and the time required will be shared with the participants of the study. Once agreed, their availability will be asked and also their preferred mode for data collection. Keeping in view their convenience and safety the interviews/survey will be conducted wither through online platforms

or face-to-face. Permission letter from the educational institutes and the researcher institute will be dually signed.

3.7 Significance of the study

COVID-19 has significantly impacted the educational system of UAE. There have been numerous changes for which the government nor the institutions were prepared. The unplanned changes and implementation of policies have posed serious threats to the effectiveness of the education system. The uncertainty pertaining to COVID-19 is still high indicating that traditional mode of education will still take time to get back. Students and the higher officials of the educational institutes have significantly suffered despite of the fact that both have exerted ample efforts to deal with the uncertain scenario. In order to compete with the escalating changes and to keep up with the standards of education and also to facilitate the student population and administration it is important to access what are the core areas that are mainly influenced by the COVID-19. In this vein, current research will scrutinize the scenario by investigating from the principals and the higher officials of the education sector. These are the figures who are at the better position to reflect upon the scenario and also they can assist in developing better policies and interventions to deal with the adversities that the education sector is facing amid COVID-19. The results of the study will assist in planning interventions and educational policies that are more relevant to indigenous population. Keeping in view their resources, instructions and educational environment could be molded. A better picture of the assets that the educational institutes have to deal with the circumstances and the deficiencies would be reflected by the current study. The area in which the current study has tapped is less explored and far from the saturation pointy. Thus, it holds significant theoretical and practical implications.

3.8 Conclusion

On the whole, research method informs the steps and the procedures that the researcher intend to follow to achieve the study objectives. This gives a reflection of the authenticity, reliability, and the validity of the study and it results. To explore how COVID-19 has impacted the educational institutes in UAE, with focus on the roles and functionality of principals and higher officials, a mixed-method research design has been employed. Interviews will be collected for qualitative data collection which will be subjected to thematic analysis to infer results. Quantitative part of the study will be based upon numeric data collected through questionnaire based survey and analyzed by employed different statistical techniques in SPSS. Study will be cross-sectional and exploratory in nature. Convenient sampling technique will be employed to save time and resources. Research ethics will be kept in focus by the researcher and permissions will be acquired from the relevant departments before data collection.

Chapter 4: Results

4.1 Introduction:

This section is representing the results of this study. This section is a very important part of the research. It represents the analyzed data to conclude the results of the study and to accomplish the research objectives. The study is aiming to find out the impact of COVID-19 on the education policies and changes made to it and also the role of school principals to implement the positive changes. The results are consisting of two types, quantitative analysis, and qualitative analysis.

4.2 Highlights of the research -

Objectives of the research:

The following are the objectives of this study:

- To investigate the impact of changes in the educational policies due to COVID-19 on school principals' role in Dubai.
- To examine the role of school principals in Dubai.
- To identify the effective step that the school principals should take for the implementation of these educational reforms.
- To examine the overall impact of Covid- 19 on the educational leadership in Dubai.

Methodology:

Research Objectives	Data and Analyses

To investigate the impact of changes in the	Quantitative data / Descriptive statistics,
educational policies due to COVID-19 on	frequency distribution, correlation analysis,
school principals' role in Dubai.	and regression analysis.
	Qualitative data / Thematic analysis
To examine the role of school principals in	Quantitative data / Descriptive statistics,
Dubai.	frequency distribution, correlation analysis,
	and regression analysis.
	Qualitative data / Thematic analysis
To identify the effective step that the school	Quantitative data / Descriptive statistics,
principals should take for the implementation	frequency distribution, correlation analysis,
of these educational reforms.	and regression analysis.
	Qualitative data / Thematic analysis
To examine the overall impact of Covid- 19 on	Quantitative data / Descriptive statistics,
the educational leadership in Dubai.	frequency distribution, correlation analysis,
	and regression analysis.
	Qualitative data / Thematic analysis

4.3 Biographical data of participants:

The following section is representing the biographical data of the participants of this study

01. Please specify your gender

Table 01: Gender

01. Please specify your gender

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Male	24	60.0	60.0	60.0
	Female	16	40.0	40.0	100.0
	Total	40	100.0	100.0	

The data collected for this study using the questionnaire including the both genders males and females. The number of male respondents were 24, while the number of female respondents in this study were 16. Including of both gender provided the opinion and perspective of both genders about the topic and also removes the possibility of any discrimination.

02. Please specify your age.

Table 02: Age

02. Please specify your age.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Below 24	8	20.0	20.0	20.0
	years				
	24 to 30 years	22	55.0	55.0	75.0
	Above 30	10	25.0	25.0	100.0
	years				
	Total	40	100.0	100.0	

The data collected for this study using questionnaire is divided into three categories according to the age of the respondents. Majority of the respondents of this study are 22 which are related to the age group of 24 to 30 years of age, while the least number of the respondents are 8 which are related to the age group of below 24 years of age.

03. Please specify your designation.

Table 03: Designation

03. Please specify your designation.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Principal	6	15.0	15.0	15.0
	Admin	20	50.0	50.0	65.0
	Head teacher	14	35.0	35.0	100.0
	Total	40	100.0	100.0	

The data collected for this study using questionnaire is divided into three categories according to the qualification of the respondents. Majority of the respondents of this study are 20 which are related to the group of admin, while the least number of the respondents are 6 which are related to the group of principal.

04. Please specify your qualification.

Table 04: Qualification

04. Please specify your qualification.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Masters	32	80.0	80.0	80.0
	Graduation	8	20.0	20.0	100.0
	Total	40	100.0	100.0	

The data collected for this study using a questionnaire is divided into three categories according to the designation of the respondents. The majority of the respondents of this study are 32 which are related to the group of Masters, while the least number of the respondents are 8 which are related to the group of graduation.

