Change and Muslim Women

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Abstract

What Muslim women wear on their faces and bodies has been the symbolic battleground for clashes and differences in culture between the West and the Muslim and Arab world. This article suggests changes that should take place in how Muslim women are portrayed in the Western media. It also explores the improvements that took place in women's rights with the advent of Islam, as well as the progress that is presently occurring in the spheres of women's education and work -- specifically in the strictest and most traditional country in the Arab and Muslim world, Saudi Arabia. The article concludes with a look at how technology is helping to solvesome lingering problems that affect Muslim women.

Keywords: Muslim women change, education, work, technology, aljahiliyya, advent of Islam

1.0 Introduction

Change is the one constant aspect of human history. Economic change, social change, educational change and technological change all have been part of human nature throughout history. Change can be gradual or rapid. One thing that change generally aims for, across all boundaries, is the betterment of society. This paper discusses change that occurred to women with the advent of Islam, as opposed to the period preceding it, "aljahiliyya," or "*age of ignorance.*"[1]The article explores the change that is taking place now to Muslim women in the spheres of education and work, particularly in Saudi Arabia. The paper aims to rectify the stereotype image the West has of Muslim women, and asks for a change. Finally, it touches upon the promise of technologically based change and solutions that could bring more rights and opportunities to Muslim women in general.

1.1   How the West sees Muslim women

Over the last decade, Muslim women's garb and Muslim women's freedom have been the focus of public attention in Western media and in political debates. Characterizations of Muslim women as '"oppressed," "ignorant," "submissive" and "uneducated" are rampant in the Western media. Muslim women are regarded as women who need rescuing from their violent families. What Muslim women wear on their faces and bodies has even been used in the fight against terror: "The fight against terrorism is also a fight for the rights and dignity of women," claimed Laura Bush, as reported in (Yaqoob, 2008). For the West, nothing was more symbolic of the claimed Islamic oppression than the alleged plight of Muslim women (Yaqoob, 2008).

As Razack(2008) puts it, the body of a Muslim woman is portrayed in the West as confined, mutilated and sometimes even murdered in the name of culture. Razack adds that this portrayal serves to reinforce the threat that the Muslim man is claimed to pose against the West and, based on it, justification for the extraordinary measures of violence and surveillance to discipline Muslim men in Muslim communities in the West and in countries where Western troops have been sent. Such stereotyping might be due to such infamous incidents as the execution of an Afghani woman in a stadium because of an accusation of adultery, the Taliban's banning girls from going to school, and from AyaanHirsi Ali's and Theo van Gogh's movie "Submission"[2](Morin, 2009).

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[1] The time of ignorance refers to the darkness and ignorance of the people of that time in matters of religion. In spite of the linguistic and poetry mastership people of that era had, they worshiped statues made of mud and sometimes made even of dates; hence, ignorance of spiritual enlightenment.

[2] Submission is a movie written by Ayaan Hirsi Ali, a Dutch politician and an ex-Muslim woman of Somali descent, and produced and directed by Theor van Gogh, an independent filmmaker. The showing of this movie on Dutch TV resulted in the assassination of the producer by a Muslim militant of Moroccan descent. Although Ali claims that the story is about

However, Westerners are unfamiliar with the various Muslim cultures, symbols and representations and their many levels of meanings.Animportant aspect of Muslim culture is the veil, which is a visible symbol of the concept of honor and shame. Honor and shame are universal concepts, although their manifestation differs from one culture to another. Honor and shame are not in the scope of this article, hence will not be dealt with here. One of the very hot subjects related to the Muslim world is the veiling of Muslim women. The veil, which is a headscarf, known in the Muslim world as the "hijab," has been the subject of obsessive attention and extensive interpretation (Davary, 2009).In the West, the veil is equated with oppression and subjugation of women. Some common and even simplistic accounts of the veil are that it is a mark of fundamentalism and control by men, the family and the society. Some others in the West regard it as an indicator of strong beliefs concerning gender relations. Still others consider it a symbol of religious devotion, which essentially implies that unveiled Muslim women somehow lack these qualities. The latter implication is erroneous because there are, and have been, many highly educated and influential devoted unveiled Muslim women throughout history, such as HodaSha'rawi[3], SafiaZaghloul[4], SizaNabrawi[5], DurriyyaShafiq[6],Suhayr al Qalamawi[7],Amina Al Said[8], Iqbal Baraka[9] and AhdafSoueif[10]. These women decided to uncover their faces and fought against the veil.

