



Exploring the Impact of Online Classes on Students' Performance during Covid-19: Voices from Pakistan

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Technology has emerged as an accelerative tool for online teaching and learning during covid-19 pandemic. This growing rate of covid-19 cases resulted in a swift change in countries to adopt escalated preventive measures for working and studying through online platforms. In this study, the authors aim to investigate the impact of online classes on students' learning performance and to explore what problems prevent effective education in Pakistan. An exploratory research design was employed and data was collected through questionnaire—administered online, the purposive sampling has been used among 60 participants studying in the third year of bachelor studies. The participants were selected seemingly due to their broader knowledge in the discipline as compare to beginners i.e. first year students, who may lack possible computer skills. Moreover, literature review presented in this research studies is relevant to online learning during covid-19. The theoretical framework for this research was based on facilitative learning proposed from Carl Roger's person-centered approach. The findings revealed that sudden shift to new format affected students' performance negatively. This study outcome benefits the online learners and higher education institutes to be prepared and to become more aware of the prospective challenges.

Keywords: e-learning, covid-19, students' performance, online teaching, education

INTRODUCTION

Pandemics have been affecting mankind since ages, in the past few decades a great number of viruses have hit the world. Dictionary of Epidemiology defines pandemic as, “an epidemic occurring worldwide or over a very wide area, crossing international boundaries, and usually affecting a large number of people” (Porta, 2008, p. 179). The

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word 'epidemic' has a long history of evolution, it was used in nonmedical context by Homer, Plato, Socrates, etc., its medical meaning was given by Hippocrates. The English term, 'epidemic' has evolved from Greek noun 'epidemia'. Epidemic refers to an outbreak of an infectious disease in a community, affecting a large number of individuals within a short period of time. Thus, pandemic is an epidemic that has spread globally, covering a wide geographical area. This paper is concerned with the impact of a recent pandemic, Covid-19, also known as coronavirus, on students' learning performance. The first case of Covid-19 was diagnosed in December 2019 in China. By March 2020, it was declared a pandemic by World Health Organization (WHO).

Covid-19 has proven to be one of the deadliest flu virus strains, as it is a viral disease, it spreads from an infected person to another in a short period of time. The recent data shows that the most affected countries are United States of America, India and Brazil (World Health Organization, 2021). After careful consideration, World Health Organization shared a number of precautions with the public to reduce the transmission of Covid-19. With the rise of cases and deaths earlier in 2020, worldwide lockdowns and restrictions were imposed to limit the spread. Many countries implemented a complete lockdown, closing educational institutions, restaurants, shops, public places, and imposing a total movement control; other countries issued stay-at-home orders, but only non-essential shops were closed. Border closure and travel restrictions were also enforced to reduce the spread across the countries. As the number of cases increased in Pakistan, international flights were suspended, provincial governments imposed lockdowns, intercity transport was stopped. On 13th March 2020, federal education minister, Shafqat Mahmood announced the closure of all the educational institutions in the country and directed the institutes to start online classes setup to continue the academic year.

With increasing competitiveness, quality education has become an emerging demand for the success of a country. There have been several research studies conducted on students globally regarding online classes mainly focusing on mental health and psychological factors, followed by online and distance learning and medical education (Boonroungrut et al., 2022), but very little has been conducted in Pakistan. Therefore, this sudden shift of education to online mode was met with a variety of reactions in Pakistan, similar reactions were noticed by Noor et al., (2020) in terms of online classes such as insufficient online resources, inability to tackle with online environment, little or no access to internet, and electricity breakouts were the most common factors found affecting learners' performance during online classes due to covid-19. In another study, Sarwat et al., (2021) suggested that students online learning received a direct and positive reaction in a behavioural intentions but unpreparedness from educational institutes and digital approach towards teaching needed a more serious attention. The transition to the online education system has not commonly been a demonstration of good online pedagogy (Hirsch & Allison, 2020).

The aim of this research is to investigate the impact of online classes on undergraduate students' learning performance during Covid-19 pandemic and to explore the problems preventing effective online learning system. The researchers assume that this study

would provide an overview of the online learning system for the higher education in the future. Moreover, this research answers the following research questions.

