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The University of San Francisco

THE IMPLICATIONS OF TECHNOLOGY FOR WOMEN OF PAKISTAN IN HIGHER EDUCATION: A QUALITATIVE ANALYSIS

A Dissertation Presented
to
The Faculty of the School of Education
International and Multicultural Education Department

In Partial Fulfillment
of the Requirements for the Degree
Doctor of Education

by
Anniqua Rana
San Francisco
May 2007

This dissertation, written under the direction of the candidate's dissertation committee and approved by the members of the committee, has been presented to and accepted by the Faculty of the School of Education in partial fulfillment of the requirements for the degree of Doctor of Education The content and research methodologies presented in this work represent the work of the candidate alone

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CHAPTER I
THE RESEARCH PROBLEM

Introduction

Gender parity in higher education in Pakistan should be reached by 2010 if the rate of enrollment continues as it has in the past five years. Currently, for every five men enrolled in an institution of higher education in Pakistan there are four women who have been able to enroll in a Degree Awarding Institution (DAI) of higher education (Khan, 2005). The near parity in public institutions of higher education is even more outstanding considering the adult literacy rate in Pakistan is only 54% (male 66.25%: female 41.75%) (Choudhry, 2005). How were the women enrolled in DAIs able to overcome the disparity in educational opportunities to become an integral part of the over 3% of the population of Pakistan enrolled in higher education (World Development Indicators database, 2006)?

In the past four years the enrollment of women in institutions of higher education has increased by 77% (Khan, 2005). This rapid increase in enrollment has had a directly reciprocal effect on gender equity in higher education in Pakistan. The dramatic increase in enrollment over the past few years coincides with the introduction of computer technology in higher education (Amjad & Ahmed, 2003). Is this a mere coincidence, or is it a reflection of the impact of globalization of higher education through computer technology on an international level (Altbach, 2005; Duderstadt, Atkins, & Houweling, 2002; Gumport, 2005; Hafkin & Taggart, 2001; Newman, 2001)? These women have surpassed all odds in a society that has traditionally left women behind economically and socially (Choudhry, 2005; Easterly, 2001; Mumtaz & Shaheed, 1995; Weiss, 1998).

On a political level having the first democratically elected female president, Benazir Bhutto, in a Muslim country (Mernissi, 1992), Pakistan has been a vanguard

where women in politics are concerned. A small group of women in Pakistan have been consistently involved in voicing their political, legal, and social concerns in the public through political and feminist groups from the turn of the twentieth century through independence from British Colonial rule in 1947 (Haeri, 2004; Mumtaz & Shaheed, 1995; Rashid, 2006; Weiss, 1998). However, this group of influential women is from an extremely small elite minority (Easterly, 2001, p. 22):

> The chief economist of the planning commission Mahbub ul Haq alleged in the 1960s that 22 families controlled 66 percent of the industrial wealth and 87percent of banking and insurance. (p. 22)

Pakistan is a country divided into an extremely small elite class with a majority of its population living in the rural areas and a very small middle class. For women of the lower and middle classes, social, cultural, and religious restrictions are so prevalent that there are even fewer opportunities to become involved in the society outside the sanctuary of their homes. Mobility restrictions for these women have been identified as one of the main reasons for their lack of involvement within the society.

> Mobility restrictions directly undermine female access to medical care, education, opportunities for paid work, voting and other forms of political and community participation. The more women are secluded in households or settlements, the more they lack access to a broad range of information and are unaware of their legal rights, the importance of health maintenance, and the benefits of participating in the public sphere. (Vishwanath, Mansuri, Sinha, & Solotaroff, 2005, p. 8)

And yet for those women who overcome the odds, they are able to achieve a level of success that is unprecedented in other areas of life in Pakistan. Pakistani society is still extremely traditional and conservative where women are concerned. And even though a small number of women are represented in politics and in education, they are not involved in major businesses or decision making areas. “Women’s rights have not yet come to rural Pakistan” (Easterly, 2002), but even for women in urban areas, where educational and vocational facilities are available, women do not participate in the

workforce that is dominated by men. Women work in more traditional fields outside the home: these include education and medicine, and if they are not educated they work as domestic help, in factories or in the fields (Bari & Mariam S. Pal, 2000; Haeri, 2004; Weiss, 1998).

In higher education, however, according to the Higher Education Commission, a government funded organization created to improve higher education in Pakistan, over the past few years the number of women enrolling in university has increased dramatically compared to that of men (Khan, 2005) As seen in Table 1, over the period between 2001 to 2004, the number of women enrolled in institutions of higher education has nearly doubled from 0.273 million to 0.417 million. Comparing the enrollment trends in universities of men with women, it is clear that the percentage of women enrolling in universities (0.48%) is increasing at a greater rate than that of men (0.45%):

Table 1

Percentage of Population between Age Group 18 to 23 Years, Enrolled at University Campus for Higher Education

	Est. Pop Age Group 18 to 23 yrs. (Million) *			Enrollment Excluding Ph.D. (Million)			Enrollment at University Campus (%)		
Year	Male	Female	Total	Male	Female	Total	Male	Female	Total
2001-02	8.39	8.28	16.67	0.172	0.101	0.273	2.05	1.22	1.64
2002-03	8.56	8.43	16.99	0.201	0.127	0.328	2.34	1.51	1.93
2003-04	8.58	8.91	17.50	0.240	0.177	0.417	2.79	1.99	2.38

* Source: Economic Survey of Pakistan 2004-05 and Pakistan Statistical Year Book 2002-03

With a steadily growing population of 155.8 million with only 49.9% literacy rate, and an educational enrollment of 82.1% at the primary level, 27.2% at secondary level, and a mere 3% at the tertiary level (World Development Indicators database, 2006), problems in the education of the masses seem insurmountable. To add to this female literacy rates are much lower and decrease even further in rural areas:

> Strong gender disparities exist in educational attainment between rural and urban areas and among the provinces. In 1996–1997 the literacy rate in urban areas was 58.3 percent while in rural areas it was 28.3 percent, and only 12 percent among rural women. (Bari & Mariam S. Pal, 2000, p. 3)

A comparison of the percentage of female enrollment at University campuses (see Table 1) with that of the literacy rates of girls in both rural and urban areas (see Table 2) indicates a disparity that could be partially explained by availability of resources in urban areas as compared to the rural areas. According to the Education for All report (EFA, 2005): "disparities are greater in poorer countries with low overall literacy rates -44% rural vs 72% urban in Pakistan" (p. 16).

In Pakistan, most universities are located in larger cities and towns and are, therefore, accessible to both men and women. However, the explanation for the disparity in rural versus urban settings cannot be as simplistic. If accessibility of education was the problem, the solution would be pretty straightforward. Providing educational facilities in remote areas should automatically eradicate illiteracy and gender disparity in education at all levels. Attempts through education policy based studies and research (Panhwar, 1996; Rahman, 2005) have been made to end this disparity, but the issue is much more complex.

Apart from accessibility and funding, the cultural and religious norms of the society have a great influence on educational achievement. Pakistan, like any other country, cannot be characterized as having one main culture. Depending upon the

politics, history, geography, language, and culture of the region, literacy levels and levels and types of education vary.

Table 2

Literacy Rates (10+) by Sex and Urban and Rural Areas of Pakistan, 1972-2004

Year	All Areas			Urban			Rural		
	Both Sexes	Male	Female	Both Sexes	Male	Female	Both Sexes	Male	Female
1972	21.7	30.2	11.6	41.5	49.9	30.9	14.3	22.6	4.7
1981	26.2	35.1	16	47.1	55.3	37.3	17.3	26.2	7.3
1998	43.92	54.81	32.02	63.08	70	55.16	33.64	46.38	20.09
2004	54	66.25	41.75	72.37	79.9	64	43.84	58.4	30

Source: Choudhry (2005, p 5)

Working within this cultural framework, how can women receive an education which empowers them to affect change in society? And as the world moves into the information age and the age of internet technology, to what extent do evolving pedagogies and methodologies in education on a global scale need to be reflected in the empowerment and liberatory impact of women's education in Pakistan? With the introduction of computer technologies in nearly every aspect of life, it is hard to ignore the influence of these technologies in all spheres of life especially education and workforce increasing globalization, which depending on the definitions (Suarez-Orozco & Baolian Qin-Hilliard, 2004) can be both positive and negative. Globalization through technology has already impacted developing nations like Pakistan (Abbasi & Miller, 1995; Amjad & Ahmed, 2003; Castells, 2001; Friedman, 2005; Kazmi, 2005; Panhwar, 1996; UNESCO, 1995). It is necessary to understand the level of globalization through computer-related technologies in higher education in developing countries like Pakistan

and its impact by empowering, further disempowering, or having no effect on the lives of the women of Pakistan.

Background of the Study

Technology has been introduced into the public institutions of higher education in Pakistan fairly recently especially compared to the private and more expensive educational institutions (Amjad & Ahmed, 2003). With this introduction efforts have been made by the Ministry of Education to include technology in all areas of learning including language classes. A Higher Education Commission, which was set up by the government in 2002, has been set up to help improve the system at various levels. The objectives of this organization include (HEC, 2006):

- to encourage institutions to pursue continuous quality improvement and building on their existing strengths in teaching and research, promoting diversity of provision and beneficial collaboration;
- to help the sector to address the needs of students, employers and society across local, national and international communities;
- to work towards equal opportunity of access to high quality higher education; and
- to achieve value for public money by seeking to make the best use of available resources and securing accountability while recognizing institutional autonomy.

Statement of the Problem

Attempts to understand the gender disparity in education and the impact of education on the women in Pakistan through previous studies (Choudhry, 2005; EFA, 2005; Haque & Batool, 1999; Panhwar, 1996; Rahman, 2005; Vishwanath, Mansuri, Sinha, & Solotaroff, 2005; Weiss, 1998; Yasmin, 2006) related to gender issues in education have focused primarily on the elementary level, and have been mainly quantitative studies, in which the voices of the participants are not heard. Within this extremely restrained academic environment and the patriarchal cultural set up of the country, the response of female academicians would be extremely revealing. The

shortcomings of previous analyses of institutions of higher education in Pakistan when discussing gender are that:

> …females are represented in very low numbers. They are more reluctant to complete questionnaires and also more difficult to access than their male colleagues. Another problem is that women do not work as faculty of private universities; most of them are employed by the public sector and deliver lectures at private universities. (Rahman, 2005, p. 199)

This apparently intentional silence of the women is noteworthy. Why do they not speak out? Do they feel they might jeopardize their positions or do they feel that their contribution will go unheard? Many reasons can be identified for this silence, which must end if women are to be empowered.

A study by Hassan (1994) identifies the need for women's involvement in higher education, and refers to only one woman Vice Chancellor in the 70s. One of the reasons identified by Hassan is that the members of the selection boards and promotion committees are invariably men who believe women work only as a hobby and do not take their career seriously. Also, since men are not eligible for managerial appointment to women's institutions, it is assumed that women should, therefore be chosen only for women's institutions. And lastly women face resistance and discrimination from male colleagues who resist social change. To challenge the system and affect change training in the following areas were identified: assertiveness, stress management, networking, and mechanisms of discrimination. The women involved in this study also identified the need for training in budgeting, personnel management, and public relations. And the women who were identified in need to be trained were at the post graduate level, the middle management level-who would probably get promoted, and those women who were already in managerial positions in educational institutions. As mentioned in previous studies, the main focus on gender equity has been at the grass roots level and

with women at the primary level. This study (Hassan, 1994) was compiled over fifteen years ago and there is some evidence that recent efforts have been made to change the situation of women in higher education.

A more recent study (Yasmin, 2006) on the impact of higher education in the understanding of social recognition for women in Pakistan is quantitative in nature, limiting the participant responses to the researcher's questionnaire. This study reveals the positive impact of higher education on women's awareness of their rights in a social context, reinforcing the need for educational opportunities for women in far flung rural areas where female access to education is extremely limited. How can these opportunities be made available, and within the social framework of these areas, what would be the different modalities used to provide higher education of the standard meeting the requirements of the universities and colleges providing this access?

A comparison of the quality of higher education in public and private sector institutions in Pakistan (Ullah, 2005 , p. 144) does not even include a discussion of gender even though some of the participants of this study with a mixed methods approach are from institutions exclusively for women. Although the focus of this study was on the quality of education and facilities at Universities, including a reference to the women's role is imperative to any such discussion.

Another study (Kanwar & Taplin, 2001) focusing on the impact of distance education on the lives of women in Asia through case studies shows that "…better and easily accessible educational opportunities and the impact of communication technologies on the social and cultural environment are making substantial differences to the attitudes, values and concerns of Asian women" (p. 5). Introducing technology in distance education has proved beneficial for women in Pakistan (Hiroo, 1992; Kanwar &

Taplin, 2001; Panhwar, 1996), but computer technology access is still not available to many women in Pakistan, according to the Commonwealth of Learning report (Tamkeen, 1998) which is indicative of worldwide trends in the disparity of the availability of technology to women in both the developing and the developed countries (Marcelle, 2000).

Because of lack of education, women in Pakistan are unable to make contributions at various levels for their families and their communities; the gender disparity makes it even more difficult for women to control their lives and make choices about how they live. If using technology and distance education has proved to help achieve parity in education at the tertiary, then this method could be used to help alleviate educational disparity at other levels.

What needs to be investigated through a qualitative analysis interpreting and promoting the voices of women who have been able to negotiate higher education in Pakistan is whether computer technology has made any impact on their education endeavors. Do they believe that computer technology has in any way allowed them to do what might not have been possible otherwise, or do they anticipate it having any impact on the education of those female Pakistani students who are currently enrolled in elementary and high school? Do women who are either currently enrolled in higher education or who have recently graduated from university believe that computer technology can help reduce gender disparity in higher education in Pakistan?

Purpose of the Study

With computer based internet technology becoming such an integral element of higher education (Altbach, 2005; Gumport, 2005; Marcelle, 2000) as well as for gender equity (Hafkin & Taggart, 2001; Marcelle, 2000), the impact of technology on the

education of women in higher education in Pakistan might reflect global trends in the impact of technology in higher education. This participatory action research study was an investigation of how women in urban areas in Pakistan define success in education. It focused on whether they fit their own definition of success and how they believe others in similar situations might be able to be successful in accomplishing their academic goals. The main focus, however, was be on whether computer technology has had or can have an impact on higher education for women in Pakistan.

After having a dialogue with the participants, the researcher and participants were able to identify how some women in Pakistan identify success, and whether they believe they are able to achieve it through higher education. They were also be able to identify whether technology has had any impact on their success, or whether there are other more influential factors involved. The discussions and dialogues concerning these issues have led to some recommendations for women in higher education in Pakistan.

Research Questions

These research questions were addressed in this study:

1. To what factors do women of Pakistan attribute their success or lack of success in higher education?
2. How has technology affected their success in higher education?
3. What recommendations can these women make to those who want to be as successful as them?

Theoretical Framework

The voices of the women of Pakistan were analyzed within four theoretical perspectives. First, the focus of this study being women, it was imperative that the framework began with a feminist perspective. Since women of Pakistan might not

necessarily share the perspectives of the traditional western feminists, it was, therefore, crucial that in order to understand the reality of these women a framework that acknowledges their identity and their realities be used.

Post-colonial discourse with a feminist approach was used as a framework for this study to contextualize the voices of the women of Pakistan. After my initial dialogue I realized it would be a mistake not to include theories relating to Islam because religion is so innately integrated into the participants' lives. Also, the theories must include women's perspective within the patriarchal, post-colonial community of Pakistan. Western feminist theories would not reflect the realities of these women living in a society with a colonial past and a globalized present.

Post colonial and Muslim feminist theories (Amin, 2000; Collins, 2000; hooks, 2000; Mernissi, 2001; Moghadam, 2001; Mohanty, 2004; Narayan & Harding, 2000; Spivak, 2003) were, therefore, used to frame this study. The colonial history of Pakistan has impacted the language, religion, education, and general attitude of society toward the west. The impact has had a polarizing effect on this complex society that is already divided because of ethnicities and class. On the one hand there might be a strong reaction to western feminist theories, but on the other, there might be an even more opaque understanding of non-western feminist ideas. Some might look for equality for women, while others might focus on equity. Similarly some might look for women's rights within the religious framework of Islam within Islamic feminism (Barlas, 2004, 2004, 2005; Wadud, 1999, 2003) while others might find inspiration outside religion with a secular approach to feminism (Moghadam, 2001, 2005).

Second, to record the voices of these women, the methodology, participatory action research, is based on the philosophies of liberatory education and critical

consciousness (Babbie, 2004; Friere, 1994, 2000, 2004; Greenwood & Levin, 1998; Maguire, 1987; Weissglass, 1990; Weissglass, 1998). Recommendations for higher education in Pakistan include the need to (Yasmin, 2006):

> …develop human rights education programmes that incorporate the gender dimension at all levels of education, in particular by encouraging higher education institutions, especially in their graduate and postgraduate curricula, to include the study of the human rights of women (p. xvii).

This awareness and transformation through education is only possible with the Frierian awareness that (Friere, 2000):

> There is no such thing as a neutral educational process. Education either functions as an instrument that is used to facilitate the integration of the younger generation into the logic of the present system and bring about conformity to it or it becomes: the practice of freedom, the means by which men and women deal critically and creatively with reality and discover how to participate in the transformation of their world. (p. 34)

Third, since the transformation through global technologies like the internet and computer technology and its impact on the education of these women was being investigated, an analysis of globalization (Castells, 2001; Suarez-Orozco & Baolian Qin-Hilliard, 2004) was required to clarify if and how computer technologies are influencing the lives and education of women in Pakistan. Has this kind of technology made an impact or does it encourage a continuation of the status quo?

And lastly, education should lead to empowerment and freedom for these women, and this empowerment might include or lead to development through economics, and other factors that promote freedom. What is the correlation between education, economics, empowerment, freedom, and development and how do the participants perceive the connection? To understand this aspect of the study, economic development as related to Freedoms (Easterly, 2001; Sen, 2000) was used to frame this study. As Easterly points out Pakistan is an example of a state with economic "development

without growth", and explains it as, "The dominance by an elite who does not support human capital investment in the masses is a theme in several theoretical models in the political economy and growth literature" (p. 3). And this is supported by Sen's focus on what is called "welfare economics," which makes human welfare central to economic thought. This argument is taken further by Easterly (2001) who reveals:

> A variant of "the elite keeping the masses uneducated so as to keep power" hypothesis is that the male elite in a highly patriarchal society are reluctant to invest in women's education, since that is likely to lead to demand by women for increased power and equality. (p. 24)

Delimitation of the Study

The participants of this study are Pakistani women who have either completed their higher education or are currently enrolled in the system. They are directly related to the system through profession (professors or lecturers) or they are students. The participants were recruited mainly from the urban areas of the country and, therefore, generalizations cannot be made for women from rural areas.

Limitations of the Study

That these women have been successful to the point that they have completed secondary level education and are now enrolled in higher education, and that they voluntarily decide to participate in this study focusing on the impact of technology might still indicate a bias for identifying it as an integral part of their success. My own Pakistani background might also have an impact on my findings creating a bias; however, having lived in the US for the past eighteen years would also create an "outsider/insider" tension.

Participatory Action Research is a process (Greenwood & Levin, 1998; Maguire, 1987) which can be cyclical and of an amorphous nature. The direction of this kind of research is neither linear nor predictable. This is the nature of participatory research.

The action taken is not necessarily measurable and depends on the co-researchers (Herr & Anderson, 2005). Working within this theoretical framework for research methodology, it is impossible to have a definitive measure of the outcome. Also, now that the voices of these women have been identified, interpreted, and heard, it is not necessary that the action will immediately follow. As Friere (1994), points out:

> Let me make it clear; then, that, in the domain of socioeconomic structures, the most critical knowledge of reality, which we acquire through the unveiling of that reality, does not of itself alone effect a change in reality. (p. 30)

Significance of the Study

After reading this study, policy makers, professors and students could get a perspective that has previously been marginalized by the educational and social system. Not much research has been done in the area of women's issues in higher education, nor has the impact of computer and internet technology been investigated. Previous research has focused on literacy levels and has for the most part been quantitative.

The voices of women in higher education will be heard and may prove to be informative for policy makers and professors interested in understanding what role technology plays in the education of women in Pakistan. The dialogue might help create direction for those interested in taking direct action to help alleviate gender disparity in education in Pakistan. Listening to what the participants have to say about their educational endeavors and their realities, policy makers and educators get a perspective that might not otherwise be included. The reality of these women might be very different from the expectations of the policy makers, who are, at times, disconnected from the constituents for whom they are creating policies. For those making assumptions about the use of technology this will give a perspective based in reality.

Definition of Terms

These are the definitions of some of the terms that will be used in the study. As the participants become involved in the study and more terms are used or coined, they will be added or adjusted.

Computer Technology: This term relates to basic computer hard ware, software and internet technology. This does not necessarily include more advanced forms of computer based technology like IPODs and handheld devices including other more advanced technologies.

Feminism: Even though western feminism has had an influence on the feminist movements in developing countries, the interpretation and implementation of women and men in developing countries have been working toward an indigenous movement for the empowerment of women for over two centuries. Feminism is defined as:

> An awareness of women's oppression and exploitation within society, at work, and in society and conscious action by women (and men) to change this situation…this goes beyond movements of equality and emancipation which agitate for equal rights and legal reforms to redress the prevailing discrimination against women. (Jayawardena, 1994)

Globalization: Globalization has been defined as a process that causes various activities and aspirations worldwide in scope or application. In this study it relates to the impact of global trends through various forces and in this case it relates specifically to the impact of the internet and other computer technologies. Even though globalization has been ascribed to having largely negative affects on the societies that are impacted, in this study it relates more to the positive effect of the introduction of technology into the educational system.

> Educational systems tied to the formation of nation-state citizens and consumers bonded to local systems to the neglect of larger global forces are likely to become obsolete, while those that proactively engage globalization's new challenges are more likely to thrive. (Suarez-Orozco & Baolian Qin-Hilliard, 2004)

Higher Education: Higher education or Tertiary education relates to postsecondary education at colleges, universities, professional schools, technical institutes, and teacher-training schools. The Higher Education Commission (HEC) of Pakistan includes in it's definition "…all degree granting universities and institutions, public and private, including degree granting colleges" (HEC, 2006)

Muslims: Muslims are those who identify themselves as such. I do not differentiate between practicing Muslims or non-practicing Muslims for the purpose of this study. I also do not differentiate between the sects of this religion.

Muslim: Muslim is an adjective related to values that are created as part of the culture of the Muslim communities. These include the day-to-day interaction between the Muslims and their outlook on Islam's rules and regulations.

Islamic: Islamic is an adjective relating to values that are set out in the Qur'an and the practice of Muhammad (S).

Pakistani Woman: A woman who was born and has spent most of her life in Pakistan. Also, an individual identifies herself as such would be reason enough to include her in the definition. Even though as a researcher, I would meet this definition but because of having lived in the US for the past 18 years, I consider myself as a woman of Pakistani origin, but not an "insider" to this project.

Success: The definition of this term is based solely on how the participants define it.

CHAPTER II

REVIEW OF LITERATURE

Introduction

This chapter is divided into four main sections. The first section relates specifically to Pakistan and the issues related to this study. The subsections include an overview of information relating to the economics and social structure (Easterly, 2001; Jalil, 1998) in Pakistan followed by a historical look at perspectives of feminism and the women's movement in Pakistan. This is followed by an overview of education in Pakistan with the subsections of language and technology in the education system. The former relates to the colonial past of British rule and the latter relates to the future of the country. The last two sub sections relate to higher education in Pakistan which leads to the women in higher education.

The next three sections focus on the theoretical framework of this study beginning with a discussion on feminism: postcolonial feminism (Asghar Ali, 2000; Ashcroft, 1999; Barker, 2000; Collins, 2000; hooks, 2000; Jayawardena, 1994; Narayan & Harding, 2000; Said, 1979; Spivak, 2003), and Islamic and Muslim feminism (Amin, 2000; Asghar Ali, 2000; Badran, 2005; Barlas, 2004, 2004, 2005; Khan, 2001; Mernissi, 1996, 2001; Moghadam, 2001; Mustafa, 1993; Wadud, 2003).

Concepts related to globalization and technology are discussed in the third section (Castells, 2001; Coatsworth, 2004; Friedman, 2005; Kazmi, 2005; Khan, 2001; Suarez-Orozco & Baolian Qin-Hilliard, 2004). This is followed by the impact on women of globalization through technology (Commonwealth of Learning, 1998; Hafkin, 2002; Kazmi, 2005; Marcelle, 2000; Mohanty, 2004; UNESCO, 1995).