Their unveiling was a symbol against imperialism and restoration of their nationalistic identity. Westerners do not know that Muslim women nowadays wear the veil for the same reason, and that is to reinforce their Muslim and nationalistic identity, in addition to other reasons. By wearing the veil, Muslim women assume their Muslim identity as a reaction to the Western uproar against the veil and Islam in general. Some other Muslim women wear the veil for completely different reasons. In Egypt, for example, some women choose to wear the veil as a strategy to gain respect in a male-dominated society where it is difficult for a woman to have autonomy. The veil is an affordable means of gaining respect for lower middle-class women who cannot afford expensive Western attire. The veil, for some, is a means to avoid men's harassment and avoid society's judgment about women's presence in public space. For many, the veil is a good way to find a suitable husband, because it indicates that the woman wearing it cares about tradition and the values and norms of fidelity and sexual purity. In short, the veil signifies no more or less than modesty, which is a universal value and a norm found in all cultures and religions.

1.2 Change that occurred to Muslim women with the advent of Islam

Unfortunately, the West does not know that, with the advent of Islam in the 6th century, women of that era went through a transformational change. Thus, rarely does it get its due credit and importance. Below, I discuss the great changes Islam brought women in times where women were considered merely as commodities.

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maltreatment of women in Muslim societies, she forgets to add that the wrongdoings inflicted on the female characters of the story have nothing to do with Islam as a religion and they are cultural, based on the region or country where the Muslim woman comes from. Please see (Morin, 2009) for an analysis of the movie and the repercussions resulted from airing the movie on Dutch TV.

[3]HodaShaarawi, a pioneer Egyptian feminist leader and nationalist, was highly educated in Islamic studies, was taught how to read the Qur'an, and spoke Persian and Turkish and French. She wrote poetry in French. She was an activist who organized many lectures for women and convinced the royal family to establish a women's welfare society to raise money for the poor women. She took her veil off in public in 1923 and this was the first public defiance on the restrictive tradition of the veil. Soon she was followed by other women.

[4] Safia Zaghloul was Saad Zaghloul's wife. Saad Zaghloul was the leader of 1919 revolution in Egypt. She had the title of "the mother of all Egyptians" due to her nationalistic viewpoints and participation in many demonstrations for the liberation of Egypt from the British colonization.

[5] Siza Nabrawi, her real name is Zeinab Mohammed Murad. She was Safia Zaghloul's friend and attended many local and international conferences with Safia Zaghloul. She was one of the first who followed Hoda Shaarawi in taking off the veil in 1923.

[6] Duria Shafiq was one of Lutfi Al Sayed students. Lutfi Al Sayed was one of the very first men, along with Saad Zahgloul and Qasim Amin, who called for women's liberation. Duria obtained a PhD from France and England. She called for the lifting of the veil and for reform in women's affairs, on such issues as divorce and polygamy.

[7]Suhayr al Qalamawi, was a woman writer and wrote many novels. She was the first woman who joined Fuad the First University in Egypt. She graduated from the department of Arabic Studies and was the only woman among 14 male colleagues.

[8] Amina Al Said was one of Taha Hussein's students and adamantly against the veil. She became the editor-in-chief of "Hawwaa" women's magazine and was very vociferous during the time of Gamal Abdel Nasser.

[9] Iqbal Baraka Egyptian Women's Rights Activist adamantly against the veil and forcefully fights for women's rights in Egypt and in the Arab world

[10]AhdafSoueif a prolific novelist who writes in English and is a writer in the Guardian, is also a woman activist and is playing a major role at present after the 25th January Egyptian Revolution.

1.3   Women before Islam

1.3.1   Inheritance before Islam

Women before Islam did not have the right to inherit from their fathers or husbands or any member of the families.

