

AN EMPIRICAL STUDY OF FEMALE EDUCATION IN SAUDI ARABIA

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ABSTRACT

Many countries of our planet have different modes of education for male and female sections of society. Often we find that a many educational institutions are open for both sexes. But there also are many intuitions which only educate either male or female students. Segregation of male and female students is not confined to any specific region or countries but it's a global phenomenon. The Kingdom of Saudi Arabia (KSA) provides a unique face to face way of joint classes for both sexes. The kingdom takes the advantage of networking technology to create an environment to provide a physical classroom for females in their campus and male students in their campus. The male teacher teaches the male section face to face in their classroom while the female section is linked with a live video of the instructor and the screen. The female students can ask questions and teacher can also interact with them. While female section can see the teacher via video link but the male teacher cannot see the female students. This way of teaching exist for many UG and PG classes across Saudi Arabia, as well as some other countries of the world. In this paper we shall analyse the benefits and drawback of this way of teaching for the female counterpart. To conclude our findings, we have conducted thirty interviews of female students in different departments of the faculties of Economics and Administration, and Computing and Information Technology of the King Abdulaziz University of Saudi Arabia.

Keywords: Female Education, Face to Face Class, Co-education, Networking E-learning, Distance Learning, Saudi Arabia.

INTRODUCTION

With the proliferation, accessibility and wider coverage of internet at affordable rates, coupled with the modern technology, especially in the last two decades, we have witnessed phenomenal advancement and improvement in all walks of our lives. In particular, we are now use powerful new ways of learning and teaching methods, which were unimaginable barely twenty odd years ago. The revolution continues and we can expect even more refined ways of imparting and receiving educational instructions. Apart from innovation in the face to face learning, we now several other models like distance and online modes of education in a variety of settings.

Methods and Means of providing education may vary from country to country and region to region, depending on linguistic and geopolitical situations. However, most educational institutions strive for and converge to the same goal of attaining excellence in receiving and imparting education. We can easily find standard ways of determining appropriate and adequate levels of education regardless their modus operandi. For example, for business higher education, international institutions like Association to Advance Collegiate Schools of Business and Principles for Responsible Management Education (PRME). Details of AACSB are provided by Hinnenkamp et al., 2019 and Doh et al. (2018). Information on PRME can be found in a report entitled as EMFD, 2016. Imparting postgraduate education in business are also determined by the Associations of MBAs (Matt Walker, 2018). Accreditation Board for Engineering and Technology (ABET) (Anwar et al. 2018, and Enno "Ed" Koehn, 2013) is an organization which provides accreditation of technical higher education in the field of Computer science and engineering, which provides accreditation to the technical (Computing, Engineering etc.) educational programs. Likewise there are accreditation organizations associated with other disciplines. Membership of these organizations goes a long way to guarantee the standards of education in related fields. All of these organizations have accredited the King Abdulaziz University programs with the existing methods of learning and teaching of both sexes.

In this article we shall discuss the teaching mode of education in Saudi Arabia in general and the King Abdulaziz University in particular. In Saudi Arabia, tertiary education in most of the institutions reflects the economic, regional, cultural and religious considerations. In classes where female and male are taught together by a male teacher, in majority of cases, the female students receive instructions through video link in a classroom in their campus supervised by a female assistant. In this setup, female students can see the male teacher, ask questions and the teacher can ask the female students questions but cannot see them. This practice has been followed for a considerable period of times and has never been objected by the accreditation organizations of the highest repute.

The questions have been long been raised whether the female students are disadvantaged in this set up. In this study we focused on this question and conducted thirty interviews of the female students from the King Abdulaziz University to arrive at a conclusion to answer the question reasonably satisfactorily. In this article we shall analyse these interviews and conclude our findings.

This research aims to gain insight into the relationship between smartphones and students' attention in classrooms. This chapter further discusses the research method, the sampling method and the data analysis procedure.

LITERATURE REVIEW

Vast improvements in the audio visual, proliferation in internet technology, and innovation in education has led to develop new ways of imparting education. In this section we shall analyse some background about some of the ways and their pros and cons. benefits is a continuous process. The aim is always to bring remarkable improvements in the methodology and manner in which educations is imparted. Indeed we are guided by student feedback, who are at the receiving end of the education. Based on their feedback, we make improvements in education. Last two decades have provided highly sophisticated technology, tools and gadgets which have led to many variations in educational industry. As our focus in this article is on the female education in Saudi Arabia, let us look at some of the socio-cultural details of this nation and the region and increasing demands for perfection, research looks for all possible solutions to make knowledge and education dissemination even more attractive.