The last section deals with the theories of liberatory education that guided this study and created voice for the women participating in the study (Friere, 1994, 2000, 2004; Giroux, 1993; Sen, 2000).

Pakistan

Society and Economics

"Steps shall be taken to ensure full participation of women in all spheres of national life" (Constitution of Pakistan, Article 34). Even though efforts have been made on the international, national, and grassroots level through Non-Government Organizations (NGOs) to ensure full participation for women in education, little progress has been made in the quantity and the quality of education of girls at the primary level. These efforts started from the inception of Pakistan in 1947 and later the Commission on National Education in 1959 called for universal and compulsory education with an emphasis on the education of women because of the impact it would have on the country in general.

Outside intervention in health and education programs in Pakistan include the Social Action Programs (SAP I and II) funded by the World Bank. In 1993, the World Bank tried to improve health conditions and education (with a focus on women because of the large disparity), but aside from " a few modest successes, the period during which the SAP [I] was implemented witnessed stagnation, marginal improvement, and in some cases-even a decline in social indicators" (Easterly, 2006). After nearly a decade of failure the SAP II was also abandoned in 2001. In 2002, with $2.1 billion dollars Pakistan was the world's largest recipient of foreign aid.

To understand the situation of women in Pakistan, a macro-vision of the disparity between the economic indicators of the country in contrast with the investment in human capital is necessary. Pakistan underperforms "on most social and political indicators-education, health, sanitation, fertility, gender equality, corruption, political instability and violence and democracy for its level of income" (Easterly, 2001, p. 1).

This underperformance at all levels impacts both males and females especially were schooling is concerned:

> Those without any schooling, which still include 15 percent of young men and 46 percent of young women, assume the work burdens of adults prematurely and are deprived of the opportunity for learning in an institutional setting outside the family. (Lloyd & Grant, 2004, p. 34)

This study focusing on the experiences of males and females growing up in Pakistan, is optimistic about the opportunities that might be made available to women in Pakistan as family size becomes smaller and women's time becomes more flexible (Lloyd & Grant, 2004). This optimism is not shared by Easterly, who refers to problem of Pakistan's growth without development. Easterly (2001) points out that the two political economy models that are used to explain this disparity are "the incentives of the elite under high inequality to under-invest in the human capital of the majority" and the "ethnic divisions" (p. 29). Easterly explains:

> A variant of "the elite keeping the masses uneducated so as to keep power" hypothesis is that the male elite in a highly patriarchal society are reluctant to invest in women's education, since that is likely to lead to demand by women for increased power and equality. (p. 24)

Considering the financial assistance from foreign organizations and governments and the various government development programs this would lead one to speculate on what factors can effect change. Can outside models prove to be influential, or does change depend upon an internal transformation? Also, why would those in power want to jeopardize their position by empowering the majority through education leading them and to demand democratic equity in health and education? As indicated by Easterly's (2001) study, the ethnic divisions identified as intensifiers of disparity can only be eradicated from within. This would only be possible if drastic measures are initiated from within the varying ethnicities. Similarly, since the women of Pakistan, like other

women in similar developing countries (Mohanty, 2004) have a culture, history, and identity that is inherent to their lives, the change needs to come from within.

If within the patriarchal society the "elite" have no incentive to invest in the human capital of women, effective change will not transpire until women work to end the silence of inequality. And the major contributor to end this silence should be the women of Pakistan. Ironically, to speak out for a change in power, one needs the language of the elite, to be able to effectively contribute to the changes needed in the education of women. Women have to be involved in policy making to transform the system. Since the system does not seem to be working for women, it has to be transformed to allow the success of women. They have to speak out and become contributors in the dialogue of policy and decision making. And this can only be possible if women are empowered in academies of higher education.

Some landmarks in Pakistani Educational policy are the Education Conference, 1947, The Commission on National Education, 1959, The New Education Policy, 1970, The Education Policy, 1972, The National Education Policy, 1979, The National Educational Policy, 1992, The National Education Policy, 1998-2010 and Education Sector Reforms: Strategic Plan 2001-2004. All of these reforms stressed literacy levels and primary education, and did not focus on tertiary education. A more recent study compiled by NIPA, affirms, "that there should be equitable representation of women in the corridors of power and policy making in the higher educational institutions" (Malik, 2003, p. 7).

This study compiled through the auspices of NIPA also emphasizes the correlation between "economy of the country and higher education". No doubt, the connection between education and the economy is indisputable, but as Easterly (2001)

points out, economic progress does not necessarily correlate with human capital leading to the fact that Pakistan "systematically underperforms on most social and political indicators -- education, health, sanitation, fertility, gender equality, corruption, political instability and violence, and democracy -- for its level of income" (p. 1).

Appointing women to posts of power and policy making is one way of accomplishing this goal, but it is not the most effective. Within the context of left feminist recommendations, curriculum and pedagogy supporting a capitalist society and reinforcing roles of dominance and subordination need to be changed. The Frierian (Friere, 2000) concept of "banking" information and education needs to be transformed so that women can be empowered to become agents of change. The "dialogic" model (Frierian concept) encourages less authoritarianism and more interaction advocating student experience as content and as a basis for problem solving. For women to effect change in higher education, and education in general, there needs to be, "models of liberators, strugglers for social justice and women engaged in collective (as opposed to individual) action" (Perreault, 1993).

If the privatization of higher education continues on an international level without any checks or balances and states continue to assume higher education as a private good rather than public good, chances for women and ethnic minorities to succeed in higher education in Pakistan, will be even more impossible (Altbach, 2000). Also, if private institutions receive higher autonomy for reduced state support, the economic competition will increase. The fear remains that the growing number of private institutions of higher education might adversely affect the political economy of institutions worldwide especially if the aim of these institutions is to increase economic gains rather than public good.

The silence of women in higher education in Pakistan needs be heard over the clamor of the market. The market and related economies could lead to unexpected changes in society (Altbach, 2005):

> The landscape of international higher education is characterized by inequalities and is increasingly focused on commercial and market concerns. These inequalities are especially stark in the context of relations between developing and developed countries, but market concerns are central to academe worldwide. (p. 14)

Granting autonomy to educational institutions and giving them academic freedom is of utmost importance to the success of relevant curricula, and even though private institutions will improve the finances of the country, to the extent that there will be an incentive to decrease the "inequality of human capital of the majority" (Easterly, 2001).

A Historical Perspective of Feminism

To understand the current situation of the feminist movement in Pakistan a historical overview of the women's movement in India will contextualize the present. Pakistan is a fairly young country, having gotten independence from the British colonial rule in 1947. Previous to this, Pakistan was a section of India. Women in India learned early in the twentieth century that higher education would "enable them to enter the job market and to brighten their chances in the marriage market" (Asghar Ali, 2000). Even though only a very small percentage of Indian women received this level of education, the need was so dire that a university for women was set up in 1916. At the Shreemati Nathibhai Damodher Thackersay (S.N. D. T.)University, the curriculum was a combination of traditional and modern subjects. The women studied domestic science as well as psychology and fine arts. Later other universities with the same focus were opened in different areas in India. Around this time vocational and industrial educational institutions were being set up for women and education for women became more

acceptable than in the past. On the one hand parents wanted their daughters to get a good education, but on the other, they feared that too much education might change the social structure irrevocably. To a certain extent, the same attitude exists even today, one hundred years later.

For the Muslim women of India in the nineteenth century, two religious and cultural practices restricted them from becoming fully involved in education and the workforce outside the home: purdah and early marriages. As the seclusion (or purdah) of women dimished because of the realization of the need for change and the legislation against child marriages, a larger number of Muslim women became involved in education. Asghar (2000) identifies three main agencies for change in attitudes and opportunities of educational change for Muslim women. These were the government, missionaries, and social reformers.

In Turkey, Iran, and Egypt, all with a majority of Muslims, women's movements were at a similar point as India during the nineteenth and twentieth century. All these countries also shared a past with a strong colonial influence. In Egypt in 1899, Qasim Amin wrote about the importance of education of women in the *Liberation of Women*, in Arabic for an Egyptian audience. He started from the premise that the liberation of women was an essential prerequisite for the liberation of Egyptian society from foreign domination, and used arguments based on Islam to call for an improvement in the status of women. In this way, he promoted the debate on women in Egypt from a side issue to a major national concern similar to the debate in India (Amin, 2000). This text was later translated into Persian with the title, *The Education of Women by* Ashtiani. The difference in theses texts concerning the connection between segregation and veiling and

the education of women is a topic of debate amongst Muslims even today (Najmabadi, 1998).

The Muslim Nationalist Movement and reform for women's rights represented two parallel perspectives for some in the Muslim feminist movement in India at the turn of the twentieth century. This discourse has continued into post-partition era in Pakistan beginning in 1947 and continues even today. This debate regarding the reconciliation between seemingly Western ideals and the Muslim legal system with a patriarchal interpretation has been on-going and continues even today (Asghar Ali, 2000; Haeri, 2004; Mumtaz & Shaheed, 1995).

In the early decades of the twentieth century, Muslim men and women were focused on women's education to promote women's rights in society (Khan, 2001). Khan (2001) traces how Sir Syed Ahmad Khan convened the Mohammedan Educational Conference in the 1870s to promote modern education for Muslims and founded the Muhammadan Anglo-Oriental College. The participants of this conference, who were mostly male, proposed education as a way of improving the social status for women. The traditional education system for women focused mainly on religious education at *Maktabs,* schools attached to mosques, but this was limited because of the restrictions of *purdah* , the veiling of women. For women from aristocratic families the options included private tutoring at home in Persian and Urdu literature as well as basic religious education.

Literature and poetry were used to inspire and guide women concerning their rights to education and family law. *Bihishti Zewar* (Jewel of Paradise), a novel by Maulana Thanwi , was considered "the standard gift for new Muslim brides" because of the guidance on the importance of literacy, knowledge of the legal system, and morality

to young women. Maulvi Altaf Hussain Hali, a famous Urdu and Persian poet, wrote poems praising the social reforms for women justifying them “without any western style higher education or removing the custom of *purdah”* (p. 49).

At the 1899 Educational Conference, a landmark in Muslim female education, which lead to greater efforts in education of women, Justice Syed Amir Ali of the Calcutta high court, an Islamic scholar, warned of the dire consequences of not educating women thus leaving them behind in social participation. But progress in women's literacy was slow; by 1921 only four out of every 1,000 Muslim females were literate (Khan, 2001).

Promoting the education of women was a first step in moving beyond the constraints imposed by purdah. Women's roles were questioned, and their empowerment was linked to the larger issues of nationalism and independence. In 1937 the Muslim Personal Law restored rights such as inheritance of property that had been lost by women under the Anglicization of certain civil laws (Asghar Ali, 2000). As independence neared, it appeared that the state would give priority to empowering women as Jinnah, the founder of the country and the proponent of a separate nation for the Muslims of India, had stressed in his speeches the importance of women being involved with men in all spheres of life (Asghar Ali, 2000).

After 1947, Muslim women from the elite class in Pakistan continued to advocate women's political empowerment through legal reforms. They mobilized support that led to passage of the Muslim Personal Law of Sharia in 1948, which recognized a woman's right to inherit all forms of property. They also supported an attempt to include a Charter of Women's Rights in the 1956 constitution. The 1961 Muslim Family Laws Ordinance

covering marriage and divorce, the most important reform that they supported, is still widely regarded as empowering to women (Mumtaz & Shaheed, 1995).

In 1981, The Women's Action Forum (WAF) was formed to support the implementation of a penal code to strengthen women's position in society. As a reponse to many of the oppressive laws proposed by Zia ul Haq's government, in the cities of Karachi, Lahore, and Islamabad women from educated and upper class backgrounds met to formulate policy statements and engage in political action to safeguard women's legal position. These laws known as the Hudood Ordinances failed to distinguish between adultery (zina) and rape (zina-bil-jabr). A man could be convicted of zina only if he were actually observed committing the offense by other men, but a woman could be convicted simply because she became pregnant. Even in 2006, laws related to the hudood ordinance are being argued by women's groups (Mumtaz & Shaheed, 1995).

The WAF has played a central role in trying to analyze interpretations of Islamic law and its role in a modern state, and in promoting ways in which women can be involved in decisions about legislation and policies made in relation to women. In the mid 1980s WAF members led public protests against Law of Evidence requiring two women for each man.

In August 1986, the WAF members and their supporters led a debate over passage of the Shariat Bill, which decreed that all laws in Pakistan should conform to Islamic law. They argued that the law would undermine the principles of justice, democracy, and fundamental rights of citizens, and they pointed out that Islamic law would become identified solely with the conservative interpretation supported by Zia's government. Most activists felt that the Shariat Bill had the potential to negate many of the rights women had won (Mumtaz & Shaheed, 1995; Rouse, 2006).

Along with the challenges of the so-called Islamic legislation, Pakistani women are unable to participate fully in the workforce because of economic pressures and the dissolution of extended families in urban areas. Even though many more women are working for wage, restrictions on their mobility limit their opportunities, and traditional notions of propriety lead families to conceal the extent of work performed by women.

Usually, only the poorest women engage in work--often as midwives, sweepers, or nannies--for compensation outside the home (Weiss, 1998). More often, poor urban women remain at home and sell manufactured goods to a middleman for compensation. More and more urban women have engaged in such activities during the 1990s, although to avoid being shamed few families willingly admit that women contribute to the family economically.

Groups including the Women's Action Forum, the All-Pakistan Women's Association, the Pakistan Women Lawyers' Association, and the Business and Professional Women's Association, are supporting small-scale projects throughout the country that focus on empowering women (Mumtaz & Shaheed, 1995; Nyrop, 1994; Rouse, 2006). According to Nyrop (1994):

> The women's movement has shifted from reacting to government legislation to focusing on three primary goals: securing women's political representation in the National Assembly; working to raise women's consciousness, particularly about family planning; and countering suppression of women's rights by defining and articulating positions on events as they occur in order to raise public awareness. (p. 50)

Language and Colonialism

An overview of the history of English in the Subcontinent will help us understand present-day attitudes toward this language including current trends and attitudes toward English language learning in Pakistan. Because of a shared history, there is a parallel to

this in India. Even though both countries gained independence from British rule over fifty years ago, the indelible scars of Colonial rule are evident in all aspects of society today most profoundly in the legacy of the English language and intimacy with the educational systems.

The foundation of this influence can be traced back to the seventeenth century with the arrival of the British traders to South Asia. A century earlier the Spaniards had arrived in South America bringing with them the Catholic religion and the Spanish language, inflicting devastating causalities physically and mentally on the indigenous people. The arrival of the British in South Asia was, however, different in that the initial group of traders became acculturated to the Indian culture. As Dalrymple (2002) records, the first group of British traders become acculturated to the Indian languages, cultures, religions, and ways of life. He describes the relationship between Britain and India as "symbiotic". Just as individual Britons in India could learn to appreciate and wish to emulate different aspects of Indian culture, and choose to take on Indian manners and languages, so many Indians at this period began to travel to Britain, intermarrying with the locals there and picking up Western ways (Dalrymple, 2002). Giving examples of immigrants from India settling comfortably and being accepted socially in Britain at that time, he criticizes the distortion of the Edwardian interpretation of the history of that time. Unfortunately, the world remembers this era through the misinterpreted words of Rudyard Kipling as "East is east and West is west and never the twain shall meet" (Kipling, 1895) .

Even though the connection between these two cultures was promising, by 1818 the British had virtual control over India. Ali (1993) divides the British "power groups" into three categories. The first are the Conservative Tories, which include Warren

Hastings, who were interested in implementing the Indian traditions and languages in the education of the Indians. The second are the Evangelicals, including William Pitt, who were “hungry for souls”. Proselytizing Christianity and teaching the English language were ways in which this group would deal with the natives. This group of individuals had similar aspirations to the final group, which Ali identifies as the Radicals. These individuals denounced the Indian traditions as barbaric being based on superstition, so they would have to be eradicated to be replaced by the Anglicized world view using English as a means to this end. Ali describes this attempt as demeaning to the Indians. Having gone through this transition of becoming a “brown Englishman” he looks back with disgust on the way he was forced to make a complete transformation: changing his way of thinking through language and education and his appearance through the clothes he had to wear. He elaborates, “In the process of transformation from Indian to brown Englishman, I found I had lost not only my freedom, but culture and identity as well, and had become an exile in my own country” (Ali, 1993, p.10). When a few bold writers decided to publish a collection of literature in Urdu, Ali being amongst this group, the book was banned and the writers were identified as communists and were blacklisted. Later, when Ali wrote *Twilight in Delhi* in English in 1940, it was accepted by the critics and the British Government as a modern Indian creating an interpretation of India for the Western world, replacing Forster and Thompson. Ali chose English intending to reach a larger audience to understand the Indian way of thinking. In the poem, “The Burning of Paper Instead of Children”, Rich eloquently describes this irony: “This is the oppressor’s language, yet I need it to talk to you” (Rich, 1993, p.40).

For the majority of those subjugated to Colonial rule, English represents colonization and oppression, but it is imperative for technological, political, and financial

power. The power of English was known to those fighting for freedom from British Colonial rule, and is still acknowledged by those competing in the global market in the new millennium. Pakistanis are faced with this dilemma today (Haque, 1993). : "English has become the language of knowledge; it is the language of the biggest reservoir of information, knowledge and literature known in history" (p. 42). In anticipating the future of English in Pakistan, Haque (1993) predicts the increasing need for English in science and technology since "thirty percent of Pakistan's gross national product is related to international trade. The study of English would have to be "compartmentalized" and the study of English literature would be restricted to those who want to become writers or journalists-of course if the Literary canon includes voices from South Asia, English literature would represent the culture and identity of the area.

English is, and will continue to be, a necessity for Pakistanis. In a country where the majority speak Punjabi, the national language is Urdu, and a large number of other languages are used on a regular basis, the status of English as a language of power and elitism reflects not only the current global attitude toward the language, but also the complex paradoxical relationship between the colonizer and the colonized (Sidhwa, 1996). "If their wealth did not set them apart, their ability to converse in English certainly did." (p. 273). This statement from The Crow Eaters by Sidhwa sums up the general attitude toward English in Pakistan. And by choosing English as one of the Pakistani vernaculars to write her novels, like Ali, and other South Asian writers, Sidhwa proves that English is just as Pakistani or Indian or South Asian as it is British, American, or Australian. But has the English language been subjugated by the excolonized, or is it an indication of a trend of creating a linguistic hierarchical paradigm on a global level?

Krishnaswamy argues that labels like Indian English, Pakistani English, or South Asian English do not change the fact that it is still English (Krishnaswamy & Burde, 1998, p. 61). By giving the analogy of the Boeing aircraft used for different airlines-the basic structure never changing-the spread of the English language is also related to capitalism and the world Market. Is this a new face of colonialism? Some like Krishnaswamy (1998) would argue that the English language, whatever form it takes, is another way of controlling the minds and ideas of individuals. “The politics of ‘World Englishes’ is closely linked with what has been termed as ‘Cultural Colonialism’, ‘linguistic imperialism’ and the building up of new ‘empires’ in the technological age, using mass media as its major weapon” (Krishnaswamy & Burde, 1998, p. 61) .

Educational Policies

Education in Pakistan is mainly centralized. Although the Ministry of Education (MOE) supervises over Pakistan’s entire system of education, education is largely a provincial matter with each of the four provinces guiding its own department of education. The central government is in charge of policy-making. Educational institutions located in the federal capital, Islamabad, are administered directly by the MOE.

Both public and private schools provide primary and secondary education as well as madrasahs. Universities are administered by the provincial governments, but are funded by the central government through the Higher Education Commission (HEC). In 2002, University Grants Commission of Pakistan was replaced by the HEC.

All degree granting universities and institutions, both public and private, are directly or indirectly supervised by the HEC, which is responsible for coordinating reviews and evaluations of all academic programs. In addition, the HEC oversees the

planning, development, and chartering of both public and private institutions of higher education (Sedgwick, 2005).

To understand the educational system in Pakistan it is necessary to have an historical overview of the policies that have affected education in the last fifty years (Ali & Kassim-Lakha, 2002; Ghaffar, 2003; Iqbal, 1993; Rahman, 2005; Sedgwick, 2005). Table 3 below outlines the targets and strategies of these policies (Kazmi, 2005):

Table 3

Educational Policies in Pakistan, 1947-1998

Policy	Targets	Strategies
1947 Pakistan Educational Conference	Free compulsory education within ten years (Universal Compulsory Education) UPE within two decades; i.e, by 1967	• Free and compulsory • A special tax to finance primary education • Primary school age group between 6-11 years • Private sector to open pre-primary schools
1959 Commission on National Education	UPE within a period of 15 years; i.e, by 1974	• Compulsory and universal primary education • Compulsory religious education • Female teachers for primary education • Resource mobilization for additional funds
1970 The New Education	Universal enrollment up to class v by 1980	• Emphasis on female enrollment • Female teachers for primary education
1972 The Education Policy	UPE for boys by 1997 and for girls by 1984	• Free primary education • Priority to rural areas • Emphasis on female enrolment • Standardized low cost school buildings • Revision of curricula and text books
1979 National Education Policy	UPE for boys by 1986-87 and for girls by 1998	• Rapid expansion of female education • Opening of mosque and mohalla schools

1992 National Education Policy	UPE for boys and girls by the year 2002	• Efforts to reduce dropouts • Primary curriculum for classes I-II will be integrated into two books only, one integrating language, Islamiyat and the other dealing with basic mathematics • Quran nazira starting in class I and completed in the terminal year • Active participation of the community and the elected representatives with the village as a unit in rural areas, and mohalla (community) in urban areas • Number of teachers in each primary school gradually raised to five over a period of ten years, as far as possible recruited locally • Basic education extended over class I-VIII • Funds for primary education non-guaranteed through legislation
1998 The National Education Policy	UPE for boys and girls by 2010	• Access and quality of elementary education to be improved • Kacchi (pre-elementary) as part of primary education • In-service teacher training to be reformed and strengthened • Substantial increase in non-salary recruitment expenditures for basic school supplies, teaching aids, materials etc. • Area/District based targets to be developed to promote elementary education • Management and monitoring to be improved through greater decentralization and accountability • Reformation of examination and assessment system at the end of the elementary level
2001-2004 Education Sector Reforms		• Universal primary education (UPE) • Adult literacy • Introduction to technical studies in secondary education • Establishment of polytechnics • Public-private partnership

The same policies are introduced on a regular basis without much progress. Since private institutions of higher education have been able to provide education of international standards, public-private partnerships will help to improve public institutions (Afridi et al., 2002; Ali & Kassim-Lakha, 2002).

Higher Education

According to Rahman (Rahman, 2005), the foundation for the current system of higher education in Pakistan can be traced back to 1857, when the Directors of the East India Company decided to set up universities in India, which should not be too challenging so as not to discourage the students. Keeping the expectations low, meant lowering the standards. One of the major reasons to establish universities in India was to educate a lower level of bureaucracy of locals who would be able to work at the lower level government jobs. There was a need to westernize and educate the Indians enough to be able to fulfill these minor responsibilities. These institutions were not supposed to equal the academics of Oxford or Cambridge, which were autonomous institutions. It was, therefore, necessary for the British colonialists that the University of Calcutta, the first Indian University in the Western tradition, be governed not by academics, as were, and so the governor general was the chancellor and the chief justice of the Supreme Court the vice chancellor. Women, at this point in history, were not considered participants in higher education. The mentality of subordination, however, seems to be a part of South Asian Higher Institutions as a result of a long period of colonization (Rahman, 2005). Even though institutions like the Aligarh University were created by the native Indians, they were in the western model ensuring adaptability and success of students within the British Colonial System.

Universities in the Sub Continent, for the most part, retained their colonial characteristics. Even after 1947, with the partition of India and the departure of the British, the institutions of higher education retained their non-autonomous characteristics (Rahman, 2004). The Chancellor and Vice Chancellor for provincial universities are currently both appointees by the governor of the province. (Pakistan has four provinces: Punjab, Sindh, Baluchistan and North West Frontier Province). The finances are controlled through the University Grants Commission, which was established in 1974: "The powerlessness of the academic, which the colonial bureaucracy had ensured, has only increased in the half century of Pakistan's existence" (Rahman, 2005, p. 27).

The number of universities has, despite of the lack of funding and autonomy, been increasing. In 1947, Pakistan had only one university, University of the Punjab in Lahore, but by 2003 there were fifty three public universities. Many private universities have been set up after 1987. The only two which have achieved an international status are Lahore University of Management Sciences and Agha Khan University of Karachi. Both these universities receive large subsidies from the government.

