

# Perceptions of female students toward video conferencing technology at AOU-KSA.

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## Abstract

Educational institutes are incorporating technology in their teaching methods to facilitate their students. The female students in Saudi Arabia, studying at Arab Open University have to attend lectures from male teachers through video conferencing due to religious restrictions. The institutes ensure to facilitate the students in every aspect to make learning process convenient. Whereas, at times there are some issues that may linger on and cause a disturbance in the learning environment. This study aims to find out the opinion of female students at AOU who have to attend classes through video conferences. The purpose is to identify the issues in the video conference technology regarding the environment of the class, the technical facilities available to them, the kind of classrooms they study in how effective the video conference method is in interaction between the male instructors and the female students. Students seem to be neutral or at times satisfied with facilities available to them, however, in some matters, it is a close call, as some of the students may not be comfortable as others.

**Keywords:** Videoconferencing; Distant Learning; Arab Open University; Female Education.

## 1. Introduction

The education system all over the world has started to incorporate technology into it to advance the learning methods. It has become an important aspect for educational institutes to benefit maximum from the technology to improve learning and teaching methods as well as cater to the increasing demand for education and training (Akyol, Vaughan, & Garrison, 2011). Specifically, the educational environment of Saudi Arabia has been changed majorly due to the incorporation of IT in its learning and teaching methods (Al-Asmari, Khan, 2014). Many researchers have already focused on how online learning has got popular in Saudi Arabia and been adapted by students and institutes despite its spreading progress is slow (ALGARNI, 2014). The distance learning was officially authorized in KSA by 2016, though it has not been fully implemented at all levels like administration and technical. One of the major causes of it is inadequate knowledge about technology and lack of training and web-based instructions (Aloraini, 2009). The learning trend grew which drew the teachers' attention towards adapting new skills, necessary to meet the growing challenges. E-learning in KSA is the need of the time because of the increasing population and a low number of teachers, both in terms of quality and quantity. Especially, there is a lack of female teachers, which are the first preference for the female students in KSA due to religious values. Furthermore, video conferencing allows students to benefit from the teachers that may not be available regularly or to interact with them with ease. Distant learning is increasingly becoming part of a normal life routine now, which further demands the advanced methods of teaching and learning.

Teleconferencing is defined as "an integration of computer with telecommunication systems in which private companies, corporations, or organizations take the advantages of meeting together through electronic equipment." (Towhidi, 2010). The interaction between learner and teacher is often difficult in an open and distant learning system, therefore, video conferencing provides a way to facilitate two-way interaction (Singh, 2012). The education system in KSA discourages the female students to be taught by male instructors face-to-face. Due to religious and social values, males and females are separated at all levels in educational institutes but being able to watch the teacher while learning, adds richness to the learning atmosphere for learners (Boverie, 1997). The video conference allows male teachers to deliver lectures through TV screens that female students can watch while sitting inside the campus and ask questions through microphone systems and get feedback on their queries. Some of the students and teachers also do not fully support this method of education, as it is considered 'boring' and full of distractions at times technical disturbance or lack of physical presence leading to less interactive teaching sessions. Not enough research and study has been done on the perception of female students of Arab Open University about the video conference. Many female student feel discriminated due to the lack of face to face interaction with the instructor. There is a dire need to identify and address the issues of female students regarding their academic problems. With the increased use of technology in educational institutes, there are more opportunities for students to connect better with the teachers. KSA is a country with several opportunities to grow in the higher education sector (Fadale, 1999). Saudi Arabia has started the National Plan for Information Technology (NPIT) to enable people with creative e-learning educational opportunities. The government has been putting effort to further develop blended learning along with the traditional form of learning through the establishment of the National Center of e-Learning and Distance Learning (NCEDL).

## 2. Literature review

Islamic values encourage males and females to be separated in all circumstances (Harrington, 2010) and following it, there are separate educational institutes for females in KSA. The government has taken special measures to ensure higher education for females. The first female primary school was established by the General Presidency of Girls' Education in 1970 (Ibrahim, et al, 2017). Then a further demand was noticed by the General Presidency of Girl's education, considering which 12 universities were established all over Saudi Arabia from 1970 to 1980, where four-year programs in various fields were offered to female students (Karal, Cebi, & Turgut, 2011). Following this, the General Presidency of Gil's education started colleges for younger females in various urban areas of KSA between 1979 and 1984 (Kerres, & Witt, 2003). The steps were taken in the light of Islam that females should be given education separately than men where they should be trained for their future of parenthood and adjust in general societal values.

