

A Gender Base Analysis Of Learners' Perception Of Online Education In The Context Of Covid-19

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Abstract

The Covid-19 hit has affected the education system of Pakistan in numerous ways; one of them is a sudden transition from traditional classroom education to online learning. Considering the social-distancing as the only solution to fight against Covid-19, the Higher Education Commission of Pakistan advised universities to switch to online teaching. Since this transition is a sudden and recent phenomenon, therefore, the current study attempts to explore learners' perception of online education specifically in the context of covid-19. The present study also attempts to examine the differences between male and female students' perception of this new mode of instruction. This research takes up this task by utilizing a qualitative method approach. The data is collected through focus group discussions, interviews and mind maps. The data collected from focus groups and interviews are analyzed qualitatively by using interpretivist paradigm. Moreover, the results of mind maps are used for triangulating the findings of the qualitative data. The study further explored that there is a significant difference between the male and female perceptions of online learning. Male students are more positive towards online learning as compared to female students. However, there are some commonalities between all the students as well. Furthermore, the majority of the students accepted online learning because of the pandemic across the globe.

Keywords: E-Learning, Male and Female Learners Perceptions, E-Learning in Pakistan, Covid-19 and Education.

تلخیص

کرونا وائرس نے پاکستان کے مختلف شعبہ ہائے زندگی کو بری طرح متاثر کیا ہے، اور تعلیم کا شعبہ ان میں سے ایک ہے۔ تعلیمی شعبے میں آنے والی سب سے بڑی تبدیلی روایتی طرز تدریس سے آن لائن طرز تدریس کی طرف منتقلی ہے، جس کا فیصلہ ہائیر ایجوکیشن کمیشن نے کیا۔ موجودہ وبائی صورتحال میں یہ منتقلی چونکہ اچانک ہوئی، اس لیے یہ تحقیق طالب علموں کے خیالات و احساسات جاننے کی ایک علمی کوشش ہے کہ وہ موصلاتی اور آن لائن طرز تدریس کے حوالے سے کیا احساسات رکھتے ہیں۔ اس تحقیق میں

بطور خاص دیکھا گیا ہے کہ اس حوالے سے طلباء اور طالبات کی کیا آرا ہیں۔ اس تحقیق کے لیے کیفیتی طریقہ تحقیق اپنایا گیا اور تحقیقی مواد، مرتکز گروہی مباحثہ انٹرویوز اور ذہن سازی کے ذریعے سے اکٹھا کیا گیا۔ مرتکز گروہی مباحثہ اور انٹرویوز سے اکٹھے ہونے والے مواد کا تجزیہ تشریحی نمونہ سے کیا گیا؛ جبکہ ذہن سازی کے نتائج کا کیفیتی معطیات کے حاصلات کی تکمیل کے لیے استعمال کیا گیا۔ موجودہ تحقیق کے نتائج کے مطابق طلباء اور طالبات کے رویوں اور احساسات میں واضح فرق پایا گیا۔ طلباء کی نسبت طالبات کا رویہ بہت مثبت تھا۔ طلباء و طالبات کی ایک بڑی تعداد نے نئے تعلیمی نظام کو قبول کیا ہے؛ کیوں کہ انھیں معلوم ہے کہ اس وبائی صورت حال میں یہی وہ طریقہ ہے جس کی مدد سے وہ اپنی تعلیم جاری رکھ سکتے ہیں۔

کلیدی الفاظ: آن لائن تعلیمی نظام، طلباء و طالبات کے رویے، ای لرننگ، کرونا وائرس اور تعلیمی نظام

Introduction

On March 12, 2020, WHO declared COVID 19 a pandemic; a type of virus that affects the respiratory system (WHO, 2020) resulting in death. Social distancing was declared important to curb the pandemic (Red Crescent, 2020) and to keep people safe from this fatal pandemic. Considering this, educational institutions were closed for all kind of physical teaching and learning. Students were introduced to get education while sitting in front of screen at their homes. Although, online learning is being practices across the globe before this pandemic, yet Pakistan is a country where Traditional learning is still a dominant way of teaching and learning. Thus, a sudden migration from traditional to online learning has become a massive challenge for Pakistani universities.

Teachers and students both are facing issues in implementation of online learning. Although HEC is providing its support and capacity building trainings to faculty (Academia, 2020), yet there are challenges faced by students. Pakistan is a country where resources are not distributed equally to all provinces. Students from remote areas face serious challenge such as lack of technology and digital resources to get benefit of this massive change (Rafiq et al., 2020). Considering this situation, there is a need to explore students' readiness and their perceptions of online learning in the context of covid-19.

The emergence of technology and new modes of communication have affected the society in numerous ways (Sutton, 2013). A shift from brick and mortar classrooms to online teaching is one of the effects of advancement in technology (Dennis, 2020). Online learning also known as e-learning is defined as a computer mediated education. In online learning, education takes place through different digital platforms.

E-learning is helpful for those who feel good in distant learning (Journell, 2007), and cannot manage time for traditional learning. It is also suitable for those who are more

comfortable with this mode of communication because of flexibility it offers (Dotterweich & Rochelle, 2012). Students opt for e-learning by their choice (Haron & Zaid, 2015); resultantly, they are well acquainted with this technology. Moreover, the institutions that offer online learning arrange training sessions for the beginners.

E-learning is a common practice across the globe in the contemporary era (Holmes & Gardner, 2006). Digital resources are maximally utilized for the convenience of the learners. However, the attitude towards e-learning is different in Pakistan (Hussain, 2007); most of the students prefer traditional settings for numerous reasons; for example, lack of connectivity, computer illiteracy, poor resources in remote areas, and lack of training.

Additionally, female students face more problems while learning exclusively in virtual space (Goulao, 2013). They face problems in time management, and usually home environments are not very conducive for their learning. On the other hand, male students feel more comfortable in online learning because of convenience and flexibility (Latchem, 2018).

Moreover, mostly e-learning is used as a methodology to enhance the learning skills of the learners studying in the conventional schools (Jethro, Grace & Thomas, 2012). Students sit in the formal academic setting, interact face to face with teachers, take help from peers, develop social skills, and use digital resources whenever required. A complete absence of traditional classroom setting is sometimes not very productive, because e-learning is challenging to cater for emotional, motivational and psychological factors of learners (Kanwal & Rehman, 2017). Furthermore, students should be able to use technology appropriately for effective learning; they should know how to use various soft wares to access available material (Rodriguez, Ooms & Montañez, 2008). Besides, students may feel computer anxiety if they cannot use technology effectively, and it may hamper their learning process (Cheurprakobkit, Hale, & Olson, 2002). Therefore, it is important to introduce e-learning to students only if they are computer literate.

Although, numerous studies have been carried out to investigate the efficacy of online learning (Nguyen, 2015), for instance, the role of instructor in e-learning (Mazzolini & Maddison, 2007) and challenges of e-learning (Rana, Rajiv & Lal, 2014); yet there is a need to investigate the perception of students towards online learning. A little work has been carried out to explore the perception of male and female students of online learning (Ashong & Commander, 2012) specifically in the context of Pakistan.