Women in Higher Education

The fact that in 1917 only thirty female Muslim students in India were enrolled in college or university and ten years the number increased to 537 shows the extent of interest in higher education, and by 1946 the number had increased to 651. The progress still seems fairly slow, but the fact that some of these women were even going to Europe to continue with their education is dramatic for the time when most women in South Asia were not even allowed to the leave the boundaries of their homes. Even for today, sending daughters abroad for education before they are married is not a common practice. The women who did get the opportunity of higher education were either in the teaching

or the medical profession. There were not many other opportunities for them, though a few did work in the armed forces but mainly in the medical profession. Even though this beginning was fairly slow, it could be assumed that the movement for women's education would gain momentum over the years. Unfortunately, even after partition, this did not happen as rapidly as would have been expected. Compared to other countries in the region, the progress of women's education in Pakistan has been fairly slow.

Not much literature is available about the role of women in institutions of higher education in the region. Within the extremely restrained academic environment mentioned above, and considering the patriarchal cultural set up of the country, the response of female academicians would be extremely revealing. Rahman (Rahman, 2005) mentions the shortcomings of his own analysis of institutions of higher education in Pakistan when discussing gender issues:

> …females are represented in very low numbers. They are more reluctant to complete questionnaires and also more difficult to access than their male colleagues. Another problem is that women do not work as faculty of private universities; most of them are employed by the public sector and deliver lectures at private universities. (p. 84)

This apparently intentional silence of the women is noteworthy. Why do they not speak out? Do they feel they might jeopardize their positions or do they feel that their contribution will go unheard? Many reasons can be identified for this silence, which must end if women are to be empowered.

Another study by Hassan (Hassan, 1994) describes a similar situation of women's response for women in higher education, and refers to only one woman Vice Chancellor in the 70s. Some of the reasons identified are that the members of the selection boards and promotion committees are invariably men who believe women work only as a hobby and do not take their career seriously. Also, since men are not eligible for managerial

appointment to women's institutions, it is assumed that women should, therefore be chosen only for women's institutions. And lastly women face resistance and discrimination from male colleagues who resist social change. To challenge the system and affect change, training in assertiveness, stress management, networking, and mechanisms of discrimination were identified. The women involved in this study also identified the need for training in budgeting, personnel management, and public relations. And the women who were identified in need to be trained were at the post graduate level, the middle management level-who would probably get promoted, and those women who were already in managerial positions in educational institutions. As mentioned in previous studies, the main focus on gender equity has been at the grass roots level and with women at the primary level. Hassan's study was compiled over fifteen years ago and there is some evidence that recent efforts have been made to change the situation of women in Higher education as was mentioned earlier in this paper.

What does the data reveal about the state of women in the Institutions of Higher Education in Pakistan? The fact that in 1998, when the UN report was compiled, there was only one woman Vice-Chancellor in Pakistan (the Vice-Chancellor of the newly established Fatimah Jinnah Women's University) is probably the most revealing of the numbers. Recently, changes have been made and other women's institutions, like Lahore College for Women, have been given the university status, but this does not dramatically reduce the disparity in education for women as decision makers. Again according to the 1998 report by the UN, women lectures were also under-represented in Pakistani institutions. The percentage of women lectures for Pakistan (16%) is similar to that of Uganda (18%), Nigeria (17.0%), Zimbabwe (10.8%), Tanzania (10.7%), and Zambia (10.2%) . Compared to other newly emerging countries like Malaysia which had 34.5%,

South Pacific 33.9%, Sri Lanka 35.5%, and India 36.8%, the percentage is extremely low (Kanwar & Taplin, 2001). Has this situation changed in the last seven years? This needs to be investigated.

As we descend the totem pole of education, the situation is not that encouraging for the women of Pakistan. The decline in the literacy level of women in respect to the growing GDP of the country reflects a decline in the quality of life for women despite economic growth (Easterly, 2001). Also considering the correlation between the education of the mother and the life expectancy and education of the child, it can be assumed that the decline in the literacy level has had an overall negative effect on the women and children in Pakistan. To quote Easterly (2001):

> Pakistan already had higher female illiteracy at the same initial income level as the control group (the starting point for this data is 1970). Over the next three decades, income grew more in Pakistan, but female illiteracy improved less…. The moderate growth control group achieved education of female illiteracy of about 60 percent, while the same amount of growth in Pakistan yielded a decline in female illiteracy of about 20 percent. The gap between female and male illiteracy actually increased with rising per capita income in Pakistan, while it declined sharply in other comparably growing countries. (p.14)

This, of course, indicates that there is need for a complete transformation in society. Even though ideas can be imported, they cannot be implemented without being adjusted to the society. It is the individuals within the society who can effectively identify the areas that need transformation. More women need to be involved in decision making and policy making to ensure the failures of the last fifty years do not repeat themselves. The failures which are "consistent with one of an educated elite who do not wish to invest in the human capital of the majority" (Easterly, 2001, p. 24).

Feminist Perspectives

Post Colonial Feminism

In the mid 1700s, when the British began gaining a foothold in India, interest in the Eastern way of life gave rise to the field of "Orientalism" which lead to creating a mystified and sometimes glorified "other" in the inhabitants of the East (Jayawardena, 1994; Said, 1979). Where the men in the East were categorized as the "native" or "savage" the women, who were less involved in public life, and therefore, understood even less, was sometimes portrayed as a suppressed individual and at other times as a sensual one kept for the pleasure of the men in harems (Mernissi, 2001). This misrepresentation of both men and women was contrary to the reality of their reality, but it was an convenient way to sub humanize the colonized to control them (Fanon, 1963):

> As if to show the totalitarian character of colonial exploitation the settler paints the native as a sort of quintessence of evil. Native society is not simply described as a society lacking in values. It is not enough for the colonist to affirm that those values have disappeared from, or still better never existed in, the colonial world. The native is declared insensitive to ethics; he represents not only the absence of values. He is let us dare to admit, the enemy of values, and in this sense he is the absolute evil. (p. 41)

Pakistan shares a colonial past with India and Bangladesh similar to other countries in Asia and Africa. In the 1940s and 1950s, when many countries from these continents were becoming independent of imperialism, they were also fighting against the western ways and ideas imposed on them. Post colonial feminism came out of gendered history of colonialism and imperialism, and is closely linked to the Nationalist movements of this time (Jayawardena, 1994). Nationalistic movements are one direction in which the colonial society moves and the other way to react to colonialism: "Formalism, of which religious formality is only one aspect, is the cyst into which colonial society shuts itself and hardens…" (Memmi, 1967, p. 101).

Postcolonial feminism condemns western feminism in its assumption that all women have the same needs and similar experiences (Barker, 2000; Collins, 2000;

Jayawardena, 1994; Mohanty, 2004). An underlying theoretical premise of postcolonial feminism is that freedom and equality stem from western privilege. Many postcolonial feminists argue that because of the colonial experience and oppression of class, race, and ethnicity, women in post colonial and developmental countries as well as women of color in the west have been marginalized (hooks, 2000; Narayan & Harding, 2000). They question the assumption that the major reason of oppression for women is patriarchy. While making these assumptions, post colonial feminists also contend to those within their own cultures that their expectation of women's liberation and freedoms to make their own choices within and outside the home are not "western".

Considering the impact of globalization on women in the Third World, a feminist agenda in the antiglobalization movement is lacking (Mohanty, 2004). Globalization in this context refers to the exploitation of the formerly colonized through international corporations referring the definition of neocolonialism and imperialism (Suarez-Orozco & Baolian Qin-Hilliard, 2004). Within this context Mohanty (2004) argues:

> Women are workers, mothers or consumers in the global economy, but we are also all those things simultaneously. Singular and monolithic categorizations of women in discourses of globalization circumscribe ideas about experience, agency, and struggle. (p. 248)

This need for a level of specificity over generalizations allows a dynamic that is multifaceted and reflective at the same time. Where some aspects of the Western feminist movement can be reflected in the feminist movement of the women in the Third World and vice versa, the issues are projected on a global level. To assert the ability to comprehend the concise reality of any group of individuals is impossible considering the constant flux and the varying influences in the lives of the individual (hooks, 2000). For Mohanty (2004), along with globalization "…the unequal information highway… and increasing militarization" (Mohanty, 2004) further complicates the role of feminists in

developing countries. A feminist perspective on globalization will not only help empower women, but it will also help many different facets of society. Globalization without social justice hurts and threatens us all (Suarez-Orozco & Baolian Qin-Hilliard, 2004). Other challenges for feminists include capitalist hegemony; privatization; and religious, racial, and ethnic strife. Even though a study of the influence of all these factors would be extremely informative, focusing on one, the internet and the related technology would give an insight into the overwhelming obstacles for the feminist movements in the Third World. Third World and developing countries are terms that have been used here interchangeably. Mohanty (2004) refers to the terminology of "one-third world" and "two-third world" as well as First World/North and Third World/South (p. 227).

The need to move toward an "anticapitalist transnational feminist practice" (Mohanty, 2004) is a reaction to the negative impact of globalization (Suarez-Orozco & Baolian Qin-Hilliard, 2004). Mohanty (2004), therefore, argues that for the "most inclusive paradigm" one must begin with the voice and experiences of the most disenfranchised. By beginning at the base of this hierarchy, one can understand the larger community because "if we begin our analysis from and limit it to, the space of privileged communities, our visions of justice are more likely to be exclusionary because privilege nurtures blindness to those without the same privileges" (p. 231).

Islamic Feminism

Over 400 delegates attended the first International Congress on Islamic Feminism, where it became clear that Islamic feminism is an integral part of the discourse in many countries with a majority Muslim population. At the forefront of the agenda for these women is the fight for their rights against the implementation of highly sexist and discriminatory family legislation in workplace environments, in the name of Islam.

Islam, like other canonical religions, has been interpreted through a male-centered way of knowing (King, 1987). Learning in historical religions like Judaism and Christianity has been dualistic and patriarchal in nature. Theology and critical analysis leading to legislation has been the domain of men rather than women. In India, with its multitude of religions including Hinduism, Buddhism, Islam, and Judaism, each religion had its guidelines for the education of women. King (1987), quoting Gaur (1984), explains how in Hinduism women who were considered unclean and apart from a few chosen women were restricted from reading and interpreting texts in later Vedic traditions. However, in the earlier Vedic tradition when scriptures were transmitted orally many women seers and prophets were noted for their contributions to Hinduism. Buddhism and Jainism, on the other hand, had a strong following of female involved in religious debate and reform. Educational reformers in India in the eighteenth and nineteenth centuries, were, however, challenged to introduce literacy and education for women in India because the more orthodox followers of Hinduism felt this would have an adverse effect on society (King, 1987). In Christianity, also, excepting the nuns in convents, women, in general were not encouraged to become involved in literacy related to religion. In Judaism, also, women have been traditionally excluded from "reading the scrolls of the Law" (King, 1987). Reform toward the inclusion of women in religion began in the nineteenth century.

In contrast to the religions mentioned above, Muslim women have never been restricted from studying the Quran, the scripture of Islam. The female Islamic scholars and saints, unlike the Christian nuns, were usually married and had children (King, 1987). Muslim women in Turkey and Iran were taught how to compose poetry and music. Muslim women have, however, been excluded from the exegesis of the Quran until the

last two decades (Arslan, 2005; Barlas, 2005; Mernissi, 1992; Wadud, 1999). In this manner, traditionally male students were exclusively taught in madrassahs, religious schools. But again, in Pakistan, organizations like Al-Huda International Welfare Foundation, "a registered, non-governmental and non-political organization, actively involved in the promotion of Islamic education and the service of mankind" (http://www.alhudapk.com/) is an organization that provides Islamic education on-site and on-line for women interested in understanding Islam. Established in 1994, this institution offers diplomas, post diplomas, and certificates and all kinds of facilities including a Library, Audio-Visual Facility, Hostel, Health Services, Financial Assistance, and Childcare Facilities. This institution, to the extent that it focuses on providing a learning environment for women interested in the Quran and its interpretations represents what Barlas (2005) proposes as necessary to understand it as a liberatory text:

> Muslims can and indeed *must* read the Qur'an as a liberatory and antipatriarchal text, and I will also show why one doesn't have to be a woman, or a feminist, to read it as such …I also ask if the Qur'an is the same as its exegesis and I am led to conclude that it is not. Indeed, Muslim theology and the Qur'an itself make a distinction between divine discourse and its interpretations. (pp. 50-52)

It is unclear, however, to what extent this information is provided to the students of this institution.

Islamic feminists of today represent groups around the world working with a variety of issues. These include the U.S.-based academics Azizah al-Hibri, Rifaat Hassan, Asma Barlas, Leila Ahmed, and Amina Wadud, scholars from Morocco like Fatima Mernissi, lawyers in Pakistan Asma Jahangir and Hina Jillani, from Malaysia the Sisters in Islam and, in Iran, Shahla Sherkat and Azzam Taleghani. The Muslim feminists are themselves divided into two camps: one within Islamic framework and the other from the secular perspective.

Advocating a secularist approach, Moghadam (2001) clarifies the difference between Islamism (political) and Islam (religious). Identifying herself as a "secular feminist" as opposed to a "feminist atheist" Moghadam believes that religion should be respected but should not be "elevated to civil status". She strongly advocates that the focus on the Quran restricts the cause of the feminist movement (Moghadam, 2001):

> …in the Muslim world this separation of political and religious is important to understand the different interpretations of Muslim feminism. As long as they remain focused on theological arguments rather than socio-economic and political questions and their point of reference remains the Quran rather than Universal standards, their impact will be limited …Feminism is a theory and practice that criticizes social and gender inequalities, seeks to transform knowledge, and aims to empower women. Women and not religion should be at the center of that theory and practice. (pp. 11-12)

Islamic feminism has taken on the two-fold task to expose and eradicate patriarchal ideas and practices glossed as Islamic -- 'naturalised' and perpetuated in that guise and to recuperate Islam's core idea of gender equality (indivisible from human equality). But even with these two guidelines the identities and platforms of Islamic feminists differs greatly:

> Iranian Islamism …has been reactive and proactive, reactionary and innovative, repressing and reforming. It differs from Afghan Islamism, which lacks modernizing features. Social structure, including the size of the middle class helps to explain the differences. (Moghadam, 2001, p. 3)

The evolution of the feminist movement in Pakistan mirrors, to some extent, the movement in Iran in the 80s and 90s. The islamization for some had represented an honoring of women and especially mothers and family law (Moghadam, 2005). Reformation in Islam (Arslan, 2005; Moghadam, 2005) might be directing the feminist movement or the feminist movement might be directing the reformation in Islam. Either way, the exegesis of the Quran with a feminist perspective is creating a new paradigm for discussing women's rights in the Muslim world.

What does it mean to be a Muslim woman? On the one hand discussions about trying to understand one of the most misrepresented groups of women is long overdue, and, therefore encouraging, but on the other hand, it is disheartening to note that discussions about the hierarchy and disparity in gender and religion is just beginning. To add to this, it is only recently that some of the constituents have been included in this discussion: these include women in academia (Abu-Lughod, 1993; Ahmed, 1992; Asghar Ali, 2000; Mernissi, 2001; Wadud, 2003) who have begun to voice their perspectives concerning Muslim women's identity. And even with these additions to the discussion, it is important to refrain from making generalizations about Muslim women; just as coming up with a generalization of the reality of any individuals that belong to a common belief system would be inaccurate because it is impossible to bring together all the multiple realities of such a large and diverse group of individuals.

To begin an understanding of some of the myriads of realties that represent the identities of women who identify themselves as Muslims, it is necessary to analyze the traditional and the current representations of them in western culture. As I write about this representation, I would like to affirm the idea that "Positionality, feminist theorizing teaches, not only is not a handicap but must be made explicit and explored."(Abu-Lughod, 1993). As a Muslim woman of Pakistani and British descent, and having spent most of my adult life in the US (California) my perspectives are unique as compared to a Muslim woman from Egypt, Indonesia, or any other geographical and cultural background. Considering my own socio-cultural background within Pakistan, my experiences are unique from other Muslim women who grew up in Pakistan. As a Professor of English, and a doctoral student, I am not surprised by the results of a recent survey in the UK that shows:

> The presence of Muslim women in higher education and the diverse routes they follow in order to enter university, contradicts problematic discourses that suggest that Muslim women's educational choices are limited due to cultural or religious reasons (Tyrer & Ahmad, 2006)

It is for this reason that I react strongly to the assumption that the Muslim woman is veiled, demure, and suppressed. This myth can be traced back through the literature and art of colonial times that helped perpetuate the image of the "otherness" of the Muslim woman. The myth lives on in the media today. However, it is a myth! Not reality. There is no archetypal Muslim woman. But it is important to demystify this myth and modify this perception to reflect the multiple realities that exist. *Orientalism* (Said, 1979) was the beginning of this demystification, which focused on the "oppositional" consciousness. However, no culture, or religion intrinsic to the culture, is one-dimensional. No group can be identified in this manner, and with immigration and globalization, the elusiveness of boundaries between cultures has intensified:

> I consider Islamic feminism to be both an important part of the emerging women's movement in Iran and a historically necessary contributor to the Islamic reformation. I would also argue that Islamic feminism is part of what a number of feminist scholars, myself included, are analyzing and theorizing as "global feminism". (Moghadam, 2005, p. 5)

Globalization and Technology

Globalization for many is equated to free markets (Suarez-Orozco & Baolian Qin-Hilliard, 2004). Others use the term interchangeably with such concepts as *transnationalism* or *postnationality*. Still others use the term as a proxy for *imperialism* or *neocolonialism*. In the popular mind, globalization is often a proxy for Americanization. Others use globalization to examine themes that in earlier scholarship came under the rubric of "development" or "world systems" theory. However, for most scholars who study globalization today, globalization "…is a set of processes that tend to

de-territorialize important, economic, social and cultural practices from their traditional boundaries in nation states" (Suarez-Orozco & Baolian Qin-Hilliard, 2004, p. 14).

Education in Pakistan has been left so far behind compared to its counterparts in the region (Easterly, 2001) that being globally competitive will be a greater challenge for the people of Pakistan compared to its neighbors (Kazmi, 2005):

> Asian countries strive to achieve a balance between global competitiveness and relevant context-sensitive education and training; this is an opportune moment to examine new ways in which education system can be effectively deployed in the process of human resource development, which can contribute to economic and social progress in South Asia. (p. 22)

The success of women in higher education in Pakistan is indicative of the potential of women at all levels of education in Pakistan. However, since most institutions of higher education are in urban areas of the country, for women in rural areas, this success is hampered because of restricted access to education. How can the educational needs of women in rural areas be met effectively? What role does technology have in increasing access? An overview of studies (Haque & Batool, 1999; Kanwar & Taplin, 2001; Panhwar, 1996) revealing the impact of technologies on the education of women, followed by an outline of trends in technology in higher education (Amjad & Ahmed, 2003) compared to trends in other South Asian countries (Demiray, 1995; Reddi U. and Mishra, 2005) can help make some conjectures about the influence of computer technology on the education of women in colleges and universities in Pakistan.

Allama Iqbal Open University (AIOU) of Pakistan was established in 1974 in response to the urgency to expand educational opportunity specifically with the need to decrease the gender disparity in education (Demiray, 1995). The mode of delivery is mainly through radio and TV and mail service to provide texts and other educational material. Some of the shortcomings of this system are based on the infrastructure- the

mail system- of the country. The courses taught at this university focus mainly on teacher training and general education, but modifications have been made to update the curricula offerings to meet the needs of the day. The Open University of Sri Lanka, on the other hand, which was established in 1980 is affiliated with Sri Lankan Institute of Distance Education (SLIDE) and offers course focusing on technology and engineering (Demiray, 1995).

The ability to provide access to education for women through courses offered at AIOU in Pakistan is evident through both quantitative and qualitative studies (Haque & Batool, 1999). The Women's Secondary Education Program (WSEP) through AIOU, which was set up primarily to create access for women, but was adjusted to include access for men, was used to introduce a skill based curriculum relevant to the realities of these women, and was aimed at training women to teach in rural areas. Following the success of this distance education project, other such programs were introduced in a number of African countries as well as in South Asia. The major benefits of this system included increased confidence of the participants, financial gains, opportunity to start their own business, ability to help children with school work and most relevant to this study the opportunity to continue into higher education (Haque & Batool).

Other studies on women's issues and distance education reveal the success of distance education in Pakistan (Abbasi & Miller, 1995; Hiroo, 1992; Panhwar, 1996). Even though computer and internet technology has been introduced fairly recently into Pakistan's institutions of higher education (Amjad & Ahmed, 2003), it could be considered a major contributing factor to the success of women. Previous studies relating to women's education and traditional technologies of radio and television (Kanwar & Taplin, 2001) reveal that within the culture of Pakistan, technology can make a positive

contribution to access to education. Access being one of the greatest indicators of ability to enroll in school, it seems that distance education has an important role in decreasing gender disparity in education and literacy rates in Pakistan.

Proximity to schools is even more important for girls in Pakistan than it is for boys. The likelihood of a girl not attending school is greater if the distance between home and school is greater (World Bank, 2005). A study of women from Asia (CRIDAL, 2000) reveals that easily accessible educational opportunities and the impact of communication technologies on the social and cultural environment are making substantial differences to the attitudes, values, and concerns of Asian women. With these new technologies, Asian women are likely to benefit much more from improved access to education.

The introduction of newer technologies, including computer technologies and internet access could potentially revolutionalize higher education for the women of Pakistan. These technologies have been used effectively in private educational systems since the early 1980's (Amjad & Ahmed, 2003) to teach technological information, but not as a methodology to teach general education. In the early 1990's computer technology was introduced into public institutions of higher education, but it was still not used as a primary mode of transmitting information or as a method of learning. Also, internet access is not readily available in these institutions even though it is available through internet cafes and in private institutions. The disparity between public and private institutions is clear (Amjad & Ahmed, 2003):

> in education institutions where the information technology and Internet are taught to the students, the services for accessing the information ocean through the Web are not available for the students, even the faculty members of that IT institutions do not have access to the Internet and they normally use a shared computers (one or two) which are connected via dialup connectivity. Thus, how can we expect from the teachers to teach the advanced technology and about the recent

> advancements around the world, when they don't have access to gather the information at their ease. This lacking of Internet connectivity is mostly found in public sector institutions whereas private institutions have realized the importance of providing these services to their faculty as well as non-teaching staff. (p. 5)

Despite the influx of computer related technologies in the country, the educational institutions are still lagging. To compensate for this lag, the Virtual University was established in 2002, to provide access to education. Using satellite television broadcasts and the internet this university is the first public university in Pakistan to provide distance education using computer technology. The virtual campuses are set up throughout the country with the main campus in the city of Lahore. The impact of this university on the education of women is yet to be seen. Will it help decrease the digital divide on a global level and the gender disparity on a national level? If according, to previous studies distance education has proved to be beneficial for the women of Pakistan, it is possible that the new technologies will help empower and liberate women through education; it can ensure their success to compete on a global level. On the other hand, it can also lead to further suppressing these women through the exploitation so closely related to globalization

Technology in Higher Education

A common misconception relates globalization with modern times and the introduction of transportation and technologies that allow the world to become a smaller place. However, on various levels, globalization has been a trend in the world at large whenever large groups of individuals traveled from one place to another. "Globalization is what happens when the movement of people, goods or ideas among countries and regions accelerates"(Coatsworth, 2004, p. 38). In this context four major periods of globalization have been identified beginning with Columbus' arrival to the New World in

1492 till the early 1600s. This was followed by second wave of European immigrants, which also included the establishment of the slave trade in the colonies. In the late nineteenth century the third wave of globalization ensued and the most recent period after World War II (Coatsworth, 2004). In all these eras productivity was immensely increased but at the expense of a large majority of people. The question arises whether today's globalization through computer and internet technologies will not have the same impact: will one group gain at the expense of the others?

According to the Future Project Report (2000):

> The globalization of higher education is at a critical juncture—technology is making tertiary education accessible to a greater number of people than ever before. At the same time, there remains a stratification between technology "haves" and "havenots" at the global level. Careful study is required in order to insure that educational opportunities develop equitably, and that the quality of educational programs meets appropriate standards. (p.28)

Technology enhances learning in multiple ways through multiple dimensions: an on-line Writing lab or (OWL) allows students to perfect their writing skills on their own time; a virtual lab allows a chemistry professor to show an experiment without having to provide the whole class with lab facilities; software can be used to enhance learning at different levels (Newman, 2001). But the question still remains about whether these opportunities are made available for all or whether they are exclusive to some students.