1. What are the impacts of online classes on the students' learning performance during Covid-19 pandemic?
2. Are there any factors in online classes that cause problems in effective learning?

With the surge in covid-19 cases, Pakistan also took preventive measures against covid-19, National command Operation Center (NCOC) was formed to mitigate the challenge of the pandemic. When the cases began to spread all across the country, the government tried to take swift actions by imposing partial and complete lockdowns. To avoid economic recession, institutions were shifted to an online medium; the policy makers failed to apprehend the digital and economic inequality in the country. Educational sector was also closed, apart from administrative tasks all the academic and other activities were moved to the online platforms.

Literature Review

The present study based on person-centered theory that emerged in 1959 from Carl Roger's facilitative learning conditions in the 1940s. It is a humanistic approach which has been employed in therapies and counselling to help the client achieve a sense of self-understanding and self-esteem. The main tenet of this theory is that people are inherently motivated to improve themselves if they are offered the right conditions. The theory states his point of the view that every person has a unique perspective and a will to learn. Quinn (2013:215) explored the effects of a person-centered theory "conditions on personality and behaviour change with individuals, families, groups, students, schools, in corporate culture, and in large groups as well". Since its origin, this theory has been applied to several fields, including the educational sector. The main perspective of the theory is that a person can be effectively taught by creating a favourable environment and the learning process can only be facilitated by the instructor (Roger, 1954; 1957). Thus, the learners must be provided with a facilitative environment to enhance learning. Quinn (2013) outlines the significance of the theory as being more effective for mainstream approach for better system of development and learning. However, when learners are pressurised with threats, deadlines, pressured assessment, and imposed goals, the desire and the inherent motivation to learn is significantly reduced (Patterson & Joseph, 2007).

Due to the rise in covid-19, there has been a sudden and great shift to the online medium. Online learning is no longer considered as one of many options, rather it has become the only option for teaching and learning due to the closure of institutions to limit the effects of the pandemic. Historically speaking, online education systems have mostly served as a medium to provide education to the learners without an access to the conventional education; therefore, learners' readiness for online learning is required for the success of such education (Warner, 1998). Mensah et al. (2020) found that the impact of sudden shift to the online education mode for learners in the USA significantly increased the workload of the students, new challenges occurred despite having know-how of technology. Al-Kumaim et al., (2021) identified that students shared various

challenges they faced while using IT platform such as inadaptability and unfamiliarity of new online learning environment, work overload from instructors, and personal health challenges related to anxiety and stress. Moreover, little or no digital training had brought new challenges for educators with low digital competence (Espino-Díaz et al., 2020).

Furthermore, a number of higher educational institutes moved to the online learning system without assessing the technical, operational, and health challenges that could arise for the instructors and learners in the future. Moreover, the questions about readiness, effectiveness and planning of online learning are not clear, in particular for developing countries (Muthuprasad et al., 2021), learners felt anxious due to online classes (Humaira et al., 2020), teachers and learners were unable to utilise the available digital devices for better interaction (Marghoob et al., 2020), teachers' opinion of online learning and access to information could positively impact the students' performance and motivate them for learning (Sol et al., 2020), online classes have substantial positive influence on students' performance (Gopal et al., 2021), emergency transition to the new format and students' response to online format was quite satisfactory (Stognieva and Popov, 2021). Another study suggested that the majority of teachers expressed concerns related to limited availability of online interactions, which resulted in negative attitudes towards online teaching and learning (Sevilla-Pavón, and Finardi, 2021). Similarly, a study found that students faced technical barriers and lack of communication which resulted in uncomfortable online learning environment (Alcalde Peñalver, and García Laborda, 2021), the impact of the pandemic on online learning identified problems as unavailability of online academic system, internet connectivity, and shortage of electronic devices (Zaharah et al., 2020), moreover, poor interactions with peers affected the physical presence of students (Cancino and Avila 2021; Garrison and Arbaugh, 2007), the findings of a study of Hashemin (2021) revealed that COVID-19 has a negative effect on the academic performance of students and they are highly unsatisfied with online mode of teaching.