Recently, the covid-19 hit has affected every department of life globally. Education department is also affected by it. Implementation of social distancing is challenging in educational institutions with huge strength of learners. In this context, the higher education commission of Pakistan decided to shift traditional classroom learning to e –

learning. This sudden transition is a challenging task for universities in Pakistan, because, most of the universities do not have adequate resources to shift traditional classroom learning to online learning immediately. Moreover, no survey has been conducted at official level to investigate the readiness of students and faculty for this sudden digital transition.

Considering this transition, the present study attempts to explore the Pakistani learners' perception of online learning in the context of covid-19. The study also seeks to investigate the differences and similarities in the perception of students on the basis of gender variation. The data is analyzed using constructivist grounded theory.

Research Questions

- How do students perceive sudden transition from traditional classroom learning to e-learning in the context of covid-19?
- What are the similarities and difference in the female and male learners' perception of online learning specifically in the context of covid-19?

Research Objectives

- To investigate students' perception of online learning specifically in the context of covid-19.
- To explore the similarities and differences in male and female students' perception of online learning in the context of covid-19.

Review of Literature

E-Learning

Development in information and communication technologies has revolutionized every sector of life including education. As a result, e-learning has become a popular tool in enhancing learning experiences. E-learning has facilitated communication between teacher and students inside and outside the classroom. It has also made learning independent, as students who learn through this mode can control and manage their own learning.

E-learning is defined by researchers as a computer network technology used through the internet for imparting instructions and information to individuals (Ong & Lai, 2006; Welsh et al., 2003). E-learning is also described as a form of education in which information is delivered using the internet, different means of technologies and the World Wide Web. Thus, when technology is used to facilitate education, it is called e-learning (Masrom, 2007).

E-learning grows rapidly in the education industry because of its usefulness in all sectors. It enables teachers and learners both to contribute significantly in learning. One of the biggest advantages of e-learning is that one does not have to travel for learning. S/he can educate him/herself while staying home or at their workplace, and they can learn anywhere and anytime (Srivastava & Agarwal, 2013). Hence, e-learning has changed the old perspective of learning that forces one to be present at a fixed place at a fixed time.

With the development of technology, e-learning does not only confine to distant or remote learning, rather it has become the choice for the best and effective learning. It is also observed that there are multiple ways to implement e-learning such as self-paced indecent study, asynchronous interactive sessions, and synchronous interactive setting. In the asynchronous interactive sessions, participants interact at different times according to their own schedule. Synchronous interactive situations allow learners to interact with each other in actual time (Ryan, 2001). However, teaching and learning through digital means is not an easy task. It requires dense training to create a rich environment with the support of comprehensive and appropriately designed resources (Khan, 1997). Consequently, developers, designers and builders of e-learning programs need rich comprehension of students' perception of online learning. They should do more research on the effective use of their online tools by investigating their usefulness. Students' perspective in this regard is very important, because effective learning is critical to the motivation of learners. If students are not motivated to learn by such means, learning would not be possible. Thus, the instructors should critically evaluate approaches to teach online to make learning effective (Koohang & Durante, 2003).

Challenges in Online Learning

Although e-learning has fruitful benefits, it also has some challenges. The first challenge is that e-learning requires a lot of self-motivation and discipline on the part of the learner, because it is self-dependent study (Serwatka, 2003). In face to face learning, students are motivated to take inspiration and motivation from their peers. Therefore, they work hard to meet the challenges. Motivation is considered as an important factor which helps people to achieve their goals (Mckeachie, 2002).

Technology makes learning effective and enhances students' learning. It has potential to improve understanding of the concepts because of varied resources. It makes learners more independent and active (Mckimm, Jollie & Cantillon, 2003). However, only implementing technology does not guarantee any good if it lacks sound pedagogical design (Downing, 2001). The need of the hour is to carefully construct institutional policy and create an appropriate infrastructure which can help instructors to use technology in an effective manner.

The E-learning system is also integrated in higher studies to facilitate learners, and this trend is bringing a lot of changes in the higher education system (Concannon, Flynn & Campbell, 2005). However, integrating technology in the higher education is not an easy task; there are a lot of barriers such as construction of technology infrastructure, training of faculty, satisfaction with digital tools, and competency of graduates (Surry, Ensminger & Haab, 2005). Moreover, a number of higher educational institutions have failed because of the high charge of technology and lack of clear strategies (Elloumi, 2004). Numerous universities are facing difficulties in achieving their goals, because most of the time online courses cannot meet students' needs (Kilmurray, 2003). Hence, more student-centered research on online learning is required to overcome these challenges (Hara, 2000).

Effective online teachings require adequate research, operational theories, strategic planning, cautiously designing online courses and excellence in teaching and learning. The flawed strategies and poorly designed course will lead to failure of the online education (Bozkurt & Sharma, 2020; Hodges et al., 2020; Vlachopoulos, 2020).

Gender Differences in Online Learning

Another challenge of online learning is related to gender. Distance education environment is not equal for male and females. It is observed that online learning permits female students to perform their domestic responsibilities and study both, but sometimes they have to ignore their studies to fulfil home chores (Kramarae, 2003). Therefore, it is derived that online learning experience for female and male learners is dissimilar in many ways because of differences in their responsibilities. Researchers argued that although these differences are not sharp, but there is a need to investigate online performance strategies of both genders to find similarities and differences (Chyung, 2007; Price, 2006).

In the past, the internet was male-dominated technology, but with the passage of time this gender break in the use of the internet has been narrowed down. Recent studies show that more female learners appear online than male (Kramarae, 2003; Price, 2006). Sullivan (2001) investigated online experience of female and male college learners, and found differences in different aspects; for example, flexibility, nature of students, face-to-face interaction, self-discipline, and self-motivation.

A different study by Price (2006) established that there are many differences in learning online by male and female learners. Female students are more self-confident and self-determining learners than males. Moreover, the interaction style of female students is different from male students.

Similarly, Gunn et al. (2003) stated that female's style of participation and contribution in online communication is different from males. Women post and read more messages than

males. On the contrary, studies done by Astleitner & Steinberg (2005) and Ory, Bullock and Burnaska (1997) discovered that gender differences are insignificant. Thus, there is a contradiction between findings of studies done on gender difference. Learning experiences of female and male students also vary from context to context. Therefore, it is needed to investigate the similarities and differences in the perception of male and female learners.

Covid-19 and Education System

With Covid-19 pandemic, it is apparent that education system is most vulnerable to outward hazards (Bozkurt & Sharma, 2020). Furthermore, instructional delivery through digital recourses faces many logistical trials and modifications in behavior (Ribeiro, 2020). Although, use of digital technology in higher education is not new. Many higher education institutions are somehow using educational technologies but, there are many challenges in applying digital technologies in education to get effective results (Kopp et al., 2019). Feldman (n.d.) in his address with student during this pandemic pointed out some challenges of digital learning such as i) pandemic associated anxiety will negatively affect student's performance, (ii) majority of instructors were not prepared to deliver high-quality instruction remotely.

The process of integration of digital transformation required a workable management system, accurate and suitable strategies and adequate administrative knowledge etc. (Cameron & Green, 2019). Covid-19 pandemic brought a dramatic change in higher education. In a limited time, a lot of transformation took place to address the challenges of online learning. Earlier, online learning was just regarded as a disruptive process but now it has changed its status (Strielkowski, 2020).

The pandemic has led to the closure of educational institutions all over the world. Due to this closure, institutions have created an online learning environment, so that learning should not be interrupted. Although many universities in the world are promoting online learning, and learners are satisfied with it, yet in Pakistan most of the institutions were not prepared for this sudden change.