In the US, the incentive for higher education has definitely changed from its inception in 1636. The philosophical foundations have moved far from the intrinsic religious affiliations of Harvard, Yale, and William and Mary. And some of the directions higher education is taking today includes the following (Hanna, 1998):

A. Extended traditional universities

B. For-profit adult-centered universities

C. Distance education/technology-based universities

D. Corporate universities

E. University/industry strategic alliances

F. Degree/certification competency-based universities

G. Global multinational universities

Of this list of changes, corporate universities and global multinational universities might prove the biggest challenge in providing effective education. The former might base all decisions concerning curriculum, pedagogy and assessment, and course offerings on a business model. This would change the intrinsic spirit of the university, which has already evolved over the past few centuries. The globalization of multinational universities might be the most harmful to the diversity of ideas and attitudes world wide. If American, or other national, universities become the main source of research and education, other perspectives may be subdued or ignored in the process. Would this be a colonization of the education systems of the less developed countries like Pakistan?

Related directly to the mono-cultural perspective is the risk of standardization "reducing it to its lowest common denominator" (Duderstadt, Atkins, & Houweling, 2002). Then not only will universities be researching and teaching with only a few main perspectives, to allow for the commercialization to succeed, the intellectual challenge might be diluted. It might even become impossible for local universities to compete with the globalized American or other western universities.

Another major challenge concerning the introduction of technology in higher education in less competitive areas of the world is the extremely rapid evolution of technology and the need to keep abreast. Traditional institutions-especially those in less developed regions- take years to evolve teaching styles and pedagogies and are similarly reluctant to update curriculum. On the one hand this speed could prove beneficial if

institutions are able to revolutionize the system, and on the other hand those institutions that lack the finances or resources to do this, will be left behind. Constant and rapid change may be beneficial, but it could also be contrary to the foundations of education allowing students and professors time to reflect on learning.

Others, however, predict that regardless of the benefits or challenges of introducing technology in higher education, the future of technology in higher educational institutions in the US depends more on the bureaucracy involved rather than the action of teaching and learning. "The future of … instructional technology in higher education will most likely be determined by how instructional issues are negotiated between administrators and faculty, an issue between management and labor" (Marsh II, McFadden, & Price, 2003, p. 3).

The strategic plan for institutions of higher education in the US reveals what the future will look like for students in private universities versus those attending public institutions. The gap between the haves and have nots seems to be clearly visible from these numbers. How can this difference be prevented? Is this still a continuation of the traditional system of higher education in the US? As Gumport (2005) points out, no definite predictions about the impact of technology on higher education can be made. Technology has been evolving with such speed, and institutions of higher education tend to lag far behind.

> We must keep in mind that technology is not a magic wand, but merely a set of tools. The ultimate challenge may involve not only positioning and investing amidst various social, political, and economic considerations, but nurturing the imagination for harnessing its power and as-of-yet unimagined educational potential. (Gumport, 2005)

Technology and Women in Higher Education

At the fourth World Conference on Women in Beijing in 1995 the first resolution included the acknowledgement of:

> voices of all women everywhere …[and]recognize[d] that the status of women has advanced in some important respects in the past decade but that progress has been uneven, inequalities between women and men have persisted and major obstacles remain, with serious consequences for the well-being of all people. (UN, 1995, p. 3)

At the same conference gender issues in Information and Computer Technology (ICT) was introduced, but was not taken up for discussion as to changes in policy. It wasn't until the World Telecommunications Development Conference in 1998 that the inclusion of gender issues in ICT was considered imperative in the workforce and other areas of life. In the new millennium with the rapid development in ICT, "if gender issues are not articulated in ICT policy, it is unlikely that girls and women will reap the benefits of the information age …However, the presence of gender issues rarely extends to information and communication technologies" (Hafkin, 2002, p. 4).

The impact of globalization through technology on women in developing countries has been documented to show a positive impact (COL, 1998; Hafkin, 2002; Hafkin & Taggart, 2001; Kazmi, 2005; Marcelle, 2000). Corporate universities and global multinational universities might prove the biggest challenge in providing effective education. The former might base all decisions concerning curriculum, pedagogy and assessment and course offerings on a business model. This would change the intrinsic spirit of the university, which has already evolved over the past few centuries. The globalization of multinational universities might be the most harmful to the diversity of ideas and attitudes world wide. If American, or other national, universities become the main source of research and education, other perspectives may be subdued or ignored in the process similar to the process of Globalization in the previous centuries

Related directly to the mono-cultural perspective is the risk of standardization "reducing it to its lowest common denominator" (Duderstadt, Atkins, & Houweling, 2002). Then not only will universities be researching and teaching with only a few main perspectives, to allow for the commercialization to succeed, the intellectual challenge might be diluted. It might even become impossible for local universities in Pakistan to compete with the globalized American or other western universities.

Another major challenge concerning the introduction of technology in higher education in less competitive areas of the world like Pakistan is the extremely rapid evolution of technology and the need to keep abreast. Traditional institutions-especially those in less developed regions- take years to evolve teaching styles and pedagogies and are similarly reluctant to update curriculum. On the one hand this speed could prove beneficial if institutions are able to revolutionize the system, and on the other hand those institutions that lack the finances or resources to do this, will be left behind. Constant and rapid change may be beneficial, but it could also be contrary to the foundations of education allowing students and professors time to reflect on learning (Gumport, 2005):

> We must keep in mind that technology is not a magic wand, but merely a set of tools. The ultimate challenge may involve not only positioning and investing amidst various social, political, and economic considerations, but nurturing the imagination for harnessing its power and as-of-yet unimagined educational potential. (p. 23)

Education as Freedom through Dialogue

Education is considered by some to be key to development (Kazmi, 2005), but for Sen (1999) it development is dependent on multiple freedoms consisting of among various other factors, freedom of education and human rights. More specifically in the case of women, he identifies women as both the "patients" and the "agents" of change. This duality of their relationship to society and themselves creates a tension: how can

women who need to improve their "well being" be the ones who bring about the change(Sen, 2000)? If they are in a position of oppression, how can they objectively and rationally identify their situation, problematize this situation and then become agents to bring about that change? It is this realization of the duality of women's role in society that if unfulfilled can lead to even more deprivation. Once women understand that they are the "patients" or oppressed, then if this oppression is not alleviated, the result can be even more devastating. For now the woman who realizes the inequities in life, but is not empowered to transform these inequities will not only be aware of her situation, but will be unable to affect change. The question then arises, how does the process of realization begin and how does the transformation take place? "Perhaps the most immediate argument for focusing on women's agency may be precisely the role that such an agency can play in removing the iniquities that depress the well-being of women." (Sen, 2000, p. 191)

Within the cultural gender expectations, if one's knowledge and contribution is not considered of a high value that is reflected in how that individual or that group is perceived within the society. If taking care of children and the work within the home is considered less productive than working outside the home, the social capital that women bring to the society will have less value than that of their male counterparts. Recognition of the worth of the social capital that women share with society and the ensuing empowerment is not only beneficial for women, but also for children and men. Sen (1999) emphasizes voice and agency to ensure the "social standing" of women in the family and the community. Sen (1999) argues that the independence gained by women working outside the home and the education that helps them make informed decisions:

> The perception of who is doing how much "productive" work, or who is "contributing" how much to the family's prosperity, can be very influential, even

> though the underlying theory" regarding how "contributions" and productivity" are to be assessed may rarely be discussed explicitly. (p 193)

Summary

To create a context for the dialogues with the participants in this study, the historical, sociological and theoretical framework of their realities will facilitate an understanding from within. Considering the challenge of this methodology of this study as being unprecedented in previous studies relating to the topic of women in higher education in Pakistan, the process of the literature review has amorphous depending on the perspectives of the participants.

A detailed analysis of the Pakistan's history and culture relating to its educational institutions was necessary to investigate the current situation of these women and to predict what the future might hold for others following in their path. The colonial legacy impacted the social structure in a variety of ways. To some extent it fossilized the patriarchal society as being one of the only ways to create an identity for a culture that otherwise is being overridden by the influence of globalization. Within the educational system, the conflicts between private and public creates a deeper divide that impacts the success or lack thereof for the participants. One of the main outcomes of this is the use of English as the language of instruction in private schools as opposed to Urdu in public schools at the elementary and high school level. In higher education in Pakistan because English is predominantly the language of instruction, the women identify the success of their students linguistically in the ability to communicate in English.

The women of Pakistan find themselves trying to find their place in society in this backdrop of a colonial past and the globalized future. The feminist movement for these women, which was a fairly integral part of the freedom movement, has in recent years taken a slightly different direction. Where women were speaking out for their rights in a

colonial society before 1947, in more recent years many of them are focusing on their rights from an Islamic perspective. They are looking at the Holy Quran for guidance on equity.

To add to the historical and feminist perspective, the impact of technology and especially internet based and cellular technology, Pakistani society faces a greater challenge in compromising with the western perspective that is having a great influence. For some this influence is positive and productive. For others it is detrimental in that the cultural and social expectations are being questioned by the younger generation that has internet access.

As mentioned earlier, internet and computer technology has only recently been introduced into institutions of higher education in Pakistan. In fact for most, their access to this technology is on a personal level-they have computers at home or access through internet cafes.

Using post colonial discourse with a feminist approach as a framework to analyze the voices and the images of the women of Pakistan, the theories suggesting the need to create an identity in historically colonial regions of the world will be tested. The relationship between development and globalization and its impact on women in a post-colonial developmental nation remains to be examined. This study may reveal the connection of the past and the present to the future covering multiple social and cultural perspectives of women in higher education in Pakistan. As a woman from Pakistan, who has experienced the culture and norms of society, and has been able to maneuver within this framework with a fair level of success, the researcher will help create a voice and direction for other women to become agents of change in their lives.

CHAPTER III

METHODOLOGY

Introduction

"The right plan is to have no plan" (Easterly, 2006) . Easterly argues that ideas imposed from the outside do not work in economics, politics, and I would argue, education as an extension of politics. The great East Asian economic success stories of recent decades were those of Japan, China, Taiwan, South Korea, and Thailand - countries that were never successfully colonized by the West. The evolution for these countries was through their own cultures, rules, and disciplines which helped build an indigenous foundation for rapid economic growth. The Philippines, according to Easterly, is the one nation of that region that was colonized and it lags behind the other countries of that region.

A country with a colonized past, Pakistan even after over fifty years of independence has been unable to progress. Gender disparity at all levels of education in Pakistan is one factor that makes it difficult for women to contribute fully to their families, communities, and general development of the country (Easterly, 2001; Rahman, 2005). This disparity tends to decrease as the education level increases. Among other factors, the urban settings of most institutions of higher education might be one major factor that explains this decrease in disparity. If, however, using technology and distance education for female students in more rural settings is proved to help achieve gender parity in education at the higher level, this might indicate a need to continue in this direction. Discussions with the women involved in using technology in higher education helped create an environment of dialogue, problematizing, investigation, and ultimately action that might help create an environment that is conducive to progress for women.

Considering previous studies have predominantly been made by Pakistani men or non-Pakistanis, the researcher of this study is a Pakistani woman whose perspective is different from that of previous researchers with an insider's point of view. This study adds an enlightening perspective because of its focus on women who have been successful in higher education and by including the role of technology and the virtual classroom in this dialogue, the discussion of women's education in developing countries is brought into the new millennium. How these women define their successes within their cultural contexts is an integral part of this study and further identifies what the women of Pakistan might wish to accomplish by completing higher education. As a "searcher" rather than a "planner" I have worked with the "insiders" to identify "homegrown" solutions.

> Planners announce good intentions but don't motivate anyone to carry them out; Searchers find things that work and get some reward. Planners raise expectations but take no responsibility for meeting them; Searchers accept responsibility for their actions. Planners determine what to supply; Searchers find out what is in demand. Planners apply global blueprints; Searchers adapt to local conditions. Planners at the top lack knowledge of the bottom; Searchers find out what the reality is at the bottom. Planners never hear whether the planned got what they needed; Searchers find out if the customer is satisfied…A Searcher believes only insiders have enough knowledge to find solutions and most solutions must be homegrown (Easterly, 2006).

An integral part of this project is to "search for" and identify action items by the co-researchers to create an environment conducive to other women following in the footsteps of the women participants. After the initial dialogues the participants would identify what action can help alleviate the problems that women face in higher education to make it accessible for them. These action items would include short and long term activities and processes that might incorporate technology or as the search would indicate go deeper than the use of technology.

Research Design

This study is based on the principles of Participatory Action Research, where dialogue with disempowered individuals may lead to action that facilitates the participants to become agents of change in their lives. The participants reflected on their experiences in education after dialoguing with them on an individual basis. Then they met as a group to further reflect on why and how they have been successful and how others might benefit from their experience. Since research based action and collaboration is currently not an essential component in institutions of higher education, the researcher worked closely with the participants and involved them in data collection.

The data collection included multiple measures listed below:

- Individual dialogue (recorded and transcribed)
- Group discussions and problematizing (notes taken and analyzed)
- Discussions with group members over email

Participatory Action Research

Participating in Action Research

The choice of Participatory Action Research as the methodology of this study is based on the premise that Participatory Action Research links social change with creation of knowledge as addressed by researchers (Greenwood & Levin, 1998; Herr & Anderson, 2005; Maguire, 1987; Sagor, 1992) leading to " Development of the critical consciousness of both the researcher and participants; Improvement of the lives of those involved in the research process; Transformations of the fundamental societal structures and relationships" (Maguire, 1987).

The gender disparity in the cultural, political, economic, and educational spheres of Pakistan reveals a need to create a consciousness leading to knowledge of the experience

of women. This knowledge should further lead to the empowerment of women. To understand the realities of these women, it is important to hear their voices and to see their world. Through a cyclical process of dialogue and thematic understanding, the participants went through a transforming process that not only helped them identify how they can change their lives and empower themselves (Maguire, 1987), but also guided the researcher on how their experiences can be shared to benefit others. The process was non-linear and consists of various levels of problematizing, dialoguing, analyzing, and planning in a cyclical manner as represented in Figure 1:

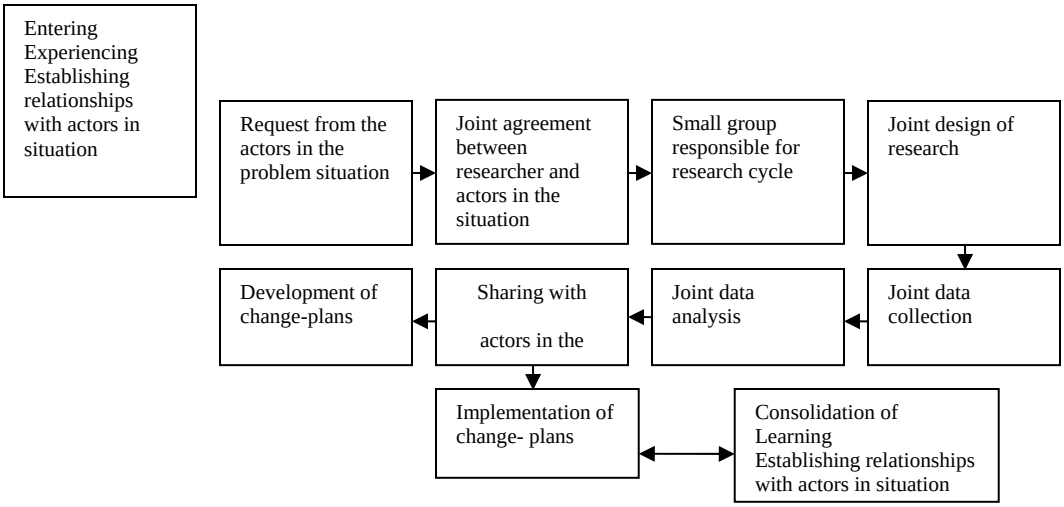

Figure 1. Steps in the participatory research approach (Maguire, 1987, p34).

Not only were the participants dialoguing about the pressures of a patriarchal society, they were also discussing their perception of a colonial past and the impact it has had on their identity for themselves and for how others see them. This process being cyclical, required more than one dialogue.

Including technology in this dialogue helped focus on the impact of globalization and the inclusion (or exclusion) of the world (or a part of it) through the internet (Suarez-

Orozco & Baolian Qin-Hilliard, 2004). Some participants felt that the impact was extremely negative while others saw the benefit of globalization.

The three main constituents of action research are "research, action and participation" action research being one of the most effective ways to create knowledge that impacts the lives and realities of the participants involved in the project. The democratization of this knowledge through the act of participation validates the knowledge created by the participants, and should lead to a liberatory action. This might be the action of self-realization or of mobilization (Greenwood & Levin, 1998). Since action research is so amorphous and dependent on the participants involved in the research, the action depends on the participants; the action cannot be predicted through a hypothesis as in traditional quantitative research. The constantly evolving nature of the transforming action of this process-even within one study-cannot be predicted in a linear manner. The researchers must be comfortable in accepting the outcome as it unfolds (Herr & Anderson, 2005).

Evolution of Action Research

Action research today has transformed from the initial and somewhat authoritarian approach of Lewin of the early 1940s. Lewin's approach of "dismantling former structures (unfreezing), changing the structures (changing), and finally locking them back to a permanent structure (freezing)" (Greenwood & Levin, 1998), has changed quite dramatically to a more fluid and non-linear process. The action research slogan that "the best way to understand something is to try and change it" is also credited to Lewin. Action researchers understand and acknowledge theories of knowledge by changing the social structures.

Other innovations in action research include studies in the Tavistock Institute in Great Britain focusing on group productivity, making changes, and leading to the "industrial democracy movement" which spread through Norway and Sweden to create a democratic process using a sociotechnical process in industry (Greenwood & Levin, 1998). This redistribution of knowledge away from the traditional hierarchal form of knowledge to include a focus on "democracy" was ultimately modified to include the concept of "empowerment" in the knowledge paradigm. Today, participatory action research focuses on the creation of knowledge by the participants to empower them in their lives.

Positionality in Participatory Action Research

"Research validity" and "research ethics" in participatory research must be addressed through the Positionality of the researcher (Herr & Anderson, 2005). Within the feminist paradigm of research Positionality clarifies the knowledge created through research-"Positionality, feminist theorizing teaches,…is not a handicap but must be made explicit and explored" (Abu-Lughod, 1993). In traditional quantitative research the researcher is considered an outsider objectively studying the subjects of research to create knowledge and ultimately theorize this knowledge in the academic setting (Creswell, 2003; Herr & Anderson, 2005; Maguire, 1987). Within the feminist paradigm of participatory research, five perspectives of knowing have been identified to challenge the traditional methodologies (Babbie, 2004):

1. *Silence*: some women especially early in life feel themselves isolated from the world of knowledge, their lives largely determined by external authorities.
2. *Received knowledge*: from this perspective, women feel themselves capable of taking in and holding knowledge originating with external authorities.
3. *Subjective Knowledge*: this perspective opens up the possibility of personal subjective knowledge, including intuition.

4. *Procedural Knowledge*: Some women believe they have fully learned the ways of gaining knowledge through objective procedures.
5. *Constructed knowledge*: the authors describe this perspective as " a position in which women view all knowledge as contextual, experience themselves as creators of knowledge, and value both subjective and objective strategies for knowing. (p.31)

This study has promoted the participants to end the silence; creating subjective knowledge based in the context of their experience and reality.

Creating Voice through Dialogue

Dialogue is necessary to help create a voice for the participants. "A dialogue should work without a leader and without an "agenda" (Bohm, 1996, p. 15); rather with a facilitator, the researcher. Like teaching and learning it should be "a creative act, a critical act, and not a mechanical one" (Friere, 1994, p. 80). Knowledge of the participants and trust between them are key elements in having a dialogue, and it was, therefore, crucial to create and maintain an environment that allowed this kind of communication to happen. If the group is a "microcosm" of the society, it was important to be able to dialogue about society to reach an empowered position in that society. An intra-cultural dialogue of women talking about their culture in higher education without any assumptions or agendas (Bohm, 1996) until the discussion focused on what the participants believe was of utmost importance. After dialoguing and then identifying the main issue, the participants were able to identify some of the key issues and themes of their realities. After identifying and prioritizing these issues, they were able to come up with recommendations that would help benefit others through their experience.

As a facilitator in these dialogues, my main concern was not to impose my ideas on the participants. Within a hierarchical and patriarchal culture, a "limited dialogue" (Bohm, 1996) takes place, and this does not allow "collaborative dialogue" which, if held effectively, should enable transformation. If individuals feel that they cannot suspend

their "assumptions", this will lead to a dialogue with a purpose or an agenda, and that is counter to Bohm's (1996) concept of a dialogue. Being “liberatory” and collaborative “… dialogue becomes a horizontal relationship of which mutual trust between the dialoguers is the logical consequence” (Friere, 2000, p. 91). In an attempt to have a collaborative dialogue, I had to suspend my assumptions. This led to what Bohm describes as an awareness of other's assumptions, which in itself was beneficial even if it probably will not affect change.

In participatory research, there must be an awareness of the participants’ assumptions; to be able to create a “participatory consciousness” to affect change, the participants must also see the connection between “presentation” and “representation” as a two-way connection. Participatory consciousness is a collective consciousness that incorporates the group perceptions (Bohm, 1996). Individuals perceive themselves through the representation of others. If individuals are told often enough that what they value in life represents a lower worth than the values of others, whenever they think of that value they will assume its lower value to be a presentation of a fact rather than the representation of others. They begin to believe their limitations as presented by others. And if they are unaware of this connection, they will not question it (Bohm, 1996). For colonized and oppressed individuals, internalizing the representation of themselves through consciousness and the eyes of the colonizer can lead to devaluing what otherwise might have been held in high esteem. An awareness of this concept guided the dialogues and discussions. As the participants expressed value judgments on their realities, investigation through dialogue helped clarify the generative themes (Friere, 2000), which are essential to participatory action research.

"Our relationship depends on how we present other people to ourselves, and how we present ourselves to other people" (Bohm, 1996). Therefore, through dialogue, it became clear that the women in this study felt they had been empowered by the choices they made, and because the participants truly believed that the way they present themselves to others in society is empowering then whatever choices they make should lead to Sen's (Sen, 2000) concept of freedom. If, on the other hand, they had believed that they present themselves as having less power and if they had presented to themselves others as having more power, then they would not be able to be free. Reflecting on their experiences, these women felt that some decisions in their lives had been made because of others while others believed it was circumstances. However, being part of this study and reflecting on their past and anticipating the future for themselves and others created an awareness of the freedoms that are possible for them.

Action through Dialogue

To understand the dialogue, the words had to be analyzed for their two components: action and reflection (Friere, 2000). If reflection does not lead to action and vice versa, each of the components will become ineffective. "Human beings are not built in silence, but in word, in work, in action-reflection" (p. 88). Faith, humility, love, faith, and critical thinking as characteristics of the participants are key to promote action and reflection. These non-quantifiable aspects of this research validate the participatory action methodology required for this study.

The act of participating in this study was empowering for the participants. Some mentioned how excited they were to be involved in such a project, while others showed an interest to continue in such projects. The participants felt the project should not end with the dissertation, rather continue on an on-going basis. I agreed with them that this

would be a beginning for collaboration to document the voices and images of women in higher education in Pakistan, to ensure there is a change in the way society perceives women and they way women think of themselves.

Listening Constructively

The goal of this study was to encourage the participants to reflect on the meanings of events and ideas, to express and work through feelings that were interfering with clearer thinking, to construct new meanings, and to make decisions (Weissglass, 1998). A personal reflective journey through the cultural and political history of the country and its impact on the education of women helped the researcher to better understand the lives of Pakistani women in higher education. Whether these events have directly or indirectly influenced the motivation, goals, and successes of these women also helped understand the implication of decisions made by policy makers on individuals. Reflections on the role women in higher education have to play in their progress and development and whether technology has had an impact will show how others need to follow. An analysis of the emotions and feelings that accompany the changes in the lives of these women as they continue in pursuit of achieving their goals helped clarify the challenges they face as they continue working toward the goals, and might help problematizing these challenges to come up with ways for others who face similar challenges to overcome them. The knowledge and meaning created through this reflection helped all the participants to make decisions to continue in the direction of success, however they defined it.

At the same time it is important to remember that "educational change cannot be mandated" (Bohm, 1996). The change in attitude and motivation has to come from within and no policies can ensure transformation of the system unless the stakeholders

are convinced that there needs to be some kind of change. The participants in this study did not feel that the steps being taken in education for women in higher education were adequate for their continued success. After reflection, they believed that action should definitely not be a continuation of the present. They did decide that change is needed in very specific areas that did not necessarily include technology. The recommendations made by the participants were focused on an in-depth look at the curriculum and the teaching methodologies, and related to this they felt computer technology would benefit others.

Research Setting

This study was done in Pakistan. The participants were initially selected from the participants who attended the CALL (Computer Assisted Language Learning) training workshop in summer 2005. This workshop was intended to train college professors to use technology in language classrooms. Since only two participants of the workshop were available and interested to participate in this study, other participants were asked to join after explaining the focus of this project.