Besides, several other research studies also investigated the perceptions and satisfaction with online experiences during Covid-19 pandemic. Mahyoob (2020) found that the main factors that influenced students learning during COVID-19 were related to technology, communication, and studies. Additionally, in another study, it was found that students had to cope with many problems to attend an online class, the major problems were improper study environment, inequity in the gadgets, little or no internet access, and load shedding (Noor et al., 2020), however, students indicated that they faced challenges, including content understanding, instructors' methodologies and behavior during online classes and examinations (Khalil et al., 2021). Thus, the literature has demonstrated diversity of models proposed for online learning, which provide essential theoretical foundations to understand and explore the students' performance in online learning. Furthermore, this study differs from the previous studies as it incorporates topic of pandemic and higher education in Pakistan and to increase education sector's readiness to tackle such problems in the future.

METHOD

Research Design

An exploratory survey research design was employed for this study using questionnaire as the main tool for the data collection. Therefore, it has employed both, the quantitative and the qualitative research methods to analyze the impact of online classes on students' performance and learning during Covid-19.

Participants and Sampling

Sixty students (20 males and 40 female) in their fifth and sixth semester (third year) of Bachelor of Studies in English language programme at a public sector university in Islamabad were selected as participants. Due to the availability issues during the initial wave of Covid-19, the subtype of purposive sampling, heterogeneous or maximum variation sampling has been used. Heterogeneous sampling also helps to select participants having diverse characteristics. Two different semesters were selected; each semester was further divided into two sections. The sample composed of students of different areas and gender and age group of 21 to 23 years. The purpose of selecting this sample was to obtain an insight about the impact of Covid-19 on the students' performance. Creswell and Creswell (2018) opined that purposive sampling is essential to select participants that have experienced and know the phenomenon being researched.

Instrumentation

A questionnaire was designed based on the closed-ended questions that were based on the Likert-scale, which is a five or seven-point rating scale. The questionnaire comprised four sections, each section consisting of five statements related to the aim of research. The questionnaire was employed due to its reliability which allows researchers to collect a considerable volume of data fairly, timely, and easily (Fraenkel & Wallen, 2019). The findings were analysed in a descriptive way, because it sets basis for prospective studies. Moreover, a pilot study was conducted in order to refine the questionnaire survey for better findings.

FINDINGS

In this section of the study, the findings of the present research have been presented and analysed. The findings revealed following responses in accordance with survey items relevant to the knowledge and experience of internet usage.

Students were asked first about their own and their teachers' knowledge of internet or IT skills respectively. The students responded on the Likert-scale ranging from strongly disagree (1) to strongly agree (5); the following figure shows their responses presented in Figure 1.