> "No one could inherit us except who carries a sword and protects the head." (Translated from, Al Muqaddim, 2005: 57)

This saying from "aljahiliya" excludes women from inheritance because they do not participate in wars, nor do they carry swords. In other words, only men who wage war and carry swords can inherit.

1.3.2   Infanticide 'wa'd al banaat'

In the "jahiliyya" time of ignorance that preceded Islam, women not only didn't have the right to inherit as well as other mundane rights, but more seriously the right even to live. Infanticide "wa'd al banaat" was a common practice among Arab tribes. Giving birth to a girl was so unpleasant and hardly accepted among Arabs before Islam. If a man knew that his woman gave birth to a girl, he would be so dismayed that he would disappear and not face his people because of shame (Ahmed, 2006; Al Muqaddim, 2005).

In fact, the Qur'anic verses condemning infanticide capture the shame and dishonor "jahiliyya" people associated with the birth of girls:

> When one of them is told of the birth of a female child, his face is overcast with gloom and he is deeply agitated. He seeks to hide himself from the people because of the ominous news he has had. Shall he preserve it despite the disgrace involved or bury it in the ground? (16:58-61)[11].

Baby girls used to be buried alive as soon as they were born. Arguments as to the reason why such a horrendous act prevailed in the culture are plenty. Some of them as reported in (Al Muqaddim, 2005) are as follows.

The father did not want his daughter to live and one day become poor and bring shame to his family and tribe, because poverty was culturally unacceptable. Since there were so many tribal wars at those times, which often ended in having the women of the defeated tribes become slaves and concubines for the winning tribe, a father who lived in fear of bringing such a shameful future upon his tribe was inclined to kill his daughter as soon as she was born. In this way, he thought he protected himself and his tribe from the shame that could come upon him if ever his tribe was defeated in a battle. Some tribes believed that girls were the angels of God, and therefore killed them so that they would join their God.The atrocity was carried to the extent that girls were buried not only as infants, in an unthinkable action by their fathers, but some girls were even buried at older ages.

According to Omar IbnKhattab, there were two things in "al jahiliyya" that made himcry and laugh. The one that made him cry was when he took a daughter of his to bury alive and, while he was digging in the ground, she would wipe the dust off his beard, not knowing what would happen to her. The one that made him laugh was when he used to make Gods out of dates and put them by his bed to guard him while he was asleep but then eat them in the morning when he woke up. Arabs of "al jahiliyya" used to think of different ways to kill their daughters. Some of them would ask their mothers to dress their daughters in their best clothes and decorate them with jewelry as if the father were taking them out for a visit. Instead he would have found a well in the desert and taken his daughter and thrown her alive in the well and then filled the well with dirt (Al Muqaddim, 2005).

1.3.3   Women as commodities

Women in "aljahiliyya"were treated as a commodity. If a man who had no sons died, his inheritance would go to the first male kin. The man's women and daughters were considered inheritance, and the male kin would inherit them as well. Women had no right over their husbands. There was no limit on the number of times a man could get divorced, and polygamywas permitted. If a man died and had another wife and children, his first son from the other wife had the right to marry his stepmother. This is because she was considered a commodity and inheritance (Al Muqaddim, 2005). The maltreatment was even extended to food. There was some food that men were permitted to eat but not women. For example, milk was forbidden for women to consume. If a goat gave birth to a male goat, it would be eaten by men only, and if a calf was born dead, and happened to be female, that calf was for women to eat (Al Muqaddim, 2005).

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[11] The convention is to give the chapters [Suwar] numbers followed by the verses [ayaat] numbers.

Widows were treated the worst. If a woman became a widow she had to remain celibate for one complete year before she could get married again. She was banned from cleaning herself or combing her hair, and was supposed to stay in the worst corner of her house. Only after one year of seclusion and living in such unsanitary conditions was she permitted to leave her house. However, she was forced to go out in that miserable, unclean and unkempt condition. The story had it, that a dog would die because of her bad breath if she sighed on his face (Al Muqaddim, 2005).