4.4 Quantitative analysis:

The following tables are representing the result of the quantitative analysis of this study.

05. Education is one of the major segments of society.

Table 05: Education is one of the major segments of society.

05. Education is one of the major segments of society.

		Valid	Cumulative
Frequency	Percent	Percent	Percent

Valid	Strongly	4	10.0	10.0	10.0
	Disagree				
	Disagree	2	5.0	5.0	15.0
	Neutral	16	40.0	40.0	55.0
	Agree	18	45.0	45.0	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that education is one of the major segments of society.

06. Quality of education can make a great difference in the impact of education in society.

Table 06: Quality of education can make a great difference in the impact of education in society.

06. Quality of education can make a great difference in the impact of education in society.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	3	7.5	7.5	7.5
	Disagree				
	Disagree	4	10.0	10.0	17.5
	Neutral	12	30.0	30.0	47.5
	Agree	19	47.5	47.5	95.0
	Strongly Agree	2	5.0	5.0	100.0

Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that quality of education can make a great difference in the impact of education in society.

07. It is important to have effective and positive reforms in the education system.

Table 07: It is important to have effective and positive reforms in the education system.

07. It is important to have effective and positive reforms in the education system.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	3	7.5	7.5	7.5
	Disagree				
	Disagree	2	5.0	5.0	12.5
	Neutral	13	32.5	32.5	45.0
	Agree	15	37.5	37.5	82.5
	Strongly Agree	7	17.5	17.5	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that it is important to have effective and positive reforms in the education system.

08. Reforms in the education system can bring improvement in the output of the education system.

Table 08: Reforms in the education system can bring improvement in the output of the education system.

08. Reforms in the education system can bring improvement in the output of the education system.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	2	5.0	5.0	5.0
	Disagree				
	Disagree	2	5.0	5.0	10.0
	Neutral	14	35.0	35.0	45.0
	Agree	16	40.0	40.0	85.0
	Strongly Agree	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that reforms in the education system can bring improvement in the output of the education system.

09. Need for reforms in the education system increased with changes in external factors.

Table 09: The need for reforms in the education system increased with changes in external factors.

09. Need for reforms in the education system increased with changes in external factors.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	2	5.0	5.0	5.0
	Disagree				
	Disagree	3	7.5	7.5	12.5
	Neutral	14	35.0	35.0	47.5
	Agree	15	37.5	37.5	85.0
	Strongly Agree	6	15.0	15.0	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that need for reforms in the education system increased with changes in external factors.

10. COVID-19 has negatively impacted the education system.

Table 10: COVID-19 has negatively impacted the education system.

10. COVID-19 has negatively impacted the education system.

		Valid	Cumulative
Frequency	Percent	Percent	Percent

Valid	Strongly	2	5.0	5.0	5.0
	Disagree				
	Disagree	2	5.0	5.0	10.0
	Neutral	19	47.5	47.5	57.5
	Agree	13	32.5	32.5	90.0
	Strongly Agree	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that COVID-19 has negatively impacted the education system.

11. Effective reforms in the education system can minimize the negative impact of COVID-19.

Table 11: Effective reforms in the education system can minimize the negative impact of COVID-19.

11. Effective reforms in the education system can minimize the negative impact of COVID-19.

			Valid	Cumulative
_	Frequency	Percent	Percent	Percent
Valid Strongl	y 2	5.0	5.0	5.0
Disagre	ee			
Disagre	ee 3	7.5	7.5	12.5

Neutral	10	25.0	25.0	37.5
Agree	11	27.5	27.5	65.0
Strongly Agree	14	35.0	35.0	100.0
Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that effective reforms in the education system can minimize the negative impact of COVID-19.

12. Implementation of reforms in the education system can improve the performance of educational institutes.

Table 12: Implementation of reforms in the education system can improve the performance of educational institutes.

12. Implementation of reforms in the education system can improve the performance of educational institutes.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	2	5.0	5.0	5.0
	Disagree				
	Disagree	2	5.0	5.0	10.0
	Neutral	13	32.5	32.5	42.5
	Agree	8	20.0	20.0	62.5
	Strongly Agree	15	37.5	37.5	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that implementation of reforms in the education system can improve the performance of educational institutes.

13. Principals of schools can play important role in the implementation of reforms in education institutes.

Table 13: Principals of schools can play important role in the implementation of reforms in education institutes.

13. Principals of schools can play important role in the implementation of reforms in education institutes.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	2	5.0	5.0	5.0
	Disagree				
	Disagree	2	5.0	5.0	10.0
	Neutral	6	15.0	15.0	25.0
	Agree	22	55.0	55.0	80.0
	Strongly Agree	8	20.0	20.0	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that principals of schools can play important role in the implementation of reforms in education institutes.

14. Performance of school principals significantly impacts the performance of the school.

Table 14: Performance of school principals significantly impact the performance of the school.

14. Performance of school principals significantly impacts the performance of the school.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	3	7.5	7.5	7.5
	Disagree				
	Disagree	2	5.0	5.0	12.5
	Neutral	14	35.0	35.0	47.5
	Agree	17	42.5	42.5	90.0
	Strongly Agree	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that performance of school principals significantly impacts the performance of the school.

15. Positive performance of school principals can make the reforms of education successful.

Table 15: Positive performance of school principals can make the reforms of education successful.

15. Positive performance of school principals can make the reforms of education successful.

				Valid	Cumulative
		Frequency	Percent	Percent	Percent
Valid	Strongly	2	5.0	5.0	5.0
	Disagree				
	Disagree	3	7.5	7.5	12.5
	Neutral	19	47.5	47.5	60.0
	Agree	12	30.0	30.0	90.0
	Strongly Agree	4	10.0	10.0	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that positive performance of school principals can make the reforms of education successful.

16. Reforms in the education system are constantly required to meet the changing demand of the professional market.

Table 16: Reforms in the education system are constantly required to meet the changing demand of the professional market.

