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RESEARCH ARTICLE

Online Learning Challenges Faced by SSC-Level Learners During the COVID-19 Pandemic: A Case of Pakistan

Shaista Noor · Filzah Md Isa

Background/purpose – The pandemic threatened education through two significant shocks: the closing of educational institutions across all levels and the financial recession. This overnight shift from face-to-face to an online mode of education became the reason for various physical, mental, and financial challenges faced by both learners and educators alike. This study investigates the perception of Secondary School Certificate (SSC-level) learners in Pakistan regarding online teaching during the COVID-19 pandemic.

Materials/methods – A qualitative research strategy was adopted, with semi-structured interviews conducted via Zoom with 15 SSC learners from renowned schools in Rawalpindi and Islamabad, Pakistan. Structured inductive data analysis technique was adopted in the analysis of the collected data.

Results – The study's results highlighted problems experienced by SSC-level learners in online classes via Zoom and Google Classroom. These related to technology, personal, and educator issues such as technical problems, adaptability struggles, computer literacy, lack of motivation, poor grades, inability to focus, homesickness, disorganization, skipping classes, failure to dedicate appropriate time to studies, technology shortages, poor sleep habits, lack of routine, power failures due to extreme weather, and uncertainty about the future and fear of SSC final exams.

Conclusion – This study will help policymakers from Pakistan's Board of Intermediate and Secondary Education System to focus more on development, technology, communication, and support programs, especially for high school learners.

Keywords – learner, online, obstacles, SSC, Pakistan

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1. INTRODUCTION

Technological growth has made computer-mediated learning largely stress-free and systematic for both students and teachers (Abbasi et al., 2020). Past research depicts various terminology associated with computer-based learning, such as online, web-based, and blended learning, which is now readily accessible virtually worldwide (Smart & Cappel, 2006). The online learning experience may be synchronous (where learners meet in real-time) or asynchronous (where participants may interact at different times) by utilizing various technologies such as laptop computers, tablet personal computers, and mobile smartphones along with Internet connectivity (Allam et al., 2020; Dhawan, 2020). However, the role of technology in academia encountered a significant and unexpected overnight boom with the worldwide COVID-19 pandemic. The World Health Organization announced COVID-19 as a pandemic on May 11, 2020, and the governments of many countries across the globe issued immediate stay-at-home orders (Rajab et al., 2020). The entire education system of many countries worldwide was suddenly disturbed by the shocking waves of lockdown orders, and online classes soon started to replace face-to-face traditional teaching in developing countries such as Pakistan, India, and Bangladesh (Johnson et al., 2020; Noor et al., 2020). Thus, this extended health emergency and societal lockdown crippled many walks of life, and particularly hit was the education sector. Policymakers and government officials worldwide undertook massive efforts to mitigate the impact of lockdowns in order to maintain learning as an ongoing process (Sahu, 2020; Uwezo, 2020).

This move led to a drastic shift from face-to-face to online learning through online tools such as Google Meet, Zoom, various learning management systems, and Microsoft Teams, since prior to the pandemic, online learning was not that popular as a general mode for educating students. However, in order to limit the negative effect on the education system, online teaching was substituted for classroom teaching as an emergency teaching practice. This emergent online teaching practice frequently encountered issues such as poor online connectivity, limited technical expertise amongst both learners and teachers, and weak or inadequate infrastructure in many parts of the world (Noor et al., 2020; Rahim & Chandran, 2021; Uwezo, 2020). However, education technology (sometimes referred to as EduTech) was soon considered the worldwide solution to minimizing student education loss; hence, distance education was largely adopted on a global scale during the early part of the pandemic (Malik, 2020; Rahaman et al., 2021; Saikia, 2021).