1.3.4   No family or marriage values

Marriage was not a sacred union as it became under Islam. In the "al jahiliyya"women were bartered and traded. A man could give his women -- whether a wife, mother, sister or daughter -- in marriage to another man, just to marry another woman he might desire, and escape paying a dowry. Adultery was not a taboo since the "jahiliyya" people were never ashamed of it. Jahiliyya men were known to have multiple mistresses. Swapping wives was customary and accepted. They even had what is called "marriage of pleasure" [nikaaH al mut'ah] which was a temporary contract that allowed men and women to have sexual relationsfor a certain period, after which they separated (Ahmed, 2006; Al Muqaddim, 2005).

Incest was practiced. A son would have sexual relations with his stepmother when his father died. If a man died and had another wife and children, his first son had the right to marry his stepmother, because she was considered a commodity and inheritance. The Qur'an forbad such incest, as in alnisaa' verse:

> And marry not women whom your fathers married what was in the past was shameful and odious, and abominable custom indeed. (4: 22)

In sum there were no laws regulating marriage or even divorce. For example, in some tribes, women could divorce men impulsively. A woman would declare divorce by simply changing the direction of her tent door. If it was originally toward the east, she would change it to the west, and if it was originally toward the west, she would change it to the east (Ahmed, 2006). Due to all these factors, lineage was not determined, as any man could have some relation with a woman and in fact, it was left to the woman to decide who the father of the child was. With the advent of Islam, many of the misogynistic practices of "al jahiliyya" against women were eradicated. Islam permitted women to inherit, limited the number of wives, and stopped girl infanticide and degrading customs such as trading women as commodities, or having widows surround themselves in unhealthy and unclean conditions in mourning of their husbands. Islam also laid the foundation of a healthy family.

2.0   *Education and Muslim women*

2.1   Seeking knowledge in Islam

As discussed above, Islam liberated women from a society that extensively restricted their rights. With the advent of Islam, women were given rights of inheritance, property ownership, divorce and even education, thereby elevating their status. In the early days of Islam, women practiced their rights with encouragement from Prophet Muhammad (PBUH). Several Muslim women were influential in the development of their society. For example, Aisha Abu Bakr, the wife of the Prophet Muhammad, was known for her intellect and role as an educator. She was a scholar in jurisprudence and [hadith]or the traditions of the Prophet. Another notable example is Rufayda al-Aslamiyyah, the first nurse in Islamic history, who treated the wounded in the wars that took place during the time of the Prophet (Al-Hassani, 2010). Therefore, at the time of Muhammad, women were not denied the above rights and, on the contrary, they were empowered to contribute to earliest Muslim societies.

Little is generally found on Muslims' contributions in traditional history books and resources translated from Arabic or other languages into English. But ongoing research is now uncovering the extent of political, religious and social influence of Muslim women (Al-Hassani, 2010). Throughout the ages, Muslim women were represented in all areas; they were scholars, rulers, doctors, writers and poets. There are ample examples of prominent women in Muslim history, such as Shajarat al-Durr, who ruled Egypt in 1250, and Labna of Cordoba, who was a well-known mathematician in the 10th century (Al-Hassani, 2010). It is not strange that education is important in Muslim women's' lives. The Qur'an repeatedly encourages believers to seek knowledge. In fact the word for knowledge ['ilm]is the third most used word in the Qur'an following [Allah]"God" and [rab]"the Sustainer" (Zaimeche, 2002).

Prophet Muhammad (PBUP) said:
Seeking knowledge is compulsory for each and every Muslim.

[Al-Tirmidhi, Related by Ibn "Adiyy, al-Bayhaqi and al-Tabarani].
For him who embarks on the path of seeking knowledge, Allah will ease from him the way to paradise. [Narrated Abu Hurayrah; Related by Muslim].

With the importance of education fortified by the Qur'an and the Prophet's traditions, Muslims established many institutions of learning. Not only did learning take place in mosques and religious schools, but it also occurred in hospitals and private homes (Zaimeche, 2002). Mosques had a major role in spreading education throughout the Muslim world as they provided basic educatonal and religious instruction [Halaqas].The latter were gathering places for the purpose of learning and discussing religious texts, prompting open discussion between scholars and students. Two of the prominent centers of higher learning are Al-Azhar in Egypt and Al-Qarawiyyin in Morocco, which exist to this day. Interestingly, Al-Qarawiyyin in Morocco was founded by a woman named Fatima al-Fehri in 859 (Al-Hassani, 2010). Therefore, women were not confined to their homes but, on the contrary, "women scholars enjoyed considerable public authority in society, not as the exception, but as the norm" (Al-Hassani, 2010).