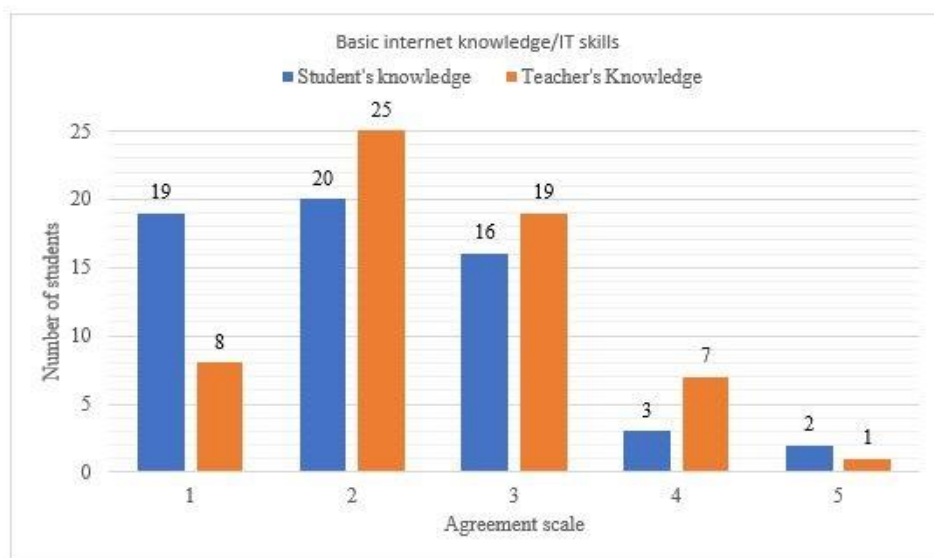


Figure 1
Knowledge of basic internet and IT skills

The findings of figure 1, regarding the knowledge of basic internet skills, had variety of responses and the data finds that majority of the respondents had the basic know-how of internet and IT skills required for online classes, 65% of the sample agreed to the statement “I have basic internet knowledge”. Only 8% disagreed with the statement. The data shows the lack of digital education in the smaller cities of Pakistan, indicating that socio-economic background also plays an important role in education. 55% of the students agreed with the statement “My teachers have basic internet knowledge”, and the remaining had either neutral response or disagreed.

The students were asked about their internet connection, and 41% of the sample agreed to have a stable connection. 26% neither agreed nor disagreed with the statement, indicating that their internet connection was not consistent. Around 30% of the sample did not have a stable internet connection. A stable internet connection is a necessity during the online classes, and the survey shows that the education of more than 50% of the sample is affected because of a poor connection. Boonroungrut et al., (2022) conducted Bibliometric network analysis on research on students during COVID-19, which revealed that the information processing was limited under the distance learning. Additionally, academic and IT staff along with faculty have not been ready to execute their skills during online teaching and learning processes (Makruf et al, 2022).

Additionally, the main second requirement for quality online teaching is an effective teaching module; as there was a sudden shift to online classes the administration did not have the opportunity to design or choose a proper module or Learning Management System (LMS). Prior to the online classes, LMS was not being used frequently,

therefore the sudden shift caused the system to crash and teachers and students faced a great deal of difficulty. Unaware of the online teaching forums, the administration and faculty began to experiment with several mediums, such as google classroom, zoom, etc. The participants were asked about their level of satisfaction with the teaching modules employed by their teachers, the figure 2 shows the results.

