

# Women in Higher Education in Iran

*Student perceptions of career prosperity in the  
labour market*

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UNIVERSITETET I OSLO

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# Abstract

Since the 1990s, there has been a significant increase in Iranian women's participation in higher education. This study aims to explore the participation of women in higher education and female participation in labor force in Iran. By adopting 'Women's Empowerment Framework' of Sara Longwe (Year), the study investigates women in higher education and their prosperity in the labor market focusing on university students' attitudes and awareness of gender equality and inequality. The empirical data of the study are obtained from a questionnaire survey on 194 students in the Tabriz University of Medical Sciences in Azerbaijan province of Iran. The survey includes questions asking education attainments of the parents to know whether background factors significantly influence the enrolment of students. The analyses show that there is significant difference between male and female students in terms of parents' education attainment. Female students in particular came from more educated parents. The most cited motivation of students' attending specific study was their own interests with almost the same rate for both genders. There is significant difference in terms of inspiring for a well paid job between students with highly educated parents and those of parents without higher. Students were aware of the role of higher education in getting a well paid job. Also, this study found differences between male students and female students in terms of their purpose of attending higher education for a potential marriage. More male students entered the higher education for this reason than female students. The study showed that male students are more aspired to continue with further higher education compared to female students. Furthermore, students are aware of employment situation for previous graduated students as well as gender inequality in the labour market. Students are aware that there is more job opportunity for men in the job market for previous graduated students. The study shows that there is a consciousness among two genders in terms of gender inequality in the labour market.

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***“Education is one of the most important means of empowering women with the knowledge, skills and self-confidence necessary to participate fully in the development process.”***

*The International Conference on Population and Development,*

*Programme of Action, paragraph 4.2*



# **1- INTRODUCTION**

## **1.1 Introduction**

This chapter will provide a brief outline of the study, the reasons why more empirical research in this area is still needed, the research method of the study and an overview of how the thesis is structured.

## **1.2 Rationale for the study**

Woman's access to higher education is one of the most considerable global transformations in education in the last decades. The trend of the narrowing gender gap in higher education is significant and sometimes it changed completely – women outnumbering men, some researchers called it a “reverse gender gap” (Goldin, Katz & Kuziemko, 2006; Woodfield & Earl-Novel, 2006). The success of social development depends upon making women full partners. They must be enabled not only to contribute their capacities, but also to share equally in the benefits of development projects.

Education's importance has been emphasized by a number of international conventions, including the Universal Declaration of Human Rights and the Programme of Action of the 1994 International Conference on Population and Development (United Nations, 1996). The Fourth World Conference on Women, held in Beijing in 1995, recognized that women's literacy is key to empowering women's participation in decision making in society and to improving families' well-being (United Nations, 1996). In addition, the United Nations has articulated the Millennium Development Goals (MDGs), which include goals for improved education, gender equality, and women's empowerment. The MDGs emphasize education's essential role in building democratic societies and creating a foundation for sustained economic growth (United Nations, 2003). Education helps women take advantage of opportunities that could benefit them and their families, preparing women for the labor force and helping them understand their legal and reproductive rights.

Iran is a young nation with a population of nearly 70 million, among whom 25 percent are below age 15, and 69.8 percent between ages 15 to 64. According to the data obtained from Iranian National Census, two years before the Islamic Revolution in 1977, the literacy rate of women was only 35.5%, while men's literacy rate was almost 59%; a literacy gap of 23.4 existed. Since then the literacy rates for both men and women increased. This was due to the government's programs for literacy of adults including policies on literacy requirement for employment and recruitment of the work force. According to the national census in 2007 out of total number of 63,899,030 of the population of 6 year and above of the country, 54, 064,275 people are literate and 9834755 people are illiterate. Based on the latest census of the country some 15.4 % of the population is illiterate. Country's literacy rate in the age group of below 30 and 50 year are respectively 96.4 and 91.2%. Out of the total number of literate people 88.7% are male and 80.3% are female (National Report on the Situation of Adult Learning and Education, 2011).

This dramatic improvement is not only in literacy rates, but also in education levels as well. The rate of female students entering universities has increased rapidly; and since 2001 women constitute the majority of students entering higher education in Iran. According to the Ministry of Science, Research and Technology of the Islamic Republic of Iran (formerly known as the Ministry of Culture and Higher Education), In 2007 51% of those who successfully passed the competitive national college entrance examination (konkur) and were admitted to public universities in Iran were women; (Ministry of Science, Research and Technology of the Islamic Republic of Iran, 2008). The highest university acceptance rate for women was 68.3% in the medical field For the first time in the history of higher education in Iran (Khaz Ali, 2010). In 2008, the ratio of female students grew to comprise 63 percent of the students entering university undergraduate programs throughout Iran. Entrance of women into masters and PhD programs is still lower than men. It remains to be seen how this landmark event will affect female higher education.

Despite great achievements in girl's schooling and considerable advancement towards gender equality in Iranian education, the battle is not yet over. Quantitative and qualitative limitations continue to exist in the realm of education while the broader participation of women in society is far from ideal. In fact, the dramatic increase in the number of educated women in Iran is not reflected in their participation in political and economic life, however, there has been some improvement in recent years ( Mehran, 2003). Despite improvements in

the gender balance of educational opportunity, labor markets are still characterized by wide inequality in the type of employment and levels of remuneration men and women receive. The public sector has long been the most important supplier of jobs for college graduates, especially women, so the rising number of university educated women without any prospect for formal employment or political participation will soon create a crisis for the state. Furthermore, the educated women of Iran are pushing the traditional boundaries due to their growing tendency to delay marriage and have fewer children. Their interest to change the traditional role of women in the family and society, leading to growing female expectations that need to be met sooner or later ( Mehran , 2003).

Although there are more girls going to school in Iran than any time in the past, and more people among the population who can read and write than ever before, there are not adequate jobs for them. Most of them are also barred from formal economic activity because of a traditional attitude that views men as the breadwinners of the family and discourages women from working outside the home. In addition, gender inequality persists in the types of jobs that women and men can get, as well as the opportunities for promotions at work. Since gender equality in education is part of gender equality in society at large, it is important to view the educational status of women within the broader framework of their participation in the social, political, and economic arenas.

Based on 2007 census, 61.6 percent of men and 9.8 percent of women are economically active. These data indicate that the participants have much higher education and skills and are involved in a wide range of professional, managerial, and entrepreneurial activities. In terms of types of jobs available to women, it must be noted that while women comprise almost one-third of government employees, they hold less than 7% of the administrative positions available (Statistical center of Iran, 2007). Considering the education level of the employees and the managerial positions available at that rank, the chances of a woman getting a managerial position is one third of that of a men's (Rezazadeh, 2001).

Several international agencies have developed various gender-sensitive measures. Among these are Gender Development Index (GDI), and Gender Empowerment Measure (GEM) developed by United Nations Development Program (UNDP). While Human Development Index (HDI), measures the overall human development in a country, the gender development index compares women's and men's development based on discrepancy between life



expectancy, educational attainment and income (Canadian International Development Agency, 1997). Gender empowerment index is to measure inequality in decision making process and is measured based on three factors of economic participation and decision-making power; political decision-making and power; and power over economic resources (Pillarsetti & McGillivray, 1998).

These indices which are devised to measure development and empowerment are good measures to understand the capacity of women in Iran. They emphasize on the importance of education, economic activity and political participation as major issues. According to 2009 Human Development Report of United Nations, Iran ranked 88 for its HDI and 76 for its GDI among 155 countries (Rezazadeh, 2011).

For over a decade, the number of women attending institutions of higher education has been growing steadily. This overbalance toward women has sparked wide social and political debates concerning the role of higher education for Iranian women. The Iranian parliament (*majlis*) recently entered into this debate, questioning whether quotas should be placed on the number of women entering Iranian public colleges and universities. The conservatives argue that women's overall access to higher education is threatening traditional values, and if women continue to outperform their male counterparts educationally, it will threaten the sacrosanct family structure that forms the basis of Islamic society.