16. Reforms in the education system are constantly required to meet the changing demand of the professional market.

		Valid	Cumulative
Frequency	Percent	Percent	Percent

Valid	Strongly	1	2.5	2.5	2.5
	Disagree				
	Disagree	3	7.5	7.5	10.0
	Neutral	18	45.0	45.0	55.0
	Agree	13	32.5	32.5	87.5
	Strongly Agree	5	12.5	12.5	100.0
	Total	40	100.0	100.0	

According to the results of this study, the majority of respondents were agreed that reforms in the education system are constantly required to meet the changing demand of the professional market.

Descriptive Statistics:

The quantitative data collected for this study is analyzed using descriptive statistics method. The following tables representing the results of descriptive statistics off the data collected for this study.

Descriptive Statistics	N		Mea	Media	Mod
			n	n	e
	Vali	Missin			
	d	g			
01. Please specify your gender	40	0	1.40	1.00	1
02. Please specify your age.	40	0	2.05	2.00	2
03. Please specify your designation.	40	0	2.20	2.00	2

04. Please specify your qualification.	40	0	1.20	1.00	1
05. Education is one of the major segment of the society.	40	0	3.20	3.00	4
06. Quality of education can make great difference in impact of education in society.	40	0	3.33	4.00	4
07. It is important to have effective and positive reforms in education system.	40	0	3.53	4.00	4
08. Reforms in education system can bring improvement in output of education system.	40	0	3.55	4.00	4
09. Need of reforms in education system increased with changes in external factors.	40	0	3.50	4.00	4
10. COVID-19 has negatively impacted the education system.	40	0	3.38	3.00	3
11. Effective reforms in education system can minimize the negative impact of COVID-19.	40	0	3.80	4.00	5
12. Implementation of reforms in education system can improve the performance of educational institutes.	40	0	3.80	4.00	5
13. Principals of schools can play important role in implementation of reforms in education institutes.	40	0	3.80	4.00	4
14. Performance of school principals significantly impact the performance of school.	40	0	3.43	4.00	4
15. Positive performance of school principals can make the reforms of education successful.	40	0	3.33	3.00	3

16. Reforms in education system are constantly					
required to meet the changing demand of professional	40	0	3.45	3.00	3
market.					
Education Reform	40	0	3.41	3.50	3 ^a
School Performance	40	0	3.60	3.67	4

The table is representing the values of mean, median, and mode. These values are showing the average response of the respondents of this study. The results of these values are higher than 3, which shows the majority of the respondents are agreed with the statements used in the questionnaire of this study. According to these results, the majority of the respondents suggested that education is one of the most important segments of society. It is very important to have highquality education to get the optimal output of the education system. In recent years, the situation of the pandemic has negatively affected the education system at the global level. Due to the threat of increasing rate of COVID-19, education institutes have been closed to observe the social distance and the majority of the institutes shifted online which was not an effective alternative to the typical school system. To minimize the negative impact of the covid-19 it is important to implement effective reforms in the education system. For the implementation process of those reforms in schools, the principles of the schools play a very important role. The performance of school principals directly impacts the performance of schools, implementation of education reforms, and performance of the whole education system. Thus, to implement the education reforms in the school system effectively and efficiently, School principals should take the responsibilities seriously and support the process of reforms to make them successful. These

results are supporting the objective of this study such as "To examine the role of school principals in Dubai" and "Impact of COVID-19 on the educational system as a whole".

Descriptive Statistics

	M	linimu	Maximu		Std.	
N	m		m	Mean	Deviation	Variance
05. Education is one of 40) 1		4	3.20	.939	.882
the major segment of						
the society.						
06. Quality of 40) 1		5	3.33	.997	.994
education can make						
great difference in						
impact of education in						
society.						
07. It is important to 40) 1		5	3.53	1.086	1.179
have effective and						
positive reforms in						
education system.						
08. Reforms in 40) 1		5	3.55	.986	.972
education system can						
bring improvement in						
output of education						
system.						

09. Need of reforms in	40	1	5	3.50	1.013	1.026
	.0				11010	11020
education system						
increased with changes						
in external factors.						
10. COVID-19 has	40	1	5	3.38	.925	.856
negatively impacted the						
education system.						
11. Effective reforms in	40	1	5	2.00	1 150	1 244
	40	I	5	3.80	1.159	1.344
education system can						
minimize the negative						
impact of COVID-19.						
12. Implementation of	40	1	5	3.80	1.159	1.344
reforms in education						
system can improve the						
performance of						
educational institutes.						
13. Principals of	40	1	5	3.80	.992	.985
schools can play						
important role in						
implementation of						
reforms in education						
institutes.						

14. Performance of school principals significantly impact the	40	1	5	3.43	1.010	1.020
performance of school.						
15. Positive	40	1	5	3.33	.944	.892
performance of school						
principals can make the						
reforms of education						
successful.						
16. Reforms in	40	1	5	3.45	.904	.818
education system are						
constantly required to						
meet the changing						
demand of professional						
market.						
Education Reform	40	1	4	3.41	.686	.470
School Performance	40	2	5	3.60	.523	.273
Valid N (listwise)	40					

The table is representing the values of mean, standard deviation, and variance. The results of these values are representing the significant amount of variance and standard deviation in the data. While values of mean show average response of the participants of this study tending towards agreeing with the statements used in the questionnaire of this study.

Correlation Analysis:

Correlations

		Education	School
		Reform	Performance
Education Reform	Pearson	1	.471
	Correlation		
	Sig. (2-tailed)		.010
	N	40	40
School	Pearson	.471	1
Performance	Correlation		
	Sig. (2-tailed)	.010	
	N	40	40

Correlation analysis is used to analyze the relationship between the variables of this study. The value of correlation analysis is 0.471 which shows the strength of the relationship between the variables is significantly strong and also the nature of the relationship is positive. That means that effective reforms in the education system can improve the performance of the education system effectively and efficiently. It supports the objective of this study to investigate the impact and effectiveness of educational reforms in making the performance of schools better.

