

Perceptions of female students toward hologram video conferencing technology at AOU

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Abstract

The research paper primarily aims at understanding women's discernment in the field of education if it is governed by technology such as hologram video conferencing. The paper is expounded in the context of Saudi Arab's education system as the country of Saudi Arab is fringed by many rules and regulations for females pursuing higher education. The research paper will extrapolate the change in conventional learning and the ways in which it can benefit women's perception and society at large. Arab Open University (AOU) has been a pioneer in distance and e-learning in SA and hence the study is directly directed towards implementing Hologram Video Conferencing and viewing the change in gender biases when it comes to acquiring scientific learning. The paper will also delve into the challenges that can be faced in adoption of holographic based learning and how it can be overcome by changing awareness and deploying more stringent rules by the government.

Keywords: Hologram Based Education; Perception of Female Students; AOU; Saudi Arabia.

1. Introduction

According to Abdullah (2011), Arab Open University (AOU) is a learning institution which is non-profitable, and was founded by a prince named Talal bin Abdul Aziz along with six branches in Arab countries and headquartered in Kuwait. Arab Open University (AOU) is one of the leading universities in Arab countries and adopts open learning methodology as an attempt to decrease the use of physical resources and in limiting face-to-face or conventional interconnection. The current revolution in technology has remarkably challenged the perception and understanding of society regarding the world. The advantages and impacts offered by online courses and distance learning have been discussed in many studies, considering it as one of the most impactful and important ways to upgrade the quality of education. SMHE (Saudi Ministry of Higher Education) has promoted the use of IT (Information Technology) in learning and teaching among their students and faculties. The major challenge faced by Saudi higher education is to serve and provide higher and college education facilities to the growing number of students in the country (Alebaikan & Troudi, 2010). As stated by Ghamdi, Samarji and Watt (2016), the immediacy between teachers and students has always been a topic for study and research since a long time in the context of face-to-face classroom sessions. The paper also discussed the nature of challenges and obstacles faced by Saudi universities in order to implement blended learning in their education system.

As stated by Allani and Sharafuddin (2012), higher education is rapidly transforming the world, and there are currently around 400 universities in Arab which is 10 times greater than the number of universities 40 years earlier. Over this period, the rapid growth in higher education was observed and this increased population demand for education in SA. However, due to the rising cost of higher education and low per capita income, most of the students in Saudi Arab are not capable of paying tuition fees or any educational expenses. So, to overcome this challenge and find the solution to this problem, open learning was realized as an effective and low-cost approach to fulfill the demand of the growing population and also to change their attitude towards higher education. With the increase in population all over the world, the need and demand for education and technologies has also increased. In Saudi Arabia, to accomplish the demand of the individuals internet services have also been provided to the public, and it's been working since 1999. The number of internet users were less at the start of this service but there was a spike of internet users later in 2007. In 2007, there was a rise in internet users by 6.4 million internet users that is about one-third of the whole population of Saudi which equaled to 24 million. The major reason for the exponential growth of internet users was that around 60 percent of the population of Saudi consists of youth who are in their 20s. The new generation is adapting to all new technologies for their better growth and knowledge and in order to meet the quick demand of education. According to Hamdan (2013), the major factor affecting Saudi Arab's education is economic development. Most of the higher universities in the country depend on the national sources which come from the oil revenue. Addressing the extent of female education in Saudi Arabia, it was noted that the 52 percent of the graduates in 2015 were found to be females in Saudi Arabia, and this percentile can be considered as a testimony of progress in women's education. It is also noted that Saudi Arabia has the lowest rate of working women. In recent years, there has been a need to increase the economy and in that endeavour it is important that men and women both partake in businesses.