The setting for the dialogues was in informal locations to allow for open discussions concerning the participants' lives. The participants were asked were they would like to meet. The researcher met with one participant in a restaurant as she was more comfortable meeting in a public place. Another participant met at the researcher's home. Two of the participants met at the home of an acquaintance, and for the two participants who lived in another city, the participant met them in their homes.

As mentioned in the literature review on Pakistan and women in Pakistan, the cultural restrictions did create a few challenges in finding participants willing to spend time and to share their ideas with an outsider. Even though the researcher is a Pakistani

woman, who speaks Urdu and Punjabi, local languages of the area, there was some resistance in sharing personal details regarding education, culture, and religion with someone from the west. However, once the participants had shown interest and motivation to work with the researcher, they were fully committed to the process and were very willing to share their experiences with the researcher and with each other.

Research Participants

The participants were six women who are currently studying or teaching in or have recently graduated from institutions of higher education in Pakistan and meet the requirements for this study. These requirements include that they:

Identify themselves as Pakistani women

Are graduates of educational institutions in Pakistan

Are available and willing to participate in this study

The first six participants who were interested in the study were selected from the CALL (Computer Assisted Language Learning) workshop that the researcher organized and ran in Summer 2005 and continued in 2006. The women who attended this workshop were contacted via email and phone to see if they were interested in participating in the study. As mentioned earlier since only two participants from the workshop were able to work with the researcher, four other participants were recruited by acquaintances and after mentioning the project to others who were interested.

The first two participants are lecturers of English in universities in major cities in Pakistan. The other two of the participants were recent graduates from colleges for women, and they were planning to continue their education. One participant is currently

enrolled in a women's college in another large city of Pakistan, and the sixth participant did not continue with her education after the first two years in college.

Questions that Guided the Initial Dialogue

The Creative Reflection Model as defined by Weissglass (1998) was used to guide the initial dialogue questions. A personal reflective journey through the cultural and political history of the country and its impact on the education of women helped to better understand the lives of women in higher education. Whether these events have directly or indirectly influenced the motivation, goals and successes of these women also helped understand the implication of decisions made by policy makers on individuals. A reflection on the role women in higher education play in the progress and development of the country and whether technology has had an impact illustrated how others should proceed. The Creative Reflection Model encouraged the participants to reflect on all angels of their lives and to create a plan that would help others. An analysis of the emotions and feelings that accompany the changes in the lives of these women as they continue the pursuit of their goals will help understand the challenges they face. The knowledge and meaning created through this reflection guided the participants to make decisions regarding action to be taken by other women who desire to continue in higher education.

These questions (See Table 4) asked the participants to reflect on the role of technology in their education and how it relates to their success. They also encouraged the women to reflect on their perspective on what they value (Bohm, 1996) as success and how they identify success.

Table 4

Questions that Guided the Initial Dialogue

Research Questions	Initial Dialogue Questions
1. To what factors do women of Pakistan attribute their success or lack of success in higher education?	a. Tell me about your education. b. How do you define success?
2. How has technology affected their success in higher education?	c. Why do you think you were able to complete this level of education? d. What role has technology played in this process? And how do you define technology?
3. What recommendations can these women make to those who want to be as successful as them?	e. What problems did you face while completing your education and how did you address them? f. What do you recommend to other women who might be in similar situations so that they might be able to overcome these issues?

After asking the initial questions to guide the dialogue, the researcher probed further to allow for deeper reflection on what the participants had to say. When the participants responded to the researcher's questions by giving details related to their lives, the researcher encouraged the participants to elaborate on the comments they were

making to help both the participants and the researcher to analyze these statements. Probing into these statements led to topics and themes that were not directly related to the researcher's initial inquiry but were included because they were imperative to the participants' lives.

Data Collection Procedures

After the participants had been selected through the process mentioned above, the data was collected in two steps. The first set of dialogues with the individual participants was recorded and transcribed. Four of the participants were more comfortable talking to the researcher in Urdu. These dialogues were then translated by the researcher, who is fluent in Urdu.

In the second dialogue, after the participants had reflected on the initial dialogue, they met as a group to discuss the emerging themes. This was a five hour long discussion where all the participants met to discuss their perspectives on the themes and to give recommendations of what should be done to facilitate the experience of women in higher education. During the discussion, the researcher used flip charts to take notes. The participants wrote their own notes and reflections that they gave to the researcher after the discussion. Some of these notes were in Urdu, which the researcher translated to include in the study.

First Dialogue

Conducting dialogues with participants (Recording and transcribing the dialogue)

Sharing the transcription with the individuals

Reflecting on the dialogue through discussion, email, or phone

Second Dialogue

Reading the transcripts and analyzing them for significant statements

Discussing the statements and identifying themes

Organizing themes and making suggestions

Recommending action plans

Data Analysis Procedures

Keeping in mind the research questions, the data was analyzed by the participants to identify, critically reflect on, and discuss issues relating to the main themes. After the analysis was compiled, it was emailed to the participants to make sure it represented their ideas accurately. The analysis has been organized according to the three research questions.

Protection of Human Subjects

The participants were given written consent forms to participate in this study. The purpose and the activities of this study were explained to them carefully before they signed the written consent forms. They were given the option to keep full anonymity, if they so chose, by using pseudonyms and by not giving specific identifying details of their lives. During the first dialogue the participants did not want to use pseudonyms, but after reflection, they decided to opt for them.

Approval from the Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco and the Computer Assisted Language Learning (CALL) committee in Pakistan has been obtained to ensure that the study would be done ethically following the guidelines to protect the participants. For details please see Appendix A.

Background of the Researcher

My interest in women in higher education in Pakistan and the influence of technology in their success or lack of success began in the summer of 2005 while

organizing and implementing a training workshop for Professors of English and Literature to use technology in teaching language in the college and university setting. This three-year project was sponsored by the Higher Education Commission (HEC) of Pakistan. But this was not my first trip to Pakistan. I was born there, and apart from a brief stay in the UK spent most of my life in Pakistan until I moved to the US in 1989. Since then, I had been working in the high-tech industry as a technical writer, but had come back to teaching because of my passion for the profession.

I had taught English at a high school in Pakistan before coming to the US, so after completing a second Masters (the first one was from the University of the Punjab, Pakistan) I decided to teach English and ESL at community colleges in the Bay Area. I taught courses in software, business communication, and basic language skills. This experience helped me become involved in using technology in the language classroom.

After receiving tenure as an English/ESL professor at a community college in the San Francisco Bay Area, I decided to pursue a doctorate, while I worked full-time. The challenge for me has been juggling my work, my education, and my family with two young sons without compromising at any level. To add to this, I felt that I had reached a point in my career that I could share my experiences by training language teachers in the use of technology. Therefore, when I was offered the opportunity to be a consultant with HEC in the Language reforms section in computer assisted language learning (CALL) I knew I could not refuse.

The first summer workshop was a coming home for me both literally and figuratively. One of the participants at the workshop was a professor who taught at my own alma mater in Pakistan, an all women college that has recently been given the status of a university for women. The group included fifteen professors (both male and female)

from the central city of Lahore as well as universities in the less developed cities of Multan, Faisalabad, and Sargodha. The objective of this workshop was to introduce technology in English learning in higher education; however, the participants varied in their levels of expertise and knowledge in technology. Some had already received training in Computer Assisted Language Learning (CALL), but for the majority this was an introduction to incorporating technology in the classroom. Apart from the focus on technology, we had informal conversations about curriculum, assessment, and language policy and professional and financial support helped ground the training to the reality of teaching English. One such discussion concerned the teaching of language through literature and the need to focus on communication competencies of students graduating from the University.

The concern that caught my interest was the need for a pipeline connecting the elementary and high schools to institutions of higher education, to help students from varied backgrounds to have equity in education and equal opportunities to succeed especially in the area of language acquisition. This led me to make a connection with the participants, and especially the women, attending the workshop and to continue working with them on problematizing and identifying the issues related to higher education for women in Pakistan.

Even though there are seemingly insurmountable social, economic, and cultural obstacles, once women in higher education overcome the barriers at the elementary and secondary levels, they can be quite successful in reducing the disparity in higher education. Why are women in Pakistan able to achieve a fair level of success at a higher level when the gender disparity continues to grow at the elementary level? What can we learn from the success of these women that can be applied at the lower level of

education? And more importantly, what role is technology playing in this success story? Can some of what we learn from institutions of higher education be replicated at the elementary level? Or can the women help create an environment that empowers young girls to overcome the social and cultural obstacles that hinder their success academically? In this study I wanted to take this discussion further and combine the general inequities in the education of women in higher education and to investigate the influence of computer technology in their education to see whether, in Pakistan, this influence can affect other levels of education.

My own background growing up in Pakistan is fairly traditional. At home my sisters and I received a traditional Islamic education. I learned how to read the Koran and to pray five times daily. My parents' expectations from my educational outcome were also fairly traditional: I would be allowed to work outside the home only if I was in an environment that - for the most part- was gender segregated. And after I've got married, I would work if my husband and my in-laws felt it appropriate. My marriage would be arranged, as well as the marriages of my other three sisters. I did not disagree with this future that was planned for me. I was comfortable that my parents would make decisions that would ensure a safe and happy future for me. Maybe it was my luck, but the system worked. I completed my education with a master's degree in English from an all-girls college and taught in an all-girls school for three years before I got married and moved to the US.

I knew that even with an advanced degree and the training and experience to work outside the home, I would also be expected, for the most part, to take care of my responsibilities inside the home. I did not feel this was unfair as I felt that my husband

would be the main provider and would be expected to do his share. There were expectations on both sides.

On the other hand, to onlookers, I appear to be extremely untraditional according to the general expectations of how Pakistani women appear in public. My ability to be able to fit comfortably in two worlds is probably my strength. And it is a strength that was an important part of my education. My mother is an English teacher, who was born in England and married my father when she was 22. She moved to Pakistan and made sure that all her children were educated so that they could work professionally if they so chose. My mother has had the strongest influence on my life as far as my academic education is concerned; she has also been the promoter of my father's Pakistani culture.

Most of my cultural education, concerning culture in Pakistan, took place in Pakistan before I left for the US. However, some of the re-learning of the culture has taken place while I have been trying to guide my own sons on the expectations that my husband and I have of them. As a first-generation immigrant in the US, I have had to rethink my cultural education and expectations for my sons. I expect them to have some responsibility toward the extended family, but I do not expect them to marry someone I have chosen for them. However, I have explained to them that this way has worked really well for their parents.

As far as my academic education is concerned, within the socio- economic class to which I belong in Pakistan, I was able to perform at a fairly high level because many of my contemporaries did not continue with postgraduate education. Further, when I came to the US, I decided to continue with my education and attended San Jose State University to get another MA, and later through UC Berkeley received a certificate in Teaching English as a Second Language. Again this is something my contemporaries, the

other first-generation Pakistani immigrant women tend not to do. There are definitely those who have received advanced degrees in the US in medicine and engineering but usually women who have studied the arts or humanities from Pakistan tend not to continue with their education when they move to the US-this is probably another dissertation topic.

Women in Pakistan, similar to the majority of women worldwide, are the primary caregivers in the family, so if they choose or if circumstances arise for them to work outside the home, they are, by and large, expected to continue in this role: they are expected organize home-related activities including taking care of the children, cooking, cleaning, doing the laundry, and socializing in general. For many Pakistani women empowerment is not just related to their profession or education. If they can fulfill all their other responsibilities as a mother, daughter, wife, and even toward their extended family and friends, they have a strong feeling of accomplishment and power.

As a full-time professor at a community college in the Bay Area, a full-time student working toward a doctorate, and a mother of two teenage boys, I find myself trying to keep a balance with all these responsibilities. Because I have wireless internet access, and other computer related technologies available, this juggling act becomes much more manageable. I am able to email students, research through the library databases, and access websites to help write papers while my children do their homework. I am able to take on-line courses without having to stay away from my family for hours at a time. If this technology has allowed me to balance my social, professional, and academic lives without sacrificing any one, are other women who share similar cultural values empowered by it, or is it just another mode of delivery?

CHAPTER IV

FINDINGS OF THE STUDY

Introduction

Considering previous studies on women in higher education in Pakistan what needed to be investigated through a qualitative analysis interpreting and promoting the voices of women who have been able to negotiate higher education in Pakistan was whether computer technology has made any impact on their education endeavors. Because of the recent introduction of technology in institutions of higher education in Pakistan, it was important to see whether women in higher education believe that computer technology has in any way allowed them to do what might not have been possible otherwise, or whether they anticipate it having any impact on the education of those female Pakistani students who are currently enrolled in elementary and high school. If women who are either currently enrolled in higher education or who have recently graduated from university believe that computer technology can help reduce gender disparity in higher education in Pakistan, the continued use of this kind of technology would help promote the success of others.

The initial dialogues with the six participants helped build a foundation for the group discussion that proved informative and directive. For the researcher the need for a detailed, comprehensive literature review to enable a detailed discussion is not representative of action research project (Creswell, 2003). After the initial dialogue and the participants' reference to Islam and its impact on education and women, there had to be details related to the background of Islamic/Muslim feminism. Analysis of the data would not have been complete without a clear understanding of this particular theme. Interestingly, the participants did not feel the need to discuss this theme after the initial

dialogue, but in keeping with the amorphous nature of qualitative participatory research, the researcher chose to include a section on this topic in the literature review: "Analysis of the data should be ongoing, as should the review of literature. As with the methodology section, the literature review from the proposal phase is expected to shift and change when written up for the dissertation" (Herr & Anderson, 2005 p 85).

Some themes emerged from the initial dialogues. When the participants met as a group they decided which of the emerging themes needed to be analyzed as a group. The themes family, choices and decisions, freedom, education, technology in education were then analyzed by the participants and discussed in detail. After going through the process of dialoguing, reflecting, and then developing a critical consciousness, the participants ended the discussion with their joint recommendations on what should be done to ensure the success of the education of women in higher education in Pakistan.

Profiles of the Participants

All six participants were women who were born and educated in Pakistan. Two of the participants were lecturers at universities in major cities in Pakistan. One of these participants taught at a University for women and the other taught at a university which had a predominantly male population. Of the other four participants, only one is currently a student at a women's college. Two of the participants had already graduated with a BA from another women's college and one of the participants had completed the first two years of college, but had decided to drop out because of family responsibilities. The aim of the researcher was to work with participants who for the most part were involved in public institutions of higher education: whether as students, teachers, or recent graduates. This was mainly because institutions of higher education in Pakistan tend to differ greatly depending upon whether they are private or public. Even within

these two types of institutions there is a range of education and options for students and teachers, but the public education tends to be more affordable for the middle and upper middle class.

The lecturers were the initial participants who had participated in the CALL training project. After I had explained this study to them, they had both shown interest in the project. Other participants of the CALL workshop who were approached felt the commitment might be too much. The fact that both these participants teach English was helpful because competency in the English language is an important factor related to success in education in Pakistan (Rahman, 2005). On the other hand, getting the perspective of teachers in other disciplines would be enlightening and might give a different perspective to the expectation of the level of competency in English. For all the participants, English is used as a second language in the academic context. For the other participants, who were not competent in English and chose to dialogue in Urdu, there was a clear feeling of being left behind because they were not able to communicate in English. They would use a fair amount of words and phrases in English, but for the most part they decided to speak in Urdu, which is also not their mother tongue. For the majority of the participants, the mother tongue is Punjabi, the language of the majority in Pakistan, but it is not used in an academic setting on a formal level.

Three of the participants had no experience using technology. One of them had dropped out of college, whereas another was motivated to work toward an MA in economics if her family would support her financially. She was not very optimistic about this, but she seemed quite stoic. The third participant who lacked computer skills was adamant that she would take some computer course as she had seen how people around

her were using technology. However, she was also probably the most vocal about the negative impact of technology on society.

Looking at society and explaining their place in it, most of the participants explained, and, generally, were at terms with the gender division in Pakistan. Amna explained the gender divide being based on religious ideas, whereas Honey and Sana identified the biological and physical difference as reasons for the gender divide, but all the participants accepted the gender divide as inevitable. Amna, who had the strongest religious convictions, talked about how there were too many traditions in Pakistani society and how they had to be reduced to the fundamentals of Islamic beliefs. She also felt that the west was following the teachings of Islam, whereas the people of Pakistan were moving away from them. And that for her explained the progress in the west. Inventions and technology, she felt, were all mentioned in the Quran, and therefore, if Muslims would read the book closely, they would be able to make progress. In a similar context a participant was concerned about the location of the meetings and dialogues and showed a preference to meet in a public place. This is not an uncommon concern for women in Pakistan and generally women, and especially unmarried women, and their families will tend to be cautious about whom they meet and where they meet.

Economically Amna and Honey were at a higher economic level than the others not only because they were working, but also because their families were economically better off. Generally the only time money was discussed by the participants was when they were talking about being able to pay the tuition or educational needs.

Afzana

Afzana is a lecturer of English in a women's college in one of the largest cities of Pakistan. Afzana teaches in the university from which she graduated. She graduated

from a high school with a major in science because that is what her mother wanted her to study. She had wanted to study fine arts, but instead decided to study English literature, which she describes as "I was just painting with words. Brushes are used for colors and here I was using words. So I'm very happy I've done my masters in English."

She is the eldest and has four younger brothers. Her mother passed away a few years back and even though she had only recently graduated, she took on the responsibility of caring for the home. Being the only woman in the house gives her extra responsibilities, but she has a close relationship with her father and brothers. Her younger brother, a serious young teenager, accompanied her to our meeting. She fondly calls him "a little devil", but clearly he is mature beyond his years.

Her mother had a strong influence on her during her earlier years in education, but later she took the initiative to experiment in the subjects she chose to study in college. Her father was "neutral" about her decisions but they began discussing things later in her academic career. Her demeanor is fairly mild, but she makes statements like:

> …if someone was thrusting their opinion or decision on me I'm not going to do anything. I'm just going to leave that thing. Even if I'm willing I can't do it. That's something that's natural in me…I've always loved power. [laughs]

Looking back, she feels her father had a strong influence on her life, but she felt she was making a lot of her own decisions. However, she also concedes that she is not very obstinate.

She was reluctant to tell me her major in BA. She might think her lack of consistency in the subjects she chose indicates a weakness, but she emphasizes that this was a fun time, when she chose what she wanted to do. "I was just testing my caliber," she says. "I was testing my ability of adapting myself." By the time she started to do her Masters in English, she realized she had found her niche.

As a student, she felt she was observant and could absorb information to the extent that she could reproduce what the teacher had said, word for word. She was also very "outspoken" in class. And she feels she has retained these characteristics in her profession as a teacher.

In general, Afzana has not had to face any challenges in her educational and professional life. Even her job seemed to have come fairly easily. She started to work on a voluntary basis until there was a job opening, which she applied for and was able to get without too many challenges.

Honey

Like Afzana, Honey is also the eldest in the family and a lecturer of English in a large university in one of the largest cities of Pakistan. Her university, however, is predominantly for men. Only in the last few decades have women been allowed to study in this institution. The fact that Honey teaches both men and women tends to give her a worldliness that is not as obvious in the other participants. Honey was also a participant at the CALL workshop and was extremely enthusiastic about this and other projects that she has planned to work on.

Both of her parents have supported her educational endeavors and choices even though they do not have a strong educational background. Like Afzana, Honey's mother wanted her to study premedical science earlier on in her education. But she later opted for English Literature in BA and later for her MA. Honey emphasizes the fact that her father, who is a religious scholar, is "an exceptionally cooperative father", contrary to the stereotypical expectations of such a person. She says, "He has been the greatest motivating force behind me. He wanted me to do my masters in English". She adds,

"My father has studied religion well that's why he is so liberal about education." Honey admits that her father defies all stereotypes:

> He never asked us not to get education. He even asked us to get education at institutions that offered co-education. I think that is something different about my family that although they are not highly qualified or well-educated despite that they have been extremely motivating in getting us higher education.

For some of the other participants, institutions that offer co-education (male and female students) are a major restriction to getting education. Their parents or other family members will not permit them to get admission in such institutions. Honey realizes the novelty of her situation, and she elaborates how the encouragement she has received from her family is not typical:

> Even if they [other parents] realize the importance of education they don't encourage their daughters to go for MPhil and PhDs. I'm not talking about Masters. I think that most parents are aware of the importance of education till the BA and MA level. I am talking about higher education. So it is in this perspective that I found my parents different from others. They didn't draw a line between daughters and their sons.

Some of the other participants also feel that the support they get is no different from what their brothers or male cousins are given by their parents. However, they also acknowledge that even if their parents might support them, relatives in the extended family criticize the parents for encouraging such behavior.

Honey is enthusiastic and ambitious about her career. The day of the first dialogue she had just completed a lengthy paper grading session that she had chosen to work on. She has completed her MPhil in English and plans to continue her education and write research papers to be published in international academic journals. As a teacher she is very supportive of her students and mentions how some of her old students call her from the US and UK to tell her what they are doing.

Sana

Sana has a BA in Education and History with a minor in Farsi and has completed a computer course. She went to a public school and started studying English in the sixth grade. She says her education was, "not so good", and she was not very enthusiastic about completing her education, but every time she completed one level, her mother would be so excited about her success that Sana would feel compelled to continue to the next level. She sums up her education in college:

> Once you are in college, no one teaches you. You have to study by yourself. First you go and have a lecture you wait for the teacher to take attendance and then she lectures but you have to sit and study by yourself.

From her family she is the only one who has reached this level of education and she says it is because of their support. She has three sisters and two brothers and a very supportive family. She says her parents are barely literate but they know the value of education and that is why they want her to continue. Even though she is secure in her life at home, as soon as she leaves the safety of the home she feels insecure. This is similar to other participants:

> Imagine. We're living in a government sponsored residential area and in front of every house is a police guard. Why is there a police guard in front of every house? To keep us secure. But it's these policemen who will pass comments on us that terrify us. If their security is such, can you imagine the others! The biggest fear is of men in our society.

If she is able to get into the bachelor of Education program, she plans to take another computer course and then work outside the home, though she is unsure what she will study.

Amna

Amna is the most vocal of the participants. She is interested in pursuing her education to study religion at AL Huda Academy, but her family is reluctant to support

her decision. They feel she is moving toward a sect of Islam that is too rigid and fundamentalist. She already has a BA of which she is not too proud because she thinks it will not get her too far especially since others get this degree by unfair means and this decreases the value of her degree.

She has six brothers and two sisters of which five brothers and one sister are married. Like the other participants, Amna is not married yet, but she is engaged to be married. She stresses the fact that girls are loved more than boys in her family. For the society in which she lives this is not the norm. She explains why this is so:

> Even from Allah it seems as a gift to love daughters. Daughters are more caring. When parents are old, sons spend time with their mothers but girls even though they go to "their own home", they are still more caring about their parents.

She explains how when one of her aunts had eight daughters and at the birth of a daughter, neighbors came to condole and her aunt responded that she was happy to have daughters because then she would get Allah's blessing in her home. Because women had such an elevated status in Islam they are held to higher standards, and, therefore, it is important that they get a good education. She also feels that women are physically weak and need to be supported by men.

As she recalls her experience in college, she seems to have had a lot of problems with administration as far as sitting for her final exams and she resents this. She also had challenges in getting to college because of harassment on her way to college. She appreciates what some of her teachers have done for her, but she does not mention any one by name.

Before she had completed her graduation requirements, she taught at a private school for a few months. She felt she had made an impact on the students during the few months she was there. This included bringing them up to speed in their preparation for

their final exams as well as grooming them as far as their uniform and general appearance are concerned. After clearing the exam that would complete her graduation, she decided to leave the school because she did not feel complete satisfaction working in such an informal setting. The school was run from the Principal's home and the Principal's wife would get students to run errands for her.

Amna had also been politically involved in local elections and had noticed the rigging at the election polls. "There should be restrictions in everything we do," believes Amna. This includes governmental control on the way both men and women behave.

Ultimately, Amna would like to work on a Masters in Islamiyat (Islamic studies). She is not sure whether she will be able to do this, but she feels it will help her to move toward becoming the "ideal woman".

Safar

Safar is more reticent than the rest of the group. She speaks in Urdu, like the other four participants, but every thought is very meticulously explained. She is also the youngest. Unlike the others, she began her education studying the arts (rather than science) and later decided to study economics. She is currently in her final year and will take the final exam for BA in 2007. She is majoring in economics and would like to continue and get admission in the masters program, but she does not think it will be possible financially or otherwise:

> Sometimes you can try and make things possible however expensive they are, but there are other problems like the fact that most universities have co-education very few are for women only. The biggest problem for me is co-education. Near my college is a university where I would like to study because it is conveniently close but the biggest problem is the co-education. I was talking to my sisters and even though my father is fairly broadminded, yet he might not be ready to allow me to go to university.