The educational institutes dedicated to females initially did not receive much appreciation but with time people got more aware and acknowledged the efforts. The demand for education grew and by 2009, an increase of 70% admissions in undergraduate programs was noted (Mortera-Gutiérrez, 2006). The number of female students increased and thus to cater to their needs, the government facilitated with new infrastructure, technology, and equipment. King Abdullah bin Abdul Aziz is believed to be a progressive leader than his ancestors. He worked to empower women in Saudi Arabia by bringing a flexible and more practical thought process for society. In 2005, King Abdullah Sponsorship Program (KASP) was launched which enabled some of the students, irrespective of gender, to go abroad for university education (Taylor & Albasri, 2014). The government emphasized women's education and provided them with various opportunities through several state-funded universities and colleges in all provinces of the country. There is indeed a lack of literature to identify the problems and issues of the female students in KSA. This particular study would help identify how the video conference technology at Arab Open University is facilitating the female students.

The trial of a video conference for study purposes was first held in 1995 to evaluate its effectiveness (Freeman, 1998). It then proved to be less costly, improved the learning quality of students and students felt equity being promoted among them despite being enrolled on different campuses. Cross-campus interaction was encouraged and the information flow improved through effective presentation methods. According to Laurillard, "video-conferencing invites the delivery of lecturers.... It is definitely a presentational medium as well as being discursive one." (Laurillard, 1993). On the other side, students also complained about the reduced learning time as much was consumed in setting up the conference lecture or shutting down. Interaction of students with staff or with the lecturer was also noted to have been reduced. Despite benefitting the students, videoconferencing was criticized for its less interactive opportunities among students, lecturers, and other academic activities (Freeman, 1998). The quality of teaching and learning has been undermined in several new types of research, whereas the practical advantages of the video conference have been focused more. The medium is believed to be more suitable for didactic lectures instead of compensation for an interactive class discussion. Video conferencing can rather be used to display university as an advanced institute using technology to facilitate students. In countries like Saudi Arabia, where females cannot directly interact with male instructors and due to lack of female qualified staff, video conferencing has proved to be the best possible alternative to traditional classrooms.

Knipe and Lee conducted a study "The Quality of Teaching and Learning via Videoconferencing" in which the activities of students and their learning capabilities through video conferencing were examined. The study was based on 66 students, 45 of them joining a class as traditional means whereas 21 students participated through e-learning. The study concluded that students joining class through videoconferencing felt left alone, as they did not get much opportunity to interact with the teacher or be able to make eye contact with the instructor. This left a negative impact on distant learners.

In 2005, an article by Martin, "Seeing is Believing: The Role of Videoconferencing in Distant Learning" analyzed students of Northern Irish who have explained the Constitution of the United States of America by one of the members of the American congress. Students being able to learn and get an opportunity to interact with the American politicians without traveling long distances felt content and thus, the videoconferencing left a positive impact on them.

A study by Koppelman and Vranken in 2008, named "Experiences with a Synchronous Virtual Classroom in Distance Education" aimed to analyze the perspective of teachers and some students in computer technology class. The students identified they encourage the course delivered in short intervals, which did not disturb their concentration level. They also believed it saved their time which otherwise would have been wasted in travel to and from the institute. However, some students did not appreciate the delays in teaching.

## 3. Methodology

A quantitative search was used to conduct the study and understand how the video conferencing at AOU has been facilitating the female students. The technical facilities, environment, and other technical aspects of video conferencing have been analyzed to observe the effectiveness of the video conferencing feature used to teach the female students. The study aims to find how satisfied or dissatisfied students are with the particular method of teaching, as it is believed that the distance learning and e-learning enables an interactive method to teach and deliver the content (52). Video conferencing technology has several aspects attached to it like the presence of equipment like microphones, their placing, and the temperature of the room, the sitting space, lighting, and overall atmosphere in the class with the presence of several students in a single room without physical availability of an instructor. There could also be a need for technical aid at times, which also has been emphasized in the study to know the students' opinions.

## 4. Sampling method/ respondents

More than 100 female students of AOU were asked to fill out the questionnaire. The sampling was done with the current students of the university who are using video conferencing technology to study. Every respondent was asked to mark their response depending upon the respective classes they have been assigned in the university and not the generalized opinion. The sampling of 100 students was conducted majorly online and they were asked to display their satisfaction level of the facilities as per question anonymously. No personal data was collected, rather random sampling was conducted. Students of different subjects or programs have been included in the sampling.

## 5. Questionnaire

The questionnaire was designed to ask respondents their satisfactory level about the video conferencing facilities at the AOU. It consisted of 42 questions, with four different sections, the classroom equipment arrangement, physical features of the classroom, technical support,

and lastly the classroom management and communication with the male instructors. Each question had five options, very dissatisfied, satisfied, neutral, satisfied, and very satisfied. The respondents selected the option according to the answer of their choice based on their point of view.

## 6. Results

For the first section, the classroom equipment arrangements, the majority of the students were satisfied with the facilities provided to them, like the number of microphones, access to them, the size of screens, and their resolution. Many showed satisfaction over the loudspeaker in the classroom and the location of the screens where they are placed. However, dissatisfaction has been noticed on the posing of the camera of the professor. Majority of Very satisfied with the sizes of the screen in the learners' room. On the whole, students were satisfied to greatly extend about the overall equipment arranged in the class (Fig. 1).