Alhabeeb and Rowley in *Critical success factors for eLearning in Saudi Arabian Universities* (2017) have discussed that the eLearning has changed the way of teaching and learning in a good and effective way. This has benefits for both teachers and the students. The government of Saudi has been supportive of the development of eLearning for the students on traditional courses and the students associated with distance learning. When e-learning started in Saudi Arab early on, it received recognition and attentiveness among the academic sectors and students at a slow rate. The Revolution of technology is affecting the development of different activities in daily life. The e-learning education system has gained a competitive fringe over the persuading traditional system and methodology. E-learning education system serves much more flexibility and also allows privilege such as time constraint, physical presence, and stressful teaching and learning for both teachers and students, hence the eLearning system plays an important role in the modern education system. However, the eLearning system is still facing some barriers and challenges on its way to successful teaching-learning practice.

Many progress and technological advancements have taken place in education sectors as well. Scientists and technicians are trying very hard to provide their best advanced technology, which can be beneficial in many areas (Ghuloum, 2010). Video conferencing is one of the aspects or elements of technological advancements, which can be used from a distance to connect the people with each other. It is also being used by the universities in distance learning for online courses or e-learning. Video conferencing is a synchronous representation for interactive video, voice and data transfer among groups of people (Candarli & Yuksel, 2012). Holography can be defined as the photographic technique which records the scattered light from an object, and eventually presents it in a 3D (three-dimensional) manner. The hologram technology was first introduced by Dennis Gabor in the 1950s, he was a physicist. According to Aina (2010), holographic technology is now playing a major and important role in educational sectors in order to magnify learning and encounter perceived educational challenges. With rapidly growing technologies in today's world, distance learning has also become a key component compared to the standard lectures. It enables the students to take programs or courses which are not accessible or available at their own educational university campuses regardless of the location. This can be a great resource of enhancing and promoting the quality of the education, online courses or distance learning is a way of creating educational integration by connecting the people who are physically, culturally or socially far from each other. Holography technology combined with video conferencing contributions can help deliver better educational services and development in today's world. The main advantage offered by holographic video conferencing was that it provides a great experience much closer to that of a conventional or face-to-face interaction and it also enhances the communication among people.

There are still many causes and consequences in Saudi Arabia regarding women's education and their participation in the workforce, it was earlier considered as a shame for the families whose females go out and work for the community. However, now the time has come where all the rights are being given to the females and they are being acknowledged for their knowledge in the society and subsequently this has shredded the gender gap in Saudi Arab. Ahdal and Hattami (2014), discussed the perception of students and teachers on video conferencing technology in learning and teaching methods. Most of the teacher's staff found that the technology is easier to learn and apply, although there were few who considered it as not-so-good to use technology and they might face problems using them. However, the faculty encouraged students to seek technology based learning for their better educational growth. As per the student's perception, some of the students mainly female found it more intimidating to talk to their teachers over video conferencing, it took them some time to get used to it. Nevertheless, they became more active towards the same after knowing about the technology and getting much more familiar with that. Students also found it very interactive as they got to work collaboratively, and this team culture made them feel good and confident about their performance.

Nevertheless, there are very few studies and researches on distance learning and online courses in Saudi Arabia, therefore this study will be unique in that context and also will help other researchers to conduct study logically and efficiently. Along with the advancement of technology (IT) within education in Arab, many types of research have been done to investigate the impact of e-learning and online courses on education and education system and also on students. However, the study on female students' perception of hologram video conferencing is still very scarce. This study analyzes the trends, opportunities, and challenges faced by females in Saudi Arab to achieve the educational rights and the challenges faced by Arab Open University (AOU) to facilitate them with all required and possible ways for their better education. The gap has been identified for the purpose of this study and it is facilitated by the need for assessing the information regarding Arab Open University (AOU) and their hologram video conferencing technology. The study will also investigate the possible impact of hologram video conferencing technology at Arab Open University (AOU) and perceptions of female students towards the same. Although the studies conducted earlier were on Saudi Arabia in order to investigate the impact and consequences of online courses and e-learning on people in Saudi Arabia, this study mainly focuses on the perception of female students towards hologram video conferencing technology at Arab Open University (AOU). This study will help the researchers to better understand the perception of female students towards such technology at AOU (Arab Open University).