Understanding the role of higher education in the lives of Iranian women brings to focus Islamic Republic of Iran's concerns about the growing numbers of women on public college campuses. As young Iranian women continue to press for acceptance into higher education, and have reversed the gender gap, government officials' fears have also been elevated. They fear that women's increasing access to higher education is incendiary to the sacrosanct family structure of this Muslim society. Better educated women are considered too independent and may find it difficult to find a husband. In this society, a woman who remains unmarried can potentially pose social havoc. The remedy, as Islamic Republic of Iran policymakers see it, is to place limitations on female college enrollments (Mehran, 2003).

## 1.3 The research questions

There has been little empirical research related to Iranian women's education and their advancement in society. Few studies look at the paradox of the higher education in the lives of Iranian women (Shavarini, 2006, Mehran, 2003) and educational policies have been analyzed in relation to the Islamization of the educational infrastructure, rather than to women per se. Consequently, our knowledge about the perspectives of girls' education and their future job opportunities is limited. Despite educated women's expressed desire to work, Iranian women continue to remain largely outside the workforce. The majority of college-educated women do not find paid employment but rather they perform their traditionally expected roles as wives and mothers. The prospect of finding a job after obtaining a college degree seems formidable, considering the boundaries that are set for women in Iranian society (United Nations, 1998). A number of hypotheses have been put forward in the literature to explain this phenomenon. In particular, the prevalence of conservative attitudes towards gender roles, especially among urban middle classes, seems to be the preferred explanation among researchers in the field. The rise of oil rents and incomes after the 1950s and the concomitant increase in the average number of surviving children per family may have contributed to the low and declining female LFP, at least until the 1980s (Karshenas, 2001; V. Moghadam, 2005; Ross, 2008).

Since 1980, the socially restrictive policies of the Islamic Republic have been viewed by many observers as the primary impediments to the rise in LFP rate among women (V. Moghadam, 2000; F. Moghadam, 2004). However, pointing to the considerable role of economic disruptions and structural changes in Iran since 1980, some scholars have questioned the significance of the Islamic Republic's social policies as impediments for female LFP beyond the early years of the 1979 Revolution (Bahramitash and Esfahani, 2009). In this Islamic society, convoluted cultural mores and religious law dictate that a woman needs her husband's or father's permission to work outside the home. Without their consent, women (educated or not) may not seek employment. A woman's primary role is strongly dictated by tradition to be that of mother and wife. It is an entrenched cultural tradition that often prevents women from entering the job market. Women's magazines and other mainstream media are replete with anecdotes of male hostility toward women in Iran's job market. There is a tacit understanding among college-going women that Iran's work atmosphere is inhospitable for women; and they are steered away from it, often without even

attempting to enter it. Even though financial independence is the main incentive that attracts women to college, that independence remains for many a distant goal.

Accordingly, as stated by the critics of women's higher education, Iran's system of tertiary education fails to create a cadre of human resources that will ultimately join the labor force.(Shavarini, 2005). However, there are visible signs of expansion in women's role in the economy during the past two decades, along with rapid increases in their educational attainments and declines in fertility and family size. These changes are taking deeper roots as the demographic transition changes the relations within the family, between the spouses as well as between parents and children, making it possible for families to invest more intensively in the education and well-being of the next generation. Understanding the factors behind Iranian women's labor market experience is important because the trends in education and family structure are continuing and could bring about major changes in Iran's economic and social environment.

What will be the benefit of women's higher education if society fails to utilize it? What are these women supposed to do with the education, supposedly trains them, for jobs that will never materialize?

The aim of this study is to find out the condition of females in the traditionally male dominated subjects such as medical sciences, and wants to find answers to the following questions:

- 1- What kind of social classes do they come from?
- 2- What are the reasons for them to take those particular subjects?
- 3- What are the expectations from their education?
- 4- What is their perception of labor market?

## **1.4 Thesis structure**

This thesis is divided into 6 chapters. Chapter 1, has introduced the study with the study rationale and provided primary research questions. Chapter 2, presents the background information about Iran, its education system and situation of women in society and provides applicable background information relevant to the study. Chapter 3, provides the theoretical framework which acts as a guideline to the presentation of the findings. Chapter 4, discusses

the research methodology utilized in the study. Chapter 5, presents the quantitative findings where in questionnaire results are analyzed and discussed in detail. Chapter 6, summarizes the major findings and provides suggestions for action and further research.

In Chapter 2, contextual analysis is presented.

## **2- Contextual analysis**

### **2.1 Introduction**

This chapter will provide the background information about Iran and its education system. The Iran's higher education, situation of the women in higher education and situation of the women in Iran's society will also be looked at.

### **2.2 A Brief presentation of Iran**

#### **2.2.1 Geographic and Climate**

Iran with an area of more than 1,648,000 sq. km is located in the southern hemisphere, north temperate zone between 25 to 29 degrees 47 minutes of north latitude of the equator and from 44 degrees 2 minutes to 63 degrees 20 minutes of north longitude from Greenwich Prime Meridian.

Iran's average height is more than 1,200 m. above sea level. Its geographical boundaries are stretched in the north and east hemisphere, southwest of Asia and the middle East. Iran's neighbors are Turkmenistan Republic, Republic of Azerbaijan and Armenia, as well as bordering the Caspian Sea in the north, Afghanistan and Pakistan in the east, bordering the Sea of Oman and Persian Gulf in the south and Turkey and Iraq in the west.

Iran has 30 provinces, 336 cities, 889 districts, 1016 towns, 2400 rural districts and about 62,000 villages.

#### **2.2.2 Population**

The 2006 national census recorded a population of 70.5 million people for Iran, about 50.7% of which are men and 49.3% women, with 103% gender ratio. 68.4% are city dwellers, and 31.6% live in villages. According to table (2.1) the population growth was 1.4% in the past decade. This rate was 3.2% during 1976-86 and it decreased to 1.4% during 1986-96. The

population inflation within the first decade of post Islamic Revolution era was a barrier to social progress and development. During 2000 to 2006, the population of Iran grew from 62.6 to 70.5 million, i.e. an average increase of about one million people per year.

**Table 2.1: Population by percentage of Age Group (1986-2006)**

Year	Total population (in million)	Annual average growth	Age Group 0-14	Age Group 15-64	Age Group 65 and over
1986	49.4	3.9	45.4	51.5	3.1
1996	60	1.47	39.5	56.1	4.37
2006	70.5	1.4	25	69.8	5.2

Ministry of education of the Islamic republic of Iran(2008)

## 2.2.3 Religion and Language

The political system of the Islamic Republic of Iran established in 1979 under the leadership of the Imam Khomeini. It is the only ruling system in the world where politics and religion are intertwined. Supreme leader (Ayatollah Khamenei) is the highest political and religious figure in the country even though there is a presidential system. Considering the Islamic nature of the political system, both the Constitution and civil laws are based on Islamic principles.

According to the latest census (Statistical center of Iran, 2007), 99.55% of the population are Muslims, 0.17% Christians, 0.07% Zoroastrians, 0.05% Jews and 0.16% are followers of other faiths. The official language of Iran is Farsi (Persian), and as well as the existence of different dialects Lori and Gilaki, some other languages such as Azerbaijani Turkic, Kurdish, Arabic and Turkmen are spoken in major parts of the country.

## 2.2.4 Economic Geography and Economic Indicators (EI)

Iran is one of the major oil and gas producers in the world. It has also underground resources of iron, coal, copper, manganese, nickel, aluminum, cobalt and precious stones. Gross National Product (GNP) per capita was 1789 U.S. dollars in 1997 and the per capita income

is 5,718 U.S. dollars. Pistachio, corn, cotton, rice, fruit, flax, barley and tobacco are the main agricultural produce, and the main exports are oil, gas, carpet, pistachio, caviar, leather, fruit and dried fruits. In recent years, petrochemical industry, cement production, rubber, production, animal husbandry, food industry and fishing have seen a boost and the products are being exported to different countries all over the world.

Based on the 2009 United Nations Human Development Report for Iran, 12.8% of people living below the human poverty index line (rank: 59) and GDP per capita, in purchasing power parity is \$10,955 (rank: 71). Below are the Economic Indicators (E.I.) trends in Iran during the period 2000-2006 were as follows:

The average growth rate of EI has been annually around 5.4%, agriculture sector's share from the GDP is 13.8%, oil and gas 11.2%, mine and industry 24% and the service sector with the highest share around 51%.