Moreover, it is challenging to implement e-learning in Pakistan because of various issues such as social isolation, lack of student- teacher interaction, and connectivity issues. Students who belong to remote areas do not have internet access. In Pakistan online learning is not considered as a part of formal education by most of the institutions until the Covid-19 pandemic. In this lockdown situation, all educational institutes across Pakistan are closed and moving towards e-learning. They are considering different online strategies to make e-learning effective such as readiness of e-lectures, video conferencing and e-tutorials for continuation of education.

Furthermore, various new teaching soft wares have been experimented such as MS Teams, Zoom, Google classroom and LMS. Both teachers and students are in the process of understanding this new system therefore, this time is very crucial for both teachers and students. It is the need of the hour to investigate students' perspective towards this online learning experience. In order to make online learning effective it is important to know whether these methodologies are effective or not.

Therefore, the present paper is aimed at investigating undergraduate students' perception of online learning, gender differences in the perception of e-learning and other challenges faced by them in online learning in Pakistan during the Pandemic Covid-19.

Methodology

Following the interpretivist paradigm, the study explores the multiple meanings and interpretations of the participants (Denzin & Lincoln, 2005). The approach that focuses on the understanding of perspectives, uses inductive analysis to generate an insightful and rich amount of knowledge is referred to as the qualitative approach (Thomas, 2006). In this study, a qualitative approach is used for analyzing and interpreting the perception of male and female students of online learning.

Data Collection

The research involved 30 undergraduate students between the age of 18-23, studying at a public university in Pakistan. Data was gathered through focus groups, semi structured interviews and mind-maps. The former two research tools helped to elicit male and female participants' perceptions of online learning in the context of covid-19. The interviews lasted around thirty minutes with each respondent, while the focus group discussions lasted around two hours. For investigating the differences in the respondents' perceptions on the basis of gender, 15 male and 15 female students were selected. Some participants were also asked to create mind-maps regarding what they perceive about the online teaching in the context of covid-19, which were also included as data for the study.

Data Analysis

For data analysis, the interviews and focus group discussions were transcribed. Constructivist grounded theory analysis (Charmaz, 2014) approach was deployed, which is based on an inductive approach to develop themes from the data. For undertaking this approach, each line of the data was coded for comprehending the online learning perception of male and female participants (Mills, Bonner & Francis, 2006). Once a sequenced connection was established within the data, the investigator analyzed and interpreted the outcome of this initial coding. After this procedure, focused coding was

conducted, where the codes which appeared frequently were marked as significant. In the next step, the researchers attempted to comprehend the similarities within the coded data sets. Lastly, lexical coding was used for explicating relationships of the emerging categories from the data (Charmaz, 2014). Moreover, the content analysis was used to analyze mind maps.

Findings and Discussion

Following the constructivist grounded theory, following themes emerged from the data.

Learners' Readiness

It is important to address the learners' readiness for attending online classes (Smith, Murphy, & Mahoney, 2003). The data also elicited findings related to students' readiness. Most of the students shared their views on the decision of online classes in the context of covid-19. They believed that the authorities should have considered students' readiness before the sudden shift from traditional to online learning context. 78% of girls asserted that authorities should have arranged a short training for students to effectively utilize virtual space for their learning.

One of the female students said;

I was not prepared for online classes because of internet connectivity issues.

Similarly, another female student said;

I am not technology savvy. I had no experience of online learning. It was very challenging for me to continue my studies with a new mode of learning.

All students cannot effectively indulge in online learning because of new skills and styles which are vital to participate efficiently (Luyt, 2013). Students agreed that in this pandemic, online learning was a reasonable decision, but it could be made effective through proper planning and short trainings. 63% of the male students said that authorities should have considered students' readiness and connectivity issues in Pakistan before shifting completely from traditional to online learning. One of the male participants said that,

Online learning is successful in numerous countries, but in Pakistan it is not very successful. Although in this pandemic, it seemed an appropriate decision. However, students were not ready for this sudden and complete shift. Authorities should have given time to students to arrange better connections if possible. Moreover, there could also be an alternate to accommodate students residing in remote areas with zero connectivity.

The findings of the mind maps collected from girls and boys triangulated the results driven from the interview data. Students' mind maps are attached below for clarification.

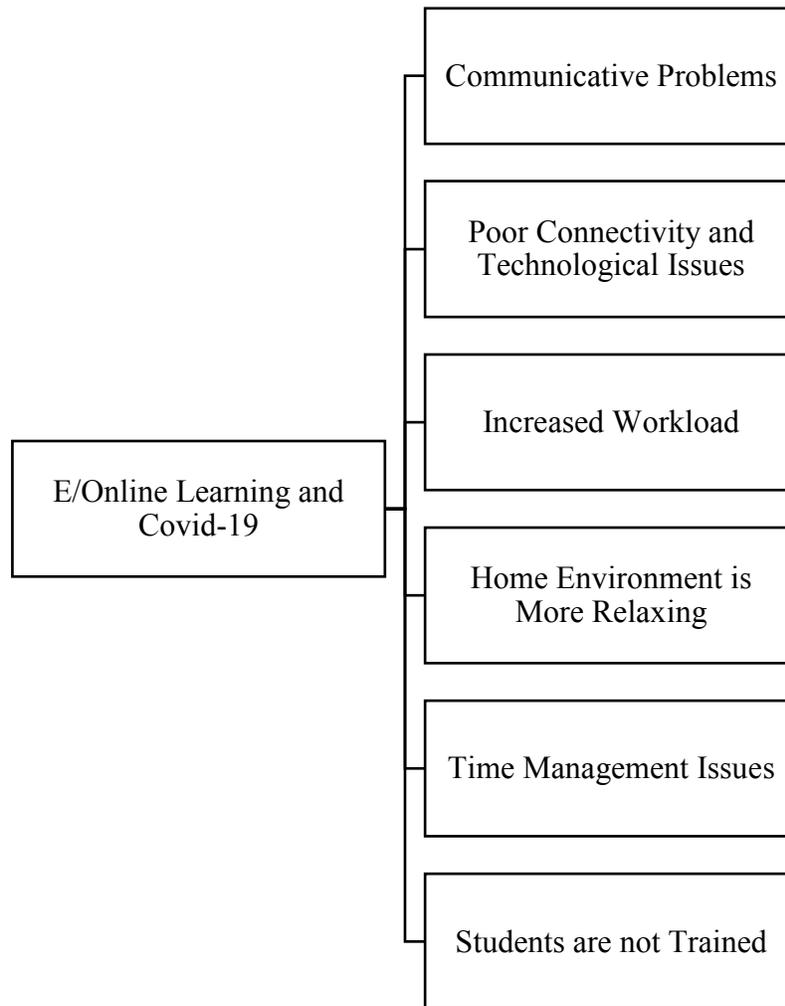


Figure 1.1 Female Participants' perception of Learners 'Readiness in the covid-19 Context; a specimen from mind maps.