2. Literature review

2.1. Trends, opportunities and challenges faced by women in Saudi Arabia in fulfilling their educational rights

Development in the higher education of Saudi Arabia (SA) has allowed many women to practice their educational rights and ambitious drive to the full extent. This is also a drastic shift from the previous generations that were bound by strict patriarchal and societal norms. As there is a surge of students seeking higher education there is an even greater urge to build more institutes that cater towards facilitating a tertiary level of education. Citing this as a major catalyst, the Ministry of Planning in SA (2009) decided on increasing the number of higher educational institutes and included it as one of the pertinent points in their Sixth Development Plan. This has led to stable annual growth of 2 percent in private institutes between 2004-2008 (Alwedini, 2016).

Subject segregation according to gender has been prevalent for a long time in SA according to which women weren't actively allowed to take up subjects other than teaching and academics. It wasn't until the Saudi King Faisal confirmed that there should be equal opportunities for both men and women and no un-bias distinction should be based on a person's gender (Hamdan, 2005). The number of educational institutes have quadrupled since women's education in SA took place. The number of institutes has risen from 15 to 155 in a span of 10 years (Al Mohsen, 2000). The number of girls that graduated has also substantially spurred from 1,85,902 to 2,55,766 in 4 years. The subjects that were initially available to pursue were only arts and teaching. Later the selection range of subjects varied to general science, mathematics, history, psychology, and home economics. By the 1980s, diverse subjects like agriculture, nutrition, dentistry, and computer science were made part of the curriculum in many universities. Currently, there are many other universities which are also starting to provide diverse fields of subjects (Hamdan, 2005). According to a research paper published by Rajkhan (2014), it was deduced that even though the government of SA has made exemplary progress in matters of female literacy in the past 50 years, there still lies much to do.

The following part of the section will give discursive detail about the common challenges that are faced by girls that are willing to pursue higher education.

The core of girl's education in SA is superimposed with Islamic beliefs, which stresses them on making themselves equipped with their basic responsibility of becoming a good wife and nurturing mother. A similar prognosis was also done through the research works of Al-Asfour and Khan (2014). The paper deduced that Saudi women have to face hardships when it comes to fulfilling their career paths or if they have dreams that are other than stereotypical roles of homemakers, mothers and wives. As per the laws that were mandated in the developmental plan the ratio of private universities has catapulted in SA. This posed a major challenge, particularly for those women and girls who belong from humble backgrounds. Private institutes demand high tuition fees and can only be accessible for girls who belong from affluent backgrounds. Although lower-class girls are given provisions of admissions in private institutes the criteria are purely through scholarships. The number of scholarships conferred is also a few. It was noticed that a minimum requirement for girls to make a pass in these non-public universities was that they should be well-versed in English (Jamjoom, 2012). Taking into consideration that most of the lower class girls have completed their secondary level education from public universities, this gap becomes difficult to bridge as students in public schools are often taught in the Arabic language (Alwedini, 2016). Besides the above-stated limitations, it was observed that schools for females remained separated from that of men. This is a common practice of Islamic culture known as *Ikhtilat* (Almalki & Ganong, 2018). Also, there aren't a lot many Saudi women who pursue courses such as social sciences, health care and education. It was reported through the Organisation for Economic Co-operation and Development (OECD, 2015) statistics that a mere 3 percent of women graduates in subjects like engineering, manufacturing, and construction. A common reason for this disparity is that subjects like engineering and construction are crowded with male students and women in male dominating streams are perceived in a bad light.

Although some of the cultural customs are difficult to uproot since it holds such a resonating semblance to the Saudi culture. The chapter will address those issues by promoting the advent of immersive learning in higher education. This will be easier for the girls in SA to follow as they are all based well within their cultural beliefs.

