

FEMALE DISABLED LEARNERS IN ASYNCHRONOUS LEARNING ENVIRONMENT DURING THE COVID-19 PANDEMI: A QUALITATIVE STUDY OF FEMALES EXPERIENCES

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ABSTARCT

The main purpose of the study is to explore the experiences of female disabled learners in asynchronous learning environment in Open University of Sudan (*OUS*) during the COVID-19 Pandemic time. The study used qualitative research -an exploratory research design; an interview technique was used. A purposive sample was carried out, and three female disabled learners were participated voluntary. The data were collected from participants who spent more than three semesters in (*OUS*) in intake 2020 -2021. The result showed that negative and positive experiences towards online learning environment during COVID 19 time. Asynchronous learning during the COVID-19 pandemic did not meet the needs of female disabled learners in terms of accessibility limitations; network coverage and download files. Learner–learner interaction; learner-content and learner–instructor interaction did not satisfy female disabled learners during the COVID-19 pandemic in (*OUS*). The study recommended that female disabled learners need an immediate interaction among leaner-learner interaction; learner- content and learner – instructor interaction during the COVID-19 pandemic in (*OUS*).

Keywords: Female disabled learners, interaction components, asynchronous learning, COVID-19.

INTRODUCTION

The 21th century has been considered the age of innovation of the World Wide Web (*WWW*). Instant Information and Communications Technology (*ICT's*), are used in many fields of knowledge such as medicine, engineering and education is no exception. It has been acknowledged that the internet in educational arena has changed the role of teachers as well as learners. It is clear that distance education provides a chance of interaction between instructors and learners either inside the classroom or outside such as café, library and even in office. In fact that, interaction has been categorized in common into four major parts such as interaction between student–student, student-instructor, student-course content, and vicarious interaction (Moore, 1989, Moore & Kearsley, 1996). Interaction has been categorized into three parts are as follows:

The first type of interaction learner-content interaction that occurs between the learner and the content or course discipline. Interacting with content that results in changes in the learner's understanding, the learner's perspective. This type of interaction occurs when learners change information and ideas they encounter in a text, blogs, television program, lecture, or elsewhere (Holmberg, 1986). This kind of interaction occurs when the mode of learning is a regular interaction such as face-to-face or it can be occurred via different types of educational media for instance threaded discussion, blogs, emails or even phone calls.

Student-student interaction is a form of communication between student-student while they discuss course content, assignment, a project or activities in this circumstances a student gives some comments and questions which are related to the course or he/she can clarify undistinguished points in the course or a project. Therefore, it sometime occurs through off line for instance email, SMS, or face -to -face interaction in a café or a bus station. Whereas, Learner -Instructor interaction is a communication process that occurs between a student and his/her instructor therefore, instant interaction can be within an online course or during communication with learners or offline (personal dialogue). This kind of interaction is crucial for learners and they can feel in a real environment it occurs face -to-face between two people or more in the library or in a café ...etc.

Thus, the theoretical framework is the interaction between learners - instructors, learner – learner interaction and learner – content interaction and vicarious interaction / materials. Interaction played an essential role in learning expansion by using various instruments, tools, mediation, etc. Thus, social interaction theory highlights the potential impact on teaching and learning using new tools as vehicles for modernizing, contextualizing, and transforming activities procedures, focused on learning development and social interaction (Vygotsky, 1978).

ASYNCHRONOUS LEARNING IN SUDAN DURING THE COVID -19 PANDEMIC

Sudan has acknowledged distance learning waves in the third decade of 20th century and at that time there was scarcity of formal education opportunities. Therefore, most of Sudanese learners had gone abroad to acquire knowledge. In the earlier of 1960s, the national T.V had attempted to disseminate asynchronous learning program by offering English language program throughout the capital city – Khartoum and the program was using for a limit period of time approximately two years and terminated. Furthermore, during that time University of Khartoum was endeavoring to deliver distance education program particularly in 1963 which was vocational program was targeting a few groups of learners. Whereby, in the earlier of 1990s Sudan was taking series steps toward installing distance education and was establishing Open University of Sudan as well as some higher institutes which were beginning to adopt the philosophy of distance education. In fact that, distance education learners attend a physical site for a few hours per week in institutional colleges (Elnour & Elhadi 2020).