Investment ratio to the GDP has also risen from 29.8% in 2000 to 36.4% in 2005. The government's public expenditure is almost 20% of the GDP and the tax revenue is about 6% of the GDP. The social welfare index had an annual growth rate of 5.8% during the period 2000 to 2005.

## **2.2.5 Employment, Social and Health Indicators**

Iran's labour force grew quite rapidly in the second half of twentieth century. In the fifty years from 1956 and 2006, the labor force aged 20 years and older grew 4.2 times from about 5 million to over 21 million. As in many other countries, the growth rate was much faster for women compared to men (on average, 4.1 vs. 2.8 percent per year), with the difference being larger and the growth rate being higher in urban areas, where female labor force grew close to 17 times in that period.

The life expectancy indicator has risen from 70 years in 2000 to 72 in 2009. The number of physicians per thousand people is now 1.13 and the number of dentists per ten thousand people has been doubled. The ratio of hospital beds to the population has been one per 605 people and the ratio of beds in use is one per 726 individuals.

In general, every health center including both public and private covers a population of 8613 people. Vaccination rate for below one-year old infants (4 vaccinations) is 95% and 97.3% of the birth deliveries are performed by trained professionals.

67.1% of the total population are now covered by social security insurance and about 93.8% are covered by health insurance, of whom 21 million being rural and 5 million underprivileged and vulnerable people. During the last decade, the cultural indicators have been relatively improved in a way that the number of published books compared to the total population is 2.4. Regarding the ITC, the number of the Internet users is currently 32% of population.(Ministry of education of the Islamic republic of Iran,2008)

## **2.3 Education System in Iran**

### **2.3.1 Structure of education system**

In the Islamic Republic of Iran, the responsibility of education is undertaken by the following three ministries:

- Ministry of Education covers the pre-primary (nursery), primary, lower secondary, upper secondary and adult education.
- Ministry of Culture and Higher Education deals with general higher academic education.
- Ministry of Health and Medical Education oversees the medical academic education.

Iran's educational system comprises many schools and universities scattered throughout the country. As illustrated in Table 2-2, Kindergarten is mandatory and begins at the age of 5 a year before the primary education. Primary school (Dagestan) starts at the age of 6 for a duration of 5 years. Lower-secondary school, also known as orientation cycle (Doreye-Rahnemai Tahsili), goes from the sixth to the eighth grade. Upper secondary school (Dabirestan), which last 3 years is not mandatory. High school is divided between theoretical, vocational/technical and manual, each program with its own specialties. Universities, institutes of technology, medical schools and community colleges, all are the providers of higher education in the country. The requirement to enter into higher education is to have a



Upper secondary school diploma, followed by a one-year preparation class, and finally pass the national University entrance's exam. Higher education is sanctioned by different levels of diplomas: Fogh-e-Diplom or Kardani (equivalent to a Baccalaureate in technical engineering) after 2 years of higher education, Karshenasi (also known under the name “Lisance”) is delivered after 4 years of higher education (Bachelor's degree). Fogh-Lisance is delivered after 2 more years of study (Master's degree), after which, another exam allows the candidate to pursue a doctoral program (PhD). The age of students and the length of studies for different levels of education are presented in table 2.2

**Table 2.2: The age of students and the length of studies for different levels of education**

<i>Structure</i>				<i>Grade</i>	<i>Age</i>
M.A./ M.S.				18	23
(2 Years)				17	22
B.A./ B.S.				16	21
(4 Years)				15	20
				14	19
				13	18
Pre- University (1 Year)	Open Associate Degree in Technical /Vocational (2 Years)	Integrated Associate		12	17
Secondary Education Vocational Branch (3 Years)	Secondary Education Theoretical Branch (3 Years)	Secondary Education Technical Branch (3 Years)	Degree in Technical/ Vocational (5 Years)	11 10 9	16 15 14
Lower Secondary (3 Years)				8 7 6	13 12 11
Primary (5 Years)				5 4 3 2 1	10 9 8 7 6
Pre- Primary (1 Year)				0	5

### **2.3.2 History of higher education**

The history of the establishment of western style academic universities in Iran dates back to 1851 with the establishment of Darolfonoon , aimed at training and teaching Iranian experts in many fields of science and technology.

In 1855, "The Ministry of Science" was first established, and the Ministry of Higher Education, which oversees the operation of all institutes of higher education in Iran, was established in 1967. However, it was back in 1928 that Iran's first university, The University of Tehran was born. It was designed by French architect Andre Godard, and built in 1934. Today, Tehran University is Iran's largest university with over 32,000 students., It was from the 1935 that women were allowed to enter the higher education..

Following the establishment of the Tehran University, the need for experts in various disciplines still existed. Therefore, other government organizations, as the Ministries of Agriculture, Finance, Post and Telegraph, as well as the Ministry of Professions and Art (Commerce) and the Ministry of War established their own centers for advanced training programs. Gradually and due to some further development, some of these centers, i.e. the School of Veterinary Medicine, the School of Agriculture, and the School of Fine Arts, were transformed into faculties. Other centers of higher education were also sprouted in the period between 1924 to 1941including the Higher Class of Finance for the purpose of training accountants, the College of Post and Telegraph for the purpose of training technicians and the War University for high-ranking officers of the army. Mashhad's School of Health, which laid the groundwork for the School of Medicine in that area, and the Schools of Music and Architecture were also set up.

### **2.3.3 Modern Higher Education**

The higher education system in Iran consists of both private and public universities. All public universities except medical schools are under the direct supervision of the Iranian Ministry of Science, Research and Technology. Medical schools are supervised by the Ministry of Health, Treatment, and Medical Education.

There are currently over 50 public universities in addition to over 40 public institutions specializing in medical study and 290 sizeable private postsecondary institutions. Counting branch campuses, technical institutes, and religious colleges, the government oversees over 1,500 postsecondary campuses. To begin operations, institutions of higher education must receive authorization from their supervising ministry.

Tuition at public universities is free. Private institutions typically charge fees. The largest private institution in Iran is Azad University, which enrolls more students at its over 360 campuses in Iran and overseas than all the public universities combined.

Distance learning degree study is provided mainly by the University of Payam-e- Nour (state affiliated university with tuition fees), though some other universities also offer distance learning programs. The university's aim is to offer a public higher education to remote areas and to employed professionals. In order to be admitted to this institution, students must pass the Concour entrance tests.

### **2.3.4 Higher Education in Iran: Facts and Figures**

The number of undergraduate and graduate students has increased by many times during the past decade. After a period of stagnation in the early 80s, there was a period of expansion in the higher education infrastructure and a concomitant multiplication of faculty members and trainees. In 1979, Iran had an elite higher education system with nearly 175,000 students and about 15,000 faculty in 20 university towns. During the last three decades, higher education has been largely democratized. There are more than 3.7 million students, 120,000 academics and 2,000 institutions in more than 200 cities. The number of students per 100,000 inhabitants rose from 510 to 5,040. (Paivandi, 2012)

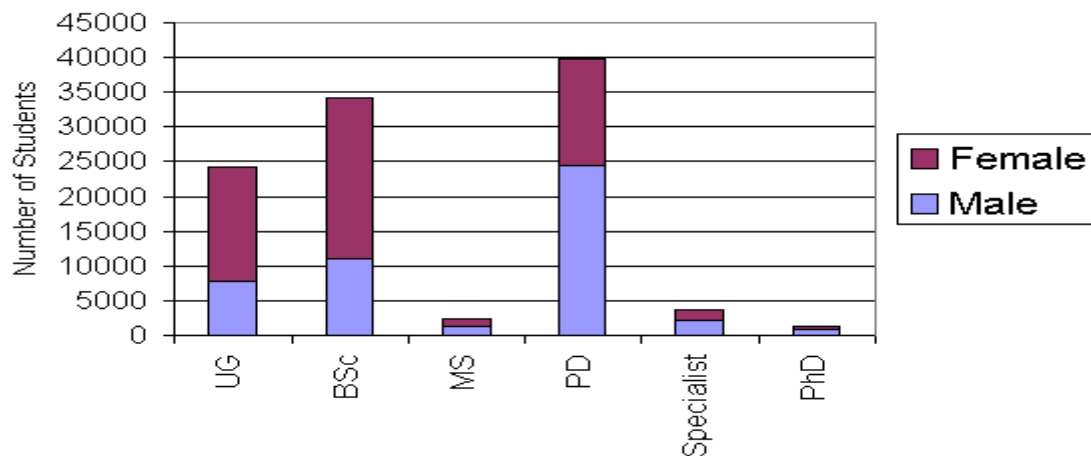
In the 2005-6 academic year, the major group of students (63.97%) were in bachelor level, while only 5.55% studied in Master degree programs and 0.77% were in PhD level. (Malekzadeh, Mokri and Azarmina, 2001)