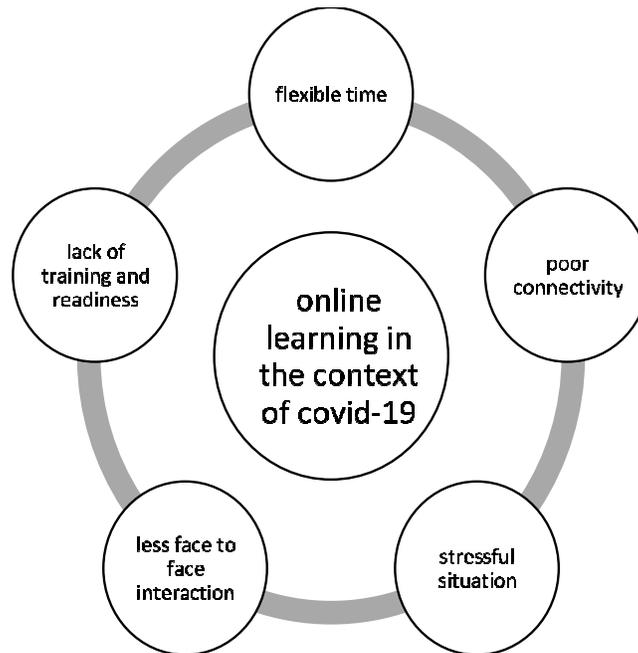


Figure 1.2 Male Participants' perception of Learners 'Readiness in the covid-19 Context; a specimen from mind maps

Computer Literacy

Instructors and students both should be computer literate for effective learning (Eisenberg et al, 2002). Teachers should clearly understand the nature and requirements of virtual classrooms. Courses should be designed according to the requirement of online teaching. The research participants held the opinion that course content was not revised according to conditions of virtual classrooms. The same outline is followed by the instructors, and it was difficult to understand that content.

The conversion from traditional classroom settings to online learning is time taking and challenging (Li & Irby, 2008). It requires time, but unfortunately instructors were not given enough time. Similarly, students should also be well familiar with the technology (Bawden, 2001) for effective learning. Although shifting to online learning was apparently the only possible solution in the context of Covid-19, yet the better strategies could be adopted by the higher authorities. Few undergraduate students belong to unprivileged communities who do not have access to the internet. Computer illiteracy puts them in great trouble to catch up virtual learning. Girls and boys shared different opinions regarding computer literacy.

Most of the boys are computer literate, because they have the exposure to technology. However, girls are more computer illiterate, because of the little exposure. The problem of computer literacy was specifically faced by those girls who live in the remote areas. One of the female research participants said;

I belong to an area of KPK where the internet is not available in every home. Even if it is available, girls usually do not use it; they remain busy in their house chores.

The data collected through mind maps also helped in triangulating the findings. Both male and female students faced problems of computer literacy, but girls explicitly mentioned these problems.

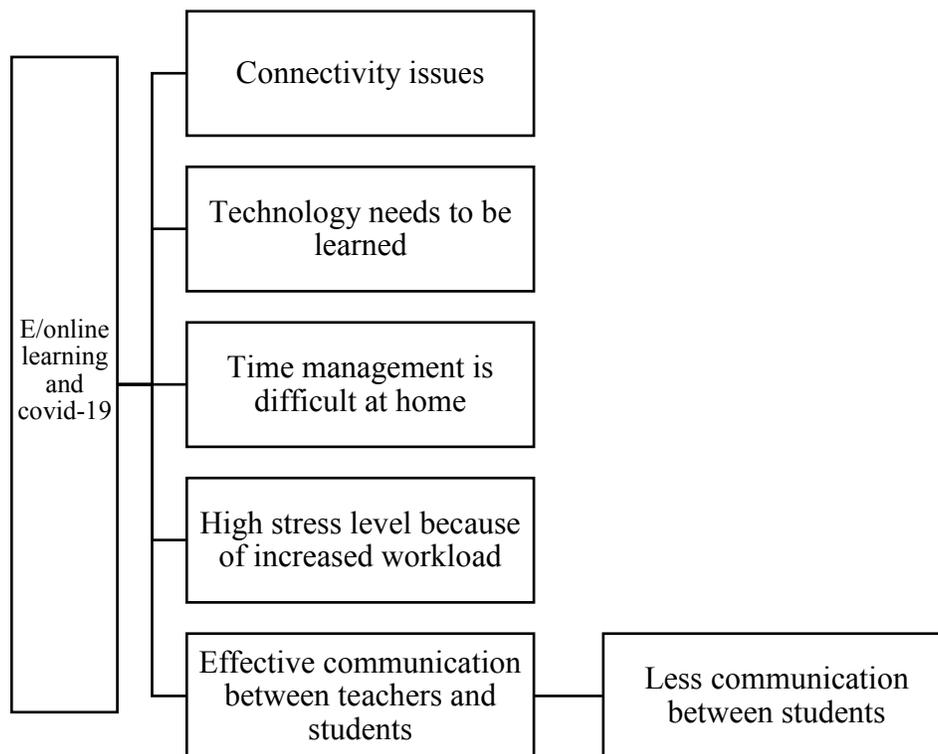


Figure 1.3 Female participants' perception towards Computer Literacy in the covid-19 Context; a specimen from mind maps

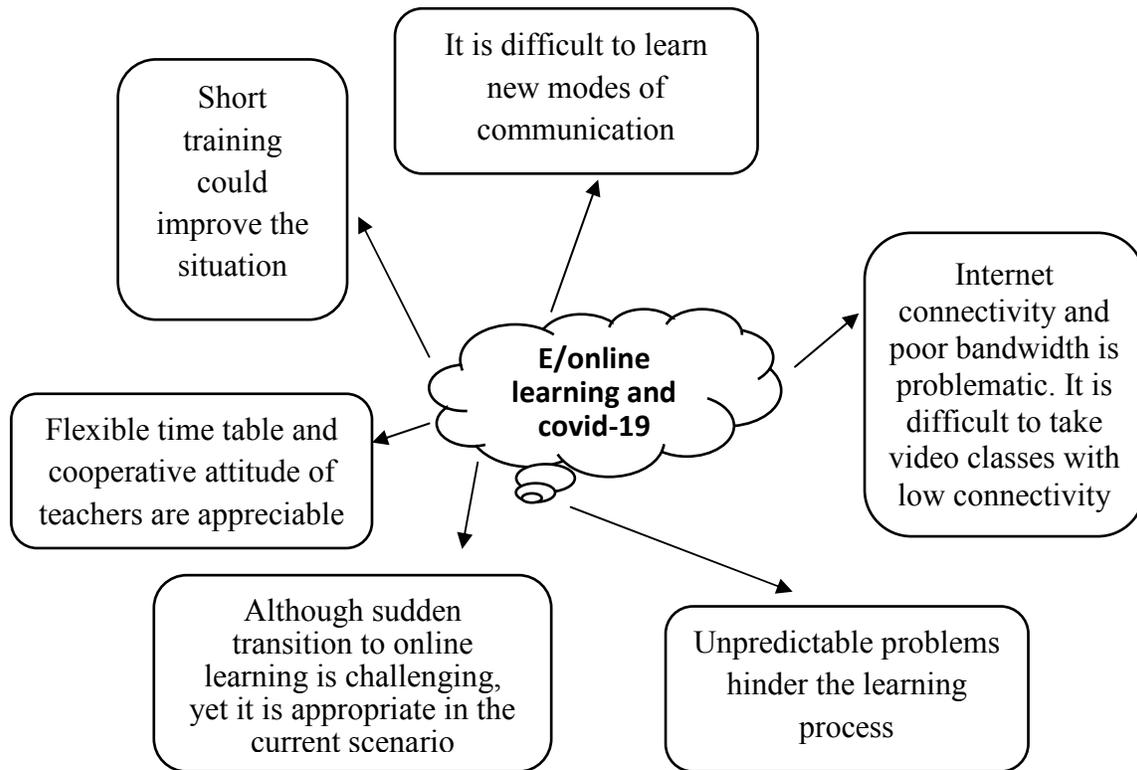


Figure 1.4 Male participants' perception towards Computer Literacy in the covid-19 Context; a specimen from mind maps

Communicative Issues

Majority of participants in focus group discussion elaborated the communication issues faced by the students in sudden transition from traditional classroom teaching to online teaching in the context of Pandemic. According to 60% of the students, shift to online teaching has increased the communication between students and teachers. Teachers act more like a facilitator in this mode of learning (Pappas, 2014). Moreover, girls upheld the view that teacher-student interaction is improved, but interaction between students is reduced. As a result, students are unable to develop good interpersonal relations. However, boys did not mention any such problem.