Regression Analysis:

Variables Entered/Removed^a

	Variables	Variables	
Model	Entered	Removed	Method
1	Education		Enter
	Reform ^b		

a. Dependent Variable: School Performance

Model Summary

			Adjusted R	Std. Error of
Model	R	R Square	Square	the Estimate
1	.471ª	.221	.213	.510

a. Predictors: (Constant), Education Reform

$ANOVA^a$

		Sum of		Mean		
Model		Squares	df	Square	F	Sig.
1	Regression	.785	1	.785	3.024	.010 ^b
	Residual	9.870	38	.260		
	Total	10.656	39			

a. Dependent Variable: School Performance

b. All requested variables entered.

b. Predictors: (Constant), Education Reform

Coefficients^a

		Unstandardized		Standardized		
		Coefficients		Coefficients		
Mode	1	В	Std. Error	Beta	t	Sig.
1	(Constant)	2.894	.414		6.988	.000
	Education	.407	.119	.271	1.739	.010
	Reform					

a. Dependent Variable: School Performance

The regression analysis is used for this study to analyze the relationship of the variables. According to the results, there is a positive and significant relationship between the dependent and independent variables of this study. The value of R square is 0.47 which means that reforms in the education system impact the performance of the education system by almost 47%.

4.5 Qualitative analysis:

The following are the results of qualitative data collected for this study using interviews and open-ended questions. The responses collected from the interviews were analyzed and common themes were obtained from them using the thematic analysis method.

In this research, there was the conduction of some interviews for the collection of qualitative data for this research. The sample size of the interview was 10 principles of different schools and educational institutes. The Questions used interviews open-ended. Following are the questions that are used in these interviews.

- 1. What do you think about the importance of education reform?
- 2. How covid-19 impact the education system in UAE.?
- 3. How can education reform minimize the negative effect of covid-19?
- 4. What effective measures a principal can take for improving the standard of education?
- 5. How school principles can make educational reforms successfully?

From the interviews that have been conducted, 10 different principals responded to the above-mentioned questions and they share thoughts and opinions regarding the education reform and also about the impact of Covid-19 on education and educational institutes. From the responses of all 10 principals, it can be concluded that their responses and opinions regarding education reform and the impact of covid-19 on education were similar. Therefore, some important points that are concluded from all 10 conducted interviews are as follows:

Covid-19 has a negative impact on education

When it comes to the relationship of COVID-19 and education it has been seen that covid-19 has greatly damaged the overall structure of education and it puts the education continuity in a lot of trouble. The quality time of students is getting wasted which can probably damage or disturb their future and professional life. According to one of the participant:

"The intensity of Covid-19 is much severe that the government authorities left with no other option but to close schools, colleges and universities". The dramatic closure of schools, colleges, and universities disturbed the pace of education and also the routine of students. The

administration of schools, colleges, and universities is greatly influenced by COVID-19. It has been known that education sectors are designed for face-to-face education. The experience of administration including staff, teachers, and principals are used to the traditional way of teaching and they have made the overall structure of their schools, colleges, and universities accordingly. Therefore, transferring from face-to-face education to online education creates structural and financial problems for administrations. Moreover, the effect of COVID-19 remains highly on teachers as well. Many teachers of schools, colleges, and universities lost their job because of the closure of education sectors. The unemployment rate of teachers remains one of the most as compared to other fields of work. When the schools get closed for the underlined amount of time, then it put danger on the continuity of teachers' jobs. Many teachers lose their job because the educational system was not in a good financial condition to give them a salary.

Importance of education reform

Nowadays, it has been seen and observed that educational sectors have become more of business sectors which aim at generating a profit and gaining financial advantages. Therefore, the educational sector has somehow lost its original purpose which is about providing knowledge and skills to individuals that can help their critical and creative thinking. Schools, colleges, and universities have developed a complex system of marking. According to one of the participant:

"Students who could not gain higher grades are dropout of those institutions which as a result discourages their interest and viewpoint toward education".

According to the research, about 1.2 million students are dropping out each year from educational sectors because they were unable to meet the high demands or requirements of the educational sectors. The focus of educational sectors is more on marks instead of quality

education. There is a need to take necessary steps to enhance the quality of education and to remove business and complexity from educational sectors. Education reform is an important step to take forward a socially and academically progressive future. When it comes to reforming, it is normally associated with transformations and changes in the education system that deal with some factors like educational philosophy, pedagogy, management, student policy, financing, curriculum, organization, didactics, organization and links its national development in this century. The most important agreements that serve as the prime purpose of education are considered as an improvement in care and holistic education right from the childhood of the individual. This type of education is more suited to children that are unprivileged and vulnerable. Therefore, the education reform should include quality education that has to be free of cost and should be in everyone's access.

Role of principals in education reforms

When there is a change or innovation occurs in the system of schools, colleges, or universities, the principals or heads of the institutes are the ones who enforce that change or reform. They can be of different departments or they can order the management team of the school, college, or university to implement the change or addition in the education system. Principals can also monitor the progress of education reform and can analyze that either it is working well or not. According to one of the participant:

"It is also a duty or responsibility of principals to take feedback from students regarding the overall system of education of which they are part".

It is also important for the management of educational sectors to monitor teachers and should ensure that they are using effective teaching techniques for educating students.

Motivations for Education Reform

Education change has been sought after an assortment of explicit reasons, yet by and large, most changes target reviewing some cultural ills, like gender, poverty, or class-based inequities, or saw ineffectualness. Current education trends address different accomplishment holes across ethnicities, pay levels, and geologies. As indicated by one of the participants:

"These educational holes force on what might be compared to a lasting public downturn."