In the non-medical fields, the majority of the students are in the bachelor levels while MS and PhD degrees are less abundant. The distribution of students in various degrees and fields changes if figures belonging to the Islamic Azad University are added. This university

educates almost half of the Iranian students in higher education with some 61% of its students enrolled in the field of humanities and social sciences. Only 5% of the students of the Islamic Azad University are enrolled in the fields of health and medical sciences. This is probably due to the fact that this university invests less in resource consuming fields. From 1993 to 1999, there was a constant rise in the number of post-graduate students in non-medical fields.

In medicine, the number of students graduating as general practitioners (MD), doctor of pharmacy (PharmD), dentist (DMD) and specialist in medical laboratory sciences increased from 1,138 in 1980 to about 8,800 in 1996. This almost eight fold increase is mainly due to a sharp increase in the recent 5 years (Ministry of Health and Medical Education; 1998). A simultaneous rise in the number of physicians graduating as specialists or PhD during these years is evident. Figure 2.1, displays the number of students under training in health and medicine in different levels (Budget and Planning Organization, 1998; Ministry of Health and Medical Education, 1998).

**Fig 2.1 Students Training in Health and Medicine in Different Levels (1998)**



UG: Under-graduate, BSc: Bachelor in Science, MS: Master in Science, PD: Professional Doctorate

Malekzadeh et al. (2001)

The rise of female students in medical sciences is particularly noticeable. During the 2007–2008 academic year, 66% of all university students engaged in Medical sciences were women (Mehran, 2009). This is fulfilled through 41 public medical universities, comprising 36 medical schools, 45 nursing and midwifery schools, 32 schools of public health, 13

dentistry schools, 10 pharmacy schools, 22 schools of paramedics, and 6 schools of rehabilitation sciences (Mehrdad , 2009). One interesting change is the relative increase in the number of female students and graduates in country's medical system. Women are about 54% of the students in the health and medical fields.

according to World Health Organization, human and physical resources indicators Rate in Iran in 2009 per 10 000 population were: Physicians 28.3, Dentists 4.2, Pharmacists 16.7 and Nursing and midwifery 35.2 and ranking 88 between countries in the 2000-2010. (World Health Organization, 2011).

**Table 2.3: Distribution of students' population in the major fields of study  
in 2005-6 academic year**

<i>Field</i>	<i>Number of students</i>	<i>Percentage</i>
Arts	87000	3.55 %
Medical Science	141000	5.75 %
Engineering	688000	28.10 %
Agricultural & Veterinary	168000	6.86 %
Basic Sciences	260000	10.62 %
Humanities	1104000	45.09 %
Total	2448000	100 %

Tavakol, (2007)

In order to make Higher Education more in the service of national development and responsive to its needs, a set of measures have been introduced in recent years. For example, in response to the shortage of skilled manpower and to overcome this shortcoming within the Higher Education, the number of technical- vocational programs and centers have increased, raising the number of such centers to 845 and number of such programs to 830 (two-year diploma programs). For the same developmental considerations projects to estimate national manpower needs have been defined, and universities have been asked to design their Comprehensive Development Plans, also Science & Technology Parks and Incubators have been established and developed (Tavakol, 2007).

It is also good news that the gender gap is minimal both with regard to the percentage of women admitted to the university (51%) compared to men (49%), and the percentage of male graduates (51%) compared to women (49%) in 2007–2008. Yet, given the underlying philosophy of the need for balance so that neither side dominates, the fact that fewer men are studying in diverse fields of study with the exception of engineering is cause for concern. The only other field of study in which there is more or less a balance is agriculture and veterinary medicine in which 48% of all students studying in this field are men, compared to 41% in human sciences, 38% in basic sciences, 34% in medical sciences and 32% in the arts (Mehran, 2009).

## **2.4 Women's Education in Iran**

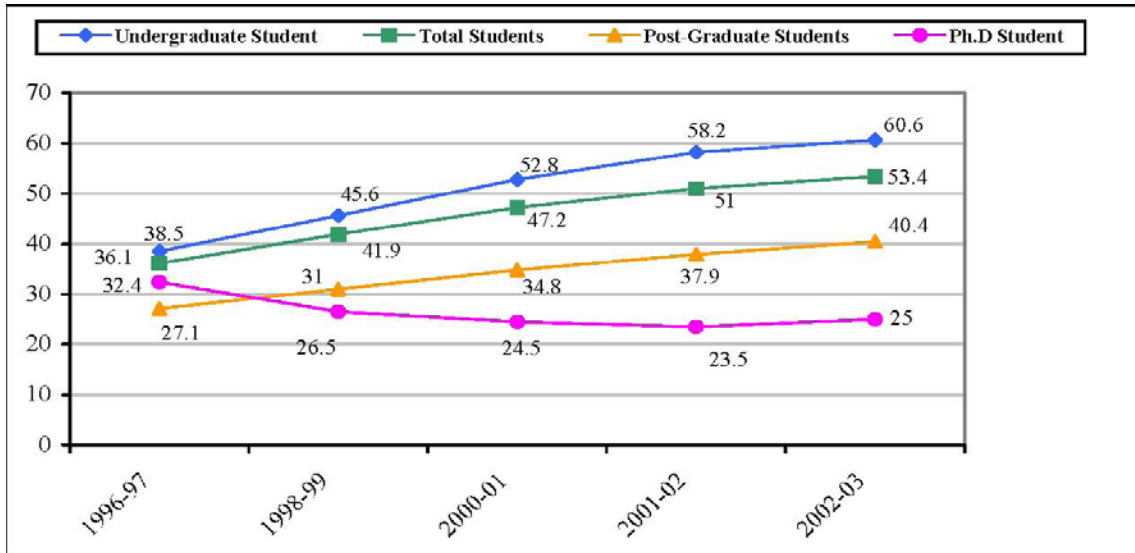
The history of women's education in Iran is relatively new. Girls have been allowed in to schools for only a little over a century, and admitted to colleges and universities for only 75 years. The first school for girls was opened in 1835 by American missionaries in the predominantly Christian town of Urmiya. It was attended by Armenian and Assyrian girls. By 1875, missionaries had opened a school for girls in Tehran that enrolled Christian, Zoroastrian, and Jewish girls. During this period, although some elite Muslim families provided their daughters with private tutors, in general, Muslim daughters were denied an education. The social and political resistance to girls' schooling came from the Muslim clergy who were concerned that education would threaten the fabric of Islamic society. For faithful Muslims, girls' education was only desirable when it was in harmony with Islamic strictures. It was not until 1899 that the first school for Muslim girls opened in Tehran. By the 1920s there were approximately 58 schools in Tehran that provided education for approximately 3,000 girls. Gaining the support of traditional Muslim families so that they would enroll their daughters continued to be very difficult, and efforts to increase the number of Muslim girls in schools were met with indignant opposition.

It took more than a century from the opening of the first school for girls and the forceful rule of Reza Khan of the Pahlavi dynasty (1925–41), for girls and women to substantially participate in schooling in Iran. In 1932, supported by liberal intellectuals, Tehran University opened its doors to Iranian women. Admitting women to Iran's system of higher education

symbolized Reza Khan's modernizing agenda that included reforms to the status of women through their participation in the educational system. Mohammad Reza Shah (1941–79), son of Reza Khan, espoused a similar political agenda in that he looked toward Western development models for Iran's modernization and advancement. His policies regarding women's education accelerated the expansion of the secular education of girls and women in the 1960s and 1970s. Before the fall of the Pahlavi dynasty, female enrollment in universities had reached a peak of 30.9 percent.