The current study was conducted in Pakistan in order to investigate Secondary School Certificate (SSC) students' perceptions regarding online teaching practices during the COVID-19 crisis. Matriculation is referred to as "matric" in Pakistan's education system, with final exams usually taking place at the end of grades 9 and 10 for students aged 14 to 16 years old. Matric students must take five subjects each year during the ninth and 10th grades based on their selections from science, the arts, and commerce. Matriculation or secondary-level education is considered necessary in students' lives in order that they have the opportunity to enroll to colleges and higher education institutions, subject to passing the SSC exam. SSC-level students used to receive additional coaching under Pakistan's school system since the government's Board of Intermediate and Secondary Education System administer the exams. The SSC examination forms the basis for admission to colleges and vocational institutes, meaning that students need to secure good grades during matriculation. Therefore, students strive for good results from their first SSC examination division in order to secure admission to reputable public sector colleges. However, the teaching methodology for pre-middle and high

school students was drastically impacted in 2020 due to the COVID-19 pandemic (Jamil & Muschert, 2023; Noor et al., 2020; Shahzad et al., 2020).

Concerning this issue, the current study aimed to explore the challenges that SSC-level students experienced regarding online teaching practices during the COVID-19 pandemic. Online teaching in Pakistan was a relatively new method at the time (Shahzad et al., 2020). Whilst teachers and students were familiar with online learning blogs, their technological experience as users was predominantly limited to Internet surfing and social platforms used for the purposes of communication and entertainment (Owusu-Fordjour et al., 2021; Popovici & Mironov, 2015; Zapata Cuervo et al., 2021). The current study will delve into a deeper exploration of the challenges faced by SSC-level students in Pakistan towards online teaching practices during the COVID-19 pandemic. Arguably the most vital resource linked to the reputation of schools in Pakistan, SSC-level students faced considerable physical, mental, and financial challenges following the almost overnight shift from classroom-based teaching to an online form of lessons. They were confronted with numerous issues such as inadequate digital pedagogical knowledge and infrastructure limitations relating mainly to power connectivity. The research objective and research question of the current study are as follows:

RO1 To explore the common challenges of SSC-level students in Pakistan towards online teaching practices during the COVID-19 pandemic.

RQ1 What are the common challenges of SSC-level students in Pakistan towards online teaching practices during the COVID-19 pandemic?

2. METHOD

The current study investigates SSC-level learners' perceptions about online classes in Pakistan during the COVID-19 pandemic. The qualitative research strategy was adopted since the study was exploratory of a new area, and which led to the formulation of a hypothesis (Miles & Huberman, 1994). The qualitative research involved data collection through semi-structured interviews using a self-structured, open-ended questionnaire (Braun & Clarke, 2006). An interview guide was prepared based on the open-ended self-structured questionnaire, and data were collected through semi-structured interviews (David & Sutton, 2004). A qualitative research design was necessary in order to apply investigative questioning of the study's participants (Easterby-Smith & Jackson, 2008). A phenomenological case study approach was adopted so as to understand the participants' views, since the research design would play a catalytic role in answering the research question. The explanatory research design was considered suitable for the current study since the research would be exploratory in nature.

The data were collected through semi-structured interviews held with 15 SSC-level learners from renowned schools in Rawalpindi and Islamabad, Pakistan. The number of participants was based on Creswell and Poth's (2012) suggestion that five to 25 participants would be sufficient for this type of phenomenological study. The participant interviews were conducted via Skype between May 1 and May 20 of 2023, with each interview having lasted approximately 30-35 minutes. Ethical approval for the study was received from the Rawalpindi/Islamabad school's secretariat in April 2023.

Table 1 presents the interview questions applied in the current study, which followed the suggestion of Bryman and Bell (2007) regarding the use of simple and short questions. As such, long and negative questions were excluded from the interview guide (Covin & Wales,

2018). It is deemed imperative to use simple language and technical terms should be avoided when developing interview questions, since it is critical that the interviewees fully understand the questions posed to them. Saldana's (2018) structured method of inductive analysis technique was used in reviewing the collected data, based on a seven-step technique: (i) Manually group and transcribe comments from participants; (ii) Remove irrelevant and redundant information; (iii) Categorize information into clusters and themes; (iv) Validate themes; (v) Construct textual descriptions based on participants' experiences; (vi) Create structural explanation by analyzing textual descriptions; and, (vii) Establish final themes based on the participants' actual experiences. This method is considered a flexible qualitative analysis technique (Hall et al., 2016; Noor et al., 2020).