Reforms are normally proposed by scholars who mean to review cultural ills or foundation cultural changes, regularly through an adjustment of the education of the individuals from a class of individuals the readiness of a decision class to control or average workers to work, the social hygiene of a lower class, the arrangement of residents in a popular government or republic, and so forth. The aim that all individuals should be provided with quality education is generally later and has emerged to a great extent in recent times.

Chapter 5: Discussion and Conclusion

5.1 Discussion

The primary purpose of the study is to reflect upon the significance of the principals and administration in implementing educational reforms amid COVID-19 in UAE. Education system has been found to be greatly effected amid pandemic (Sintema, 2020). Pandemic has transformed the education system all over the globe and UAE is no exception as revealed by the results of the current study and supported by the studies conducted on higher education in UAE (Leo, Alsharari, Abbas, & Alshurideh, 2021). Participants of the study revealed that UAE has to comply with the WHO recommended precautionary measure according to which the school closures for unprecedented time, social distancing, and online teaching were mainly emphasized. Accordingly, all over the country the educational institutes were shut down and without any preparation schooling and teaching were shifted to online platforms. Dhawan, (2020) also supported the notion that COVID-19 caused serious disruption in educational sector across the globe for the sake of controlling the spread of pandemic. Neither the students nor the teachers were prepared for this rapid and uncertain shift to online teaching system from on-campus teaching. There were significant connectivity issues that students and teachers have faced. Moreover, teachers were not trained enough to deliver the classes on online platforms. The teaching strategies that were suitable in on-campus classes were nullified in online classes (Pokhrel & Chhetri, 2021). All these aspects significantly negatively hampered the education system, highlighting the need for educational reforms as revealed in the results of the current study.

Align with the past literature, results of the study revealed that Principals and administration clearly made their point that COVID-19 has transformed the education system and they were not

prepared for this transformation as indicated by Mahmut, (2020) and Pokhrel and Chhetri, (2021). Thus, requiring effective educational reforms in order to mitigate the adverse impacts of the pandemic on the educational sector in UAE as revealed by the results of the study.

In this vein, principals, leaders, and administration operating the educational sector have to face serious issues and they were looked upon for the successful implementation of the education reforms formulated to deal with the pandemic as revealed by the results of the current study. Similarly, a study conducted by Sahi, Mishra, and Singh, (2020) also revealed that the education sector has been significantly impacted by the pandemic and in this vein the main challenges were faced by the administration and top management who have to run the system. The administration as well as principals were found to be overburdened and stressed in shifting from on-campus educational system to online system (Strielkowski, 2020). Educational leadership have become focus of attention during the pandemic in order to deal with the Covid-19 challenges pertaining to educational institutes.

Results of the study revealed that the educational reforms were direly needed to deal with the crisis in education sector to deal with the novel situation occurred due to COVID-19. Literature has also revealed that pandemic has resulted in significant disruptions in education system where teachers as well as the students have suffered in unusual manner. In order to deal with the crisis educational reforms were taken in many countries across the globe as supported by Idrees, Said Saeed, and Iqbal,K. (2021). Likewise, Al-Fadhel, H., Al-Jalahma, A., & Al-Muhanadi, M. (2020) addressing the scenario of GCC countries amid COVID-19 highlighted that educational reforms are required in order to deal with the educational challenges posed by the pandemic. The focus of the educational reforms should be the digital learning.

Current study revealed that principals and administrators lie at the core of the successful implementation of education reforms taken to deal with the crisis in the education sector amid pandemic. Likewise, Baloran and Hernan, (2020) have revealed that those who are in operational management in education sector has to come forward to play their role as they are the people who have the better understanding of the crisis in the targeted sector. Also they are looked upon for delivering the quality education. In this vein, they are responsible for sustaining the educational system (EUA, 2019;2020). In this vein, they are the most reliable and effective entities who could lay a profound role in successful implementation of the educational reforms formulated to deal with the crisis situation. Principals have good understanding of the problems that the teachers or the students are facing in the education sector as supported by Thorne, (2011). This is evident from the results of the study where principals and administrative rightly tap into the issues of connectivity. In order to facilitate the student population, the Government of UAE offered free internet connection to all those who struggle to get an access to internet.

Findings of the study have also revealed that there is a significant positive relationship between the positive performance of the school principals and administration and successful implementation of education reforms. Studies support the findings of the study by stating that school principal and administration have the sole resources of the firm. In this vein, they are in better position to identify the loopholes in education sector for investing the resources and implementing education reforms (Heck, 1992). Their positive performance would be reflected in how effectively educational reforms have been implemented. Marshall, Roache, & Moody-Marshall, (2020) supporting the results of the study highlighted that educational leadership -that includes principals and administration- are responsible for crisis management in the education sector. The successful implementation of the reforms depends upon the attitude of the leaders in

the education sector towards the pandemic. The more efficacious they feel better will be the adaptation with the change learning environment.

Moreover, results of the study have also revealed that educational reforms have to be updated in accordance to the external environmental factors. This is justified as in novel situations one that UAE education sector is facing amid COVID-19 the traditional reforms seem to be unfit. In this regard, it is important to update the reforms keeping in view the external crisis and environment. Educational reforms have been updated in order to face the crisis that educational system has faced during the pandemic as supported by Zhao, (2020). UAE has updated its educational reforms to deal with the novel challenges from time to time, keeping in view the rapidly changing educational standards and in order to compete with the developed countries in education sector (Gobert, 2019; Tabari, 2014).