2.2. Women's benefits from AOU's initiative of virtual learning

Gender role is considered to be an influential factor in the process of E-learning or distance learning. It is also inferred that both males and females will react in different ways to the methods, participation, and interaction to online teaching. Presently, SA faces a serious challenge of making their higher education meet international credit while maintaining the cultural standards. The virtual learning environment can potentially increase social presence. It is also believed that virtual teaching or immersive education in a country like SA can propel freedom of expression among women. Beyond that, new trends that can also be visible through virtual learning is that it holds potential in blurring social and cultural boundaries, will evoke better social interaction, lower or eradicate the social anxiety for females and considerably remove the gender segregation norms in the country (Adham, Lundqvist & Parslow, 2016). Walker (2013) has affirmed that holography can be a functional tool for learners of all age groups. As it is based on a 3-dimensional environment, its stimulating training experience can turn any complex data into simple and engaging learning. According to Ge (2011) research, he attested that marriage becomes an important factor in the attrition of female students from the college. This factor was found to be a major reason for withdrawal among female students pursuing higher education. According to Roberts, McGill, and Hyland (2012), 7.4 percent of women in the US withdraw from college due to pregnancy. Lack of transportation to schools and colleges can also influence women's decision to not follow the path of further education (Smith-Hunter, Nolan & Carpenter, 2019). From the antecedents mentioned above, women in SA can get back to their education if they have dropped out of the education system due to some personal setbacks. Virtual means of learning can adequately compensate for the gap in the education cycle of women while also making it a more meaningful experience.

It is also noteworthy that SA was among the first few countries that legislated the use of cloud computing and it was also functional in many parts of the nation. It was at a time when most of the other developed nations were skeptical about its privacy feature. Hence, SA can have an added benefit of eliminating the need for infrastructure and services that is important in providing education in rural areas and make use of cloud computing instead of delivering conventional means of higher education. Women and men in rural areas can benefit from this discourse (Jagadamba & Babu, 2016). The Arab Open University (AOU) in SA is a major university that has acknowledged the importance of flexible means of learning that is promoted through online learning courses. It can greatly improve learning styles, the collaboration between students, time and place can be efficiently managed by students based on their convenience. Online means or distance learning can also provide a wider base for education seekers with an opportunity. The setbacks of the traditional educational ecosystem can be redeemed through the course of online or distance learning (AOU, 2017). Amador et al. (2016) have also referred to e-learning or distance education as a learning design that makes students more technologically reliable while improving the quality of their education. He asserts that e-learning has the potential to improve teaching and assessment thereby helping the teachers to a great extent. It has been stated many times that e-learning or distance learning can be an effective educational delivery system in a crisis area or countries that are socially deviant. This method of education can be aidful in reaching hard to access groups and countries that follow a comparatively traditional approach of education like SA (Yamani, 2014). Navarro and Shoemaker (2000) through their experimental research extrapolated important results on the idea of distance and technology-based learning. The research showed that online learners performed better than conventional students with respect to their academic performance. The effects were measured on the basis of gender, ethnicity, and background.

Rajab (2018) stated that it can be seen that Saudi women can have more academic opportunities through the course of e-learning. As per Islamic tradition, men and women are not allowed to interact within the same classrooms (Hamdan, 2014). This puts the universities in a pressure to give equivalent education to both males and females in different set-ups. The process of e-learning or technology based learning can provide a seamless dispensation of education to both genders by allowing the same instructors to teach online. The shortage of universities can also be addressed through the means of technology based learning (Yamani, 2014). Therefore, from the aforementioned research analysis it can be concluded that Saudi women can extensively profit from virtual or any other technology based learning by simultaneously keeping their traditions intact.

2.3. Holographic based teaching and its benefits for women

As suggested by Aman et. al., (2016) in his research work that virtual learning environment can be a supporting pedagogical factor in distance education. The study has proposed that implementation of holographic technology can improve the effectiveness of students in AOU. As the chapter had earlier given a consensus that only 3 percent of women participate in Science, Technology, Engineering and Mathematics (STEM) subjects which gives a representation of concentration of male students (OECD, 2015). Islam (2019) in his research work showed that the number of women working in the STEM fields is less, contrary to the notion that these four fields are the most

profitable field in the world. Technical companies can be an intimidating place for women as it offers minimum opportunities for them to grow. STEM can provide varied opportunities especially for Middle-East women in redefining the age-old practice of gender discrimination. However, there is a great polarity in the percentage of women in the labor force who enroll and graduate from technological fields. It is also important to state that the paper eventually concludes through statistical analysis that there was found to no greater gender difference of students in technological streams (Islam, 2019). Exploration from the above-given research paper has revealed that women in SA are actively participating in STEM domains.