In 1979, when Khomeini came to power, his newly formed Islamic Republic inherited a "Westernized" education system that was fundamentally secular and promoted education for a small segment of Iranian women—urban, elite women. His newly formed government set out to "Islamicize" the country with the educational system as its top priority. This system of "purification" required the educational system to be culturally and religiously transformed. The overriding objectives were to stress values over knowledge, to make education meet the needs of society, and to eradicate what remained of the influence of the Pahlavi period. What women could study reduced to nearly half of available fields of study. For example, women were forbidden to study veterinary medicine, geology, agricultural sciences, animal husbandry, and natural resources. As a result of the lobbying efforts of the Women's Cultural and Social Council, many of the restrictions on women's higher education were slowly lifted. By the mid-1990s, with all limitations lifted, Iranian women began gaining admission to fields that, before the revolution, had been male dominated.

The number of female students increased steadily in almost all levels of higher education. Figure 2.1 shows this improvement from 1996 to 2003. The number of female students increased from 36.1% in 1996 to 53.4% in 2003. In undergraduate and post graduate levels it reached 60.6% and 40.4%, while it was only 38.5% and 27.1% in 1996. Although the progress of female students in mentioned levels were significant, there was a reduction in PhD level. It decreased from 32.4% in 1996 to 23.5% in 2002 and 25% in 2003 (Tavakol, 2007).



**Figur 2.2 Women's share of students in different educational levels from 1996 to 2003**

Tavakol,(2007)

One of the most commonly cited reasons for women’s advancement in entering institutions of higher education has been attributed to the solid and strong Islamic identity that Iranian universities have established. It is an atmosphere that has secured the trust of traditional religious families who make up the vast majority of the Iranian population. Before the revolution, some families did not want their girls to go to school because their teachers would have been men. But since it came in an Islamic packaging, more people have accepted it as Islamic education, hence willingly allowed their daughters to be educated in schools and universities, giving rise to the rate of enrollment in schools. Two reasons that made higher education available for girls were the “Islamic packaging” of higher education and the fact that universities were the only place that women can access their public role and status. (Shavarini, 2006).

Table 2.4 points out that in the 2003-2004 academic year, 51% of students was women (in different levels of higher education in both public and non-public universities). While girls had more percentage (51%) in Bachelor degree level, their number decreased to 34% in master level and 25% in PhD level. It is notable that in the previously men dominated fields (Professional Doctorate included Medicine, Dentistry and Pharmacy fields), the number of girls increased dramatically (51% female versus 49% male), (Tavakol, 2007).



**2.4: Number & Percentage of female students by sector and  
study level in 2003-4 and 2007-8**

<i>Study Level</i>	<i>Year</i>	<i>2003-4</i>	<i>2007-8</i>
Associated (2 years)		35%	44%
Bachelor		51%	55%
Master		34%	43%
Professional Doctorate		51%	58%
Ph.D		25%	33%

Professional Doctorate included Medicin, Dentistry and Pharmacy fields.

Tavakol, (2007)

During the 2007–2008 academic year, 44% of students studying at the associate level were female. More women (55%) than men (45%) were studying at the bachelor’s level, while at the master’s level their share was 43% compared to 57% male. The ratio changed to 58% female enrolment at the professional doctorate level, radically decreasing to 33% at the doctorate level. One can, therefore, see a gender gap in favor of women at the professional doctorate level and bachelor’s level, with substantial gains at other levels (Mehran, 2009)

## **2-5 women's situation in Iran**

Carrying out investigation on status of the post-revolutionary Iranian women is fraught with difficulties today. Such difficulties are rooted in varying perspectives derived from extensive and numerous studies conducted on status of women belonging to the Islamic societies of the Middle East and of elsewhere. Two examples of such divergent perspectives are for instance, (Mayor, 1998) considers Iran as typical example of a patriarchal society. He sees the Islamic cover imposed on women by the clerics, as evidence to support his claim. *Majid* (1998). On the other hand, citing the higher ratio of female university teachers in Iran, as compared with

those of Germany and the USA in 1997 and that of France in 1980 as a positive view of Iranian women.

A comparative study (KazemiPour & Safiri, 2001), concerning the situation of the Iranian women before and after the Islamic Revolution of 1979 showed a more favorable situation, as compared to the past, for women in terms of employment and social presence. Human development indices, based on the Human Development Reports of various years are indicative of the operations of three main indices: index of life expectancy at birth, index of adults' literacy rate, and the purchasing power index, that is the income earned, all of which would act to determine a country's ranking situation.

According to statistics (United Nations, 1995; 1998; 2003), despite the fact that the rank of Human Development Index in Iran has fallen from 78 in 1998 to 106 in 2003, yet Iran's rank in terms of Gender Development Indices have increased from 92<sup>nd</sup> to 86<sup>th</sup>.

Table 2.5 illustrates that women's share of the earned income, compared to men's share, is very little. Yet the difference decreases gradually so that the gender gap dwindles. The increase in women's share of per capita income is the result of employment rate. The economic activity, against which wages and benefits are gained, increases women's share of per capita income.

**Table 2.5: Share of Earned Income Received by Men and Women in Iran (1998–2001)**

<i>Year</i>	<i>Women's Share of Per Capita Income</i>	<i>Men's Share of Per Capita Income</i>	<i>Gender Gap in Terms of Income</i>
1988	7.6%	92.4%	84.8%
1992	14.9%	85.0%	70.2%
1995	18.9%	81.1%	62.6%
2001	21.84%	78.16%	56.32%

United Nations, (1995; 1998; 2003)

Table 2.6 shows that although there is still inequality between women and men, the extent of gender gap in education decreases gradually and an upward trend is apparent.

**Table 2.6 Trend Change of Men’s and Women’s Education Index (1992–2001)**

<i>Year</i>	<i>Adults’ Literacy Rate</i>		<i>Adults’ Enrolment at 3 levels</i>	
	<i>Women</i>	<i>Men</i>	<i>Women</i>	<i>Men</i>
1992	55.0%	74.5%	61.3%	73.6%
1995	59.3%	77.7%	62.6%	67.0%
2001	70.2%	83.8%	63.0%	66.0%

United Nations,(1995; 2003)

The data so far surveyed are indicative of a change in the situation of gender development indices in Iran within the years 1995–2001. Examining other social and demographic factors such as rising age of marriage, fertility reduction, universality of education to the level of the secondary schooling, women’s active presence in universities and an increase of women’s role in decision-making, all can shed more light on women’s situation and thus portray an accurate picture of the contemporary Iranian women. The ratios of participating in Non-Governmental Organizations for men and women are respectively 23% and 25% (Mohseni, 2000). Number of women who participate in city-village councils to decide on the issues involved, increased to 38% in villages and 62% in cities. (Centre for Women’s Participation, 2002).

For the urban areas, the rather small female labor force is about equally divided between private and public sector employment. Just 20% of the urban female work force is in industrial employment (compared to 45% of rural women). Some 50% of the female work force is in professional and technical employment (54.5% with executive positions included); 11% in administrative and clerical, and 10% in services and sales. The vast majority of urban working class women are either unemployed/seeking work, economically inactive/housewives; or engaged in informal, home-based, or voluntary activities. This would mean dependence on male kin for social insurance and retirement benefits (Moghadam, 2002).

Statistics show that 79% of all Iranian women are literate. However, only 21% of them are employed, while 79% to 85% of Iran's literate males are at work, which is a drastic difference. Female earning power is about 11% of the earning total. Based on the same statistics, men earn 89% of that total. The rate of unemployment for college educated women is 16.7% as compared to 6.8% for their male counterparts. For every eight to ten job positions available for women, there are 37 positions available for men. The unemployment rate for educated women stands at 40 percent (Iran labour report, 2010).