Regression analysis has revealed that educational reforms significantly predict the school performance that is better the educational reforms better will be school performance. In this vein, the quality of the education delivered by any educational institute depends upon how effectively the institute has adopted with the change and how effectively they facilitate the teachers and students. Educational reforms offer policies and instruction to deal with the issues and challenges in hand. UAE has offered and planned substantial educational reforms to solve the issues pertaining to digital learning which has escalated amid pandemic. Because of effective educational reforms UAE has been able to sustain its education standard. In this context, it can be stated that educational reforms play a significant positive role in sustaining the school performance and quality of education (Al-Fadhel, Al-Jalahma, & Al-Muhanadi, 2020; Ashour, El-Refae, & Zaitoun, 2021).

Furthermore, results of the study also highlighted that there is a significant positive relationship between school performance and the performance of the educational leaders that include principals and administrators. In this context, literature reveals that education leaders such as principals are equipped with the capabilities of crisis management and they have better coping strategies to be implemented in education system. Those who positively align their capabilities tend to come up with more productive education system and have capacity to deal with the crisis (Heck, 1992). In many cases, because of productive coping skills of the education leaders such as principals' educational institutes excel at the face of high uncertainty and challenges. A study conducted in post-pandemic phase has also supported the notion that higher educational institutes in UAE have coped with the pandemic crisis under the dynamic leadership of their principals and administration (Ashour, El-Refae, & Zaitoun, 2021). Educational leadership acquired ample attention in the modern world more specifically during the pandemic as their performance were found to be significantly positively related with the performance of the educational institutes (Sebastian et al., 2019).

The qualitative results of the study have also supported the notion that COVID-19 had adverse impacts on the education system in UAE. Tus, further validating the quantitative results of the study. The participants highlighted that education system and setup was designed to facilitate the physical classes and not the online classes. The results revealed that significant number of teachers lost their job as they could not manage to facilitate students through online classes. Students also revealed that there learning has been negatively impacted by the online education system. This reveals that despite of the fact that education system somehow sustained the crisis of COVID-19 but its effectiveness and quality has been hampered to a significant extent as supported by Leo, Alsharari, Abbas, and Alshurideh, (2021). In order to rectify the educational

system effective and updated educational reforms are direly needed in UAE where focus should be kept on the enhancement of digital learning.

5.2 Conclusion

COVID-19 has caused some serious disruptions in the education system all over the globe and UAE is no exception. In order to comply with the restrictions imposed by the WHO the educational institutes were closed in UAE for unprecedented period of time, compelling the principals and administration to shift to online education system. Conclusively, educational system has been negatively impacted by the COVID-19. The rapid closure and shift to online classes has significantly negatively hampered the learning system. It has impacted not just the teachers and students but also the principals and administration who were responsible to manage the crisis. Results revealed that education reforms are required to meet with the crisis and mitigate the negative impacts of the pandemic. For that matter, principals and the administration in education institutes revealed that the previous educational reforms are not appropriate to deal with the novel crisis and thus requires upgradation. Educational reforms need to be updated keeping in view the external factors as previous reforms have targeted the refinement of oncampus educational system, curriculum, mode of education, etc. Crisis that education system in UAE has faced amid pandemic are entirely different thus the reforms have to be updated. Findings of the study also revealed that it is not just the upgradation of the educational reforms but also the effective implementation of reforms that matters. In this vein, principals and administrators were found to be the most significant personnel's who could enhance the education system amid pandemic. The positive school performance was directly related to the positive performance of the principals and administration and education reforms. Thus,

educational reforms and effective participation of the principals and administration could lead to better adoption with the change and online education system amid COVID-19.

5.3 Limitations

The main limitation of the current study is that the sample size is too small to represent the targeted population. This can potentially result in type II error making it difficult to determine if the findings of the study are the true findings as is the case in the current study (Boef, Dekkers, Vandenbroucke, & le Cessie, 2014). The targeted population is quite diverse in nature and sample of the study did not cater the diversity. Thus, the generalizability of the results of the study is low. The results may be relatable to a specific group but not the entire population. This aspect has limit the scope of the study as well and reliability of the study outcomes.

Another limitation is that the validity and reliability of the instrument used to collect quantitative data was not established. In this vein, it is not clear if the instrument has measured the construct properly or if the items were relevant with the construct under scrutiny. This aspect hampers the reliability of the results. Moreover, researcher biasness has been reflected in the sample selection as convenient sampling technique was employed to collect data where participants were selected based on researcher convenience and judgment rather random selection. One more limitation of the study was that researcher has limited resources and time to complete the study. Consequently, researcher could not invest required efforts and time to infer more reliable results.

Moreover, researcher has not paid any attention to the confounding variables and thus it is not clear if the variation in the dependent variable is mainly due to the impact of independent variables. Furthermore, self-reported data is often effected by the exaggeration or selective memory that could be the case in the current study.

5.4 Recommendations

In order to enhance the results of the study and make the results more reliable, it is recommended to address the topic of the study through sequential mixed-method research design. This will assist the researcher to come up with more comprehensive and elaborated view point. In this vein, a scale need to be developed that specifically address the issues and required educational reforms in context of UAE. This will offer grounds to tap into the problems in a more comprehensive manner.

It is also recommended to establish the psychometric properties of the instruments used in the study. The reliability and validity of the scales used in the quantitative part must be established and for the qualitative part it should be clearly discussed what method has been used to frame interview guide.

Additionally, it is also recommended to increase the sample size to make the sample the true representative of the targeted population and also to imply higher statistical analysis that further enhance the insight into the topic under scrutiny.

Researcher should prefer to come up with ample resources to implement random sampling technique where there are equal chances of selection for all the potential participants. Thus, mitigating the sample and researcher biasness and further enhancing the reliability of the results of the study.

New Education reforms should focus on implementation of hybrid education system as this seems to be viable solution to deal with the adversities caused by COVID-19. In this vein, it is recommended to come up with reforms that support hybrid education system in UAE.

It is also recommended to offer effective training session to teachers and principals on the significance of digital learning and ICT techniques. This will assist UAE to acquire a more sustainable educational sector.