Tertiary Education in Saudi Arabia

Given the historical and cultural background, Saudi Arabia places some restrictions on its citizens, men and women alike. One of the visible restrictions is the dress code for male and female folks, aimed at preventing exhibition of some body parts. Many Saudi women prefer to cover their faces although it is not a part of dress code. Saudi Vision 2030 is set to bring many changes to many social and cultural aspects of the Saudi life. For example, now Saudi women can drive vehicles, work with men in offices, banks, businesses and airports. Saudi women can also travel without a guardian and take part in concerts and sports, which are now taking place in Saudi Arabia. Yamin (2015) and Yamin and Aljihani (2016) have studied some aspects of Saudi women.

Saudi Arabia is predominantly a desert country but very rich in oil reserves and minerals, having a unique distinction of the largest exporter of oil and petroleum products to the rest of the planet. Saudi Arabia is a member of G20 as well as that of the group of Gulf Cooperation Countries (GCC). According to (Global Media Watch, 2019), the population of Saudi Arabia has passed the mark of thirty four million. According to (General Authority of Statistics, Saudi Arabia), the population of Saudi Arabia has passed the thirty four million mark. The percentage of the female population is just under 43 where that of males is over 57. According to the Ministry of Education of Saudi Arabia, there are more female graduates than male, despite the fact that the female population in the Kingdom of Saudi Arabia (KSA) is considerably lesser than their male counterpart.

Saudi Arabia has undertaken drastic measures for educating its population, particularly at the tertiary level. Through its scholarship program, the KSA has sponsored hundreds of thousands of its graduates to study abroad (especially in the developed countries) for postgraduate studies. The full sponsorship has particularly been facilitated by providing living expenses of their mahram (guardian), who may be husband, father or brother.

On its turf, Saudi Arabia has undertaken extra ordinary step to create world's largest female university, known as Princess Nourah Bint Abdulrahman University (PNU) (Yamin, 2015), which is located in its capital Riyadh. Currently, there are over fifty two thousand students at PNU, which provides state of art facilities to make it a vibrant and fabulous environment for teaching and learning. In particular, the university has a unique system or mono rail to facilitate smooth movement of staff and students to the different parts of the campus.

Many researchers (Basahel and Yamin, 2017, Yamin and Matar, 2016, Yamin and Aljihani, 2016, Basahel et al., 2015, Yamin and Al Amri, 2016, Yamin and Alharbi, 2016) have studied socio-cultural, economic, religious and historical aspects of Saudi Arabia.

Non Traditional Methods of Teaching and Learning

With the advent of new technologies facilitated by internet, Web 2.0 and subsequent developments, we now have developed innovative ways and don't have to rely on the old fashioned ways of teaching and learning. Many researchers have discussed traditional and non-traditional ways of Teaching and Learning (T&L) (Deepika Singh, Mukul Kumar, 2018, Senthamarai (2018), Blázquez et al., 2019, and Waite (2011).

The traditional ways of learning and teaching cannot be rejected just because we now have newer ways now. Every method would be effective in some context or circumstance (e.g. lack of resources). However it is often argued that the traditional approach may not provide students with valuable skills and not be suitable for retaining knowledge after exams. Tularam (2018) emphasis on active learning rather than traditional ways of learning. MacDonald (2018) has conducted a review of non-traditional ways of teaching.

Questions have always been raised whether segregation of sexes for educational purposes have positive or negative impact. There are some positive effects (Blue, 2009) of providing education to male and female separately. This study was carried out in the context of school education in the UK. Pahlke et al (2014) have suggested better or at par results for Senior Secondary schooling for boys and girls in single sex educational institutions.

One should not be led to believe that segregation of female is mainly confined to some Asian and African countries. In fact (Wikipedia, 2019), there are far too many single sex higher educational institutions in the US, Europe, and Australia. The list included dozens of colleges in the US, Great Britain, and Australia. The quality of education and the students' performance in the single sex schools has been discussed by many scholars. Here we provide findings of only a few of them.

Teresa (2013) concludes that 'the single-sex education may still be beneficial to women in ways that co-education is not. Women's colleges encourage students to pursue non-traditional career paths, offer more female role models and mentoring opportunities, provide more leadership experiences on campus, and cultivate generally supportive campus environments in which students develop social and academic self-confidence". A study by Kinzie et al., 2007, after analysing student surveys from more than 26 colleges, found "Women at single-sex institutions were more engaged in effective educational practices and reported higher levels of feelings of support and greater gains in college". Forbes (2009), after analysing surveys of 1000 students and alumnae, found that "women's colleges performed higher, including in the proportion of entrepreneurs produced and leadership training received.". There are numerous other studies which conclude that women in the single sex educational institutions perform well.