In recent decades professional and technical jobs have come to dominate as main occupations where women find employment. It is driven by the rise of female education and the expansion of the service sector where women find professional and technical occupations as educators and healthcare and social service professionals. Indeed, the share of women in such occupations has been relatively high over the past four decades, rising from about 32 percent in 1966 to over 34 percent in 2006. The overall picture shows that female education has translated into some improvement in their work position and percentage of female workers in professional and technical occupations has increased. The percentage of women in executive and managerial positions has also been on the rise, though it remains relatively low. By 2006, women still held only 15 percent of such occupations. Administrative, clerical, and sales occupations are also gaining ground among jobs taken by women, but their shares are still rather small. The statistics show that women gained incredible access to higher education and that their participation in the labor market increased, especially in the late 1990s. However, this significant increase in education did not translate into a similar rate of increase in women's participation in the labor market (Rezai-Rashti, 2009).

Iranian women could not have achieved any major positions in political management of the society in spite of their personal and social abilities. The fact is that women have faced social, political, legal, customary and cultural barriers in achieving high managerial and political positions. For example, now only 8 women attend among 290 members of parliament.

According to the latest census published by the Statistical Centre of Iran, in 2006, female participation in the workforce was 17%, of whom 32% were engaged in agriculture, another 32% in industry, and the remaining 36% in services (Statistical Centre of Iran, 2007). In 2008, 34% of the total number of professional and technical workers were female (United Nations, 2008).

Moreover, the extent of women's involvement in the economic activity can be taken as representing their enjoyment of higher levels of wellbeing, earnings, and access to more resources. On this score, Iran, in recent years has witnessed a 6% growth rate. It is expected that along with graduation of the current female university students, the employment situation be somewhat improved. The increase in number of women in decision-making positions and their increased social participation reflects their more active presence in NGO organizations and city-village councils (Safiri, 2006).

In the following chapter, Empowerment Theory \_as it constitutes one of new approaches in development\_ will be discussed. Based on the Empowerment Theory, the change in the Iranian women's situation that is to determine whether or not such change has been in the direction of empowerment will be assessed.

# **3- THEORETICAL FRAMEWORK**

## **3.1 Introduction**

A review on the literature will be detailed in this chapter. More specifically, Empowerment and its characteristics and relationship to women settings will be discussed. The conceptual framework will be presented.

## **3.2 The Empowerment Theory**

Empowerment is a strategy to help the disadvantaged and the marginalized members of the society to gain power to change the quality of their lives. Ever since the debate over the issue of “women and development” was launched, various approaches for defining the content of its programs have emerged in various historical periods. Generally, one may attempt to classify these approaches, or theories, in three generic categories: welfares and poverty eradication, efficiency, and empowerment (Moser, 1989).

”Empowerment” is used in many ways and in a wide range of contexts; therefore it is important to conceptualize the term. Empowerment can be understood as a social process, where people either are empowered or disempowered in relation to others but also in relation to themselves over time. To be disempowered or disadvantaged allows the current power relations to work in a way that affects the possibility to make choices and affects the wellbeing and opportunities of people in a restraining manner (Moser, 1989).

The origin of empowerment as a form of theory was traced back to the Brazilian humanitarian and educator, Freire (1973), when he suggested a plan for liberating the oppressed people of the world through education. Empowerment was most commonly associated with alternative approaches to psychological or social development and the concern for local, grassroots community-based movements and initiatives (Parpart, Rai, & Staudt, 2003). The word has become a widely used term in the social sciences in the last decade across a broad variety of disciplines such as community psychology, management,

political theory, social work, education, women studies, and sociology (Lincoln, Travers, Ackers, & Wilkinson, 2002). The concept of empowerment is conceived as the idea of power, because empowerment is closely related to changing power: gaining, expending, diminishing, and losing (Page & Czuba, 1999).

Empowerment can be related to development theory and has predominantly been discussed in that context. Parallel to, and influencing the debates on development theory, is the emergence of theories concerned with women and development, and later gender and development. In the context of gender and development, the meaning of empowerment is not precise, but commonly defined as a *process* rather than an end product. This is also the case within the disciplines of social work and education whereby empowerment is perceived as a process involving some degree of personal development and the moving from insight to action (Rowlands, 1997). Empowerment of women aims to raise the group's awareness, among themselves and others about the access to equal rights and possibility to influence their situation in society (Bunch & Frost 2000).

A definition suitable for this study as it identifies what constitutes women's empowerment is: *A process whereby women become able to organize themselves to increase their own self-reliance, to assert their independent right to make choices and to control resources which will assist in challenging and eliminating their own subordination* (Malhotra, Schuler & Boender, 2002).

The triangle of education, equality and empowerment will be the focus of this study. The women's empowerment framework (WEF), (figure, 1), developed by Sara Hlupekile Longwe (Longwe 1991, 1998; Leach 2003; March, Smyth and Mukhopadhyay 1999; Williams 1994), will be the gender analysis tool used to study the interplay between education, equality and empowerment. The Longwe's framework will be reinterpreted in light of the revolutionary and post-revolutionary dynamics in Iran and the specificities of being a woman in this country.

### 3.3 Longwe’s WEF in the Iranian context

The present study will use Longwe’s WEF to identify the status of female higher education and employment issues in Iran and provide a comparison with the male experience. Longwe defines female empowerment as “enabling women to take an equal place with men”. Her framework is based on the concept of five different “levels of equality” which indicate “the extent to which women are equal with men, and have achieved empowerment” (March et al. 1999). Her hierarchical levels of equality appear in the following order: welfare, access, conscientization, participation and control. According to Longwe, “the extent to which these five levels of equality are present in any area of social or economic life determines the level of empowerment” (Leach 2003).

**Figure 1. 3 Longwe’s women’s empowerment framework**



Wallace and March (1991)

According to Longwe, welfare, the first level of equality, is defined as “the level of women’s material welfare relative to men” (Leach 2003). In the present study, women’s status at this stage are provided through a comparative study of female and male enrolment rates at higher education institutes in Iran.

Access is defined as “women’s access to the factors of production on an equal basis with men” (March et al. 1999). The factors of production at this level include land, labor, credit, education and training, marketing, and all public services and benefits. Since access to higher education is often unequal, this level focuses on the equality of educational opportunities for men and women, taking into consideration all forms of legal and administrative



discrimination against women. In this study, Iranian women's access to higher education and various fields of study are compared to men.

In the Longwe's framework, conscientization is defined as the "conscious understanding of the difference between sex and gender, and an awareness that gender roles, including the sexual division of labor, are culturally determined and can be changed" (Leach 2003). According to Longwe, "sexual division of labor should be fair and agreeable to both sides" without the domination of one sex by the other (March et al. 1999). In the realm of education, the level of conscientization is the stage during which one is conscious of discrimination against both men and women in institutions of higher education, based on stereotypical views of what is deemed "appropriate" for each. Longwe defines participation as "women's equal participation in the decision-making process" (March et al. 1999). The latter could include policy-making, planning and administration.

Control marks the highest level of equality and empowerment in Longwe's WEF. This term is defined as equal control over the decision-making process. Since the term "control" may create misunderstanding, it is important to note that Longwe's ideal of "equality of control" refers to a "balance of control between men and women, so that neither side dominates" (Leach 2003).

WEF will be used in this study for two reasons. First, Longwe seeks equality as opposed to domination or subordination of either sex. Second, WEF looks at the "question of woman" from a male-female perspective. In other words, it does not treat women in isolation, but looks at their levels of equality and empowerment in relation to men. As such, it is a balanced and inclusive framework that can be applied to the female educational experience in Iran without being caught in any form of dualism. Despite its general usefulness and applicability within the Iranian context, WEF needs to be reinterpreted in order to account for the socio-political dynamics of a revolutionary society marked by constant change in all spheres, including "women's issues". The reinterpretation of WEF occurs mainly at the conscientization and participation levels. According to Longwe, conscientization embodies "awareness of the need for change and the means to achieve it" (Leach 2003).

In this framework, conscientization comes before participation and is placed at the third level of the equality-empowerment hierarchy. Iranian women's experience in the 1978-1979

revolutionary process has altered the hierarchy, such that participation for the most part occurred before conscientization in Iran. Iranian women participated along with men throughout the popular movement that led to the 1979 revolution (Mehran, 2009). Therefore, these five levels are not really a linear progression, as written above, but rather circular: the achievement of women's increased control, leads into better access to resources, and therefore improved socio-economic status.