Table 1. Semi-Structured Interview Questions

No.	Interview question
1	How do you feel about online learning?
2	Are you comfortable with the online class via Zoom and Google Classroom?
3	What obstacles did you face with online classes?
4	What is the biggest challenge you faced moving from the face-to-face to online mode of learning?
5	What is your opinion regarding online classes for SSC-level learners in terms of the school administration?

Table 2. Profile of Interviewed Participants

Sr.no	Variables	SSC-L1	SSC-L2	SSC-L3	SSC-L4	SSC-L5	SSC-L6	SSC-L7	SSC-L8	SSC-L9	SSC-L10	SSC-L11	SSC-L12	SSC-L13	SSC-L14	SSC-L15
Age (years)	14-15	√	×	×	×	√	×	√	×	×	√	×	√	×	√	×
	16+	×	√	√	√	×	√	×	√	√	×	√	×	√	×	√
Gender	Male	×	√	√	×	√	×	×	√	×	√	×	√	×	√	×
	Female	√	×	×	√	×	√	√	×	√	×	√	×	√	×	√
Prior online learning experience	Yes	×	×	×	√	×	√	×	×	×	×	×	√	×	×	×
	No	√	√	√	×	√	×	√	√	√	√	√	×	√	√	√
Personal Laptop	Yes	√	√	×	×	√	√	×	×	×	×	×	×	×	×	×
	No	×	×	√	√	×	×	√	√	√	√	√	√	√	√	√

Table 2 shows the profile of the study group. Six of the 15 participants belonged to the 14-15-year-old age group, whereas nine belonged to the 16 or over age group. Seven males and eight females participated in the study. The majority of them had no prior online learning experience (L1, L2, L3, L5, L7, L8, L9, L10, L11, L13, L14, L15), while three of the participants (L4, L6, L12) did have some prior online learning experience. The majority of the participants (L3, L4, L7, L8, L9, L10, L11, L12, L13, L14, L15) responded negatively to having any laptop personal computer available to them, whereas only four participants (L1, L2, L5, L6) stated having a personal laptop computer.

Table 3 presents the various perception attributes reported by the SSC-level learners regarding online teaching during the COVID-19 pandemic as generated themes.

Table 3. Generated Themes

Perception Attributes	Dimensions	No of Participants
Online learning	Lack of resources	14
	Adaptability struggle	13
	Disorganized	12
	Restricted time	11
	Inadequate teacher support	10
Obstacle's associated with online learning	Failure to dedicate appropriate time for studies	15
	Poor sleeping habits	15
	Homesickness	15
	Technology shortages (e.g., laptop, smartphone, tablet)	14
	Power failure and extreme weather condition	14
	Connectivity issues	13
	Inadequate computer literacy	12
	Lack of technology confidence	11
Biggest challenge	Poor grades	15
	Lack of motivation	15
	Online assignments / No exam preparation	15
	Uncertainty of future and fear of failure in SSC exam	15
	Unable to focus	14
	No routine	14
Opinion	Engage SSC-level learners more	15
	Platform needed for student/teacher communication outside of class	15
	Constant feedback needed	15
	Teaching via different activities (e.g., debate, group activities, discussion) to increase learner engagement	15
	Quizzes and tests	14
	Redesign course content for online learning	14
	Motivate SSC learners via frequent online meetings with section head and school principal	14

3. ANALYSIS AND DISCUSSION

The study's findings regarding the perceptions of SSC-level learners in Pakistan concerning online teaching practices during the COVID-19 pandemic are summarized in Table 1. The participants highlighted a need for more resources, struggles with adaptability, disorganization, limited time, and inadequate support from teachers. The following are excerpts from two of the participants' responses.