2.2   Women's education in Saudi Arabia

The importance given to women's education is evident by the substantial gains in literacy rates and overall educational opportunities in some Muslim and Arab countries, such as Saudi Arabia. Laws in Saudi Arabia mandate free education for all its citizens, and require children between ages 6 and 15 to attend school (Al Munajjed, 1997, 2006). I particularly specify Saudi Arabia in my discussion of education and work of women. This is because Saudi Arabia is established as the strictest in the Arab and Muslim world in terms of the tradition of wearing the veil and segregation between women and men. My aim is to demonstrate the huge developments and strides that have, and are being taken, toward women's education and work, even in the midst of the strictest and most traditional society in the Muslim and Arab world.

In Saudi Arabia, schools for girls started in the 1960s and, since then, the presence of girls in the schools,and women in the labor force has remarkably increased. As indicated by a report in 2007 by the United Nations Development Program (UNDP) in Saudi Arabia, the percentage of girls going to school, compared with the percentage of boys, in primary, secondary and tertiary education rose from 85.1 percent in 1990 to 95.4 percent in 2006 and the percentage of literate women to mean 15-24 year-olds rose from 73.7 percent in 1990 to 92.7 percent in 2006 (UNDP, 2009). Since the inauguration of the first girls' school in Saudi Arabia in the 1960s, girls' education has been on the rise. As noted in the Saudi Arabia Human Development Report of 2003, the ratio of males to females in each level of education is about 1:1. Please see table 1.

Table 1: Number of students by level of education (by thousands).

Level	Male	Female
Primary	1,807	1,622
Intermediate	433	409
Secondary	232	255
Tertiary	126	168

The table demonstrates a funneling effect as the level of schooling increases. This implies that there are equal opportunities for both males and females to attend school. UNICEF also provides a table illustrating the rates of female and male literacy and enrollment in each educational level between the years of 2002-2009. Please see table 2.

Table 2: Literacy rates and enrollment rates in Saudi Arabia, 2002-2009

Education in Saudi Arabia	
Total adult literacy rate (%), 2005-2008	86
Youth (15-24 years) literacy rate, 2004-2008 male	98
Youth (15-24 years) literacy rate, 2004-2008 female	96
Primary school enrollment rate 2005-2009, net, male	85
Primary school enrollment rate 2005-2009, net, female	84
Completion rate to last primary grade (%) 2005-2009	96
Secondary school enrollment rate 2005-2009, net, male	70
Secondary school enrollment rate 2005-2009, net, female	76

In Saudi Arabia, women's degrees are generally in education and teaching, human sciences, natural sciences and Islamic studies (Hassan, 2000). In fact, 93% of the females whograduated from universities in the last decade had degrees in education and teaching or human sciences (Al Munajjed, 1997, 2006). In contrast, fields such as science and technology, engineering and agriculture are predominantly male fields (Al Munajjed, 1997, 2006). This bias in specialization, as demonstrated by the high concentration of women in education and men in science and engineering is not only in Saudi Arabia, it is also found in other Arab and Muslim countries but not as high as in Saudi Arabia. It could be attributed to cultural restrictions, based on the expected role of women in society. In many Arab and Muslim countries, teaching is perceived as a female job and, in fact, a social extension of a woman's role as a mother and a wife (Al Munajjed, 1997, 2006).

Nevertheless, Saudi Arabia has tried to address these gaps as demonstrated by the recent efforts of King Abdullah bin Abdul Aziz Al Saud. In 2010 the country's first women-only university, Princess Nourabint Abdul Rahman University (University, 2011)was established. It has become one of the largest centers of higher education for women in Saudi Arabia. This university provides several academic areas that women were previously excluded from, such as the Computer and Technology College and the College of Science. By giving women greater access to higher education in varied fields, Saudi Arabia hopes to provide women with greater opportunities in the labor market.