Safar does not talk as much about her family as the other participants. She says they are supportive, much more than her friends who have "typical" unsupportive families, bur she mentions that she would like to work in an office or most likely teach in a college if she is able to get her Masters.

Hina

Hina is extremely soft-spoken and chooses her words carefully, but she is confident in what she says:

> Up to primary and middle I was able to study with ease. At the point in your life there are no tensions or responsibilities. I studied well and got good grades, but when I was in ninth because the level of education is so high that my grades declined. I didn't have a lot of support. I am the eldest in my family and would have to help my mother.

Hina has decided not to continue with her education, which she stopped after the second year in college. She is about to get married and until then, she will stay at home helping her mother with the household chores. From early in her academic life, she has faced resistance from family members regarding her education. Her mother was generally indifferent about her education, but her paternal grandmother was more reluctant to support her education. She believed that girls should stay at home to help with the house work. For a while Hina tried to continue with her education, but at home she did not have a place to study, which made it even more difficult to prepare for her exams. When she did not get through, she gave up and did not try again.

> My father, however, wanted me to continue my education. My younger sister is mentally not normal and so I was like an only daughter to him and that is why he wanted me to get educated and keep trying. But because people keep influencing and it gets difficult to concentrate on your work…

Hina mentions how one of her teachers spoke English fluently and she had wanted to learn to speak like her, but probably would not be able to. She plans to learn

how to use the computer they have purchased at home, but even then she does not get a lot of time to do that.

A comparison of the participants' ages, educational backgrounds, and goals is made in Table 5. Half of the participants were fairly comfortable using computer based technology but the other half had only a very basic experience using it. Amna, Safar, and Hina had not received any formal training using computer technology, but they felt the urgency to learn how to use it for a variety of reasons including assisting their family with business and education. Afzana, Honey, and Sana, however, were fairly competent using computer technology in an educational environment as well as for personal use at home.

Table 5

Participant Profiles

Name	Age	Education	Professional Goals	Use of Technology
1. Afzana	25	MA English	Continue as lecturer	Intermediate
2. Honey	30	MA English MPhil	Continue as lecturer and publish research	Intermediate
3. Sana	23	BA Education, History and Farsi Basic computer course	B. Ed. Computer courses Montessori teaching	Intermediate
4. Amna	25	BA Islamiyat	MA Islamiyat Teaching	None
5. Safar	19	Currently enrolled BA Economics	Office work MA Economics, Lecturer	None
6. Hina	25	Completed first two years of	Computer classes	None

college

Findings

The initial questions that guided the dialogue encouraged the participants to explain their educational experiences. Even though these women belong to less than 3% of the total population of Pakistan with a degree in higher education, they did not identify this as a definition of their success. For the participants, success was related to factors including professional and religious satisfaction as well as the ability to communicate and adapt in different circumstances but not education. For some success was illusive. The more they accomplished, the less successful they felt. For others success came at specific moments in their lives, but the feeling of being a success was not permanent.

The factors that helped them succeed in education were based mainly around their families. Apart from some professors who inspired these women, they did not feel that the educational institutions were in any way responsible for their success in completing their education. In fact, in some cases, the participants complained that the administration created obstacles by institutional administration rather than helped them succeed. Societal factors also created hindrances for them, which, at times, also influenced their families-the participants' only advocates in their educational endeavors.

The discussions about technology were also revealing in that the participants for the most part had not been dependent nor had been able to gain a lot from computer technology, the main reason being lack of availability. Wherever it was available in their educational institutions, it was not accessible because of bureaucracy.

Ironically when asked about the major obstacles that others might face in higher education, family and parents were identified. If the family did not encourage them to continue with their education, there was no other avenue for them. However, finances

were also identified as a reason for why women are unable to continue with their education.

The research questions are analyzed below:

Research Question 1: To what factors do women of Pakistan attribute their success or lack of success in higher education?

Defining Success

As the participants responded to questions regarding their concepts of success, they identified various perspectives of success on an academic level, a professional level, a personal level, and a religious level. For some success was elusive because it kept changing depending on the stage in their life. The first section in response to this research question illustrates how they define success and in what way their education and careers relate to their definitions. The participants' definition of success will help identify whether they believe they are successful and the factors to which they attribute their success or lack thereof.

Academic Success

Even though the majority of the participants have been able to achieve a higher level of education than their brothers, some of them do not feel that this indicates success. "I am successful because I am educated. If someone is not educated they are not successful," says Sana, but Amna does not think she will get much out of her degree, "I don't think much of a BA. Nowadays it's nothing." Even though the participants are motivated by others who are educated, they do not mention what they might gain from education. Amna stresses that if you educate a woman the whole family is educated but if you educate a man only an individual is educated, but in general what they hope to gain

from education is fairly amorphous. Some participants talk about the freedom of making choices, but it is not exactly clear what kind of choices they want to make.

Honey explains that in a society where women are not considered safe on their own, parents feel obligated to ensure that their daughters will be secure in marriage. And here she clarifies that the feeling of security is independent of financial security. A woman can be independent financially, but she needs to be supported by a father, husband, or brother. This insecurity is repeatedly identified as a hindrance to the success of women in higher education. If they are to be secure, they are to be married, and once they are married, they will become involved in taking care of the family, and most likely will not be able to pursue a higher degree.

Sana adds that she feels her inability to communicate in English is closely related to society's perception of one's level of education. "Whoever speaks English is successful, but whoever speaks Urdu and follows Islam they are backward and ignorant. And if you speak English and wear jeans or pants [rather than the traditional dress] then they are successful."

Whether the elevated status of English and westernized dress is a throwback to the colonial past of Pakistan and South Asia (Ali, 1993) or the impact of globalization (Suarez-Orozco & Baolian Qin-Hilliard, 2004), success is clearly measured linguistically. Afzana elaborates this point: "If you want to communicate with the world, you have to speak English. You cannot speak Urdu. That is not possible…Well there's nothing wrong with it but if you want to be successful…"

For the most part the participants feel any success they have had in education is because of family support. Parents with elementary level education aspire for their daughters to accomplish what they were unable to do. Family has a strong influence on

the education of these women. They acknowledge the support of their teachers, but only Honey names a teacher who inspired her. Honey hopes to be a teacher of the same caliber. Safar mentions that there are some teachers that have motivated her, but does not name any.

The educational institutions have had barely any impact on the motivation of these students. If anything, the administration has created unnecessary hurdles making it more difficult for them to continue their education. Amna mentions the problems she had just before her final exams:

> When it came to the time for final exams my name was struck off the list. Now I thought I had been honest. My parents had been depending on me and had trusted me to go to college and now my name was struck off the list.

She had to pay a fine for her absences before she could take the exam. To someone already burdened with financial issues, this is yet another burden. Even though her parents were supportive, she empathized with the others who had received letters of absence at home:

> My family wasn't worried that I had been spending my time at other places- they're not that type, but for others it would have been a problem. It [the letter] was sent to many girls' homes. They stood outside the office of the Vice Principal to protest that their families would be upset that they had not been going to school when they had. How could you work something like this out? If they've left college, were did they go? For a couple of girls who were engaged their engagements were broken because they were in an extended family set up and their family didn't know where they had gone. That's women's lives!

Even as far as the curriculum was concerned, the participants mention their disappointment with what the content they are being taught. From the instructor's point of view Afzana talks about the linguistic disparity.

> They are scared of English. The students in our college don't belong to the elite class. They belong to the middle and lower class. Mainly. We do have some students from the elite class, but most of them have not been to good schools. Some of them have but most of them have been to government schools and don't

> have a background. We have to build up that background. We give them the confidence and courage, strength to speak and I think to some extent I have been able to do that. I try to give 150% so that they can at least take 50 to 60%.

In his study, Rahman (2005) mentions this linguistic divide and the continuing debate relating to the introduction of English in public schools especially English is the language of higher education in Pakistan. Most texts at college and university level across disciplines are in English and even though lectures might be delivered in the Urdu or the local languages, students are expected to communicate at a fairly high level of English. Sana mentions her frustration when in an English language class; she was unable to understand what the lecturer was saying. She felt that if the lecturer had explained some of the content in Urdu, she would have been able to perform at a higher level in her BA final exams.

The strong influence of the parents on the success of these participants is clearly expressed, "I wouldn't have reached to BA without my parents and teachers," says Amna. Honey also acknowledges that despite the fact that her mother is not educated, she has motivated her children to get educated. For her mother education is synonymous to success. "The most striking thing about my family is that my mother is not educated at all but it was her greatest desire to see her children getting higher education and entering professional fields and becoming successful people."

For the other participants, competency in the English language, the ability to communicate, the ability to adapt, professional satisfaction, and religion are inherently associated with success.

Factors that hinder academic success include family, marriage, and the system, mainly identified as the government. Some of the participants were reluctant to admit

that they were successful. Sana later in the dialogue denies her success by adding, “You can keep trying but you’ll never be satisfied enough to say you are a success.” She adds:

> We can’t succeed because of our government. You either have to pay people or you have to have some connection to be successful. And the government is set up in such a way that you have to have these to get anywhere.

This illustrates the hypothesis that, “the male elite in a highly patriarchal society are reluctant to invest in women's education, since that is likely to lead to demand by women for increased power and equality" (Easterly, 2001, p. 24). Other participants feel that the environment, the government or the society in general held them back, but would not clearly identify the reason they were not able to achieve the success they desired. Afzana felt there was a conflict between marriage and success, which she related to education. To her marriage, or the desire for it, hinders success in education.

> …most girls are not serious about education. There are a few girls…who are focused about what they want to do. The ones who want to do Masters. Mainly the parents think BA is enough and then they should get married and mostly the girls who get into the Masters [program] are waiting for engagements or waiting to get married.

The parental and societal expectation to get married at an early age is mentioned by Honey as well, but she also feels that women can continue their education after marriage:

> Yes, most of the women I know or girls I know they got married straight after FA and then continued with their education. Their husbands supported them and they were able to complete it, but mostly the women who reach the Ph.D. level either they don’t get married or they continue with their education because they are not getting married.

Even though the family members support the education of the women in the family to a certain extent, they do not always believe it necessary. Honey and Afzana both mention how their father supported their education, but Amna mentions a case in her family where too much education was considered the reason for a divorce:

> In our family there was a girl who was very educated. She worked [outside the home]-all her sisters still work outside the home-now this girl was married against her will. She told her parents she didn't want to marry the man but her parents forced her to get married… He was not educated. I admit this was the parent's mistake. Why did they marry her when she told them she didn't want to marry him? Later she got divorced-now everyone says it's because she was educated.

These women are not expected to support the family financially, and even though there is no clear correlation between education level and financial success, the education of boys is given precedence over girls'. Hina mentions her grandfather's response to her passing the high school exam which would allow her to get admission into college:

> And when my result was announced for my final exams, my grandfather said that if you were a boy I would have been happier because a son would have worked. The elderly in the family usually think like that. They felt that boys will make money so there will be more joy in their success in the exam than for girls.

For those participants who are disheartened by their lack of success, they mention the disparities in society. "The degree can be bought, but it is a sign of success if you got it by fair means," Sana mentions. A few other participants mention the unfairness of the system. They mention how they are unable to continue with their education because they have to compete with others who have "connections" with administrators.

Professional Success

For both Afzana and Honey, their success was reflected through their students. Afzana had a feeling of fulfillment when her student was able to speak in fairly fluent English to an authoritative and senior professor. This sense of accomplishment because of her students is also reflected in Honey's experience:

> Financially, I might not be as successful as other people are but as far as in the hearts of my students I am very successful indeed. I receive phone calls from abroad [from students, and] when they express their gratitude, there I am successful.

For both these English teachers, their students' ability to communicate well in English is how they identify that they have been successful. Honey adds:

> I love teaching as a profession. For me its not only a way of making money, it's a way of communicating with people, and it's a way of getting satisfaction out of my job. When students call me four years later and thank me that I inspired them or really taught them well and for that reason they are able to say or write something really well in good English, I feel really satisfied from within. I think success for me is not just how financially successful you are in the world. I think success for me is how strong a position you have in your own field and this is how I define success. Whether you are a strong teacher or a good worker in the eyes of the administrators I think this is success.

On the whole it seems that the participants who are not currently employed have been able to reach this level of education without any clear idea of why they are trying to get there and what will happen once they have accomplished this goal. They know that a degree in higher education will be beneficial, but because of social and family restrictions they are not able to plan their futures. In general, they seem comfortable with the support they receive from their immediate and extended family, but some societal forces are still holding them back from accomplishing their objectives. For some the "government" should make the changes in society. Some feel that the government should control, whereas others feel that the government should support. But it is obvious that something needs to be done in the educational system to support the women who are brave enough to venture into the uncharted territories of higher education.

Financial Success

Honey, the more experienced participant in the group, is probably the only one who mentions money in relation to success, even as she negates the general assumption that money relates to success. Considering some of the other participants mention lack of money as the reason that they are unable to complete their education, which they associate with success, lack of work experience might explain their reluctance to connect

success with money. Apart from Honey and Afzana, both lecturers at well-established universities, the others have only worked briefly outside of their homes. Sana and Amna have both worked as teacher at elementary schools for a short while. The others are still contemplating the options, focusing mainly on teaching, and showing some interest in office jobs.

The younger participants relate their success to work outside the home. Sana realizes that her college education is giving her more than text-based knowledge. She acknowledges the need for experience to work outside the home.

> You can't get experience just sitting at home. Your parents will guide you in certain ways, but there is a big difference between what our parents. If we're going to college for example and just getting to college was an experience for me. When I first went I didn't know which bus to take and where to stop. All that counts as experience.

Spiritual Success

The participants are aware of the need to have enough money to be able to live comfortably, but one participant, Safar, explains how success is also the ability to survive in any situation. She elaborates this point:

> Success is the ability to be able to have confidence to go anywhere in the world and meet anyone and …wherever you go you should be able to do "taraqi" [promote yourself-develop.] That is at least how I would define success as related to the worldly sense-that is related to this world. But in the other sense…

For Safar success relates to this world and the next. She explains the need to do well in this world to prepare one for the next, after death:

> You would have "jannah"-that is what we believe in as muslims-and it is not that that doesn't exist-it does. In this world you have classes of people-lower, upper and middle-[economic classes] similarly in jannah you would also have different classes of people. For example the higher class in that life will be dependent on what we do in this life. What we do in this life if we want to be successful in this life, we won't take shortcuts. It's not like that. We might be able to take shortcuts in this life, but we won't be able to do that in that life. An intelligent person will try and find a way that will make you successful in this life as well as

> in that life. If you're successful in this life, you'll automatically be successful in that life.

For Safar, moral behavior in this world will help one to be successful in the next. Therefore, achieving "jannah" (paradise in the hereafter) is how she defines success. Religious beliefs and ideas are a main focus for these participants. The unknown and the abstract of religion and morality are analyzed by each participant so intrinsically in the dialogues but each has their own slightly different perspective. Where Safar indicates the need to be persistent in this world to be successful in the next, Amna feels that, "a woman needs support to be successful. A woman is weak compared to men in every way. Allah has said that woman is weak." She doesn't feel is successful because she is not the "ideal woman" that she would like to be. For her the ideal women are Ayesha and Fatima, the wife and daughter of the Prophet Mohammad. Amna explains, "They were so educated and were such great scholars." She continues by explaining how to become successful she would work with Farhat Hashmi, a renowned scholar of Islam in Pakistan.

Dr. Farhat Hashmi has a Ph.D. in religious studies from the University of Glasgow. She is a controversial figure in that she is a religious scholar, a position that was previously reserved for men in Pakistan. She is often quoted and admired by her mainly female students who are from affluent and educated families in Pakistan and abroad. Amna aspires to work with or study under this scholar, but does not seem to be getting much support from her family, whom she says believes she is becoming a "wahabi"-a believer in the basics of Islam without the rituals and other beliefs. Her family seems reluctant to support her need for religious tutelage with this scholar for both religious and financial reasons. Thus even though Amna does not feel she is the ideal woman, her ability to express herself eloquently does bring her closer to her definition of success. "This relates to education. If I wasn't educated I wouldn't be able to express my

views so confidently. I don't think I am very educated but…" she believes she is fairly competent in conveying her ideas.

Hina, who was unable to continue with her education, and is engaged to get married, is adamant that she is successful even though this might not be apparent to others. She repeats this statement to stress the fact rejecting the idea that level of education and the ability to use computers are appropriate ways to measure success.

Considering this group of women is part of 3% of the population in Pakistan able to reach this high level of education, their pessimism is remarkable. Despite overcoming so many challenges in this level of education, some of the participants do not seem to have a feeling of accomplishment. A further investigation into attitudes of women in higher education may illustrate whether this is one of the factors that hinder others to pursue similar paths.

Research Question 2: How has technology affected their success in higher education?

Computer technology has been introduced fairly recently in public institutions of higher education in Pakistan. I did not, therefore, expect, the lecturers to have had too much experience with computer or internet technology during their education, but since they are currently working in the same system, I was interested in noting whether they felt that the classes they teach were any different from their own experiences as students.

To ensure our discussion would be based on a mutual understanding of what we meant by technology, the dialogues included the participants' perspective regarding technology. Some participants mentioned overhead projectors, TV and radio, but more often technology meant computers and internet based technology as their way of defining technology. This included Power point presentations, web surfing, internet, and chatting.

After some reflection, during our group discussion, we also talked about mobile phones. They decided to include mobile technology in their definition of technology as related to their education. Most of the participants either had their own mobile phones or someone in their family owned one. Because text-messaging is fairly inexpensive compared to making a regular phone call, many of the participants used it on a regular basis. And because the key pads have the English alphabet, they were text messaging in English on a regular basis.

Defining Technology

To illustrate the impact of technology on the participants' education it was important to determine how they define technology and then to elaborate on the role it has played. Honey defines technology this way:

> I'm not sure about the dictionary definition but I think that for me it means the use electronic media that includes mass media, television, radio, and computer overhead projector and slides. This is what I think technology is. Of course email and optic fiber…

Other participants were not as specific in their definition of technology, but they mentioned TV, radio, mobile phones and computer technology as examples of technology. Their lack of a definition did not prevent having a strong opinion about the uses of it

Experience with Technology

The responses to the use of technology varied depending on their exposure to technology from critical, to cynical to optimistic. The cynicism related mainly to the accessibility of computer technology into the public institutions of higher education. The participants all identified technology to be computer related and more specifically internet technology. This kind of technology they felt was intrusive. Compared with TV or radio technology, they felt computer technology, especially related to the internet, had

a greater impact on their lives. There was fear that the intrusion of the internet in their educational lives could be harmful as it had been proved for some in their experience. The harm was related to it being a waste of time to communicating with men via email and chatting. And there was also some resentment that it had not been a major part of their education and would probably not become one in the near future. Most of their experiences with computer and internet technology were because of them acquiring this technology at home rather than it being provided in their educational institutions.

Honey, the most enterprising as far as the internet is concerned, was extremely pessimistic about the technological support provided at institutions of higher education. As one of the participants at the CALL workshops, she felt that the smart classrooms and smart labs (classrooms with internet and projection facilities) were "just not practical". She had been able to communicate with her students via email and send assignments to her which she believed helped the more shy students get individual attention without being intimidated, but even though she is teaching at one of the largest universities in the Punjab, she felt that it would not be possible for her to get the facilities to use on a regular basis.

On the professional level, however, she had a more positive response:

> I don't know how my chairperson found out that I was able to use computers and I remember just four months previously someone came to deliver a one day workshop and my chairperson asked me to attend that workshop. The director taught us how to utilize the journal archive keeping information of all the journals from 2003 and 2004 on-line, how to locate articles, how to do research for topics pertaining to literature. There I greatly benefited from using technology because it made me interested in doing research and write after that my chair person gave me a list of on-line journals that are available on our campus and I tried to correspond with them. Initially the response wasn't very good. They thought that any email coming from Pakistan is not even worth replying to.

The culture of research is recently being promoted in educational institutions in Pakistan. Historically most universities and colleges have focused on teaching and

learning, leaving research to a small number of universities, or depending largely on research done in universities in the west. This dependence on the west can be traced to the history of higher education in Pakistan and South Asia in general. As a British colony, the institutions were created to educate and train civil servants and middle managers to work as intermediaries between the masses and the government. The culture of research was not encouraged and after partition, this attitude persisted. Most texts and information used in universities and colleges were based on western research. For those promoting the need to continue using English as the language of instruction, the argument was that most research and knowledge available comes from the west, mainly the US and the UK. Therefore, English would have to be promoted to ensure that students would be able to continue with higher education.

Honey's interest in research was promoted by her the availability of research journals on the internet, and she was able to contact an editor of one of the research journals via email.

> She asked me to write a letter about the work of Pakistani scholars and I took the hint from her and this was the greatest benefit I earned from the use of technology, had I not tried to investigate and contact people living abroad through emails particularly editors I would not have been able to have my letter published.

Honey plans to stay in contact with this editor and write research articles in an attempt to get them published. Considering she has been working in an environment where teaching and learning has been the focus of her profession, the opportunity to have an international audience by publishing her work on an internet based academic journal "the female subaltern" will no longer "remain in the shadow" (Spivak, 2003, p. 274).

She will, however, have to speak the language of Western academia, which might change what she intended to say in the manner in which she planned to say it. The internet as a window to the world might provide an opening for Honey and others like her

to express their opinions, but considering she will be writing for a specific audience, she might adapt her ideas, to make sure her work is published and read. This would reflect the negative impact of globalization through the internet-becoming a homogenous society.

For Honey, any form of technology is fairly new in her educational experience. She recently completed her MPhil in literature and the only form of technology that was included was videos and TV.

> Till my Masters I was not familiar with what a computer is like. But in MPhil we were made to watch literary movies based on literary texts like watching Shakespeare's movies was part of our curriculum. Here TV came in. video tapes. I don't remember whether they used computers when they were teaching.

The other participants, who are still students and are also younger than Honey, have not been exposed to TV, video, or computer technology in their classes. Afzana mentions her experience in the Master's program, where the use of technology was an option that she did not always avail on campus or through her institution because it was not always available and because she had a computer at home:

> When I was doing my masters if we wanted to consult a computer it was our choice but it was not like the way that in the Punjab University [the oldest and largest University in Pakistan] where they have made it a compulsion for the students, giving their presentations on OHPs (overhead projectors) and PowerPoint. There using multimedia is a compulsion. For us it was not a requirement. We only used it if we wanted to.

Again, the use of technology was at a fairly basic level. Afzana mentions how she used the internet as a student to check websites and find information related to her classes but this was not on a regular basis. Only a few years after she graduated, when she became a lecturer at her current university, she has been more enthusiastic about the use of internet and computer technology. Afzana was also a participant of the CALL

training workshops and she mentions how even before the formal training she had been using technology in her classes:

> It has been fun. It's facilitated the teaching and learning process without doubt… I can incorporate computer technology into anything. I can give them an activity or say this is your homework or anything. You can reserve the lab for one day so if you need to search for something you can do it in the lab. If you do it for language, the language should be improved, so we can use it for various activities … it facilitates learning. The modern age is of computing. We cannot live without it. I feel if we had had that sort of exposure as students, that much use of technology, I would have done much better.

When asked how she thinks she would have done this, she does not illustrate this clearly, but she feels as a student and as a visual learner, she might have been able to get a better grasp on the content. Also, it seems as if in the Master's program she was expected to give presentations and the use of overhead projectors and PowerPoint would have facilitated in presentation skills.

Like Honey, Afzana explains how the availability of computer and internet technology influences how and when instructors can incorporate technology in the classes they teach. Afzana has access to a computer lab because she is teaching in the computer science building. Honey feels frustrated getting access to these facilities. The process to be able to reserve the computer labs is so tedious that she feels at times it is not worth trying.

Even though Honey and Afzana both teach English, because Honey is primarily a literature teacher, she feels that computer technology really has no place in the area that she is teaching. This is a common perception about computer technology in educational institutions in Pakistan. Computer technology is primarily connected with the computer science departments. Rather than considering it as an educational tool to be used throughout the system, it is delegated its place in the sciences. It is generally not utilized as a tool in the humanities and social sciences. According to Honey:

> So far as the use of multimedia projector or slides are concerned in our educational system that seems to be more useful for science subjects not for literature and language. I don't think it works there… I don't find the place of using technology in teaching literature useful because teaching literature is a different activity. It is more of a philosophical subject that would not allow technology as other subjects…I haven't thought about whether the use of technology would have made a difference in my MPhil or not.