We are suffering from a lack of resources required for smooth online learning as it is new for both students and teachers. Unfortunately, the COVID-19 outbreak is a tough time for SSC-level students since it is the peak time to revise the syllabus and prepare for the Board exam. We are still in an adaptability struggle. (SSC-L9)

Online classes are disorganized, and we are getting less support from the teacher as they only appear online for a restricted amount of time and seem in a hassle to connect to their other classes. I don't know if COVID-19 has collapsed our school system: 1 year has already passed and we are still struggling to get into the online learning system. (SSC-L2)

Regarding the obstacles that the SSC-level learners faced with online learning, the majority of the participants mentioned failure to dedicate appropriate time for studies, poor sleeping habits, homesickness, technology shortages (e.g., laptops, smartphones, tablet computers), power failures caused from extreme weather conditions, Internet connectivity issues, inadequate computer literacy, and lack of technology confidence. Examples of the feedback from the participants includes the following.

I cannot give appropriate time to my studies since our routine has completely changed. A long hour sitting in front of the screen disturbs our sleeping habits, too. Power failure is another issue due to extreme weather conditions these days. I am unable to concentrate. (SSC-L5)

Many students are facing a shortage of technological gadgets in their home and are taking classes on an alternate basis [with their siblings/family members]. Poor Internet connectivity is another issue; and we are still not technology-confident. Most of us cannot concentrate as we are used to face-to-face teaching. This year is crucial for us because of our Board exam. (SSC-L4)

Concerning the significant challenges faced by SSC learners, the interviewees voiced poor grades, lack of motivation, online assignments/submission and lack of preparation for their Board exam, uncertainty of the future and fear of failure in the SSC exam, inability to focus, and lack of routine.

I am fed up with doing [online] assignments. We used to do them on loose sheets and then just submit it online. I feel that I am just writing and not preparing for the exam. We all feel overburdened with assignment deadlines, and the focus is on assignment submission rather than Board exam preparation. (SSC-L15)

I fear I will fail the SSC final exam as I cannot focus. I have no routine for my studies. I am very demotivated. Our final exam date has been postponed three times due to rising cases of COVID-19 in Pakistan. (SSC-L11)

The interview findings revealed SSC-level learners' significant challenges during online classes (see Figure 1). The most significant challenges quoted by the participants were the following:

- Poor grades;
- Lack of motivation;

- Online assignment submission only /No exam preparation;
- No routine;
- Inability to focus;
- Uncertainty of the future;
- Fear of failure in the SSC Exam.

The SSC-level learners must sit the Pakistan Board of Intermediate and Secondary Education (BISE) examination in order to gain the secondary school certification equivalent to matriculation. Emergency online instruction significantly changed the overall teaching methodology when compared to traditional face-to-face classes. Additionally, the extra coaching usually given to SSC-level students in Pakistan for the Board exam was withdrawn during the COVID-19 pandemic.