The result revealed that boys are more comfortable with online learning, whereas girls feel more comfortable in traditional classroom settings because of social relations. Same observation is found in the mind map. The boys consider online learning more effective and easy going. However, all the students considered it the best possible solution in the present situation. Below are the figures representing both girls' and boys' perception of online learning.

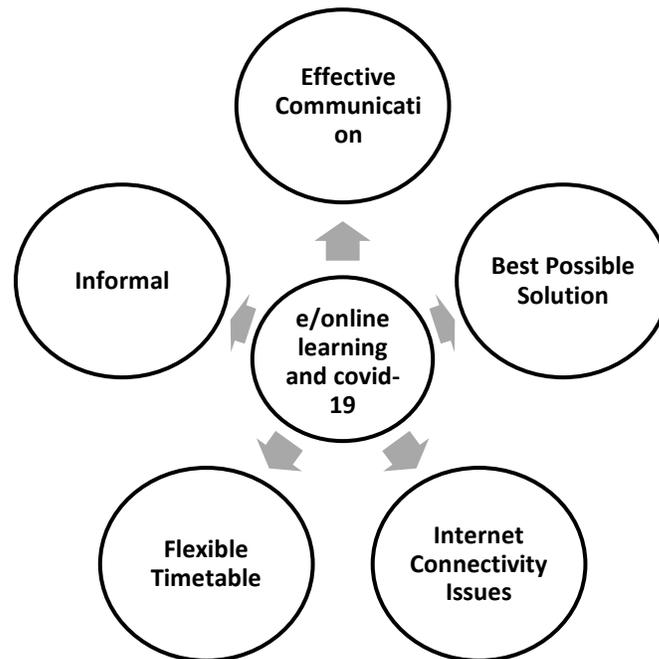


Figure 1.4 Boy's approach towards communication and online learning in the covid-19 context; a specimen from mind maps

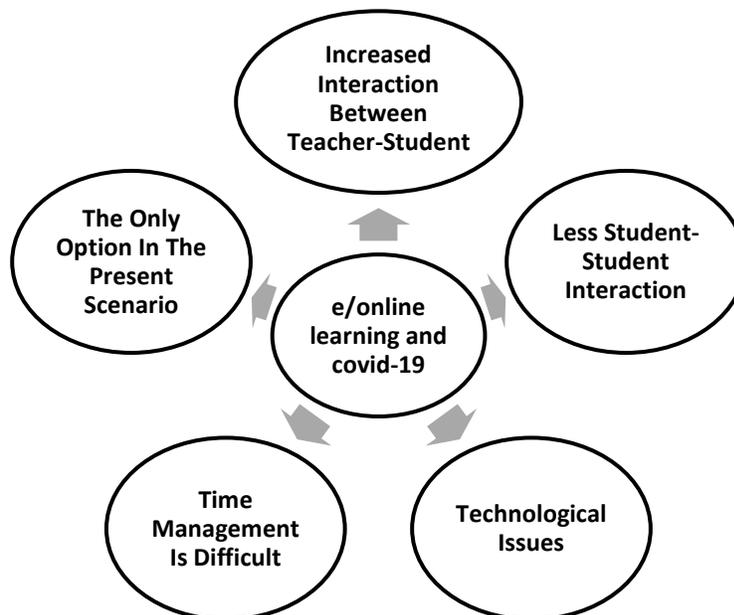


Figure 1.5 Girl's approach towards communication and online learning in the covid-19 context; a specimen from mind maps

Flexibility and Accountability

Another interesting theme emerged from the data is related to flexibility and accountability. Students were enthusiastic to talk about the adjustment of timetable. As most of the students do not feel good to wake up early in the morning, therefore, they took online learning as an opportunity to adjust their classes at the time of their choice. However, there was variation in students' perception regarding flexibility. 70% of boys were comfortable with the flexibility of class. However, 30% of boys were not happy with this flexibility. They preferred an already set timetable to avoid bizarre situations.

Girls' response was different from the boys in this aspect. 83% of girls preferred a fixed timetable instead of a flexible one. One of the female students said:

An already defined timetable allows me to manage my time appropriately.

I make my schedule considering the timetable provided by the instructor.

A sudden change in the schedule creates trouble for me.

Majority of the girls shared the same opinion. One of the girls also mentioned that the shift from traditional to virtual classroom is sudden and abrupt. As a result, both teachers and students are not clear about online classes. Students are not trained to properly utilize virtual space for learning. Although, it was the only possible situation to continue learning in the context of pandemic, yet, a short training could be arranged for the students to effectively utilize virtual space.

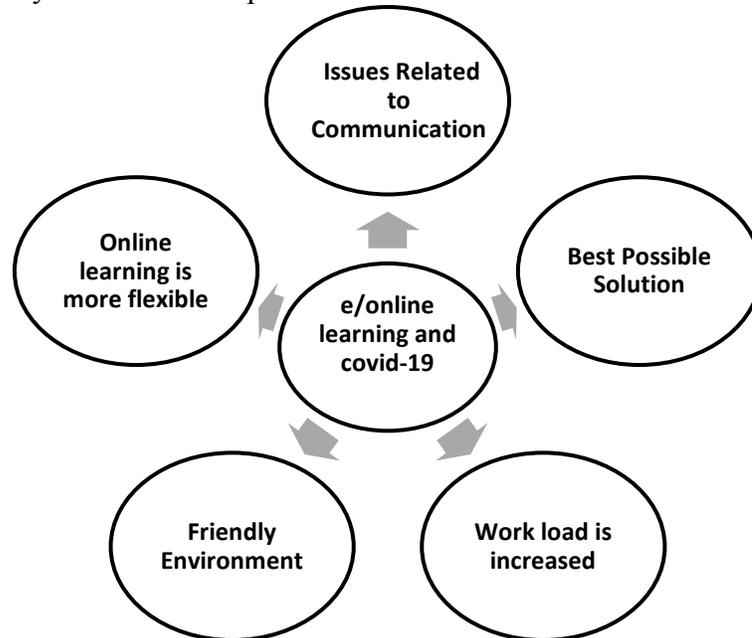


Figure 1.6 Boys' approach towards flexibility and online learning in the covid-19 Context; a specimen from mind maps