The Corona Virus (COVID-19) emerged in the world in the December 2019. Therefore, the World Health Organization (*WHO*) announced that COVID-19 is a global pandemic in March 2020. It spreads and covers many countries in order to prevent it strict regulations have been taken such as lockdown and social distancing, while some countries preferred to use immunity methods. To stop the spread of this pandemic these steps have been adopted seriously such as working from homes, flexible working hours, because the authorities are afraid of people infect each other. The government banned face-to-face activities, including teaching, in order to contain COVID-19. So, many health ways have been taken such as keep distance roughly one meter; sanitized hands and face masks are compulsory to be used in public places as a result shut down schools, universities, stadiums and many other activities, really the situation forced all levels of educational institutions to use emergency remote teaching into practices (Elhadi & Elnour, 2022).

In the Sudan circumstances ministry of higher education has introduced an initiative to provide hundreds of millions of students with effective online learning from their homes using Moody application with the help of the Open University platform. The rapid COVID -19 potential explains technology in education is receiving special attention, especially in the situation of the COVID-19 pandemic witnessed the early entry of the Internet in institutions of tertiary level (Viju, 2021). Obviously, many countries of the world have been

offering distance learning program while during the pandemic the states have encountered many challenges, and barriers in terms of educational courses delivery, and becomes more difficult, which will widen the pre-Covid-19 education funding gaps (Viju, 2021).

In particular female learners with disabilities may they have been encountering great obstacles and barriers, since the COVID -19 pandemic has disseminated throughout the universe and may learning tools they need are not always available, therefore experienced disabilities in distance education environment during the COVID -19 pandemic are crucial to be highlighted. Therefore, many studies have been conducted in disabled learner's education in asynchronous environment. It seems that female disabled learners have faced lack in terms of face to face interaction between teachers and learners and tools affordability ...etc. Moreover, some previous studies have documented in both negative and positive manners. This study attempts to explore disabled learners' experiences in asynchronous learning in Open University of Sudan (*OUS*) during COVID-19 time. Identify thoroughly experiences of female disabled learners toward interaction components in asynchronous learning in Open University of Sudan (*OUS*) during COVID-19 time.

Studies have been conducted in disabled learners in distance education environment. Special education teachers expressed both positive and negative experiences towards distance education practices in primary education; the use of materials suitable for students' needs is inadequate (Nedime et al., 2020). The application of e-learning technologies allow disabled students for cognitive, social, and education interaction during the pandemic. Whereas, lecturers reported that accommodations were appropriate for students and disability resource centers neglecting to contact students after the transition to online instruction during the COVID-19 pandemic (Abed, 2020).

Difficulties in organizing distance learning for disabled students permits the researchers to offer some advices to be implemented for this kind of education, more success in terms of course completions, and certain types of disabilities appeared to be more amendable to certain types of assistance in education arena (Logan, et.al., 2020). Including students with disabilities in distance education a similar study showed that individuals with disabilities and offering flexible learning and virtual mobility, individuals with disabilities in a user-center design so that accessibility and usability are achieved, Eleni et.al 2020. The links between education and society are strengthened (Susan, 2004). Whereas, the study highlighted that the problems of self -organization, fatigue, low mood, lack of live communication and technical problems with the Internet communication are real barriers of distance learning for students with disabilities in a pandemic time (Denisova et al., 2020). However, parents and educators had generally neutral attitudes toward distance learning, although educators agreed that their students were obtaining educational benefits during distance learning (Miguel, 2021).