As per a paper published by Jones and Alba (2019), representational figures and graphics and the accessibility to interaction makes holographic based learning an engaging tool for scientific learning. This can also be aidful in visually representing situations that may be difficult to recreate in real life. This makes virtual or holographic environments conducive for scientific-based studying. Orcos and Magrenan (2018), both conducted a similar experiment to show the difference between a student's academic understanding of a biological concept of cell division. Through the results collected from the students and with the help of a further SPSS analysis, it was concluded that there is a considerable gap in perceivment of a scientific concept among students. It was concluded that holographic tools of learning had greatly improved purposeful learning of concepts that are hard to grasp in real life.

Saudi Arab's vision for the year 2030 is to target women's increasing participation in the workforce. The present participation stands at 22, it is estimated that it will reach 30 percent at the end of the approaching decade (Al-Saud., 2016). However, with that being said there are also various problems that are restricting the notion. The women's number of graduates exceeds the number of jobs that are present. Currently, 30 percent of the women are unemployed. Therefore, it becomes imperative that women's dichotomy between education and their active role in SA's economy should be convalesce (Koyame-Marsh, 2017). Recently, it was also proven that immersive based learning is also important in services rather than just in education or academic streams. Its major utility is found in the nursing field where virtual reality software helps to learn and navigate the human biological system (Hauze et al., 2019). Hence, it's important to note that immersive learning or 3-learning can be important in jobs and not only in the education line. This style of virtual learning can also prove to be fruitful in achieving the set agenda by the Saudi government which stresses on increasing women's job prospects.

With the redefining of gender roles in SA there are also some positive transformations that are witnessed. The employment opportunities have increased, there is huge funding in cultural and entertainment sectors, women are allowed to attend football games in stadiums, and so on (Spencer, 2016). However, these changes are not seen in traditional households of SA. As the majority of the societies in SA are traditional and follow conventional thinking it is important for the working women to follow a balanced life in order to keep aside the negative strain it might have on their family (Sembawa et al., 2018). Technologically stimulated education has had notable advantages in eradicating such traditional beliefs and keeping the work-life balance of women in check. E-learning can substantially reduce peripheral matters like place, distance, and time barriers by giving the student an authority over these matters. Improving educational based technology is of prime concern (Alothman, Robertson & Michaelson, 2017). According to a research work that was published by Kalansooriya, Marasinghe, and Bandara, (2015) it was deduced that students find certain characteristics to be very crucial for understanding concepts in a classroom. As per the paper's working it was found that students gave importance to the following topics: interactive teaching methods, communication between teachers and students, diversity in presenting, classroom conditions, and frequent breaks. These characteristics are also mentioned in a chronological manner. The following analysis done helps in understanding why holographic learning is best when it comes to interactivity. This was obtained by the election result on CNN (2008), the election coverage was done through a realistic display. This new way of media interaction attracted millions of viewers to watch the hologram effect. It was also conveyed that the interaction quotient between announcers was realistic and efficient. From the analysis of both the above-given studies, it can be inferred that interactivity is maximum through hologram means of learning as this is also an imperative value as stated by students earlier. It is also interesting to note that women's mean engagement level for holographic based learning were found to be more than that of boys (Kalansooriya, Marasinghe, and Bandara, 2015).

2.4. Challenges that can be faced by AOU in committing towards a holographic paradigm

There are many major challenges and inhibitors of growth when it comes to setting up a full-fledged immersive or holographic technology-based learning. As per the Kalansooriya, Marasinghe and Bandara (2015) the two pertinent barriers are that of infrastructure and high initial cost of infrastructure. In accordance with a paper published by Al Gamdi and Samurai (2016) it was identified that technical incompetencies with limiting resources and infrastructure were the main problems of implementation of hologram learning in SA. Teachers' inadequacy to innovative and technologically sound means of teaching has also been cited as a major reason for the barrier of hologram teaching in schools and colleges (Bingimlas, 2017). This is also due to the lack of efficient training of technological instruments usage. Qadri et al. (2017) through his paper proved that the government's investments in technology stimulated education did not fruitfully reflect on its adoption and implementation across SA's tertiary level of education. However, it was Al Gamdi and Samurai (2016) who attested that the steepness in advancing technology in academics is not only pertaining to SA's education but all other countries are also inclusive of it. Alenezi (2015) argued that mandatory adoption of Information and Communication Technology (ICT) is necessary to boost important prospects of teaching like interactivity, collaboration and an easier understanding of tedious concepts.