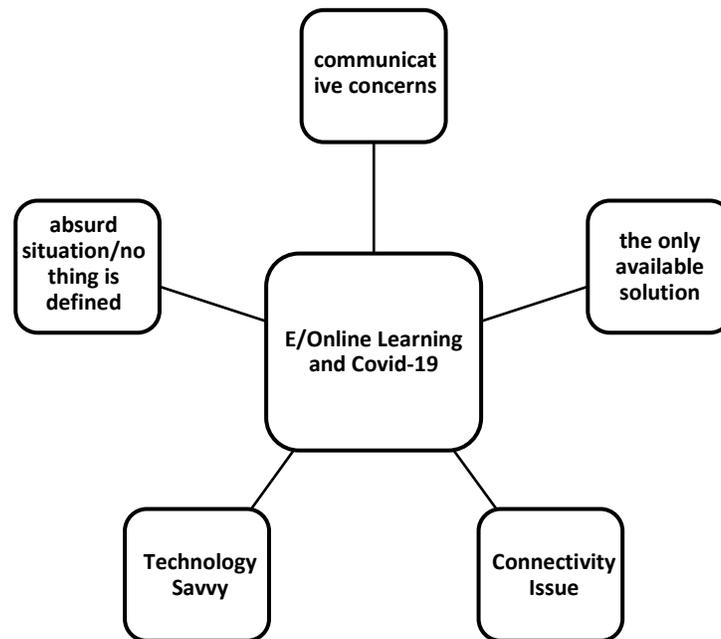


Figure 1.7 Girls' approach towards communication and online learning in the covid-19 Context; a specimen from mind maps

Mind maps collected from girls and boys also support the findings. Boys accepted the situation more rapidly as compared to girls. Girls preferred scheduled routine, and they shun the idea of flexibility. According to girls, flexible timetable means the availability of 24/7 which is not possible in this chaotic situation.

Role of Instructor

Instructors play a major role in online teaching-learning situation (Brooks, 2003). Many participants highlighted the role of teachers in effectiveness of online learning specifically in the context of covid-19. There was no major difference in the perception of male and female students regarding the role of instructor. Almost all the participants mentioned that it was easy for them to adjust to new mode of learning because of teachers' contribution and efforts. For effective online teaching, teachers should mention their course outline and strategies in the beginning (Kebritchi et al, 2017). Students were more comfortable with teachers who explained the new requirements, their teaching strategy, course outline and assessment criteria in the beginning.

One of the female students mentioned in the focused group discussion that,

Sudden shift to online teaching was entirely a new experience for me. I had never attended any online class before this shift. In the beginning, I

was very upset, and it was difficult for me to understand the situation. However, one of my teachers help me a lot in better understanding of the online teaching. She discussed new ways of learning, course material and even assessment criterion. It was helpful.

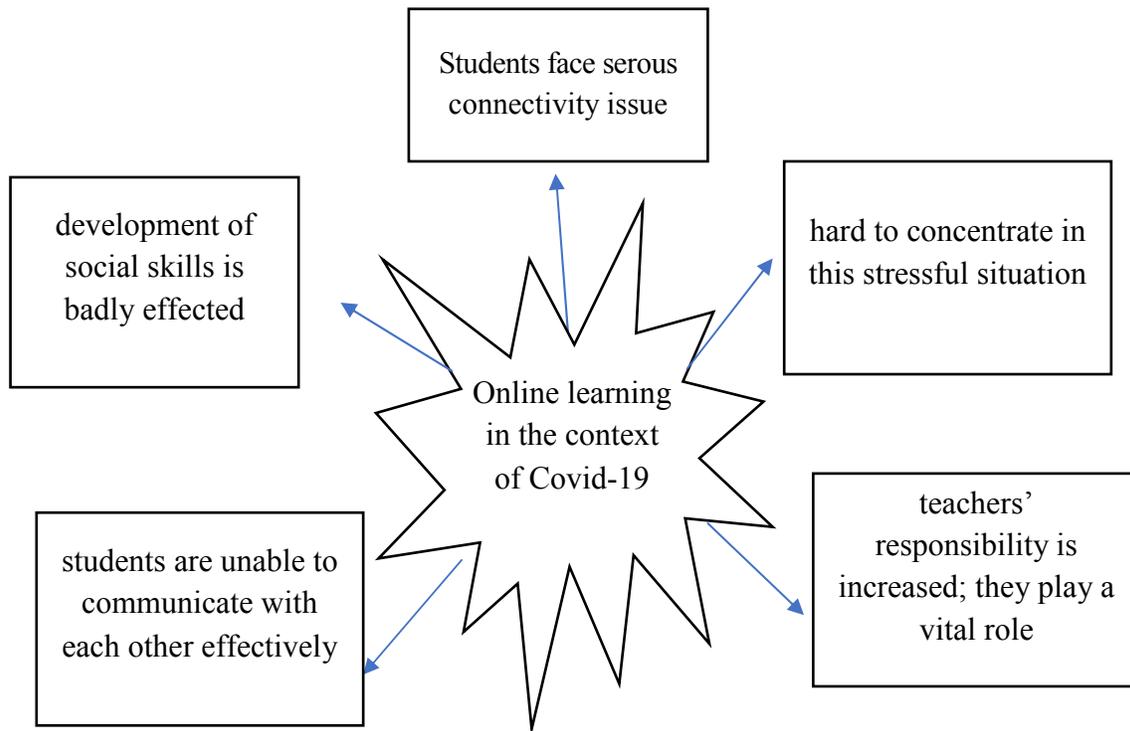


Figure 1.8 Male and Female students' perception towards online learning in the Covid-19 Context; a specimen from mind maps

Lack of Community

Online learning does not allow learners to develop sense of community, as a result, learners feel detached and isolated which hampers learning process (Mcinnery & Roberts, 2004). Abrupt shift in means of teaching has also effected learning of majority of the students. The data revealed that boys felt detached in online learning, as they are unable to communicate effectively with their class fellows. It affected their learning process as well. One of the male research participants said that,

I miss my university life. I used to study with my friends in a group, and it always helped me in better understanding of the difficult tasks. Now, I face challenges to work on my projects without discussing them with my friends and seniors.

However, girls' response was little different from the boys. Majority of the girls said that initially they felt lack of communication between class fellows, but gradually they developed the habit of individual work and less interaction. Moreover, few girls mentioned that they used various other platforms to stay connected. However, only 20% of girls said that they miss working in groups.

Although it is challenging to immediately stop going to university, but it is for the benefit of students. This is the only possible situation in the prevailing pandemic.