A similar study showed that support services are needed for undergraduate and postgraduate students with learning disabilities whose attending Saudi institutions of higher education, so learning disabilities of the council for exceptional educational was supported in higher education (Mohaned & Todd, 2020). The results of different study showed that more than 60% of respondents had experience using Moodle, Google Classroom, and Blackboard; 80% of teachers had training from their institution for the use of virtual platforms and students attitudes, and student's attendance at class sessions (Marco et al., 2022). Whereas, parents were pleased with the outcomes that their children were experiencing in online learning, but some issues still exist for educating students with disabilities within this environment (Paula et al., 2014).

Thus, a lack-disabled people specifically lack of the student perception knowledge with hearing and visual .Teachers experienced the greatest difficulties in determining the presentation form of the lecture material, monitoring and evaluating independent works of

students with problems of hearing, vision and movement (Movkebayeva et al., 2020). Whereas, the majority of previous studies stated that female disabled learners were not able to benefit from distance education environment during COVID-19 and also they were stated that there are not enough interact with instructors, learners and exercises provided in the course content; female disabled learners and need more orientation and guidance. So, low self-motivation and self-organization, fatigue, low mood, lack of live communication and technical the problems with the Internet communication and distance learning platforms (Denisovl et al., 2020). Based on previous studies the questions are formulated below:

- 1- What are female disabled learners' experiences in asynchronous learning environment in Open University of Sudan (*OUS*) during COVID-19?
2. What are female disabled learners' experiences toward interactions components in asynchronous learning environment in Open University of Sudan (*OUS*) during COVID-19?

METHODOLOGY

RESEARCH DESIGN

To understand in -depth the experiences of participants during COVID-19 Pandemic crisis, the present study used a qualitative research – an exploratory research design has been applied in this study in order to detail the meaning of an individuals' lived experiences and tries to understand in depth the phenomenon of those who directly involved (Creswell, 2014).

ETHICAL CONSIDERATIONS AND PARTICIPANTS

Before interviewed participants, ethical approval was not obtained from the dean of languages program in (*OUS*) because of spread of COVID -19 pandemic .The present study was carried out during COVID -19 pandemic crisis, selection of participants was based on the availability of them, in fact they agreed that to participate due to personal decision. Really, participants were chosen and contacted via mobile and WhatsApp simultaneous interaction. In line with this premise, open-ended questions was used to encourage participants to be honest share experiences.

A second ethical informed consent is done that participants were provided with sufficient information about the research objectives that allows them to make an informed decision about whether they will or will not participate in this study. During the interview process, participants were reminded about the research objectives over and over, and also of their option to terminate their involvement in the study at any point. Consequently, during the transcription, no names were mentioned.

Third ethical consideration is that the actual names of the participants were coded to keep their personal identity confidential for instance, participant 1 coded (P1); participant 2 coded (P2) and participant 3 coded (P3) in this article respectively. The interview process notes were taken only for accurate transcription of data while during the real interview the researcher emphasized on the details information .To protect interviewee identities, only data relevant to the study concerning their backgrounds were recorded. Transcription of the recorded interviews was performed with focused attention to every word, with subsequent rereading and listening to minimize errors (Kvale & Brinkmann, 2009).

Validity should be assessed occasionally throughout this study. The findings should be subjected to control tests and questioning, with the researcher performing theoretical

interpretation. The consideration of validity is not outcome oriented; rather, it lies in planning, design, interviewing, transcribing, and data handling. In the current study, control testing of the interview questions was conducted through the deployment of the pilot study. Participant responses in the main study were probed in a manner that provided opportunities to clarify, control, and validate responses. Therefore, during the meeting the researcher was committing that all information will be kept confidentially and to ensure privacy. It will be deleted after completion of the study.