3.0   Work and Muslim women

3.1   Islam and women's role

Contrary to common belief, Islam does not confine women to the role of mother, in spite of the fact that this role is an inherent biological function of women. Similarly, Islam does not limit the role of parenthood to mothers, but places a significant emphasis on both men's and women's responsibility for providing and caring for their families. Islam reveres the biological function of mothering as a distinction between men and women, but does not define this as the psychological and social limitation for women. Certainly, not all women will get married or have children, so to confine a women to this purpose would be unreasonable.

There are a few key examples of women in the Qur'an that support this theory. First, there is the example in Chapter [Sura] 28 about the two female shepherds. In this example, Prophet Moses encountered two young females waiting by the well to give water to their herd. When he asked them their circumstances, the two young girls responded that their father was too old to come to the well, so they had to give water to his herd in his place (Qur'an 28:23). Barbara Stowasser(1994) argues that these two females exemplify the modesty expected of Muslim women in the workplace, because they waited until the other shepherds had finished. She also uses it as proof that Muslim women working outside their home is religiously acceptable:

> "This Qur'anic story, then here severs as scripturalisticproof that Muslimwomen's work outside of the home isreligiously acceptable only as long as it is truly unavoidableand does not entail association with strangers (that is, non-related males)." (Stowasser, 1994: 61)

The Queen of Sheba is the second example of Muslim women in the Qur'an. In the Qur'an Queen Sheba is described from the context of the Prophet Solomon. A man reports to him, "Indeed, I found [thee] a women ruling them, and she has been given all things and she has a great throne." (Qur'an 27:23). The Queen and her people worshiped a sun god so, according to the Qur'an, Solomon set out to convert her to Islam. The notable part of this interaction is that, after the Queen of Sheba converts to Islam, she remains in power of her kingdom. Stowasser(1994) remarks that, according to the Qur'an, the queen is described as "the competent sovereign ruler of her country." (Stowasser, 1994: 65). The Qur'an states that the Queen's encounter with Prophet Solomon does not result in her submission to him, but to God as she declares "My lord, indeed I have wronged myself and, I submit with Solomon to Allah, Lord of the worlds." (Qur'an 27:44).

Therefore, we can conclude that Islam does not condemn women if they are in positions of power, neither does it restrict them to working on a need-only basis. Queen Sheba did not abdicate her position of power and authority when she converted to Islam.

The tendency of not only the West, but of some Muslims to believe that Islam's purpose for women is to maintain a family, and that Islam does not allow women to work, may be explained by the lack of specification of the role of women. AminaWadud(1999) explored this explanation and found that the Qur'an is a "moral history" that teaches a gender-neutral lesson for believers. She states:

> "It proposes moral values, which are 'extrahistorical' and 'transcendental' in nature, such that their location at one point in history does not exhaust their practical impact." (Wadud, 1999: 29-30)

The Qur'an states that Allah "God" made his people "male and female" in various societies know each other and associate with each other.

> "On mankind, indeed we have created you from male and female and made you nations and tribes that you may know one another. Indeed, the most notable of you in the sight of Allah is the most righteous to you." (Qur'an 49:13)

We note that the Qur'an does not restrict men and women from working together. Most importantly, the verse declares that people's relationship with Allah is not based on their role in society but on the righteousness of their deeds. Wadud(1999) further maintains that, "The Qur'an does not specifically determine the roles, and the individual nations have not considered all the possibilities."(Wadud, 1999: 67).

In spite of the Qur'an's teachings, Islamic cultures tend to restrict the freedoms of women based on political agendas and traditions. Although most Islamic societies still expect a strict standard of modesty from women, it is not always enforced -- and the range of enforcing restrictions differ from one Muslim country to another and from one Arab country to another. Therefore, the status of women has been evolving over time, and women are beginning to expand into more self-sustaining roles in the workplace. Certainly, this progress is limited in comparison to Western societies, such as in the United States, where women as young as 16 are employed, and opportunities for improvement of the status of women are plenty.