METHODOLOGY

We have used well established method of selected female students from the King Abdulaziz University (KAU). The KAU is situated in Jeddah, the port city in the west of the Kingdom of Saudi Arabia (KSA). Jeddah, is the main port city and the business centre of Saudi

**Table 1:
General Purpose Questionnaire**

Your Name			
Which degree did you study at KAU?			
Are you still a student?			
How many courses did you study from male teacher	UG	Code:	Grade:
	UG	Code:	Grade:
	UG	Code:	Grade:
	PG	Code:	Grade:
	PG	Code:	Grade:
How many courses belonged to each of the faculties	FEA		
	CIT		

**Table 2:
Questionnaire**

Q	Questions
1	Do you think that this way of teaching female students by male teachers is appropriate?
2	In your view what are the advantages of this way of teaching?
3	In your view what are the disadvantages of this way of teaching?
4	How well were you satisfied with the role played by Teacher Assistant (TA) in your classes?
5	Did you have opportunities to ask questions from your instructor
6	Were you satisfied with response from the instructor
7	What was the point you found most easy to understand in this way of teaching and learning?
8	What was the point you found most difficult to understand in this way of teaching and learning?
9	Do you think that the female students should be taught only by male instructors
10	Do you think that the system needs improvement? If so, what – please elaborate
11	Any more comments?

Arabia. The KAU is the oldest and the 2nd largest university (with enrolment in excess of 150 thousand) of the KSA. In many ways the KSA is a good representative of the universities in KSA.

We had chosen 30 students who received instructions from male teachers through video link, while sitting in a classroom in the female campus under the supervision of a female assistant teacher. We provided the interviewee with eleven questions in advance, along with a consent form and assurance from us to treat their information as sensitive and confidential. This was to ascertain that we get well thought-out answers. Survey questions were also made available in Arabic to ensure complete understanding of them. We then gathered all responses in a grid and then analyses one by one manually. Since the sample wasn't too big, we thought manual way of analysing would give us more insight into the results.

The Survey Questionnaires

Table 1 shows the general purpose questionnaire and Table 2 the questionnaire to the interviewees in advance.

**Table 3:
Responses to Q2**

Response	Measure
There are no advantages	4
Teacher explained the information in an excellent way	14
The exams would be easier	12
The assignments would be simpler	5
Good to know opinions of male students	2

The Responses

All of the respondents said yes to Q1. Answers to Q2 were varied as shown in Table 2, where four respondents said there were no advantages, fourteen said the teacher explained in a superior manner, twelve thought the assessments would be easier, another five said assignments would be simpler, and two thought it was a good idea to know the views of their male counterpart. In response to Q3, majority of respondents said it was difficult to communicate either because of the lack of the body language, the poor audio quality or shyness. Three girls said it was difficult to maintain discipline. In response to Q4, fifteen students acknowledged satisfaction, seven dissatisfaction and six of them were neutral. In response to Q5, all but one student answered in affirmative and the remaining one said 'sometimes'. Answering Q6, 27 students said yes and the remaining three said 'sometimes'.

**Table 4:
Responses to Q3**

Response	Measure
Difficult to communicate with the teacher	11
Poor audio, difficult to understand without body language	16
It doesn't have any disadvantages	4
Some girls do not talk as they are shy	4
Teacher can't see the body language of girls	3

**Table 5:
Responses to Q7**

Response	Measure
Charts	4
Knowing the main and important points in each lesson	4
Knowing the main and important points in each lesson	8
Theoretical content	6
Practical content	2
Different things from different teachers	8

**Table 6:
Responses to Q8**

Response	Measure
Practical courses	14
Nothing	12
Theoretical concepts	3
If it contains a lot of discussion	1

**Table 7:
Responses to Q 9**

Response	Measure
It depends on who has more experience	4
Yes because the communication would be easier	4
Yes because of the assignments etc.	8
Yes if the course is practical	6
Yes	2
No	8

**Table 8:
Responses to Q 10**

Response	Measure
No	3
Yes: Make the communication face to face	2
Yes: The microphone should be near the teacher	16
Yes: The accent of teacher should be clear	2
Yes: Make the system more interactive	2
Yes: Install large screens see body language of teacher	11
Yes: Use smart technologies	13

**Table 9:
Responses to Q 11**

Response	Measure
No comments	12
Have separate male and female sections	8
Provide online lectures at home	7
Make it face to face with male teachers	4
Provide the lecture recordings on blackboard	2
Need a tool to let the teacher know who didn't understand	1
Replace male by female teachers	1