INSTRUMENTATION AND DATA PROCEDURES

Then, pilot implementation of the questions was made with two special education and thus, the interview questions were finalized. This research can be reached during the pandemic period and is applied with female's special education. Participants of this study were 3 undergraduate learners (age range 25 - 37 years). In this study, the sampling frame was obtained from disabled learners at (*OUS*). Participants of this study were chosen purposively. The researcher was fixing meeting time with the target interviewees, and they have informed twice and they have verified that they were willing to share their own learning experiences during COVID-19 pandemic crisis. Before embark the initial interview, the researcher was explaining thoroughly the purpose of the study to the participants, which is to explain participants experiences during courses offered by (*OUS*). The interview was taking half an hour in a public garden and the participants were coming on time as they have promised. The interview was carried out in Arabic language and translated to English language.

DATA ANALYSIS

The researcher conducted the interview, which carried out in Arabic language, and translated to English language. The data have been transcribed in the word program, pertaining to the analysis of this study there were three major themes were discussed thoroughly namely: Interaction learning environment during COVID-19 time in this point learners emphasized that "we can not interact via WhatsApp due to decrease of internet service and even no electricity power". They added "the internet services such as broadband services becomes extremely expensive". This result is in line with Nedime et al., 2020; Abed, 2020; Logan et al., 2020, Eleni et al. 2020. The second of the theme of this study is learner -learner interaction, the study was showing lack of interaction and much homework and activities of the course content were postponed and they said "We cannot communicate with peers to guide each other therefore we feel isolated" this result is in line with Susan, 2004; Miguel, 2021; Mohaned & Todd, 2020. The third themes is learner -instructor interaction. Learners told that "Frankly there is scarce of audio /visual materials it revealed lack of academic atmosphere inside house, and we have lost contact with peers and instructors during COVID-19 time could be passed through. This result is in line with these studies, Marco et al., 2022; Paula et al., 2014; Movkebayeva et al., 2020, Denisov, 2020.

The final transcriptions code showed that participants were not shared lived experiences about distance education COVID -19 pandemic crisis in (*OUS*). The researcher passed through this step and categorized it into chunks in order to be analyzed. Thus, it have been refined and filtered the themes clearly to discuss and report in the findings of the present study. The participants were shown negative and positive experiences towards distance learning environment during COVID -19 in (*OUS*) for instance technical limitations, which were mentioned by almost of the respondents in this study. Female learners with disabilities showed also the disadvantages of course activities in distance learning during COVID -19. Absence effective interaction between learner - learner interaction and learner - instructors interaction these factors disappointed and frustrated learners and made negative experiences. The result was formed via a tangible interview. There are three

themes were highlighted thoroughly in this study. (1) The disabled learners' experiences toward an online learning environment during COVID-19. (2) Learner -Instructor in an online learning during COVID-19. (3) Learner – Learner interaction and learner – content interaction in an online learning during COVID-19. The themes are follows:

Theme 1: Online learning environment during COVID-19

In fact, learners showed various experiences toward online learning environment during online COVID-19 time. The explanation from the disabled learners' experiences as follows: P1: Obviously, online learning environment during COVID-19 showed many barriers and makes me frustrated because, there is no tools and applications that provided via website of the university and collaborative projects for instance Wikis; Forums and Blogs ...etc.

P2: Really, many challenges were occurred such as technical problems. I will tell you straight out that the internet connection / coverage during the online classroom environment was a complete disaster.

P3 and P1: Another important thing happened is that increases the cost of broadband because, high demand on that device and I could not buy a new device because of my parents are retired. That is disappointed me in an online learning environment during COVID-19 time.

P2: I really struggle that time at home because, could not attend on time online interaction and submit academic activities before deadline. I was quite dissatisfied with my own work due to a poor internet connection. Frankly, there is scarce of audio /visual materials to pass through in the e-library.