3.2   Work and Saudi Arabian women

About 60% of the female population are reportedly housewives (M.E.P, 2003: 74). However, this does not mean that the status of women in Saudi Arabia is so restricted. The Saudi Arabia Human Development Report of 2003 provides statistics about the current educational and labor status of women in the Kingdom. As seen in table 3, the rate of female participation in the workforce at working age is 10%. Non-participation here includes women who are homemakers or students.

Table 3: % Population at working age

Labor Status	Male	Female
Participation	62.2	10.0
Non-Participation	37.8	90.0

In spite of the small percentage, definitely it is an improvement as the report states:

> "Increased female participation in the labor force is a positive indicator of … the increasing job opportunities being made available to them in conformity with their requirements and Islamic teachings and values." (M.E.P, 2003: 105)

The opportunities referred to in the report concern girls' education and health. Most Saudi women concentrate their studies in humanities and/or social sciences and medicine. Yet, the report also mentions opportunities in the fields of communications and Internet technology. As mentioned above in the education section, new universities of science and technology for women are being inaugurated, such as Princess Nourabint Abdul Rahman(University, 2011) and King Abdullah University of Science and Technology (KAUST) an international, graduate-level research university located on the eastern shore of the Red Sea at Thuwal(KUST, 2009).

4.0   Problems Muslim women face and the role of technology

4.1   Lack of technology-based education

With the increase in the number of technological fields across the globe, one would imagine that Muslim women would be eager to get some type of technology degree to fill these fields. However, it is an unfortunate fact that, despite a growing increase in technology globally, Muslim women seem to be left out. Farkhonda Hassan (2000), a professor at the American University in Cairo and the chair of the Commission on Human Development and Local Administration of the Shoura Assembly, writes an essay detailing several of the reasons Muslim women have become excluded from science and technology education. The first is a lack of science education in high school. Under current systems, Hassan argues that unlike their male counterparts, women tend to "self-inhibit" themselves by not taking science-oriented classes, based on cultural biases. Hassan notes that this is essentially a failure of the system. This is because the system does not encourage women to relate such topics to their lives.

This, in turn, perpetuates low enrollment rates by women in science and engineering classes in higher education. The second dilemma that Muslim women face in relation to science and technology fields involves socio-cultural factors. Hassan argues that being in a male-dominated society limits career advancement in these fields. Furthermore, there is an effective "glass ceiling," which prevents Muslim women from garnering jobs that are concerned with leadership and policy-making in these departments. This tends to lead to a situation where a woman could potentially earn a degree, but be unable to find a job based on underlying prejudices, or simply from a lack of jobs that would be available to her. There are several ways to combat this from a technological standpoint.

One such example is the idea of science diplomacy. Science diplomacy, by definition, is an exchange of science and technology across borders. The United States, being one of the leaders in technology in the world, is in an exceptional position to apply science diplomacy as a way to reach out to Muslim women. This is observed in a recent initiative: The TechWomen program (TWP), announced by U.S. Secretary of State Hillary Clinton. The goal of the program is to reach out to Muslim women in Muslim countries and allow them an opportunity to come to the United States and gain experience from several technology-based companies. Such a program would have the capacity to solve one of the systemic problems Hasan outlined; the TWP would effectively provide more jobs for Muslim women and begin to shatter the glass ceiling (Wagdy, 2010). Involvement in technology would not only shatter the glass ceiling and provide women with more opportunities for leadership positions, but it could also be used to solve one of the most serious problems in the Middle East, and that is sexual harassment.

4.2   Role of technology in fighting sexual harassment

Sexual harassment toward Muslim women has become something close to an epidemic in the Middle East. Looking into statistics, a 2008 study by the Egyptian Center for Women's Rights (Stack, 2008), shows that 83% of Egyptian women have been sexually harassed in public. In Yemen, 90% of women have been sexually harassed, while more than 30% in Lebanon have also been harassed. One of the underlying problems is the fact that only a half dozen of the many Muslim countries even have sexual harassment laws. The problem has become so significant that it reached international attention when Lara Logan, a CBS News reporter,was violently sexually assaulted in early March 2011 while covering the Egyptian revolution. News of the event spread like wildfire, thanks to technology, namely social media such as Facebook, blogs, YouTube and Twitter. All these social media sites were filled with responses both in support of Logan and in opposition to sexual harassment.