Responses to Q7, advantages of having male instructor through video link were scattered and so were the disadvantages as shown in Tables 5 and 6. Similarly on the question (Q8) whether the female students should be taught only by female teachers varied as shown in Table 7. Responses to Q10 and Q11 concentrated on various improvements, mainly in the audio visual area as shown in Tables 8 and 9. We shall now analyse these responses in the new section

ANALYSIS AND SUMMARY OF THE RESPONSES

From the forgoing discussion, that none of the interviewee objected for being taught by a male teacher through video-link with the male students being in front of the teacher. As seen in Table 3, students have expressed various positives of being taught by male teachers. Some of the students even thought that the assessments set by male teachers are easier. As for the drawbacks of this way of teaching, the interviewees have provided different reasons for disadvantages. An overwhelming concern has been the poor quality of the audio visual systems used. Indeed, poor systems can falter even the best systems. Not only this, poor quality of systems create ripples and affect the outcome overall. Many

students think that the absence of the body language makes it hard for the students to express themselves clearly. Indeed body language is very important in making a point. However, in an interactive lecturing session, most of the students are not that active in deliberations which would involve body language. But in tutorial class, student-teacher discussions are intense and so the body language does matter. A few interviewees think that shyness comes in the way of their expressions with the male teacher. Shyness is something which partly is because of poor speaking skills in front of the audience. For someone asking a question through audio systems, not being watched, shyness doesn't make a lot of sense. Question 4 deals with Teaching Assistants which are all female for the female students. Table 5 shows that only half of the interviewee have expressed their satisfaction with the female assistants. When asked about the opportunities to ask questions and measuring the satisfaction levels of the answer, we do not find anything unusual. Responses to most easy to understand in this way of teaching and learning are also along the familiar lines and there is nothing extraordinary point to take home. However, as to the difficulties in understanding, just under half expressed practical content was hard to understand by not having the instructor around. Here it should be clarified that the students' labs are conducted by female tutors. So what they mean by practical content is the contents of applied nature which comes in the lecturing.

When asked whether the female students should be taught by only female teachers, we received various responses. Eight of them said no and two of them said yes without giving any reasons. Four of the students preferred experience over gender of the teacher. Four said yes for the communication reasons, eight for receiving assignment help and six for the reason of practical content. When asked about the areas of improvements in the system of teaching this way, different reasons were given as shown in Table 8. Most of these reasons are about improving audio-visual systems and peripherals. When asked for their comments on any issues, as can be seen in Table 9, a number of interesting points were made. Seven students suggested to provide online lectures at home (so that they don't have to come to the class), two of them suggested to provide recordings on Blackboard (the learning management systems of the university). Eight students reiterated to have separate classes for male and female, four wanted to be visible by male teachers and twelve of them offered no comments. Interesting enough, only two students suggested to record lectures and upload them on Blackboard. This feature is now prevalent in many universities of the developed countries but is mostly lacking in developing countries.

CONCLUSION AND FUTURE WORK

Saudi Arabia has all kinds of teaching methods which any other country has. Most of the universities have separate campuses for male and female students. We have conducted our study based on interviews of 30 female students drawn from 10 different cohorts at the King Abdulaziz University, which is the second largest and a good representative, of Saudi Arabian educational system. For many undergraduate students of science, social science and technology classes, female students occasionally (mainly due to shortage skills) are taught by male teachers via video link which we have described earlier in this paper. In this research we have studied impact of such teaching on female students. The responses of the thirty female students from ten different classes were gathered by interviewing them. As can be seen in the foregoing discussion, the interviewees have expressed a number of interesting points. Some of them have shown concern of visibility of the teachers. We believe it's a poor management of the audio-visual systems by the teachers. Ideally, in such an environment, the teacher should exhibit himself as well as the presentation board (slide presentation) concurrently. Interviewees have expressed dissatisfaction because of different reasons. Prominent of them are poor quality of the audio-visual systems and body language. Indeed the body language plays a significant role mostly if the discussion takes place. In a lecturing environment, although clarification are sought by students but the

occurrence of discussion may not be sizable. Poor audio visual systems is a genuine concern. We did not find something extra ordinary in the list of other concerns. On the other hand, majority of interviewees seem to be satisfied by the system. However improvements must take place. Based on our analysis, we recommend that the following measures should be taken by the management.

1. Conduct an audit of the audio visual systems involved in this way of remote teaching
2. Lectures should be recorded and be made available on Blackboard
3. Practical classes of all students should be conducted face to face.
4. Teachers involved in this way of teaching should be provided adequate training.

ACKNOWLEDGEMENT

Authors would like to thank the Deanship of Scientific Research (DSR) of the King Abdulaziz University for supporting and sponsoring this project and providing funding to conduct this research.

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