5.5 Future research

Future research need to focus on the opportunities that could be created by using online platforms in educational setup. The skills that has developed and could developed in the long term should be focused on. It should be scrutinized what difference does the students and teachers found out whole shifting to online classes in terms of learning.

Moreover, after being exposed to both the education system that is online and on-campus, the difference in grades should also be scrutinized. Once the gaps are identified, the principals and administration should focus on loopholes to make the educational system more progressive and sustainable. Interventions plans need to be developed in indigenous context to mitigate the problems associated with online-education system.

Additionally, researches need to be conducted to test the effectiveness of hybrid education system rather than relying solely on on-campus or online education system. Future studies should focus on attitude towards hybrid education system, taking into account the perspective of principals, students, teachers, and administration.

Apart from this future researches need to take into account the impact of COVID-19 on higher education system with focus on research students and supervisors. The role of educational leadership and management is also suggested to take into account in indigenous context.

References:

- Abowitz, D. A., & Toole, T. M. (2010). Mixed method research: Fundamental issues of design, validity, and reliability in construction research. *Journal of construction engineering and management*, 136(1), 108-116.
- Al-Fadhel, H., Al-Jalahma, A., & Al-Muhanadi, M. (2020, December). The Reporting of Technological Readiness of Higher Education Institutions in GCC Countries: A

- Situational Analysis of COVID-19 Crisis. In 2020 Sixth International Conference on e-Learning (econf) (pp. 296-301). IEEE.
- Alkutich, M. (2021). Exploring the Professional Development Needs of International School Principals in the UAE (Doctoral dissertation, The British University in Dubai (BUiD)).
- Almeida, H. R., & da Costa Ramos Filho, A. (2019). Organizational Change Management Concepts Applied To The Effectiveness Of Project Management: A Study With Senior Managers. Revista de Gestão e Projetos, 10(2).
- Ashour, S., El-Refae, G. A., & Zaitoun, E. A. (2021). Post-pandemic Higher Education: Perspectives from University Leaders and Educational Experts in the United Arab Emirates. *Higher Education for the Future*, 23476311211007261.
- Baloran, E., & Hernan, J. (2020). Crisis Self-Efficacy and Work Commitment of Education Workers among Public Schools during COVID-19 Pandemic.
- Boef, A. G., Dekkers, O. M., Vandenbroucke, J. P., & le Cessie, S. (2014). Sample size importantly limits the usefulness of instrumental variable methods, depending on instrument strength and level of confounding. *Journal of clinical epidemiology*, 67(11), 1258-1264.
- Burwell, T. W. (2021). The Impact of COVID-19 on School Leadership, E-Learning, and Student Achievement in the United Arab Emirates. CCEAM, 94.
- Carvalho, V. O., Conceição, L. S. R., & Gois Jr, M. B. (2020). COVID-19 pandemic: Beyond medical education in Brazil. Journal of Cardiac Surgery, 35(6), 1170.
- Chu, X., Ilyas, I. F., Krishnan, S., & Wang, J. (2016, June). Data cleaning: Overview and emerging challenges. In *Proceedings of the 2016 international conference on management of data* (pp. 2201-2206).

- Clarke, V., & Braun, V. (2014). Thematic analysis. In *Encyclopedia of critical psychology* (pp. 1947-1952). Springer, New York, NY.
- Dhawan, S. (2020). Online learning: A panacea in the time of COVID-19 crisis. *Journal of Educational Technology Systems*, 49(1), 5-22.
- Dolph, D. (2017). Challenges and opportunities for school improvement: Recommendations for urban school principals. Education and Urban Society, 49(4), 363-387.
- Ebert, P., & Freibichler, W. (2017). Nudge management: applying behavioural science to increase knowledge worker productivity. Journal of organization Design, 6(1), 1-6.
- El-Saharty, S., Kheyfets, I., Herbst, C. H., & Ajwad, M. I. (2020). The GCC countries' responses to COVID-19.
- EUA, (2019). The Role of Universities in Regional Eco Systems Innovative, European University
 Association, Brussels, Belgium. Retrieved from
 www.eua.eu/downloads/publications/eua%
 20innovation%20ecosystem%20report_final_digital.pdf.
- EUA, (2020). Covid-19 and Universities, European University Association, Brussels, Belgium.

 Retrieved from available at: www.eua.eu/issues/27:covid-19-and-universities-in-europe.html
- Galli, B. J. (2018). Change management models: A comparative analysis and concerns. IEEE Engineering Management Review, 46(3), 124-132.
- Ganon-Shilon, S., & Schechter, C. (2019). School principals' sense-making of their leadership role during reform implementation. International Journal of Leadership in Education, 22(3), 279-300.

- Gobert, M. T. (2019). Transformation in English language education in the UAE. In *Education* in the United Arab Emirates (pp. 113-126). Springer, Singapore.
- Hallinger, P., Hosseingholizadeh, R., Hashemi, N., & Kouhsari, M. (2018). Do beliefs make a difference? Exploring how principal self-efficacy and instructional leadership impact teacher efficacy and commitment in Iran. Educational Management Administration & Leadership, 46(5), 800-819.
- Harris, A., & Jones, M. (2018). Why context matters: a comparative perspective on education reform and policy implementation. Educational Research for Policy and Practice, 17(3), 195-207.
- Hayes, J. (2018). The theory and practice of change management. Palgrave.
- Heck, R. H. (1992). Principals' instructional leadership and school performance: Implications for policy development. *Educational evaluation and policy analysis*, *14*(1), 21-34.
- Idrees, M., Said Saeed, D., & Iqbal, K. (2021). Elementary Educational Reforms in Pakistan: An Analysis of Government of Khyber Pakhtunkhwa, Pakistan. *Elementary Education Online*, 20(5), 1928-1935.
- Kapasia, N., Paul, P., Roy, A., Saha, J., Zaveri, A., Mallick, R., ... & Chouhan, P. (2020). Impact of lockdown on learning status of undergraduate and postgraduate students during COVID-19 pandemic in West Bengal, India. Children and Youth Services Review, 116, 105194.
- Klandermans, B., & Smith, J. (2002). Survey research: A case for comparative designs. *Methods* of social movement research, 16, 3-31.
- Leo, S., Alsharari, N. M., Abbas, J., & Alshurideh, M. T. (2021). From Offline to Online Learning: A Qualitative Study of Challenges and Opportunities as a Response to the