A study in India, on indicators of women's empowerment indicates that a much higher proportion of women who have completed at least middle level of education are involved in decision making, have freedom of movement and also have access to money, compared to women, who are illiterate (Roy & Niranjana, 2004).

'Family influence' is one among factors affecting equal participation of females in education (Hyde, 1993). The socio-economic background of parents and their attitudes about educating girls contribute to shaping decisions about schooling of daughters. Girls, who come from socio-economically advantaged families, are much more likely to enter and remain in schools than girls from disadvantaged families. Many girls drop out of schools due to lack of fees; however, the true reason for this is that parents prioritizing their finances to educate boys more than girls (Kwesiga, 2002; Bendera, 1999). Kwesiga notes that the main explanation for this male-child preference seems to lie in the way parents view education, either as consumption or an investment. Parents background (Bendera, 1999; Kwesiga, 2002), location and religious beliefs (Bendera, 1999), are important factors in girl's schooling. Movement is more often restricted for Muslim girls than for those of other faiths (Bendera, 1999). Hyde highlights that overall economic development is also another reason, with richer countries having higher levels of female enrolment than poorer countries.

Based on this theory to create opportunities for women is to enable them to be not solely engaged with child bearing, rather to be involved in the area of social roles. This is the means by which women will be empowered. The opportunity of accessing their own consciousness will be provided by the general and higher education which will turn their destiny to be determined by their own actions.

# **4- DATA AND METHOD**

## **4.1 Introduction**

The purpose of this chapter is to explain the research design, research methods and data collection techniques. To fulfill the needs of the research questions, quantitative methods are employed to analyzing and interpreting data and a questionnaire was used to data collection. Undoubtedly, research by its nature is a complex process; hence it is very imperative for the researcher to stick to certain procedures in collecting, analyzing, and interpreting data in order to maximize the validity of the findings (Bryman, 2004).

## **4.2 Research Design**

Tabriz University of Medical Sciences is selected as a data collection sight because it is one of the biggest and well-known universities in Iran. A questionnaire survey is conducted for collecting data in the four fields within medical university, which are included: Medicine, Dentistry, Physiotherapy and Pharmacy. This study will use the quantitative research method. Researcher selected this University for collecting and utilizing data since the university is one of the largest and well-known public universities in Iran and many students come from near provinces such as West Azerbaijan, Kurdistan and Bakhtaran. Beside, the researcher worked as a librarian in this university for a long time and has substantial information and knowledge about the students, environment as well as the administrative issues.

Tabriz University of Medical Sciences is a public medical sciences university located in Tabriz, East Azarbaijan Province, Iran. It is ranked as one of Iran's top medical schools, with more than 5000 students. The University consists of seven faculties: Medicine, Pharmacy, Dentistry, Paramedical Sciences, Health and Nutrition, Rehabilitation, Nursing and Midwifery. The school offers professional degrees in Medicine (M.D.), Dentistry (D.D.S.), Pharmacy (Pharm.D.); Bachelor's, Master's, and Doctor of Philosophy(Ph.D.) in various other medically-related subjects. The school also offers technical courses in pursuit of Associate

degrees and certification in medically-related fields. In addition, this university has over 10 teaching hospitals and is a major medical care provider in East Azerbaijan and the surrounding provinces.

### **4.3 Data collection and the sample**

In this study, emphasis will be put on quantitative method for data collection and subsequent analysis. The study was conducted by questionnaire with focus on students, who were in the last year of their education. As a form of quantitative approach, tables will be used as statistical models to classify features, count them and present their summation in attempt to explain what were observed. The statistics will focus on student's background – parents education-, their attitudes toward selecting the field and the employment perspectives among genders. The use of this research method in this study allows for a more detailed picture to emerge and thus a deeper understanding of the phenomena. The researcher believes that this is the most appropriate method to obtain detailed and relevant data within its real-life context.

The most meaningful way of getting information concerning the causes for this study would be a questionnaire. A self-designed questionnaire contains of twelve close questions was translated into Farsi and subsequently edited several times for clarity and political sensitivity. Both male and female students were chosen to attend in this study to compare their attitudes, similarities and differences. First part of questionnaire was intended to recognize the gender, field and parents education as background information. In this part researcher wanted to find out how many female and males students were studying in mentioned fields and what type of families they belonged to. Did they have well educated parents or not? In the next questions, researcher tried to get information about the factors associated with field selection. The reasons that made students opt for these particular fields. Were they themselves interested in or, were they influenced by their families? Did they want to improve their statues or were they expecting to get well paid jobs after graduation, or would the chosen field affect their marriage after graduation? What will be their preferences after graduation: continue to further education, start to work or stay at home? The last part of questionnaire was to discover the attitude of students towards job situation in general, and equality in employment among males and females in particular. Do they think there will be opportunities for them to be

employed after graduation? Will there be any inequalities between different genders in getting jobs?

The data for this study were collected using a questionnaire survey and carried out in the Tabriz University of Medical Sciences, in four faculties. The original idea was that the four selected fields were man dominated fields and now more females are accepted in to these fields.

The data collection for the study was carried out during June 2010. The questionnaires were officially permitted and their distribution supervised by the Ministry of Education and each college's administration. Questionnaires were delivered by hand to students in the faculties' libraries by the researcher herself. Students who were in the last year of their education were asked to fill in the questionnaire. Purposeful sampling was used in order to study a small number of female and male students. Patton (2002) emphasizes that the logic and power of purposeful sampling lies in selecting information-rich cases for study in depth. He also adds that using purposeful sampling, one might be able to get a deeper understanding of an issue rather than making empirical generalizations. After the completion of all questionnaires by the students, the data were coded and processed using the Statistical Package for the Social Sciences (SPSS).

As previously it was mentioned, researcher herself sat in the faculties' libraries and gave questionnaires to the student. The effort was that to have same number of two genders (25 female and 25 male ) for each field.

Table 5.1 shows that from 194 students, who answered the questionnaire, 98 (50.5%) are males while 96 (49.5%) are females. When it comes to study subject fields, 50 of them (25 males and 25 females) are Pharmacy students, 41 (22 males and 19 females) are Medical students, 51 (25 males and 26 females) are Dentistry students, and 52 (25 males and 26 females) are Physiotherapy students. It is notable that the sample group were in the last year of their education and entered into university four or more years before.

**Table 5.1 Descriptive statistics in terms of gender and subjects**

	<i>Gender</i>		<i>Total</i>
	<i>male</i>	<i>female</i>	
Pharmacy	25 25.5%	25 26.0%	50 25.8%
Medicine	22 22.4%	19 19.8%	41 21.1%
Dentistry	25 25.5%	26 27.1%	51 26.3%
Physiotherapy	26 26.5%	26 27.1%	52 26.8%
Total	98 100.0%	96 100.0%	194 100.0%

## 4.4 Measures of the variables

The variables and measures are all taken from the questionnaire survey. The variables have been investigated in relation to the student's background of higher education students in the Iran context.

Factors suggested to affect students enrolments in particular subjects in this study were: background factors such as: gender (item 1 in questionnaire), field (item 2), father's education (item 3) and mother's education (item 4). Other factors included: the reasons of choosing the subject (item 5), their interest after graduation (item 6), possibility in labor market and equality (item 7, 8 and 9) and how they react to equality in labor market (item 10).

Under background, gender was coded into 0= 'male' and 1= 'female'. Field was coded into 0='Medicine', 1='Physiotherapy', 2='Pharmacy' and 4='Dentistry'. parents' education were categorized and coded such that: 0= 'illiterate', 1= 'primary level', 2='secondary school', 3= 'high school diploma', 4= 'college degree', 5= 'bachelor degree', 6= 'master degree', and 7= 'PhD'.

There are eight questions assessing students' attitudes towards their choice of field, their future plans and the employment perspectives. Based on Iran society there are some elements that affect students' selection of subjects when they want to enter into university. The first

question (question No. 5 in the questionnaire , see Appendix 1) asks respondents to look back to their original attitudes and aspiration selected field: “ You have chosen this field because ...” and contains five items which aim to measure different aspects of motivation for choosing field. This was coded into 0= ‘you are interested in’, 1= ‘your family interested in’, 2= ‘you want to improve your statuses’, 3= ‘you will have a well paid job’, and 4= ‘you will have potential marriage’.