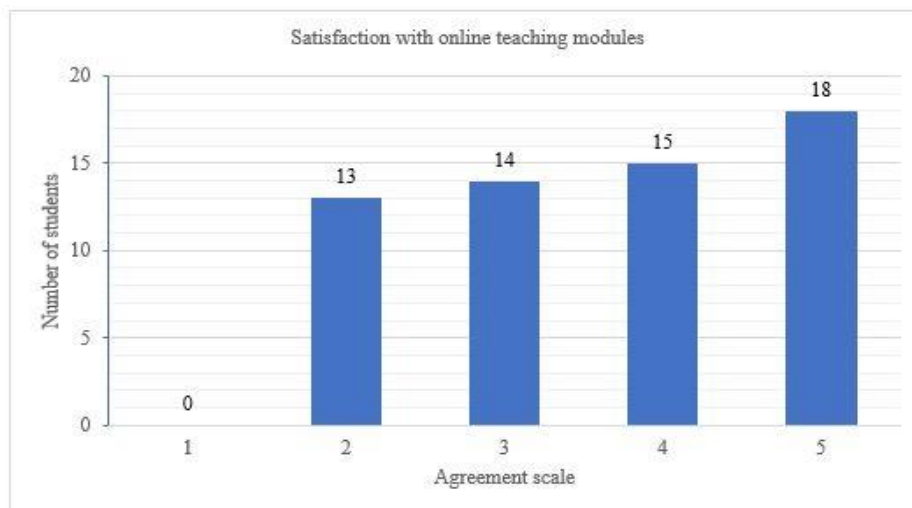


Figure 2
Level of satisfaction with online teaching modules

The findings in the figure 2, shows the lack of strategic planning to select and design a teaching medium and LMS; only 21% participants showed satisfaction, whereas 55% of the sample was dissatisfied with the online teaching platforms. As the questions were based on the theory of Facilitative learning, according to which a favorable environment must be created by the instructor for effective teaching and learning, the responses of the survey show that this requirement was not met by the administration. 18 out of 60 students strongly disagreed with the statement “I am satisfied with the teaching modules, such as Google Meet, LMS, Zoom etc.”, showing that the administration nosedived into the online education system. Moreover, the universities were experiencing a level of digital divide and declining equality during Covid-19 due to a sudden shift to online mode (Marghoob et al. 2020), the poor interactions with class fellows and shortage of peer rapport negatively affected the students (Cancino & Avial, 2021). Therefore, everyone’s concerns must be considered while selecting a platform or designing a module for online learning.

As Carl Rogers has put forward three main conditions for facilitative learning, realness, acceptance, and empathy, the third section of the survey was constituted of the statements based on his conditions. The responses given by the participants explore the aim of this study by gathering the opinions about impact of online classes on students’

learning. Consequently, the findings for this section revealed a major difference between on campus and online learning as shown in the Figure 3.

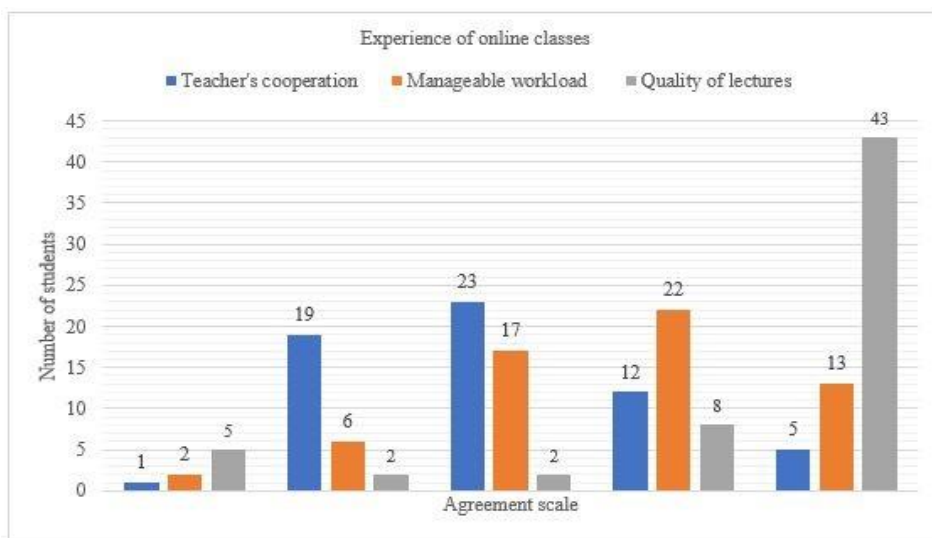


Figure 3
Experience regarding online classes

Based on the data, the responses indicate that only 33% of the sample agreed with the statement “My teachers and faculty members are cooperative”, and only 13% agreed with the statement “I am assigned manageable workload”, the data shows the teachers have failed to create a constructive environment for teaching. The results demonstrate a major hurdle in effective learning, the students are expected to complete numerous assignments and tasks within a short period of time while facing stressful circumstances. Empathy and compassion are important components to create a positive setting for effective education. 85% of the sample revealed that the quality of lectures during online classes has failed to meet the quality of on campus teaching.

The findings of this study contradicted with that of Okada et al. (2015), Stognieva & Popov (2021), in which most of the students found satisfactory conditions and considered online learning an effective platform. Thus, the findings were obvious to draw a contrast between much developed learning system availabilities in other countries and Pakistan which lacks basic facilities for online learning.

Moving on to the next RQ findings of this study, which aim to identify the main challenges that affected students' online learning performance are presented in the figure 4.