In the light of mentioned interview transcription, it is obvious that disabled learners showed various experiences in an online learning environment during COVID-19 time. It means that all of them showed negative experiences towards online learning during COVID-19. Moreover, some of the learners said that in an online learning during COVID-19 time faced challenges, and they could not manage it, and some answers showed that negative experiences such as frustrated, and disappointed. These results is aligned with Nedime et al., 2020; Abed, 2020; Logan et al., 2020; Eleni et al., 2020.

Theme 2: Interaction components

P1: I am quite happy when the instructor appears in the online classes.

P2: I am frustrated sometime because there is technical barriers such as no power consistency but, I'm feel also build a good academic relationship with our instructor who gives immediate feedback. Learner- instructor Interaction needs more practice and more activities and integrated us with that make learners feel confident.

P3: I am delighted with online interaction because, the instructor guides me and highlights some points in the course content carefully and precisely.

P1 & P3: We always feel captured critical thinking of this course and never feel we run out of ideas during our interaction with the instructor.

P1: I really, did not find a consistent interaction with my peers who make me frustrated throughout day. I think learner – learner interaction needs to use advanced technology to improve interaction among peers -instructors to share and collaborate confidently.

P2: I interest with peer – peer interaction because, it facilitates to comprehend all the given activities.

P3: I sometime feel the lack of learner – learner interaction and to cope with them because I am sometime unable to catch main points they discussed due to technical problems. I do not think maintain learner - learner interactions during the online classroom can encourage me to understand further the course and its relevant activities.

P1: I am not satisfied with learner - content interaction because, it was posting in chunks and I could not absorb it clearly.

P2: I am quite frustrated because, sometime there is general ideas in the course content and I have attempted to adopt with multimedia to facilitate understanding the course content.

P3: I am delighted to some extent with learner -content interaction because, it provides new knowledge. I feel learner – content interaction gives sufficient learning materials.

P1 & P2: We always feel isolated from course content interaction because there is new concept that unfamiliar with and there are less activity were provided.

P3: I really, think learner – content interaction provides valuable knowledge and Audio - Visual elements.

P1: I think learner-content interaction needs more practice and more activities to be conducive.

P2: I am satisfied with learning materials that have been providing when I passed through the content.

Pertaining to theme 1, 2, and 3 had shown that positive and negative learners experiences towards learner- instructor interaction; learner – content, and learner-learner interaction components that were occurring in an online learning environment during COVID 19 time. Based on the data transcription and a tangible interview, it obvious that this study showed disabled learners perceptions that have shown positive and negative experiences toward learner- instructor interaction; learner – content and learner- learner interaction. This result is aligned with Susan, 2004; Miguel, 2021; Mohaned & Todd, 2020; Marco et al., 2022; Paula et al., 2014; Movkebayeva et al., 2020; Denisov, 2020.

CONCLUSION AND SUGGESTION

Female disabled learners stated that some activities need more clarification from instructors, which are not simple for all female disabled learners. There is accessibility problems at homepage and local network coverage during download files. During this period of COVID-19, learners need support of families to pursue their educational practices and interaction with instructors; their peers and course content successfully. The result also revealed that family income and materials availability played a great deal of role in facilitating an online learning interaction for female disabled learners at (OUS) during COVID-19 time.

In this respect, this research study showed that; the distance education applications carried out during the covid-19 period did not meet the needs of female disabled learners in terms of network technical barriers; learner – learner; learner - instructor and learner - content interaction. Female disabled learners have not considered the instructor to learner interaction; learner - learner interaction and learner -content were not done effectively.

Therefore, it is necessary to take into consideration to diminish technical problems such as network coverage that may arise in emergencies specifically synchronous learning such as SARS or COVID-19 pandemic. Based on the results of this study, the following recommendations have been taken seriously to develop online interaction environment to female disabled learners during COVID-19 period at (OUS): It is necessary to prepare alternative educational method for female disabled learners at (OUS). An advanced materials and interactive instructors 24/7days in charge; learner - learner; learner – content and learner – instructor interaction should be done effectively.

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