But she concedes:

> If I'm not available by phone, I send them an email and they respond by email and I always respond… Even the students don't think they need the use of technology as far as teaching is concerned. But there are certain areas where technology can be used in teaching in language and literature like I teach literature and compulsory English… when I teach a lesson called "Spanish Bullfight", I would ask my students to go to the internet and find photographs of a Spanish bullfight and find which one looks attractive and which one looks less attractive. So there I would use technology.

Here technology creates another means of communication with the students. It is also interesting to note the response of the participants who have plans to continue their education. Sana, who is fairly competent at using technology, feels that technology would have made a difference if it had been introduced when she was in college. She began taking computer lessons after she graduated from college. During this time, she was learning a variety of computer related skills, including word-processing, the use of spreadsheets, and sending email.

> My instructor was able to connect with universities in England and go abroad to get education, room and board. This made me realize the potential of the internet. I realize that if they had used these kinds of facilities when I was in school it would have been really helpful…In schools and colleges they have started introducing computer technology, but call it our own ignorance that we opted out of studying computer technology.

As mentioned earlier, because Sana was not majoring in computer science, she would not have been exposed to computer technology in her regular college classes. Of all the participants, she is probably the most excited about how this technology could impact her life. She identifies competency in English as being one of the major benefits

of using computers. Like Honey, she also identifies communicating on an international level as being another benefit of computer technology. Both these participants want to connect with international educational institutions, whether to submit research papers or to sign up for on-line classes. Sana explains her educational experience in her first two years at college:

> In FA I didn't get good grades the reason for this is that the teacher would come and lecture us in English and then expect us to understand everything. She could have explained a bit more, but to tell you the truth, we were not really very interested.

Things did not improve much for Sana in BA, but once she graduated and took computer classes she seemed to make progress in her language skills. This could, however, be explained because she had already gotten the background she needed to become proficient in the language, but she vehemently believes that her work with computers made her confident and competent in English:

> Well if you look at my previous education-even though I am a graduate with a BA, my English was not high. If I had studied abroad or even at a better university, my English would have been better, but it wasn't. Now that I have studied computers, I have learned English. I was able to understand English by reading the text and working on the computer. This made me realize that I had missed a lot from my education. When I started working with computers, my level of English really improved. I began to understand. She [my instructor] showed me information about universities abroad. I kept looking at these on the internet. She taught me how to chat on the internet and how to create an email address. Now I was so interested to see the things on an international level.

For Sana, her experience using computers has benefited her linguistically and created a global awareness that regular college classes did not seem to provide. This confirms the Mansoor's (2005) study on English language policies and teaching in higher education in Pakistan

> Formal English Language teaching in classrooms is not leading to successful language learning……the reason why students with a higher socio-economic status have better English proficiency is due mainly to them acquiring the

> language through informal exposure to media and the Internet. (Mansoor, 2005, p 352)

Not only does Sana benefit linguistically from her use of technology, she also gains the respect of the male members of her family because of her competency in technology, a traditionally male domain. With her increased confidence, she gains in her stature in the family:

> My eldest brother, who has so much authority in the family, asks me what to do when it comes to computer technology. I am happy that he asks me. He talks to me and asks me in such a nice way.

To add to this, Sana plans to continue working with computers both inside and outside the home. At home, she is teaching her nieces and nephews and hopes they will benefit the way she has.

> I want to work after I've completed my computer training and B Ed. Look at all the benefits I've gotten from my computer training. I can use my computer at home and teach my nieces and nephews how to use it without having to pay the steep tuition for computer centers. They ask me a few things and then independently they can work on the computer. They're really improving. They work things out for themselves.

Sana admits that there are both pros and cons to the use of internet technology. Both Amna and Sana have a strong opinion about the negative impact of technology on society. Since Sana is more familiar with this kind of technology she is able to identify and elaborate on the misuse of internet technology, more specifically:

> I realized chat is not that good, because anyone can come in and start chatting. The same with emails and then my instructor guided me in how to email business letters and I realized that this is the real way to use the internet. They way we sent photos and chatted idly were not the way it should be used.

Amna mentions how people waste time on the internet, but she is unsure of what they are doing while on the internet. Most of the time, she says, they are chatting with boys. She admits that she has no experience using computers, but she does plan to learn how to use them in the future. She thinks she should take a course in computers because

she sees how her brothers hire people to work in their offices and they pay a lot of money for someone else to manage the business.

> There are many benefits of using computer technology. But it's not used in the right way. That is one of the reasons that our country is not progressing. Girls go to computer cafes and spend the whole day there just to chat. And they spend their time chatting with boys. Is this the only way they can use computers?

Amna brings in another novel concept that the other participants do not mention. She talks about the connection between technology and religion:

> Now the Holy Prophet went to Mairage Shareef (ascended to heaven) and this was such a long journey the non-believers couldn't believe it. And now how quickly we can get from one place to another with technology! First people used to travel on camels and horses. Then bicycles, then cars and then faster than that on airplanes. In the past we used to travel long hours to go from Islamabad to Lahore, and now with the new motorway or by plane we can get there so quickly. So that is all technology and how did we get this technology? From studying the Holy Quran!

Because of her interest in religion, Amna is constantly making references to Islam and her life. This is not a new phenomenon. For many, legitimizing knowledge by connecting it to religion is a way of reconciling or adapting to new situations.

Sana, on the other hand, because of her expertise, mentions in detail how she tries to convince her cousins who spend hours surfing the internet to use some of that time on informative websites. She is also excited about the fact that once she has learned the basics, she is able to build on them to become more proficient.

> Because of the computer, I realized my education had not been complete. Once you get involved in technology, the knowledge and interest keeps growing independently. The same way as education. I've learned so much from my education and my teachers, but I have learned a lot about technology as well.

In contrast to Sana and Amna, Hina, who has decided not to continue with her education, mentions how her family has just purchased a computer within the last year, but she does not have a strong opinion about whether this technology will influence her life. She does echo the opinion of the others that this could also take her away from other

responsibilities. Being the only daughter who can help with the household chores, she does not have enough time to spend on the internet. She explains:

> My life has not been impacted by technology. It's only been a year since we got a computer, and if I start on that it takes away from my housework. I don't have that much time to work with it. When I come and sit next to them [her cousins] they explain how to use the computer…My cousin is very fond of it. Whatever I learned I learned from him. I didn't know anything about a CPU or a monitor but now I know what they are. I'll probably find out more.

Like Hina, Safar also does not have any experience using computers, but because she is one of the first in her family to work toward a degree in higher education, she looks for support that is otherwise not available at home. She does not expect this kind of support from her educational institution.

> Now the home environment plays the main role. If you have technology at home that would help because if the people around you are not educated then what you learn is only from your books. You don't get any other support…That [knowledge from text books] is the only real knowledge you have and even that is only retained for a few months after the final exam and then you forget it. Practical knowledge would really help. That's probably the reason we can't remember anything.

Safar has not had any experience using computers, but she anticipates the benefits she might get. Since she is concerned about the finances related to her getting further education, she believes the internet might provide a less expensive option. In reality, that might not be possible, but she tries to envision what this might get her.

> I don't have a computer. I haven't used technology in my education. That doesn't mean I don't think it would have been helpful. The main reason is that I don't have the facility. Technology, computer, the internet, radio, tv. I think all these things can facilitate learning…If you're in any country of the world. Say you're in Pakistan. You can sit in Islamabad and get educated from a university in London. So that's a big help. So without having to make such large payments you can get a good education. You can get a degree.

Research Question 3: What recommendations can these women make concerning those who want to be as successful as them?

Most of the participants appreciated the fact that they had reached as far as they had because of their family's support and motivation. When referring to their families they made a point of identifying how their families were different from the traditional families even though the participants tended to be from fairly traditional families themselves-depending on the definition of traditional.

Once they had identified the problems that they had seen others had faced, they identified ways those problems could be solved. After further reflection, the participants focused on more specific areas that needed to be addressed to ensure that women who are unable to get higher education can succeed.

The first of the three main areas they identified related to speaking out. Those who had already made it, needed to tell others what they need to do to get there and how they could control their own lives. As female role models teaching in higher education, they could prove to others who were hesitant or unable to follow in the same direction. Many of these participants talked about how lecturers had inspired them to continue in higher education either because of their ability to express themselves with confidence or to influence others. Some remembered the names of these instructors and seemed to have a very close relationship with these mentors and others just remembered the image of an individual who inspired them.

Apart from the speech, they also felt the actions of others inspired and motivated others. The younger participants talked about how their family was greatly influenced by the behavior of the women who worked outside the home. Being confident in leaving the safety of the home environment was essential to moving to the next step of getting higher education. Either the government or the educational institutions needed to provide facilities that created a feeling of security for women traveling from their homes to the

institution. Even at the institutions, women need their own space, where they feel secure and their families are confident that the women are getting a good education. Internet technology relates to this point as surfing the web is also a stepping out into unknown territory, but it could also represent stepping out into the world in the comfort of the home.

And lastly, because women have traditionally been ignored by the system, they should be provided with financial support that would enable them to continue education. Also, if the higher education of men is also promoted, they might not feel intimated by women becoming more educated than them.

For those women who wanted to follow in their footsteps, the participants had some specific advice. They would have to speak up to express their rights and needs; they would have to step out of their homes-in the way the participants have done- to show that they belong in the world outside the home. And to make sure that these women are successful, someone needs to pay up. Financial aid has to be available for women who want to pursue a higher education and to provide the facilities they need to achieve these goals.

Speaking up

Considering what all the participants have to say about the support of their parents when it comes to higher education for women in Pakistan, this recommendation by Afzana seems extremely relevant:

> On the part of the department and on my part, we don't ask them to stand against their parents but we tell them this is wrong. They should have their own opinion. They should know this is wrong or good for them.

In a society where family holds more power than public institutions or the individuals themselves, trying to balance the pressures from the family and the society to

meet the needs of the individual, is one way to address this issue. For women who do pursue a higher education in Pakistan, one of the biggest fears of the family in particular and the society in general is that these women will become "outspoken" and independent. The participants definitely had a lot to say about their experiences. To compare the perspective of these women with those who complete high school, but do not continue their education would put this hypothesis to test. How does one prepare a society for the suppressed to speak out? Is that even possible?

Even though Safar feels she has been supported by her family, she realizes that others are not as lucky:

> Probably as a student one of the biggest problems relates to the family. The family doesn't support you, or you might have mental or physical problems that create difficulties. I haven't had physical or mental problems and my family has always supported me so I don't think I have had any problems.

The society and the family members of women who do not continue in higher education seem to fear that educated women will begin speaking out about their issues. And once they begin speaking, administrators and policy makers and families will have to listen. The participants, who represent the stakeholders in society, those women who are unable to complete their education, have already begun to make a change by speaking out about the issues.

They talk about the trust they are trying to keep with their families, but the fear they feel when they leave home. Honey, a mature professional, talks about the reason that women feel so dependent on the male members of the family:

> Maybe it is the sense of insecurity that we have that we have to depend on the male member so of our society, or maybe that is the way we are trained to think…

The family, educational institutions, and society teach women that they are dependent on the male members of the family.

Stepping out

Independence and outspokenness relate closely to the trust between the female members and the parents, extended family, and other male members of the family that Sana mentions, “There are many girls who have problems but my brothers trust their sisters, and that’s why we are able to get educated. If they didn’t trust us, we wouldn’t be able to get educated.”

Once these women decide to leave their homes to pursue higher education, they are stepping into male territory, either by traveling on public transport or studying in male dominated institutions of higher education. A major problem is the harassment they face getting to their university; whether it is the police guard that Sana mentions or just by-standers at the bus stop that Amna mentions. There is a definite fear of leaving the safety of the home environment. Those families that have this feeling of trust encourage the women to become involved in pursuits outside the home. Honey mentions women in rural areas who, she feels, face an even greater challenge:

> One of my relatives lives in a village. She has to walk two miles to reach her school. We can’t say education is not available, but the conditions are such that she can’t think of traveling two miles to reach her school. I think that is the challenge women in villages are facing, the challenges are more of economics and finances. These are women who really want to educate themselves but don’t have the resources…This is one of the biggest challenges.

Even though Honey is relating the problems that women in rural areas face, and despite the defiance her family shows to the cultural expectation, she still feels the pressure from society:

> Talking about myself, I don’t feel insecure because my parents have given me the confidence, but there are moments like if I’m standing at a bus stop and someone passes a comment at me then I think about if I had a car of my own or if I had been with my brother no one would have dared do that. Or the kind of environment we live in might make us feel insecure. I teach in a boy’s college. Now it’s a university but I am quite confident. But there are moments that I think

> if I had been driving myself or if I had been with my brother, but I think it's pretty natural.

For someone like Honey to think it "natural" to feel insecure while walking down the street shows the strong impact of society on women. Because she identifies it as "natural" she does not think there is a solution to this problem although she is optimistic that things are changing:

> I think Pakistani women are becoming aware of their rights and responsibilities and we see them taking the lead in all fields of life. So far as the general condition is concerned, they are growing bolder and gaining more confidence. I'm talking about urban areas. I don't know the condition of women living in rural areas. I don't think what I am talking about applies to that part of society…I'm talking about urbanized women. They are becoming aware of their rights. They are getting education not only to support them but also to defend themselves against the social pressures. So there I can see a change. When I talk to my female students they feel no harm in going for jobs. This is a change I have felt over the years.

For Honey, education is making a change in women's behavior; though for others the change is slow. For the participants who do not work outside the home, it is mainly because their family members are unfamiliar with the kinds of jobs they are interested in. Unfamiliarity breeds suspicion. And if the only experience they have is when women are openly communicating with men, their family members become uncomfortable about allowing the women to leave their homes. Sana mentions her aspirations to work outside the home and her interactions with men in a computer academy she attended:

> As I kept leaving the house and found the academies and was able to do things once I had experiences. I was able to teach myself and got confidence to work independently. Someone else told me about JAVA courses and I haven't done them, now I plan to do know everything there is to know about computers, I won't feel successful. Until I know all this information, I won't be successful. I would also like to do my B. Ed. Maybe even get a job. In some families there are restrictions. In my family we're only allowed to do teaching jobs. Other jobs only if they are good.

The definition of a "good" job is a place with a safe environment, where men and women do not mix too freely with each other. Technology, especially the internet, is a

similar “stepping out” from familiar territory. Just as women and their families are afraid of the encounters these women will have by physically leaving the house, the virtual leaving via the internet- or any other such technology can be intimidating to the family. The participants also mention they are hesitant and looking for some kind of control. Sana and Amna mention the problems with chat and internet and later when we meet for our group discussion they talk about cell phones. Amna felt strongly about cell phones having a negative influence because they allow communication that should be controlled.

Paying up

Even though higher education in Public institutions is comparatively inexpensive, some of the participants feel the financial pressure of the tuition and other expenses. For the families funding their education, this is an investment that might not pay back. Unlike students in the US and Europe, students in higher education rarely pay for their own education, nor are there many scholarships or other funding resources available.

Hina, who has had to drop out of college, identifies two major problems that have kept her from completing her education. First she mentions the expense:

> We can’t afford so much when there are so many people in the family…Education is so common that the government should provide discounted education…If our parents wanted they probably would have helped me get education. But I didn’t want to pressure my family to have to pay for my education.

Safar also mentions that she feels that because of financial problems, she will not be able to continue her education and work toward a Masters in Economics. She recommends that the government, or related institutions should give preference to women because traditionally they have been ignored by society:

> If we think that just getting educated is enough for us then we’re wrong. Having just a graduate level education is not enough. We have to go higher. The government should support women. For boys it is alright. They can get to the masters level but for girls it is difficult. Parents can’t because of facilities and

> expense, but the government should specially- and I stress specially because I really want to work on my Masters- but the government should create special opportunities for girls. Around 60% of Pakistan's population is not ready to send their daughters to an institution of co-education so there should be more facilities for girls who want to continue with their education. It should be free for girls. There should be all the other facilities like conveyance and other support. At lower levels they do support, but at a higher level there should be a lot of support.
>
> And on an ending note, Hina adds with a smile:
>
> If the girls are more educated than the boys, then it is a problem. We have a few cousins who have completed their masters and their fiancés have not even passed the matric exam. If the girls are more educated than the boys, it gets a bit embarrassing.

The idea then is that if higher education for men is promoted, it might have an impact on the education of women.

Discussion of Themes

After reflecting on the initial dialogues, during our group meeting the participants decided on the themes they wanted to discuss as a group. Even though the topic of marriage had come up many times in the discussion, the participants decided they did not feel it pertinent to their current discussion. They also felt they had said all they wanted to say about religion, so they would not discuss this again. We then sat for five hours with the researcher taking notes on a flip chart to ensure all the participants agreed with the comments that were being recorded. Initially I tried to record the conversation, but because of the nature of this discussion, and the complexity of differentiating the speakers, I did not turn the recorder on. The participants felt the note-taking would suffice.

After an initial discussion regarding the priority of the themes, this is what was decided: We would begin by talking about family since this was the most influential in the participants' lives. We then moved on to discuss choices and decisions, followed by

freedom. Education in general was then discussed. We then talked about the impact of technology in education and ended our discussion by looking at the recommendations the participants would have as a group.

Family Issues

"Our energies are halved when we are organizing work at home," said one of the participants during the group discussion. Having to juggle housework and education is a common issue for most women in cultures where the division of labor is based on gender. Women are expected to continue with the housework even if they opt to work outside the home. And in a culture where boys are not expected to do housework, girls are expected to help their mothers at home. This is the issue that forced Hina to discontinue her education.

The participants noted that there seemed to be a clear imbalance in their experiences between men and women in higher education. There seemed to be more women who were in higher education in their experience and this sometimes creates a strong feeling of resentment. Clearly more education relates to power and for some this is intimidating, and there is also the fear that highly educated women are also outspoken. If the men in a family do not feel motivated to pursue higher education, they tend to feel that the women do not need to get educated.

Since for most family members education equates to jobs, if they do not want the women in the family to work outside the home, they also do not promote their education. And even if parents want to educate their daughters, the extended family tends to have a strong influence on the decisions about women's education.

The main issue during this discussion was how to reconcile family and social expectations with individual choices. For educational institutions promoting the

education of women, it would be important to work with this powerful force in the life of students. In Pakistan there is hardly any connection between families and educational institutions. And by the time students reach higher education, even as freshmen the students are expected to work on their own registration processes and official work. This is mainly because many of the parents are not familiar with the processes or have a basic level of information and are unable to assist their children in these processes.

Choices and Decisions

"In our society females are not major decision makers outside the home," one of the participants opened the discussion with this statement. Another elaborated that depending on the family, women make decisions when they are related to the home, but most decisions outside are made by men. The physical spaces are clearly defined for men and women and until the outside becomes a space affiliated with women, their control over the work place will be difficult. This again relates to the idea of making it clear that women belong outside the home, by identifying role models for young women and their families.

The conversation of decisions and choices concerning women in Pakistan cannot be complete if the concept of marriage is not brought up. Even though the participants did not want to bring up the issue of marriage, they felt that the fact that most marriages are arranged, sometimes with the consent of the women and sometimes without, marriage influences whether they are able to pursue higher education.

As Honey mentioned in her initial dialogue:

> For Pakistani women higher education is difficult keeping in view the social and other conditions of our society. Parents want to marry off their daughters as soon as they complete graduation. Doing a Masters for them is not advisable in the sense that there is so much pressure on them that girls should be married off after graduation or even after FA the girls have to face a challenging situation where they have to convince their parents to allow them to go for Masters or MPhil or

> PhD. Parents think that girls can take care of their education after they have got married.

And even though Honey believes that this is possible, and she has seen some of her colleagues who have been able to do this, the other participants feel this really depends on the husbands or the in-laws and is not always possible. Some participants also felt that even if the marriage is "a love marriage" (not arranged) it might not be possible for a woman to continue with her education.

The concept of arranged marriages is a cultural expectation which some mistakenly connect with Islam. Some Muslims feel that it is grounded in the tradition of the Prophet or the Quran, whereas the Muslim tradition does not advocate arranged marriages. The fact that in arranged marriages family and relatives try to ensure the bride and groom are a good match, men usually prefer not to marry a woman who is more educated than him.

As far as choices related to education are concerned, Sana participant brought up the idea that there are more options for students today than there were in the past, but sometimes students are unaware of these choices. Afzana and Sana had mentioned that they had studied the subjects that their parents had wanted them to rather than the ones they wanted to. When the idea of counseling was brought up, Honey reacted strongly, "The condition of the schools is horrifying. How can we talk of student counseling?" Here she was referring to schools in rural areas, but some schools in the urban areas are just as appalling. Honey mentioned how in her university, which is probably one of the most competitive in the area, there was only one counselor for thousands of students and he wasn't even able to counsel appropriately. Again the idea of student support is not yet available in public institutions. Honey felt that more funding needs to be spent on the actual teaching before discussion of counseling can begin.

At both high school level and college level there is no career guidance or academic counseling. This is probably one of the reasons that students end up majoring in subjects that will not prepare them for a career. In their initial dialogue Safar and Amna mentioned how their education was not practical. They memorized the information and then regurgitated it for the final exams to forget by the time they had graduated, the Frierian concept of banking knowledge.

Teaching, therefore, is still one of the only options available to women once they have graduated. Because they will be teaching what they learned in school, their education does not prepare them for other professions.

Freedoms

Family members feel they are protecting when they do not give the women the freedom to what they want. Some participants agreed that they felt protected while others did not agree. They did, however, relate this to the trends in society. The trends relate to the general direction in which society is moving.

Within the last few years, Pakistani society has become more liberal and to a certain extent more westernized. With satellite TV and the internet, the MTV concept has become global, and Pakistan has not been left behind. However, some believe that kind of openness is detrimental to the society. The negative impact of the internet because of pornography on the internet and chat rooms has added to the fear of the unknown.

For some this globalization has lead to a feeling of the freedom to explore the unknown, for others it has lead to a fear of what can happen with all this freedom. Amna constantly talked about the need for control, by the government and by the authorities. It might be an inability to deal with the freedom as a contrast to one's own restrictions.

More probably, it is the fear that this freedom will have a stronger on the impact on the men who already creating problems for young women who attempt to leave home in safety.

Education

Honey started this discussion explaining how students who came from far-flung areas tend to struggle in the educational system for many reasons, the main reason being their lack of competency in English. As other participants, who were from urban areas, this was a common problem. The division in the education system between private English medium schools and public Urdu medium schools creates a linguistic division as identified by Rahman (2005) and others.

Private institutions tend to charge extremely high tuition rates, which the average individual from the middle class cannot afford. Because these institutions are not obligated to follow the educational government policies, the students are taught in English even when the ever-changing policy regarding language of instruction changes from English to Urdu and vice versa. This consistency allows students to become proficient in the language that they will have to master to be successful in higher education.

Because these institutions tend to have more funding, innovations in teaching and learning are introduced in these schools years before they are a part of public institutions. And because the government spends such a minimal amount of money on education, some schools are without buildings and textbooks. The teachers also do not have the appropriate training and the cycle continues through higher education. In higher education, students from public and private institutions get to compete on an extremely unfair playing field. Those students who had the money to study in a private institution

have the benefit of being proficient in English and having had the exposure to technology. Rahman (2005) elaborates on this discrepancy and its impact on education.

The participants also felt that students were extremely challenged when they transitioned from high school (matric) to college. Even though the system is fairly similar they felt that after their high school experience, they were expected to fend for themselves without any assistance. To ensure students are successful, an evaluation of the pipeline from high school through college-level and university-level education should be made.

Technology in Education

"It has helped me a lot in research work" says Honey reflecting on the impact of technology in her educational experience. Research is one of the areas that is the most lacking in higher educational institutions in Pakistan. The historical background and the reasons of the founding institutions can illustrate why this is so. Unlike such institutions in the US and Europe, higher educational institutions in colonial India were initially set up in the 1800s to train and teach the indigenous population to be able to work effectively in the civil service to assist the British government to run effectively. These individuals were trained to understand the British system in the English Language. The tradition of academic freedom related to educational institutions, as practiced in Europe and the US, was, not exported to India.

The higher education system in Pakistan is not independent of the government. It is a centralized system, where the federal government controls curriculum. Research and academic freedom are interdependent. The former is not possible without the latter. Even though the current government promotes research through the Higher Education

Commission and has recently taken measures to ensure the climate of research is maintained, this is not possible when there is a hierarchical system.

The efforts to promote research made by the Higher Education Commission include grants for research projects, scholarships for students to study in international universities, provision of lists of nationally recognized advisors, and invitations to international scholars to work on an advisory capacity and all this information is regularly updated on the website:www.hec.gov.pk/new/index.htm. Despite the fact that this information is available, Honey was more interested in making international connections. She felt the need to get her voice heard on an international level and to ensure this she made contact with universities in the US.