Besides that, there are also major issues that are accompanied by online or distance learning some of which are given thorough practical undertaking by Basahel and Basahel (2018). The issues as stated in the paper are inefficiency in leadership and management, maintenance and security issues and so on. It is important to note that gender issues may also arise between male and female students but it is also because women have to balance both their house and educational obligations (Al-Fahad, 2009). There is also a major issue of lack of interaction between fellow students as put forward by Basahel and Basahel (2018) and this can be efficiently tamed through the advent of blended learning as already mentioned earlier in the chapter. As per a paper published by Hamdi and Abu Qudais (2018), it is evident that blended means of teaching and learning have proven to be an effective education design in Arab Open University (AOU). In the past Aman et al. (2016) had effectively shown how virtual learning environments can greatly instigate diversity of performance and interactivity. The research paper later goes on to state that holographic presence can remarkably improve the virtual learning environment and thereby both the associated characteristics. However, it does not adequately state the challenges that AOU might face while accomplishing in developing a virtual environment. In context with SA, there are some psychological beliefs that also hinder people's active participation. People are accustomed to conventional means of print materials for educational purposes. Most of the trainers are hired from local universities who are not trained in new technologies (Ibrahim & Van der Heijden, 2019). However, these are the negative impacts associated with distance learning; it can also be of great issue in holographic means of teaching as both are unconventional ways of education. As per Hu-Au and Lee (2017), virtual reality-based learning facilitates constructivist learning thereby allowing students to devise their own knowledge base and to learn from their meaning encounters. As immersive or holographic means of learning can be very important in forming a flourishing

mindset this might also be instrumental in changing some of the archaic and draconian beliefs that have been followed since time immemorial. Technology-based learning has the advantage of changing the staunch mindset of students and society as a whole.

3. Methodology

According to Barkhaya and Halim (2016), hologram video conferencing has played a major role in distance learning for the students who are not able to come to universities regularly and especially for some female students who are not allowed to go to the education campuses. Female education has been promoted in Saudi Arabia as well and the main factor was online courses for those who are not allowed to come out and for those who do not have sufficient income to pay full tuition fees. Video conferencing has made itself a high communication technology, that it has efficiency and potential to spread over a huge area and get people connected for the knowledge. In other words, it provides new, diverse and interesting chances for the distance learning and online courses. All this is possible, because of its potential to incorporate with the diverse end-points to a single plot. Most of the students feel bored having a classroom lesson where the time constraint factor, stress factor also comes into play, in order to get the lesson in an innovative way, students nowadays go for online and some innovative technological learning where they get the lessons through online sessions and video. Through video conferencing, the learning and lessons would become more interactive and because of graphical images and pictures, the students can get attracted towards the lesson and hence will adopt the knowledge more seamlessly. The revolution of technology has already made tremendous participation in the area of education. In general, the three-dimensional technology of hologram or 3DH (three-dimensional hologram) includes a contiguous display that detaches the technology of display from the user and integrates it into the actual environment. Video-conferencing systems offer various tools such as chat, audio, and many more which varies from person to person depending upon the information they want to share among each other. Several digital information technologies exist to increase synchronous interactions in online learning and online courses. Video conferencing is among those technologies that serve as the main tool for students involved in distance learning as well as in the classroom's face-to-face interaction. These digital technologies appear to create a more familiar and confidential learning environment for the students in online learning in order to make faculty presence much more stronger, where they allow quick and clear discussions and feedback with no stress and time constraint of classroom interaction.