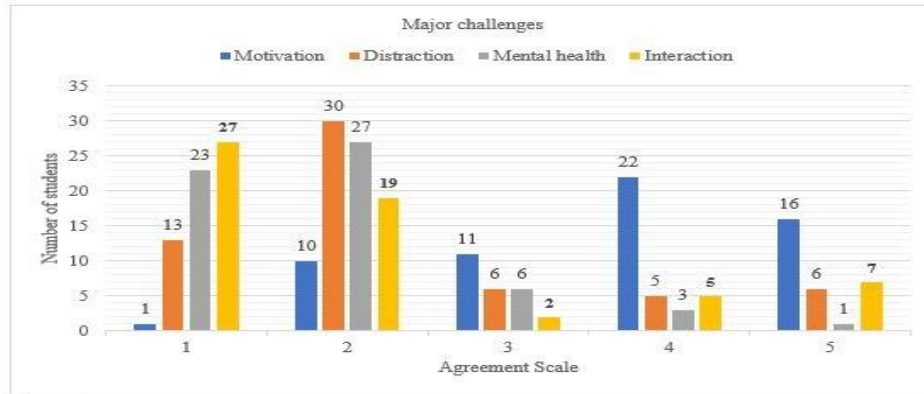


Figure 4
Major challenges encounter during online classes

The figure 4 points out the major challenges that students faced while coping with online learning, it identified that the students' lack of motivation, distraction, mental health and interaction with peers and teachers were some of the serious factors that impacted the students attending online classes. As the theoretical framework of this study was based on the Theory of Facilitative Learning, which has emerged from Carl Rogers Person Centered Theory; according to the theory a nurturing environment must be available for the students so they can utilise their potential (Roger, 1957; 1959, Quinn, 2013). The major factor in creating a facilitative environment is interaction between the students and the teachers, by assigning interactive activities the teacher promotes understanding and communication skills in the students.

The data reveals that 63% of the sample disagreed with the statement "I am motivated to take classes", it indicates the dissatisfaction of the students with the online education system. The lack of motivation can lead the students to perform poorly in the academic tasks and assignments. In the absence of an interactive classroom, the students tend to become occupied with other activities. As mobile phones are the major devices being used to join online classes, the students can get distracted by other applications in the device. The students attend the sessions absent mindedly while using social media, which in turn causes poor understanding of the lectures. 71% of the sample agreed with the statement "I get distracted by social media and other apps while taking the class" revealing the need to make the online classes interactive. The lack of interaction can also discourage students to ask questions about the lesson and to clear their concepts. To promote an effective education and learning through online medium, the administration needs to take these factors in consideration.

The teaching should not only focus on bookish knowledge, it must also cover social skills, such as compassion, cooperation, communication, etc. The teaching methodology needs to be remodeled; a research on the importance of emotions in classroom shows, "Teachers' effective emotional skills may contribute to their good relationships with students, thus supporting students' adjustment to, and performance in, school,

encouraging their learning process and motivation, as well as their memory and creativity” (Prosen et al., 2011, p. 143). Throughout the dataset gathered through survey, there were multiple suggestions concerning teachers’ attitudes towards the students, they expressed the need of compassionate attitude in the classroom. As evident from one of the suggestions, “Mental and physical well-being must be factored into the teaching-learning experience.”, it is essential to foster empathetic setting in the classroom.

DISCUSSION

The data analysis has summarized the important factors affecting the learning, there is an unequal distribution of digital resources in the country which reveals the lack of planning by educational sector. Today, education has become a necessity to succeed in life; the learning and teaching methods have shifted towards a grade-oriented approach, emotional and social intelligence is taken for granted. During such a time, Covid-19 has proven to be a blow to the already deteriorating educational policies of the country. The survey shows that despite challenging and vulnerable times, our education system emphasizes on assigning tons of assignments, tasks, and conducting exams without considering students’ mental or physical wellbeing. The online education system has served to increase the communicative gap between students and teachers, the teaching process has become more teacher-centered than ever. The lack of interaction has led to an unsympathetic environment in the classrooms, students believe that their teachers have adopted an insensitive attitude towards them. Muthuprasad et al., (2021) examined the priority and understanding of students about the e-learning, which identified classes structure being effective and hindrances in online learning as long duration of online classes, consecutive classes, lacking of technical proficiency, and infrastructure shortage. Similarly, most teachers expressed reservations to the limitations of online teaching and communicative classes, on the positive side, the finding highlighted possibility of autonomous learning and experiencing technologies (Sevilla-Pavon and Finardi, 2021). However, there is attitude division among scholars and debate continuous on e-learning, but swift change and unpreparedness, shortage of resources were major challenges encountered by both teachers and students (Margoob and Mamuna, 2020).