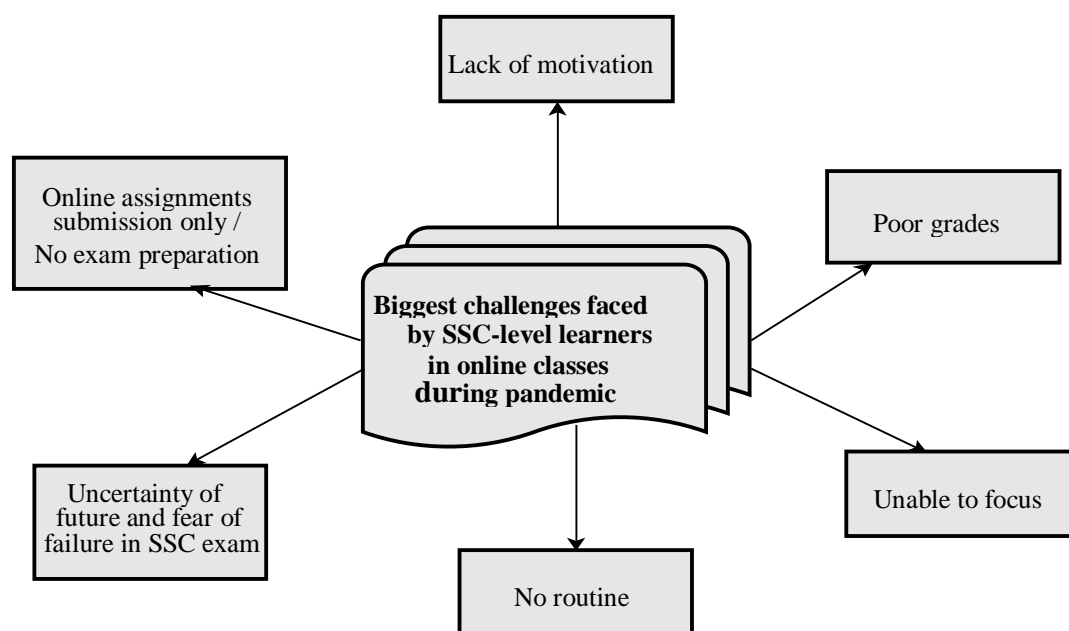


Figure 1. Biggest challenges faced by SSC-level learners during pandemic-era online classes

Related to the SSC learners' opinions regarding online classes during the pandemic in terms of their school's administration, the participants explained that although the school management had taken steps to help SSC learners, the need still existed to further engage with SSC-level students, as well as a platform for use outside of class time where students and teachers could communicate, provide constant feedback, teach via different activities such as debate, group activities, and discussion (to engage learners more), provide quizzes and tests, redesign course content appropriate for online learning, and to motivate SSC learners via frequent online meetings held with the section head and school principal.

Teachers should engage students more during online classes. The teaching methodology should change and involve students in group activities and discussions. Most students do not pay attention when the teacher gives an online lecture, and the teachers are always in a hurry to connect to their other classes. (SSC-L13)

There is a need to redesign the course content for online teaching methodology, since teachers just use the same content as for face-to-face classes. We need a platform where

both students and teachers can connect outside of class hours. We need motivational speeches from our section head and school principal just as we did when attending school. The school administration needs to conduct frequent online meetings with SSC learners in order to motivate them for their Board exams. (SSC-L10)

The COVID-19 pandemic enhanced online learning practices in developed or developing countries; still, both learners and educators struggled to adapt from face-to-face to online teaching in developing countries like Pakistan, where the need for significant improvements and access to quality education services were still evident (Malik, 2020; Noor et al., 2020; Zapata-Cuervo et al., 2021). This e-learning wave during the pandemic was, at that time, still a recent development, and students still had to learn and even prove themselves with the limited facilities available. SSC-level learners faced tremendous obstacles due to the sudden shift to online learning, having been used to face-to-face classes and, especially at this stage of their education in preparing for the Board exam, experienced not only inadequate resources and a lack of facilities but also a lack of interest in studies due to a sense of uncertainty about their future. Preschool learners, as well as primary- and middle-schoolers, may have had the luxury of time to become more familiar with online learning, whilst high school (SSC) learners faced extreme pressures due to the sudden changes seen in teaching methodology during the pandemic. In 2020, the Pakistan government awarded student grades in the absence of exams; however, in 2021, the Pakistan Education Ministry stated that students would not pass under any circumstances without attending the exams as normal. The high school exams were then postponed, and delays were seen in setting new exam date announcements; a situation which was seen as demotivating for SSC learners (Pakistan Board of Intermediate and Secondary Education, 2021).

The COVID-19 outbreak paved the way to adopt online learning as an emergency alternative education system at all levels. However, more innovative learning strategies are needed in order to make the education system more resilient and robust, and thereby better prepared to deliver during any similar future crises (Jamil & Muschert, 2023; Pokhrel & Chhetri, 2021; Rahim & Chandran, 2021).

4. PROPOSED CONCEPTUAL FRAMEWORK

Based on the literature and findings of the current study's semi-structured online interviews with SSC-level learners, a conceptual framework is proposed. SSC-level studies are considered as the base for college or other higher education in Pakistan. Figure 2 depicts the obstacles which SSC-level learners experienced in Pakistan's schools due to emergency online teaching during the COVID-19 pandemic. These obstacles have been categorized as relating to technology, personal, and educators. The participants' opinions regarding future strategies are aimed at improved overall well-being of SSC-level learners and school system success (Malik, 2020; Shahzad et al., 2020).