She was able to contact editors of academic journals over email, and mentions "a letter would have taken me months." Honey hoped that this contact would help reduce the bias that exists in the western world about academics in developing countries. The globalization in this way would not only impact those in countries like Pakistan but would also have a positive impact on academics in the developed world, a complementary relationship.

Honey had the most to say about the impact of technology on education, but there was also a lively discussion about mobile phones. Amna felt that mobile phones have added to the tendency of promiscuity in the relationship between men and women. She also felt the use of these phones had led to people wasting time and money by spending time on the phone. However, she was also ready to admit that whenever she had to contact someone regarding school information, she found it much more convenient to use a mobile phone. Just as Honey had mentioned the use of email had allowed her to communicate with her students who otherwise would not, the mobile phone was a way

for Amna to connect with her peers. Sana added to this that in the past when she had to contact her friends about school related assignments she would have to ask a young neighbor to take a note to her friend's house, but now she had the convenience of connecting with her friends directly. She also mentioned how the use of text messaging had helped her sister-n-law, who knew no English, to be able to learn some basic vocabulary to be able to communicate over the mobile phone using text messaging in English. The students were fairly excited about this positive note to the discussion.

Recommendations from Participants

The participants, by this time in the process, were very clear about the recommendations they needed to make. The fact that not much had been said about the content and the methodology of what is taught in educational institutions, the participants made recommendations about these issues. It is evident that they felt their families were supporting them as much as possible to enable their success and now it was up to the policy makers and administrators to ensure the educational process is successful.

They also did not make any recommendations that would be specific to women. They felt the changes that were needed were in the education system in general. If these changes were made, both men and women would benefit. Here are the recommendations they made:

1. They felt there was too much experimentation in the examination system and syllabus changes without any follow up or explanation. It seemed as if people were changing policies on a whim, and a lot more thought needs to go into what is being taught in educational institutions at all levels. More time with appropriate evaluation and assessment needs to be spent on the planning of curricula and methodology before it is implemented.

2. To enable appropriate teaching and learning, teachers need to be trained in new methodologies, so that what they teach is applicable to the lives of the students.
3. There needs to be an evaluation of how one level of education builds on to the other, to ensure that students are able to manage the transition from high school to college. Generally the gap between these two levels is too large for students to handle effectively, so some mechanism needs to be in place for students to be able to manage this transition. The syllabus from the first two years in college to the last two years, seems repetitious. There needs to be a clear distinction between these two levels and students need to know how one level builds on the other. In the US, the first two years are usually general education courses and the final two years are focused on the major. In Pakistan, however, students study their major in both levels, and that leads to what seems like repetition to students.
4. Lastly, because they realize the expense of technology, they feel it should be made available to students at reasonable cost. The newest technology in computers like laptops and ipods should be provided at reduced rates to students so they can be competitive on a global level.

Summary

The initial dialogues and follow-up group discussion covered a vast range of subjects even though the attempt in this study was to focus mainly on women in higher education in Pakistan and the impact of technology. After the initial dialogue it became clear that a lot more than education and technology would be discussed. The socio-cultural background of the participants was discussed in detail, and sometimes these discussions became more central than their education.

From these discussions, it is clear that for these participants, it is not easy to compartmentalize their lives. Large and multiple generation families have an on-going influence on their lives; the participants are highly responsive to the social, financial and religious expectations of them in an extremely politicized and globalized society. Through their dialogue and discussion, they provide a glimpse into their complex lives where change is inevitable, yet because of the restrictions on them, they obscure their efforts to hasten the change.

Of all the participants, the youngest, Safar, aware of the social restrictions is determined to become a lecturer of economics, though stoically she admits that the odds are not in her favor. Amna is passionate about pursuing a Masters in Islamiyat and reveals her frustration at the obstacles she has to overcome to achieve her goal, and Sana is unwavering in her attempt to get her degree in Education and become an elementary school teacher. Hina's firm belief in her success despite what others think is an inspiration. Honey and Afzana's pride in the success of their students reveals that whatever influence technology has on the education of the next generation of women in higher generation, these women will definitely have made it easier for those who follow.

CHAPTER V

SUMMARY, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Educational research in Pakistan has traditionally focused on literacy and equity, analyzing quantitative data because of the disparity in literacy rates of men and women. In many public institutions of higher education, however, enrollment of women is equal to that of men. The purpose of this study was to analyze the success (or lack thereof) of these women and because of the recent introduction of computer technology to higher education, whether computer technology has had or can have an impact on higher education for women in Pakistan. Working with the assumption that having negotiated the challenging social and educational system, the participants of this study are successful in that they have enrolled in higher education and some have also graduated recently, the researcher wanted to investigate whether these participants had been assisted in achieving this with the help of computer and internet technology.

Computer technology as it exists today is extremely expensive. For those public institutions of higher education in Pakistan that currently provide this kind of technology, the cost is prohibitive. However, once the facility is made available on campus it is not made available to the students. Therefore, the participants in this study have depended mainly on personal computers and internet in their homes.

In this qualitative, participatory study six women who are either currently enrolled in, are working at, or have recently graduated from a public institution of higher education in Pakistan discussed their educational experiences. After initial dialoguing with the participants on an individual level, the researcher met with the participants as a group to discuss and further analyze the themes that emerged from the dialogues. There

was a six month period between the two dialogues which allowed the participants to reflect on the dialogues and come up with recommendations concerning their experiences as they might relate to the experiences of women who are unable to reach the higher level of education.

For most of the participants, social factors and linguistic factors had a greater impact on their education than academic issues. Their discussions revolved around gender issues, social and financial restrictions, and familial motivations. At times conversations about gender, society and religion dominated the discussion. Technology was discussed within these contexts, but for the participants the more pressing issues related to their daily lives in which computer and internet technology has less influence.

All the participants were interested to continue with this project and other related projects on a regular basis to make a difference for others. They felt this study would create a platform for them to continue their involvement in higher education and empowerment of students, both male and female.

Discussion about Action

Just as in the US "the second economy was a structural consequence of inequality, the overt manifestation of which is poverty", and the welfare programs proved to be a way of coercing "the poor into obedience" (Aronowitz & Giroux, 1991, p. 23), on an international level, developing countries tend to be placed in the same dilemma: accepting aid and being forced to become followers rather than becoming agents of their own change. Similarly, where students of color in the US felt that getting educated would alienate them from their own communities (Aronowitz & Giroux, 1991), those involved in programs for development sponsored and created by outside agencies in developing countries can feel isolated from the larger community. The code switching required in

these situations can create a friction in society that would lead to a fracturing collapse of the system.

To what extent can a group of researchers impact the situation of women in Pakistan? The impact might not be great, but it will definitely be a start in ensuring self articulated action. On the other hand, even though the aim of multilateral and unilateral development programs is to help build constructively, but to empower without coercion seems paradoxical. If individuals are content with their situation, can an outsider force change? I entered my research project with trepidation because of my doubt that as an outsider I can help my participants problematize their lives, so that these discussions can lead to change. Also working in the traditional framework Pakistan clearly fits into the category of "traditional" as described by Inkeles and Smith as cited in Scott (1995). In fact, "high value placed on religion and the sacred" would be considered an asset to my participants. Would this then mean as a participant researcher, I would have to ask them to change if they wanted to become “modern”? I found that for the most part the participants were proponents of tradition. They were more willing to work within their current social and cultural framework to get educated and become professionals.

One of the reasons I decided to focus on women in higher education is that these are successful women. They have overcome societal, financial, gender related and other barriers to work toward a higher degree. This is in a society that according to the UN shows great disparity in gender in all spheres of life. The literacy rate in Pakistan is a low 45%. Of this percentage, women make up only 32.6%. Women of Pakistan have along way to go to end this disparity in literacy rates. Studying women in higher education in Pakistan can illustrate how the disparity can be decreased. How had women

in higher education made choices that allowed them to change their lives? What factors had empowered women to be successful working against such odds?

With post colonial discourse with a feminist approach as a framework for this study, the voices of these women of Pakistan were contextualized by including theories relating to Islam because religion is so innately integrated into their lives. “If we begin our analysis from and limit it to, the space of privileged communities, our visions of justice are more likely to be exclusionary because privilege nurtures blindness to those without the same privileges” (Sen, 2000, p. 231).

Women are both the “patients” and the “agents” of change (Sen, 2000). The participants of this study were definitely proponents of change and identified how this change would include their need to feel safe in the society of which they are both contributors and stakeholders.

This duality of their relationship to society and themselves creates a tension: how can women who need to improve their “well being” be the ones who bring about the change? From their position in society the participants problematized and reflected on their identity and situation deciding on the action that needs to be taken if they are to become agents to bring about that change.

As Sen (2000) points out, once women understand that they are the “patients” or oppressed, then if this oppression is not alleviated, the result can be even more devastating. For now the woman who realizes the inequities in life, but is not empowered to transform these inequities will not only be aware of her situation, but will be unable to affect change. The question then arises, how does the process of realization begin and how does the transformation take place? According to Sen, “Perhaps the most immediate

argument for focusing on women's agency may be precisely the role that such an agency can play in removing the iniquities that depress the well-being of women (p. 191).

Within the cultural gender expectations, if one's knowledge and contribution are not considered of a high value, that is reflected in how that individual or that group is perceived within the society. If taking care of children and the work within the home is considered less productive than working outside the home, the social capital that women bring to the society will have less value than that of their male counterparts. Recognition of the worth of the social capital that women share with society and the ensuing empowerment is not only beneficial for women, but also for children and men. Sen (1999) emphasizes voice and agency to ensure the "social standing" of women in the family and the community. Sen (1999) expresses that independence gained by women working outside the home and education helps them make informed decisions. At the same time it is important for society to discuss and evaluate those who are contributing to the family and society:

> The perception of who is doing how much "productive" work, or who is "contributing" how much to the family's prosperity, can be very influential, even though the underlying theory" regarding how "contributions" and productivity" are to be assessed may rarely be discussed explicitly (Sen, 2000, p. 190)

In this context, the action that the participants have identified to help women in higher education includes both traditional and technological strategies. The participants felt that a website regarding women's issues in higher education would be beneficial in creating a community and educating others both nationally and internationally. As a more immediate action agenda, this dissertation will be shared with the Higher Education Commission of Pakistan to ensure that administrators in public institutions of higher education are aware of the challenges that these women have faced and to identify ways

that they can be addressed. The researcher will share this dissertation and include the findings with the intended audience during her next visit to Pakistan.

The participants are also interested in continuing this project on an on-going basis to follow-up and ensure that their recommendations are presented and shared and built upon by others in similar situations. The participants will be included wherever this is possible regarding their schedules.

Conclusions

Technology is an extremely new (and for some a non-existent) factor in higher education in Pakistan. The types of technology are also evolving rapidly. The extent that technology has impacted the success of the women in this study is not clear, but it is obvious that the participants believe technology can make a difference in their education.

For Sana communication via email, chat, and mobile phones had improved her English language skills which are an important part of the academic skill requirements for higher education in Pakistan. She had also been exposed to the international opportunities in higher education. Honey through internet based technology was able to connect with her students and gave her an international exposure to begin the process of publishing her research for an international audience as well as creating an international awareness of the perspective of a Pakistani woman in higher education.

For Hina who is still unsure of the role technology will play in their education, there is an awareness, that like other forms of technology (phones and TV) computers are here to stay, and will probably evolve on an even faster level. The complexities of the lives of these women might not be simplified by the use of technology, but it could be changed. For the women that follow in higher education, the role that these women have played will help set the stage for women who will be able to leave their homes without

the reluctance that these women have had. The families, the men, and society in general will have to accept them rather than just tolerate them.

Even though this was the first time that these participants had been involved in such a study, they were extremely excited about their involvement. Most of them went out of their way to communicate with the researcher. Honey kept in constant contact via email, while the others called the researcher once they found out she had arrived in Pakistan for the group discussion. Not only did they coordinate the time to meet, Hina and Safar made a six-hour journey to meet with the researcher in the group discussion, for which she is indebted to them. The participants are already involved in the attempt to make changes to facilitate the success of those who follow them in higher education, what needs to follow is explained below.

Recommendations

As mentioned earlier, there are very few studies of this nature which focus on women's perspective through their voice on their own lives. After dialoguing and problematizing and reflecting on the educational endeavors of the participants, the group was able to identify areas that need to be addressed on a general level in education and more specifically for women in higher education. These recommendations have been presented in Chapter IV. To add to the recommendations made by the group, below are some suggestions of the type of research that would complement this study.

For Further Research

For the researcher, this is the beginning of a quest she hopes to continue. In this study, women participants were chosen from only urban areas in Pakistan. Women coming from rural areas need to be the focus of future research. Even though there are problems regarding power and phone supply, computer technology could have a greater,

or less, impact on women in rural areas. A study of the impact of technology on women in higher education in rural areas, specifically through the recently established Virtual University would help direct computer and internet technology use in higher education.

Also, in this study only one participant was currently enrolled as a student. A longitudinal qualitative study of students enrolled in an institution of higher education using computer and internet technology compared with students without these facilities would give a more accurate indication of the impact of technology.

And lastly, investigating the male perspective of the education of women in higher education would help understand the issues that these women are trying to address. This could be either the perspective of students or the family members. A study focusing on the male perspective on the education of women in Pakistan would illuminate further the complexities of this study.

For Educational Practice

Even though the impact of technology on women in higher education in Pakistan has not been overwhelming, in general it has been positive. Public institutions should provide computer and internet technology on a regular basis to all students (male and female) in all disciplines, not just computer scientists. This will create a more open yet safe environment for students, especially women, to pursue higher education more effectively. It will promote a climate of research and a sharing of ideas on a global level. Institutions should also provide students with the option to purchase computers and other related technology on a discount so they can continue with their work at home. With the newer handheld technologies, institutions should investigate mobile technologies that allow students to communicate and connect on national and international levels.

The women in this study have been able accomplish what they have because of family support. Even though the parents of most of the participants did not have a high level of education, they understand the benefits of their daughters' education. Colleges and universities should use this resource to the utmost. For students entering college, educational institutions should connect with parents to ensure that their daughters will be in a safe environment that will benefit everyone. Currently there is no communication between parents and administrators in public institutions. A system that connects parents of young women to the educational processes will create an atmosphere of trust that is necessary within this culture where parents are hesitant to send their daughters outside the home.

At high school level, students need to be made aware of the rigors of higher education. For both men and women, it seems clear that they are unaware of the options that are available to them when they enter college, and they are unfamiliar with the processes in college. A system that creates a pipeline from school to college may promote the success of students at all level.

Researcher's Reflections

This dissertation process is an inspiration for me to continue working in the area of gender issues in higher education on an international level. When I began the doctoral program, I was unsure of what area I should focus on for my research, but with guidance from faculty to follow my passion, I was able to work on a project that is close to my heart.

To add to my own interest in higher education in Pakistan, the participants were bold and enthusiastic about sharing their experiences with me. When I asked them to think of a pseudonym to use for this study, they all said, "we have nothing to be afraid of.

We're telling the truth." And just as the dissertation process has allowed me to reflect on and understand the system, the culture, and the country of my origin, it has inspired my co-researchers to participate in research projects based on the voices of the people it will impact.

The process has demystified for me the seemingly daunting and impossible task of creating knowledge that relates to my reality. Despite the trepidation, this journey has been extremely pleasant and fulfilling. It has left me with the realization of the extent of the work that needs to be done in the area of research in higher education in developing countries within the complexities of globalization and internet technology.

I think this dissertation has also impacted my immediate family, especially my two sons. Apart from missing field trips and weekend events, which I will have to make up for, I have unintentionally taken them through the process and raised the bar of educational expectations for them. I hope it has inspired them to become contributors to knowledge on an international level.

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APPENDIXES

APPENDIX A
IRBPHS Approval

June 13, 2006

Dear Ms. Rana:

The Institutional Review Board for the Protection of Human Subjects (IRBPHS) at the University of San Francisco (USF) has reviewed your request for human subjects approval regarding your study.

Your application has been conditionally approved by the committee (IRBPHS #06-052). Please note the following:

1. Your application will be fully approved when we receive permission letters from the participating institutions indicating that they are aware of and give you permission to conduct your research.

2. Approval expires twelve (12) months from the dated noted above. At that time, if you are still in collecting data from human subjects, you must file a renewal application.

3. Any modifications to the research protocol or changes in instrumentation (including wording of items) must be communicated to the IRBPHS.
Re-submission of an application may be required at that time.

4. Any adverse reactions or complications on the part of participants must be reported (in writing) to the IRBPHS within ten (10) working days.

If you have any questions, please contact the IRBPHS at (415) 422-6091.

On behalf of the IRBPHS committee, I wish you much success in your research.

Sincerely,

Terence Patterson, EdD, ABPP
Chair, Institutional Review Board for the Protection of Human Subjects

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IRBPHS University of San Francisco
Counseling Psychology Department
Education Building - 017
2130 Fulton Street
San Francisco, CA 94117-1080
(415) 422-6091 (Message)
(415) 422-5528 (Fax)
irbphs@usfca.edu

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http://www.usfca.edu/humansubjects/

From: kshahzad@hec.gov.pk [mailto:kshahzad@hec.gov.pk]
Sent: Wed 8/16/2006 12:35 AM
To: irbphs@usfca.edu
Cc: Rana, Anniqua
Subject: Ms. Anniqa's reserach requirements

Dear Terence Patterson,
EdD, ABPP
Chair, Institutional Review Board for the Protection of Human Subjects

This is to confirm that we are aware of Ms. Anniqa Rana's research requirements and her plan of using interviews of participants for her research. We have been informed by her that she will comply by all the regulations of University of San Francisco governing her research and the protection of the research participants.

Regards

Mian Khurram Shahzad Azam
Coordinator, CALL subcommittee of National Committee on English, Pakistan

APPENDIX B
Participant Consent Cover Letter

I, Anniqua Rana, am a doctoral student in the International and Multicultural Education program at the University of San Francisco. I am doing a study on the impact of technology on women in Pakistan in higher education. You have given me approval to conduct this research.

You are being asked to participate in this research study because you are a Pakistani woman who has completed her higher education in a Pakistani institution. I would like to know whether technology has impacted your educational goals. I would also like to focus on other issues related to the higher education of women of Pakistan.

It is possible that some of the questions I ask may make you feel uncomfortable, but you are free to decline to answer any questions you do not wish to answer, or stop participation at any time. Although you will not be asked to mention or state your name during the dialogue, I will know that you were asked to participate in the research because I sent you this cover letter. Study records will be kept as confidential as possible. Study information will be kept in a private location. Only my dissertation chair, Dr. Rosita Galang, and I will have access to the files and the tape recordings will be expunged upon completion of the dissertation.

While there will be no direct benefit to you from participating in this study, the anticipated benefit of this study is a better understanding your perceptions and experiences of the impact of technology on the higher education of the women of Pakistan.

There will be no cost to you as a result of taking part in this study, nor will you be reimbursed for your participation in this study.

If you have any questions about the research, you may contact me at 001 650-306-3470. If you have any further questions about the study, you may contact the IRBPHS at the University of San Francisco, which is concerned with protection of volunteers in research projects. You may reach the IRBPHS by calling 001 415 422-6091 and leaving a voicemail message, by emailing IRBPHS@usfca.edu, or by writing to the IRBPHS, Department of Psychology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117. You may also contact my dissertation chair, Dr. Rosita Galang at galangr@usfca.edu.

PARTICIPATION IN RESEARCH IS VOLUNTARY. You are free to decline to be in this study, or to withdraw from it at any point.

Thank you for your attention. If you agree to participate, please complete the attached consent form, and return it to me at your earliest convenience.

Respectfully,
Anniqua Rana
Doctoral Student (USF)

APPENDIX C
Participant/Student Consent Form

Purpose and Background

Ms. Anniqua Rana, a doctoral student at the School of Education at the University of San Francisco, is conducting a research study that seeks to understand the impact of technology on the higher education of women in Pakistan.

Procedures

If I agree to be a participant in this study, the following will happen:

1. I will participate in interviews.
2. I will participate in the dialogues with knowledge that they will be taped, and transcribed.

Risks and/or Discomforts

1. It is possible that some of the questions will make me feel uncomfortable, but I am free to decline to answer any questions I do not wish to answer or to stop participation at any time.
2. Study records will be kept as confidential as possible. No individual identities will be used in any reports or publications resulting from the study. Study information will be kept in a private file at all times. Only the researcher, Ms. Rana and the dissertation chair, Dr. Rosita Galang, will have access to the files.
3. Because of the time required for my participation I may become bored or tired.

Benefits

There will be no direct benefit to me from participating in this study. The anticipated benefit of this study is a better understanding of the impact of technology on my education.

Costs/Financial Considerations

There will be no financial costs to me as a result of taking part in this study.

Payment/Reimbursement

There will be no payment or re-imbursement for participating in this study.

Questions

I have talked to Ms. Anniqua Rana about this study and have had my questions answered. If I have further questions about the study, I may call her at 001 650-306-3470 or Dr. Rosita Galang galangr@usfca.edu.

If I have any questions or comments about participation in this study, I should first talk with the researcher. If for some reason I do not want to do this, I may contact the IRBPHS, which is concerned with protection of volunteers in research projects. I may reach the IRBPHS office by calling 001 415 422-6091 and leaving a voicemail message, be emailing IRBPHS@usfca.edu, or by writing to the IRBPHS, Department of Psychology, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080.

Consent

I have been given a copy of the "Research Subject's Bill of Rights" and I have been given a copy of this consent form to keep.

PARTICIPATION IN THE RESEARCH IS VOLUNTARY. I am free to decline to be in this study, or to withdraw from it at any point. My decision as to whether or not to participate in this study will have no influence on my present or future status.

My signature below indicates that I agree to participate in this study.

_____

Subject's Signature Date of Signature

_____

Signature of Person Obtaining Consent Date of Signature

APPENDIX D
Research Subjects' Bill Of Rights

The rights below are the rights of every person who is asked to be in a research study. As a participant, I have the following rights:

1. To be told what the study is trying to find out;

2. To be told what will happen to me and whether any of the procedures, drugs, or devices are different from what would be used in standard practice;

3. To be told about the frequent and/or important risks, side effects, or discomforts of the things that will happen to me for research purposes;

4. To be told if I can expect any benefit from participating, and, if so, what the benefit might be;

5. To be told of the other choices I have and how they may be better or worse than being in the study;

6. To be allowed to ask any questions concerning the study, both before agreeing to be involved and during the course of the study;

7. To be told what sort of medical treatment is available if any complications arise;

8. To refuse to participate at all or change my mind about participation after the study is started; if I were to make such a decision, it will not affect my right to receive the care or privileges I would receive if I were not in the study;

9. To receive a copy of the signed and dated consent form; and

10. To be free of pressure when considering whether I wish to agree to be in the study.

If I have any questions, I should ask the researcher. In addition, I may contact the Institutional Review Board for the Protection of Human Subjects (IRBPHS), which is concerned with the protection of volunteers in research projects. I may reach the IRBPHS by calling 001 415 422-6091, by electronic mail at IRBPHS@usfca.edu, or by writing to IRBPHS, School of Education, University of San Francisco, 2130 Fulton Street, San Francisco, CA 94117-1080 USA.

APPENDIX E
Right to Confidentiality/Pseudonym Assignment

As a participant for this study, please indicate your feelings regarding confidentiality.

CHECK ONE OF THE FOLLOWING:

_____ Please use my legal name in all documentation required to complete the above-mentioned research study.

OR

_____ Please conceal my identity by using a pseudonym in referring to me in the documentation required to complete the above-mentioned research study.

CHECK ONE OF THE FOLLOWING:

_____ Please use the pseudonym _____ when referring to me in the documentation required to complete the above-mentioned research study.

OR

_____ Please choose a pseudonym for me.

PLEASE READ, SIGN, AND DATE:

I understand that I have the right to speak candidly yet confidentially for this research study. By checking the above sections, I am either granting permission to use my legal name or asking to be referred to by a pseudonym.

_____ _____
Signature Date

APPENDIX F

Dialogue Guide for the Participants

Questions to Guide the Initial Dialogue

Research Questions	Initial Dialogue Questions
1. To what factors do women of Pakistan attribute their success or lack of success in higher education?	a. Tell me about your education. b. How do you define success?
2. How has technology affected their success in higher education?	c. Why do you think you were able to complete this level of education? d. What role has technology played in this process? And how do you define technology?
3. What recommendations can these women make to those who want to be as successful as them?	e. What problems did you face while completing your education and how did you address them? f. What do you recommend to other women who might be in similar situations so that they might be able to overcome these issues?