Blended Learning and its applications can prove to be advantageous to SA. Following are the reasons that can help in confirming the same. With the quick and exponential growth of digital technology intensified learning systems, new and advanced mediums such as computer-based learning, video conferencing and many more, are being introduced for better teaching and learning systems. Many institutions are still confused with the proper definition of blended learning, and many teachers in various institutions have established different understandings regarding the term and also the various approaches for designs have evolved. Distance learning and the use of digital technologies are growing exponentially throughout the whole world, in remote areas as well as in regions. Distance education provides the online communication among students and teachers in order to have much more clarified lessons with effective discussions. Teachers in different institutions of higher education have adopted this blended learning for their teaching and making it better for students to learn and apply. Blended learning can be defined as the way of meeting new challenges of adapting learning and development for the needs and demands of individuals by combining the technological and innovative advancements proposed by online learning with the participation and interaction proposed in traditional learning. On one hand, where the face-to-face learning system provides the advantage of reading body language and perceive immediate feedback from the teacher and can also clarify doubts, on the other hand, the online learning provides other advantages for students such as considerable time to get ready for the class discussion and get reliefs from the stress that comes with the in-class or face-to-face interaction. It has been seen that the female students have a positive attitude towards distance learning, and they feel more comfortable in that as compared to the in-class interaction. Many educational sectors including higher education institutions approve blended learning over traditional methods and simply online learning, few educators are still anxious about teaching-learning in blended learning (Ma'arop & Embi, 2016). Blended learning has come up as an effective and powerful approach for students both involved in face-to-face interaction in the classroom and the students enrolled in distance learning or eLearning. Hence, both unfortunate and favoured classes of the people can benefit from the implementation of blended learning.

Table 1: The Above Scheme Demonstrates the Major Findings of the Research Paper

<p style="text-align: center;">Women's Challenges in Pursuing Education in SA</p> <ul style="list-style-type: none"> Women from humble background can't partake in private universities English is not widely spoken Men and women are separated in schools Early marriage and lack of transport to schools and universities Less participation in STEM fields

Benefits of Holographic Learning

Complex data can be presented in an engaging way
 Knowledge can be accessed anytime. Hence, convenience of time, place and resources
 Improve different learning styles and collaborations
 Scientific learning can be more effective
 Can work well with other technologies like IT and cloud computing

Opportunities for women

Freedom of expression, social and cultural boundaries can be prevented without compromising education
 Social anxiety can be reduced due to collaboration
 Increase in STEM related courses
 Increase in job opportunities
 Social anxiety can be reduced due to new growth opportunities

4. Conclusion

In Saudi Arabia, distance-learning or distance education plays an important part in order to facilitate education of students in regional or zonal areas, where the problem to these people is to attend the university campus on daily-basis. Hence, the distance learning or e-learning and online courses are receiving immense attention, support and investment in Saudi Arabia, from both the Saudi universities and the SMHE (Saudi Ministry of Higher Education). Distance-learning or distance education plays an important part to facilitate the transport where the problem of the students is to attend the university campus on daily-basis. In today's time where the need for education is becoming very important to every individual for their better progress and knowledge, it also becomes important for the authorities to provide the best services to their residents. For this, there is a need to establish a strong framework for the same that describes the actual status of distance learning and online courses in Saudi Arabia. This research study reflects holographic learning can lead to interactive and innovative ways of learning. This study also serves the purpose of the use and importance of new-age technologies. The above study opens doors for other potential studies and carries out a clear perspective for the future researchers. The research relies on the strategic goals to establish more education facilities for the students in Saudi Arabia especially for female students.

The research has identified benefits in holographic means of education especially in SA. The issues of gender biases in education and job opportunities can be sternly improved with the advent of technologies in education. Holographic means of learning can significantly improve the participation of women in scientific studies and it has also been seen that it can improve the job prospectus for women. The gender segregation that is norm in Arab schools and colleges is built on customary following and it will be hard to completely eradicate it. Technology based learning can be aidful in that area where equal sharing of knowledge can be practised and equal opportunities can be given to all sexes. Due to such undertakings from the government and private institutes a gleam of hope can be ensured for women in any socially deviant area and country. This can also lead to social and economic development of one's country.

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