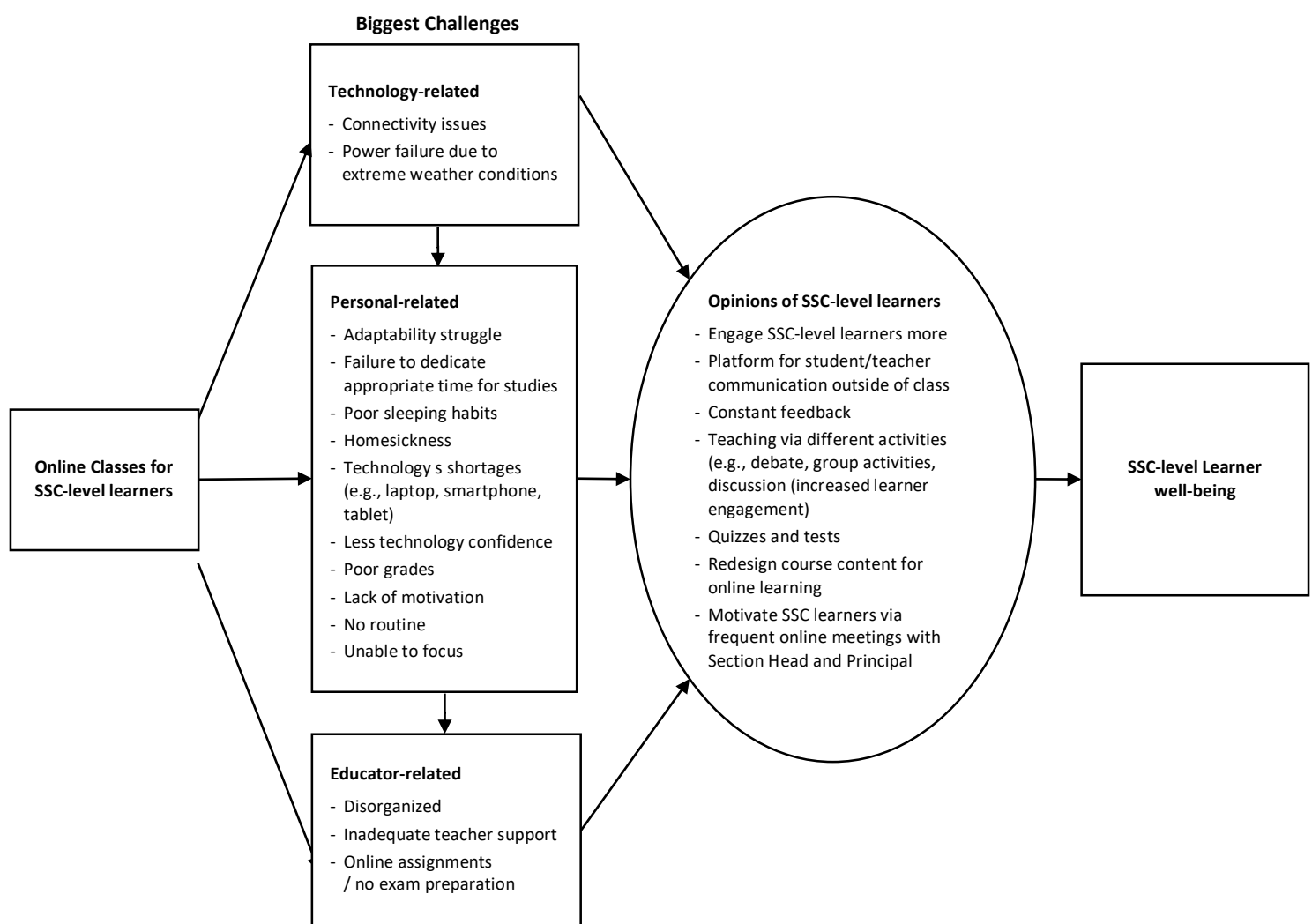


Figure 2. Conceptual Framework

Theoretical Justification

Experiential Learning Theory

Experiential learning theory explains that learners experience things for themselves, that they learn from their experiences, interpret each experience, and modify their behavior accordingly (Kolb, 1984). The theory suggests how learners reflect upon tasks based on the opportunities available to them and adjust their efforts accordingly. Experiential learning describes how learning can start at any stage, and that it is continuous and endless. The theory suggests that active experimentation takes place through the learning of new things and then refining the task based on recreating the experience and subsequent reflection (Wang, 2018).

Proposed Strategies

Educators

- As seen during the pandemic, a need exists to revise curricula, especially for SSC learners, since it is unnecessary to burden students with assignment writing only.

- As SSC-level learners face their upcoming Board exam, a need exists to increase discussion sessions and to engage learners more through online debate, group discussion, as well as quizzes and tests.
- For SSC-level students, educators may need to change their online teaching methodology. The participant students interviewed were facing their upcoming Board exams and were in trauma due to the lack of remedial classes, extra coaching offered by the school administration, and bimonthly and term exams. SSC-level learners may be in need of additional support with online learning and how to cope with Board exam fear.
- Teaching staff must put extra effort into supporting and facilitating learning for SSC-level students and provide extra coaching where appropriate, irrespective of class timings.

School Administration

- There is a need for a platform for SSC-level learners to be able to communicate with their peers and teachers outside of class hours since time is very limited during online classes. Due to connectivity issues during the 40-minute class sessions, sometimes the educator joins the class late, and then after class they may be in a hurry to connect to their other classes. However, the students may need more discussion time than offered during online classes, or where they have queries they wish to raise.
- There is a significant need for senior school administrators such as a section head or the school principal to connect with SSC-level learners via online platforms in order to motivate them in the same way offered during face-to-face teaching with morning assemblies and other functions. It is important that administrators remind SSC learners how the current school year is critical to their 16 years of education in Pakistan due to the requirement to sit the Intermediate and Secondary School Examination Board exams.