Finally, the data demonstrates the importance of compassion and empathy during these tiresome times. Majority of the respondents were of the view that lack of stable internet connection and devices impeded their learning process. The administration should ensure the availability of internet facilities and devices for the students from far-flung areas, their circumstances should be taken in consideration while assigning them assignments and evaluating their performance. Gopal et al., (2021) in Indian context identified the factors affecting student’s satisfaction and performance on online classes, which revealed that main factors as effectiveness of instructors, feedback on learning independent impacts on students’ performance. The suggestion regarding less workload appeared around 10 times in the data, bearing the struggling situations in mind teachers should be flexible concerning the deadlines. One of the suggestions stated, “Staying at home does not mean that students have their entire day off. The workload on students need to be minimized and properly managed”, thus highlighting one of the major

challenges which has a negative impact on learning. Apart from academic stress, Covid-19 has put a financial strain on many families, thus affecting the education and learning of students belonging to such families. Similar studies in Pakistani context consent with this study's findings as Marghoob et al., (2020) perceived that higher educational institutes need to develop infrastructure, internet connectivity and speed, along with availability of electronic devices to overcome the main hindrances for effective online learning and teaching. In addition, Hindun et al., (2021) findings demonstrate factors that affected e-learning of students and teachers during COVID-19 were mainly cognitive (mind-related or thinking) and metacognitive (self-awareness) significantly, digital learning in a comparative perspective among students' showed more effectiveness in improving students' skills (Sariyatun, 2021).

The findings presented herein have some limitations; the data was collected from a public sector university, and the sample consisted of the students of Bachelor of Studies in Modern Language (Hons.), who were enrolled in the 5th and 6th semester of studies during the first Covid-19 wave. Moreover, the participants responded according to their understanding of questionnaire items. However, despite the aforementioned limitations, this study consents with other studies conducted in Pakistan.

CONCLUSION

To sum, the important factors affecting students' performance during online classes are need to for basic know-how internet and IT skills, leaners were unsatisfied with online teaching due to unconducive environment, teachers' cooperation remained optimum but lacked basic facilities for online learning, whereas, from major challenges that hindered effective online learning were distraction, mental well-being, and non-interactive class which result in demotivation from learners' point of view. The present study highlighted the shortcomings of the online education system in Pakistan. The data has indicated that students' learning performance has been severely affected by the online classes, moreover, students in Pakistan are facing great ratio of digital disparity and decreasing equality (Marghoob et al., 2020). The teaching methodology and learning process was already lagging behind other countries, the pandemic only functioned as an additional challenge for the education sector. The shift to online classes has exposed the poor policies and unpreparedness to tackle problems causing hindrance in effective delivery of higher education. Students having inadequate internet resources began to perform poorly and fell behind their class fellows, the study was conducted to analyze the impact of online classes on students' learning. The unavailability of stable internet connection and lack of access to internet devices is a failure of the administration and the policy makers. Nevertheless, the teachers also play an important role in this situation, they should be considerate towards the students. With the technological advancements at the global level, the country needs to stay ahead of the curve to succeed. The future of education significantly depends on the online platforms because of the uncertain circumstances due to the pandemic. Online learning has become a crucial part of education, therefore above all, digital training should be provided to teachers and students to ensure quality education. Implications of this study in particular, are within the parameters of Pakistani higher educational degree awarding institutes/universities; they should prepare conducive learning environment; training of both teachers and

students; IT related challenges need rapid address and institutes better provide an easy access to internet; and teachers should hold more interactive classes, whereas, generally, the study focuses on prospective challenges in applied linguistics in Pakistani setting.

DISCLOSURE STATEMENT

No conflict of interest was reported by authors.

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