From many, there was a call for an end to such brutal phenomena, and a call for laws and actions that would begin the stop of sexual harassment. Technology is playing a big role in solving the problem on a local level. A group of activists in Egypt launched a program called "HarassMap"(Chiao, Ghozlan, Fahmy, Gad, & Eldermerdash, 2004). HarassMap is an initiative that combines several technologies in an attempt to curb sexual harassment. This is accomplished by the marriage of texting and mapping technology. The general idea is that a woman who is sexually harassed in public will text her location to HarassMap. HarassMap then adds that and other locations to the map, which is available to everyone. Heavily marked areas are not only noted as places to avoid, but are subjected to increased security as well. This remarkably simple utilization of technology has been fairly successful. Since HarassMaphas been released, there has been a decrease in the number of reported incidents of sexual harassment.

4.3   Role of technology in changing negative stereotypes

Stereotypes are something that men and women of all races, religions, and cultures have to deal with on a regular basis. What is specifically damaging about stereotypes involving Muslim women is that these stereotypes have the potential to limit their activity in various career fields, as well as lead to a perpetuation of loss of rights in education, work and even the rights over one's own body. As discussed in the introduction, stereotypes that Muslim women are "oppressed,""ignorant,""submissive,""uneducated," or "'imperiled" run rampant through the Western world. There is no problem more systemic than stereotypes, so there is a large hope that technological advances will be able to address this issue.

In a way, technology has been linked to beginning this breakdown. I believe the key example is the Egyptian revolution whichbegan in January 2011. Many women, veiled and unveiled, participated and loudly voiced their opposition to the corrupt government. These protests garnered significant interest and viewership in the Western media. This media was, as such, able to portray women playing a strong role in the revolution. Egyptian veiled women are being portrayed as a critical part of the regime change in Egypt (Gregory, 2011).

Another technological mechanism that allowed for a change in stereotypes is that of blogging. Blogs have allowed Muslim women to address groups without fear of misrepresentation due to stereotypes. A rapid increase in blogs and media watch sites have occurred. For instance, FatemahFakhraie, the founder of Muslimah Media Watch (MMW) has made significant strides in this field. MMW was initially founded as a blog by Fakhraie in 2007, but since then has expanded to a Website run by more than 21 individuals with diverse backgrounds from Egypt to Switzerland. Fakhraie says that her reason for starting the blog was that she was "uncomfortable with the mainstream media's tendency to portray Muslim women as either 'exotic sex slave, oppressed women, or dangerous terrorists.'" As such, she established the Website as a method with which to tackle one-dimensional and misleading representations of Muslim women in media sources (Fakhraie, 2011a, 2011b).

5.0 Conclusion

One thing to be noted from the above information is that technology does not function alone. Behind all the programs, Facebok, blogs, twitter and YouTube reports are individuals who chose to make a difference. Technology, in the absence of someone with the will to accomplish, will fail. It is for this reason that the overarching solution to solving women's rights in education and labor in our time must deal with individual activism. Individuals and women should not be focused too much on allowing their governments to achieve the end goals of the individual, man or woman. In the Middle East, individuals feel that the government should solve sexual harassment, that the government should be able to eradicate prejudices against women and that the government should be able to advance Muslim women in the areas of science and technology. However, complacency is not the answer here. As has been shown, an individual can make a difference. HarassMap was a small group of individuals who had an idea and, because of technological innovations, were able to implement it, and were moderately successful in curbing sexual harassment in their area. Likewise with MMW, one woman made a decision to better herself and to attempt to erase stereotypes, and this was successful because of her will and because of the technology available

To conclude, Muslim women should not wait for their governments to better their lives, even though their governments have taken strides toward women's progress. On the contrary, Muslim women should take the matter into their own hands. As noted, several individuals have come up with remarkable ideas and literally have taken the problems into their own hands. From such actions, problems have begun to ease. Sexual harassment is being reduced. Stereotypes are being broken. In the end, technology is an aid to change, but it is only the individual who has the ability to make that change.

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