5. CONCLUSION

From the perception of SSC-level learners regarding online learning, the current study concludes that significant obstacles may be faced by high school learners receiving online classes during a pandemic, or similar crises. The biggest challenges faced were technology-related, personal-related, and educator-related. Student participation within online classes was found to be disrupted due to limited Internet connectivity and sometimes a shortage or non-availability of appropriate e-devices. The SSC learners felt demotivated and homesick as they needed the level of coaching and facilitation they would normally have received during face-to-face education. The high school learners felt overburdened with online assignments; although their learning was minimal, they faced fear of failure concerning their upcoming Board exam.

Therefore, revising the current teaching strategies by engaging SSC-level learners in group discussions, quizzes, and tests is considered essential. The focus should be on preparation for the Board exam as well as assignment submission. Teaching staff should work to meet the needs of high school learners in addition to being available online to teach the mandated lessons; for example, during face-to-face tuition, students are offered remedial and extra coaching, bimonthly and term exams, and significant focus on preparation for the Board exam. Similarly, senior school administrators should work to motivate students by connecting

with them via online meetings, similar to how they normally would (i.e., prior to the pandemic). Thus, it is deemed essential to revise the teaching methodology for SSC learners facing online-only education, and to bolster students' confidence via discussion sessions and engaging with them more so as to provide a more realistic and familiar classroom environment.

Since the current study was conducted within schools of twin cities Rawalpindi and Islamabad in Pakistan, further studies on SSC-learners, teaching and learning strategies, and online teaching impacts should be conducted in the other main cities of the country such as Lahore and Karachi in order to gain a broader and deeper understanding of the pandemic's overall effect on the education system in a developing country such as Pakistan.

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Author Contributions: S.N.: Literature review, conceptualization, methodology, data analysis. SN., F.M.I: Review-editing and writing, original manuscript preparation. All authors have read and approved the published final version of the article.

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