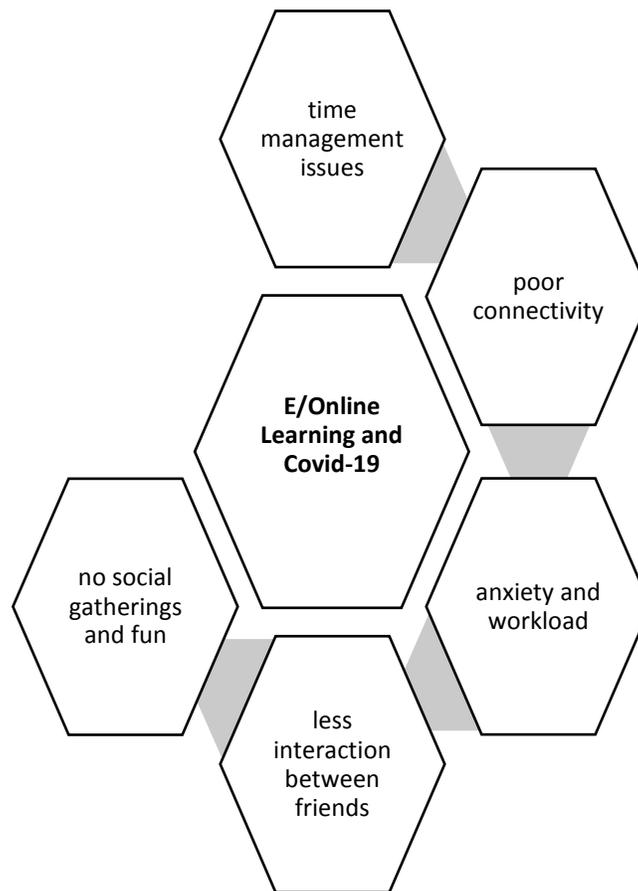


Figure 1.9 Male participants' perception towards community practice in the covid-19 Context; a specimen from mind maps

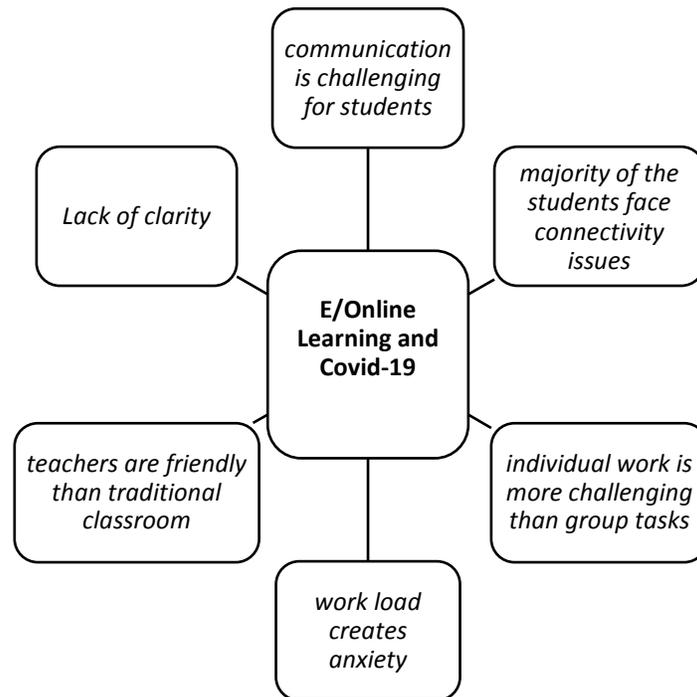


Figure 1.10 Female participants' perception towards community practice in the covid-19 context; a specimen from mind maps

Affordability of Technological Tools

Students who belong to low income families cannot afford laptops, good internet and computers. They face problems in attending online sessions (Desrosiers, 2020). This situation created a digital divide among students who can afford technological tools and those who are unable to buy these tools. The findings of the data also revealed that students face problems in the availability of digital resources. All students are not well equipped with technology and the related tools. Both male and female students face this issue in sudden transition to online learning. One of the male participants raised his concern by saying that:

I belong to a lower middle-class family. My father is a shopkeeper. I have four siblings who are also students. My father cannot buy us individual laptops or computers. I am very frustrated nowadays, because I am unable to attend my classes regularly online. Sometimes I go to my Uncle' house to attend my class. I am disturbed.

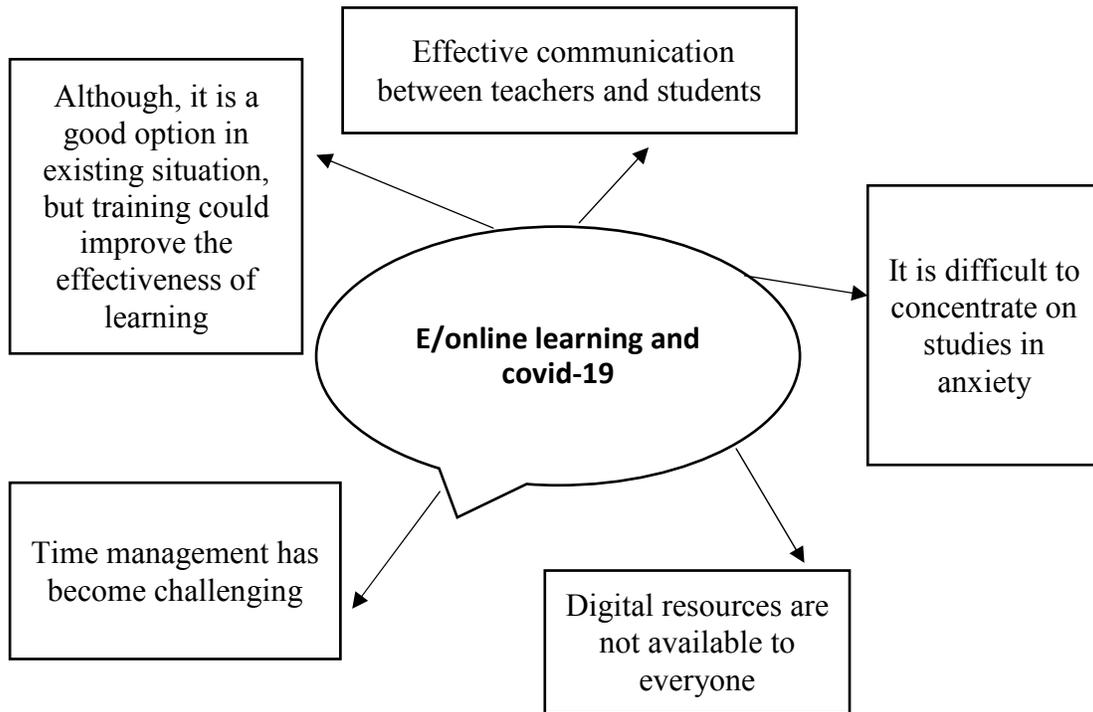


Figure 1.11 Male participants' perception towards Affordability of Technological Tools in the covid-19 Context; a specimen from mind maps

The situation is more challenging for the female students, because they cannot travel to other places to get education. Although, in the context of covid-19, it is challenging to travel for any purpose for everyone, girls face this problem more often because of cultural and social barriers.

For example, one of the female participants said:

It has become difficult for me to continue my studies, because I don't have enough resources. I don't have a laptop, and my PTCL internet connection does not always work. I cannot take classes regularly because of poor connectivity and unavailability of a laptop. I have twice visited my neighbor's home to attend my class, but it is not considered good. My brother won't let me go there on a regular basis.