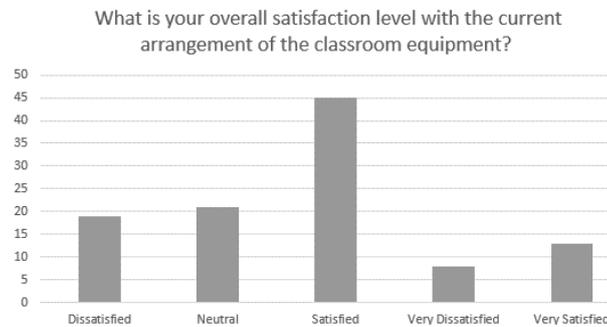


Fig. 1:

Students had mixed reviews about the physical features of the classroom, like its light, the floor and ceiling of the learning room, the number of windows and their size, the location of the door, and other physical features of the classroom. Students normally had neutral to satisfied or very satisfied responses, however, some of the features have not been found very popular like the temperature of the room. Overall, students were neutral or to come extent satisfied with the physical features of the classroom (fig 2).

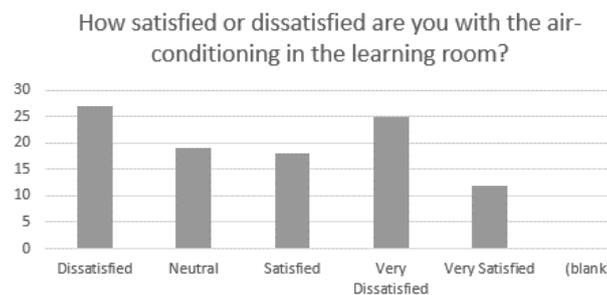


Fig. 2:

The technical assistance provided to the students during the video conferencing does not always meet the upper standards. The learners had a mostly neutral opinion about the technical assistance, be it in terms of time required to provide assistance or working of the instrument, some of the students were not impressed how they are facilitated, however, others held neutral opinion. The performance of technical assistants, as gauged by learners, had an almost equal response of satisfies and dissatisfaction, while some being neutral about it. When asked about the overall satisfaction level of the learners about technical assistance, the majority were satisfied with the class equipment arrangements (Fig. 3).

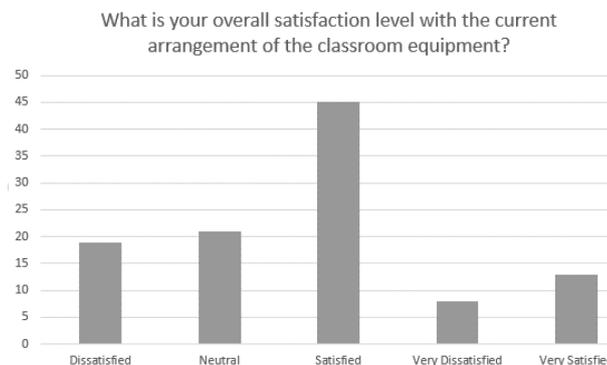


Fig. 3:

Classroom crowdedness is not an issue for the majority of the student, neither many are reluctant nor hesitate in conversing with the male instructors. However, students are worried about the disturbance in the class due to other students, like noise or unnecessary movements, which often result in an inability to focus on the lecture. Students agree to the fact that they can communicate with their teachers after class which helps them in solving their queries. There has been a moderate answer when asked about the authority of male teachers over female students (Fig. 4).

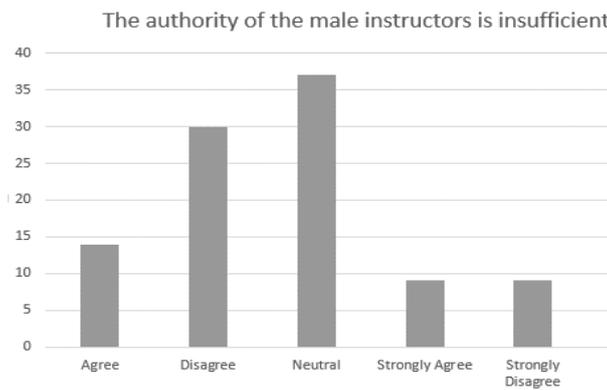


Fig. 4:

## 7. Conclusion

The purpose of the study was to analyze the opinion of female students regarding video conference technology at AOU. Many religious barriers may not allow female students to be open to many opportunities and privileges that males might enjoy. The resources available for the female students should be utilized properly so that the complete benefit of it can reach the students who are willing to educate themselves at a higher level. The study points out the hurdles that students could be facing, either technical or communication gap with the teachers. Though results have been a little on the satisfactory side, nonetheless, special attention should be paid to resolve the issue of students who might be facing hurdles in gaining proper education through technical incorporation. Students should be facilitated in a way that their focus should not divert from the academics. Though the study has figured out the underlining issues female students face towards video conferencing technology at AOU, further research should be conducted to analyze how these issues can be reduced at Arab Open University.

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