- COVID-19 Pandemic in the UAE Higher Education Context. *The Effect of Coronavirus Disease (COVID-19) on Business Intelligence*, 203-217.
- Mahmut, Ö. Z. E. R. (2020). Educational policy actions by the Ministry of National Education in the times of COVID-19 pandemic in Turkey. *Kastamonu Eğitim Dergisi*, 28(3), 1124-1129.
- Marshall, J., Roache, D., & Moody-Marshall, R. (2020). Crisis leadership: A critical examination of educational leadership in higher education in the midst of the COVID-19 pandemic. *CCEAM*, 30.
- Masoud, N., & Bohra, O. P. (2020). Challenges and opportunities of distance learning during covid-19 in UAE. Academy of Accounting and Financial Studies Journal, 24, 1-12.
- Matsumoto, A. (2019). Literature review on education reform in the UAE. International Journal of Educational Reform, 28(1), 4-23.
- Moody, W., Kinderman, P., & Sinha, P. (2010). An exploratory study. *Journal of Fashion Marketing and Management: An International Journal*.
- Ng, A. Y. M. (2017). School leadership preparation in Malaysia: Aims, content and impact. Educational Management Administration & Leadership, 45(6), 1002-1019.
- Olsen, C., & St George, D. M. M. (2004). Cross-sectional study design and data analysis. *College entrance examination board*, 26(03), 2006.
- Omair, A. (2015). Selecting the appropriate study design for your research: Descriptive study designs. *Journal of Health Specialties*, *3*(3), 153.
- Park, J. H., Lee, I. H., & Cooc, N. (2019). The role of school-level mechanisms: How principal support, professional learning communities, collective responsibility, and group-level

- teacher expectations affect student achievement. Educational Administration Quarterly, 55(5), 742-780.
- Pathak, V., Jena, B., & Kalra, S. (2013). Qualitative research. *Perspectives in clinical research*, 4(3).
- Pokhrel, S., & Chhetri, R. (2021). A literature review on impact of COVID-19 pandemic on teaching and learning. *Higher Education for the Future*, 8(1), 133-141.
- Rajan, R., & Ganesan, R. (2017). A critical analysis of John P. Kotter's change management framework. Asian Journal of Research in Business Economics and Management, 7(7), 181-203.
- Reimers, F. M., & Schleicher, A. (2020). A framework to guide an education response to the COVID-19 Pandemic of 2020. OECD. Retrieved April, 14(2020), 2020-04.
- Roopa, S., & Rani, M. S. (2012). Questionnaire designing for a survey. *Journal of Indian Orthodontic Society*, 46(4 suppl1), 273-277.
- Rowley, J. (2012). Conducting research interviews. *Management research review*.
- Sahi, P. K., Mishra, D., & Singh, T. (2020). Medical education amid the COVID-19 pandemic. *Indian pediatrics*, *57*(7), 652-657.
- Schechter, C., & Shaked, H. (2017). Leaving fingerprints: Principals' considerations while implementing education reforms. Journal of Educational Administration.
- Sebastian, J., Allensworth, E., Wiedermann, W., Hochbein, C., & Cunningham, M. (2019).

 Principal leadership and school performance: An examination of instructional leadership and organizational management. *Leadership and policy in schools*, 18(4), 591-613.
- Sedgwick, P. (2014). Cross sectional studies: advantages and disadvantages. *Bmj*, 348.

- Shaked, H., & Schechter, C. (2017). School principals as mediating agents in education reforms. School Leadership & Management, 37(1-2), 19-37.
- Sintema, E. J. (2020). Effect of COVID-19 on the performance of grade 12 students: Implications for STEM education. *Eurasia Journal of Mathematics, Science and Technology Education*, *16*(7), em1851.
- Soiferman, L. K. 2010. Compare and Contrast Inductive and Deductive Research Approaches. *Online Submission*.
- Stone-Johnson, C., & Weiner, J. M. (2020). Principal professionalism in the time of COVID-19.

 Journal of Professional Capital and Community.
- Strielkowski, W. (2020). COVID-19 pandemic and the digital revolution in academia and higher education.
- Tabari, R. (2014). Education reform in the UAE: An investigation of teachers' views of change and factors impeding reforms in Ras Al Khaimah schools. *Ras Al Khaima*, *UAE*.
- Taherdoost, H. (2016). Sampling methods in research methodology; how to choose a sampling technique for research. *How to Choose a Sampling Technique for Research (April 10, 2016)*.
- Thorne, C. (2011). The impact of educational reforms on the work of the school principal in the United Arab Emirates. *Educational management administration & leadership*, 39(2), 172-185.
- Warner, R. S., & Burton, G. J. S. (2017). The Current State of Education in the UAE.

 Mohammed Bin Rashid School of Government. Retrieved on, 12(7), 18.

Weiner, J., Francois, C., Stone-Johnson, C., & Childs, J. (2021, January). Keep Safe, Keep Learning: Principals' Role in Creating Psychological Safety and Organizational Learning During the COVID-19 Pandemic. In Frontiers in Education (Vol. 5, p. 282). Frontiers.

Zhao, Y. (2020). Tofu Is Not Cheese: rethinking education amid the COVID-19 pandemic.