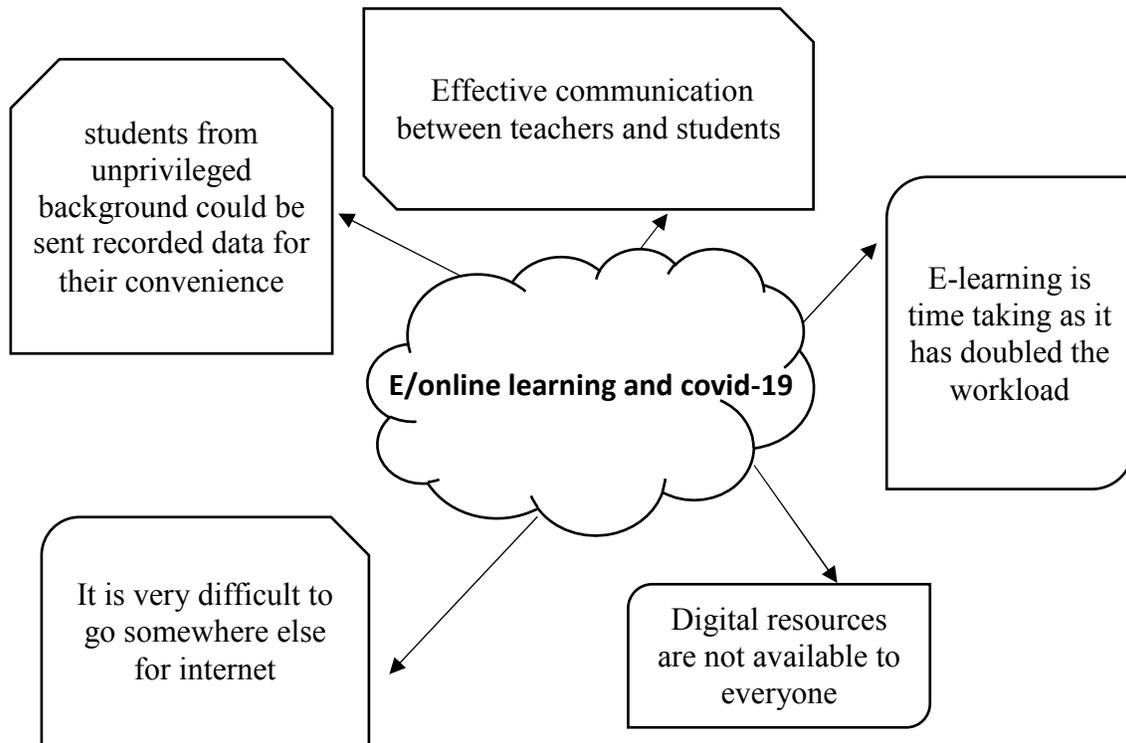


Figure 1.12 Female participants' perception towards Affordability of Technological Tools in the covid-19 Context; a specimen from mind maps

Assessment and Evaluation Tools

Assessment and evaluation are yet other challenges of online learning (Kearns, 2012). Instructors have to carefully design assessment strategies (Williams, Howell & Hricko, 2006) which should be fair and satisfactory. A complete shift to e-learning in order to maintain social distancing is a new practice in Pakistan. Therefore, the higher authorities are taking time to devise a final policy regarding exams and assessments (Young-Powell, 2020).

Students are perplexed and annoyed over rapid change in the policies regarding exams. However, male students are more skeptical about assessment than female students (Flaherty, 2015). In the current scenario of global pandemic, universities are considering open book exams; unfortunately, students are not familiar with this type of exam. Open book exam requires analytical and critical thinking abilities (Doghonadze, 2018). Students are confused and afraid of this type of assessment, because they are neither

trained nor habitual of open book exams (Sharma, 2020). One of the male participants remarked:

I am told by my instructor that we have to take an open book exam to get promoted to the next semester. I have no idea what type of exam it is. I am not prepared for this type of exam. I am afraid I will fail.

Interestingly, both male and female learners' perception of assessment was similar. Almost all the participants shared their stress and anxiety because of online exams. A female participant stated:

I put my efforts to successfully complete all the assignments and projects, but I am afraid of online exams. Technical errors may occur anytime, so how universities are going to handle them. I am confused and worried for my exams.

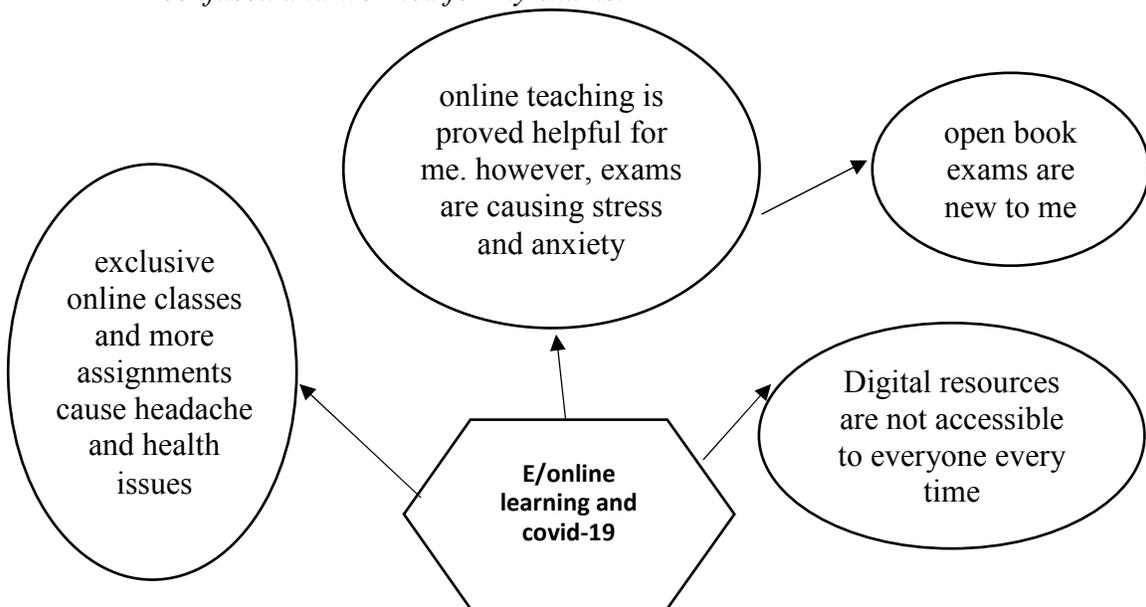


Figure 1.13 Participants' perception towards Assessment and Evaluation in the covid-19 Context; a specimen from mind maps

Conclusions and Recommendations

The study intended to explore the learners' perception of online learning. It also attempted to investigate the differences between the perceptions of male and female students. Following the qualitative approach and interpretivist paradigm, the study concluded that e-learning is attractive yet challenging for students. Students learn effectively through computer mediated learning, but it needs proper planning and strategy

(Muirhead, 2001). Teachers and students should be trained enough to use digital resources for effective teaching and learning

All the students cannot afford digital resources at home (Hall & Batty, 2020). HEC decided to implement e-learning in the context of Covid-19; apparently the decision was good, but it was not an easy transition for all the students. Majority of the students accepted this mode of teaching because of the prevailing situation all over the world. However, male and female students had few similar and more different perceptions of e-learning. Male students were more positive towards online learning as compared to female students. It is more difficult for females to manage time at home to take classes. Although students have accepted this new mode of learning, yet it is difficult for them to educate family about the nature of e-learning.

Although, a sudden transition to e-learning was challenging for the students in the beginning, yet students accepted this mode of learning considering it an easy option available to continue studies. Students were not in the favor of vacations, because they do not want to waste their time. However, students were in the favor of short training for teachers and students both to get maximum outcome from this exercise. A well-planned training for both instructors and learners should have been arranged before any change in the mode of learning. Moreover, learners who do not have access to digital resources in their native town could have been provided with alternate options.

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