Question (No. 6) asks respondents to indicate what they would like to do after graduation. Following this question, three items are listed and coded into 0= ‘resume education’, 1= ‘work’ and 2= ‘stay at home’.

Concerning their chance of getting job and equality and possibility in job market between males and females, the respondents are asked to answer questions (No.7 and 10). An additional question (No. 12) wants to find out the attitude of respondents to the inequality in getting job between genders. Whether it is fair or not that more male or female get job offer. All attitudes items were answered with ‘Yes’ and ‘No ‘ and coded into 0= ‘yes’, 1= ‘no’.

To find out how many male and female from prior students have got a job, participants asked to answer questions (No. 8, 9) followed by five different items from” all of them” to” none of them” and was coded into 0= ‘all of them’, 1= ‘most of them’, 2= ‘few of them’, 3= ‘none of them’ and 4= ‘I don’t know’.

## **4.5 Validity and reliability**

Validity and reliability are two important concepts that are used to judge the quality of an empirical research. Validity and reliability measures tell how data collected suit the research problem. Yin (2003), identifies four relevant criteria or tests for judging the quality of a case study research as: construct validity, internal validity, external validity and reliability.

### **4.5.1 Construct validity**

Establishing correct operational measures for the concepts being studied is referred to as construct validity (Yin, 2003). When there is substantial evidence that the theoretical

paradigm rightly corresponds to observations, this situation will be explained as construct, theoretical or argumentative validity as noted by Jerome and Miller (1986). Yin claims that construct validity is a problematic test, he therefore proposes three tactics to increase construct validity in doing case studies. First, the use of *multiple sources of evidence*- a process of triangulation. The advantage of this is that, any finding or conclusion is likely to be more convincing and accurate if it is based on different sources of information. Second, establishment of a *chain of evidence*- to allow an external observer or a reader of the study to follow the derivation of any evidence, ranging from initial research questions to ultimate case study conclusions. The third measure is to have *key informants review draft case study report*.

### **4.5.2 Internal validity**

Bryman (2004), terms internal validity as to whether there is a good match between researchers' observations and the theoretical ideas they develop. To ensure internal validity Using a good number of respondents and materials enable researcher to get holistic views of the context. It also helps to avoid personal bias.

### **4.5.3 External validity**

The extent to which findings can be generalized to other environments that are similar to the environments where the research was first carried out is known as external validity (Brock-Utne, 1996). To increase external validity researcher will chose appropriate sampling strategies to make sure that sample of informants are representative of wider academic population to which generalization is desired.

### **4.5.4 Ecological validity**

This refers to the question of whether social scientific findings are applicable to people's everyday natural social settings (Bryman, 2004). He further quoted Cicourel (1992) as he questions: 'do our instruments capture the daily life conditions, opinions, values, attitudes, and knowledge base of those we study as expressed in their natural habitat? Bryman (2004)



claims that social research sometimes produces findings that may be technically valid but have little to do with what happens in people's everyday lives. To achieve this goal, the study will investigate a good number of respondents in both genders in four fields.

### **4.5.5 Reliability**

Yin (2003) holds that reliability must demonstrate that the operations of a study such as data collection procedures can be repeated with the same results. He suggests three principles to deal with the problems of construct validity and reliability. These are (a) using multiple sources of evidence (b) maintaining a chain of evidence (c) creating a case study database. Creating a case study database is the way of organizing and documenting the data for the case study. A study needs to contain enough data so that the reader of the study can draw independent conclusions about the study. A database is developed from notes, documents, tabular materials, and narratives.

## **4.6 Ethical concerns**

In this study, researcher made every effort to make sure that ethical issues not violated in relation to the people who were participated in the study. First, made sure that participant in this study not harm in any way by insensitive questions. Secondly, they were informed beforehand about researcher and the research so that they could decide whether to take part in the study. The third principle was not to invade respondents' privacy. The participants were assured that all their responds would be used only in this research and their privacy would be protected by all means.

## **4.7 Chapter summary**

This chapter will present the methodology used in the study. The chapter will show that a case study design, with the use quantitative approaches is used as guidelines for data

collection and analysis. The questionnaire was used for data collection. Tabriz University of Medical Sciences is selected for study for two reasons: first, the university is one of the largest and famous academic institutions in Iran, especially in the northwest region; secondly, the researcher worked as a librarian in this university for several years hence has acquired good knowledge and sufficient information about the issue. The sampling procedure employed in the study is a purposeful sampling, which involved final year students both males and female in four faculties. Validity and reliability as significant criteria for judging the quality of research were also discussed. Finally, the chapter will touch upon the main ethical issues that are considered in the study.

The next chapter will focus on data analysis and empirical findings, dealing with social background of the students and examine students' attitudes concerning job market.

# **5- RESULTS AND DISCUSSION**

## **5.1 Introduction**

This chapter will discuss and report the study results of the students' survey. The survey took place in the Tabriz University of Medical Sciences among students who were in the final year of their studies. First, a basic statistics of variables such as gender and parental education attainments of students will be illustrated. Secondly, it looks at the students motivation of attendance to the higher education, their plans for the future, possibility of job market for both male and female and equality or inequality between genders in job market. A discussion on the relationships of the variables and gender cross tabulation will also be shown.

## **5.2 Social background**

The educational attainment of parents, which is used to analyze the social background of Medical Sciences students in the Iran context, is described below.

### **5.2.1 Parents' education**

The parental educational attainment analyzed to identify any systematic characteristics of those who are likely to attend higher education. The level of parental education turns out to be a very important factor for explaining the participation in higher education. The empirical results show that the chances of participation in higher education increases significantly with parental education and is the highest with parents having graduate level education (Basant & Sen, 2012).

As displayed in table 5.1, from the total 388 parents, 37 of them were not educated (11 fathers and 26 mothers). Parents with primary education level, were 67 (26 fathers and 41 mothers), 32 parents had secondary school education (14 fathers and 18 mothers), 82 of them had high school diploma (39 fathers and 47 mothers), 56 parents had college degree (30

fathers and 26 mothers), 78 parents with bachelor degree (49 fathers and 29 mothers), 16 parents had master degree (10 fathers and 6 mothers) and finally 20 parents had Doctoral grade (15 fathers and 5 mothers).

Mothers with high school education were in majority with 22.2% while fathers with Bachelor degree were in top (25.3%).

**Table 5.1 Educational attainment of fathers and mothers**

	<i>Fathers' education attainments</i>	<i>Mothers' education attainments</i>	<i>Total</i>
illiterate	11	26	37
Primary	26	41	67
Secondary	14	18	32
High school	39	43	82
College	30	26	56
Bachelor	49	29	78
Master	10	6	16
Phd	15	5	20
Total	194	194	388

As can be seen on Table 5.2, 56.2 percent of parents in this study do not have higher education with 33.5 percent from male students and 22.7 percent female students. 43.8% of parents have higher education with 17.0% for male students and 43.8% for female students. Based on the 2006 census of the country, literacy rate in population 10 years and over is 79.5% for female and 88.5% for male. Share of 10+ year population with high school degree is 6.8% for female and 24.2% for male. Share of 20+ year population with tertiary degree is 8.3 for female and 11.3 for male (Statistical Center of Iran, 2007).

Plunkett and Bamaca-Gomez (2003) noted that more education parents have, the more benefit it will provide in raising children's academic outcomes, as more time, more opportunity, more help is given to children's academic work, raising academic motivation,

aspiration and self-efficacy in turn. Whereas, less educated parents would have less ability to provide academic support for their children, less confidence in helping with actual schoolwork, and less time to actually devote, in favor of working more jobs than educated parents (Plunkett & Bamaca-Gomez, 2003).

**Table 5.2 Educational attainment of parents by gender**

	<i>Parents educational attainment</i>		<i>Total</i>
	Male students	Female students	
Illiterate to high school level	130 33.5%	88 22.7%	218 56.2%
College to doctorate grade	66 17.0%	104 26.8%	170 43.8%

Note: The differences is statistically significant at 0.05 level

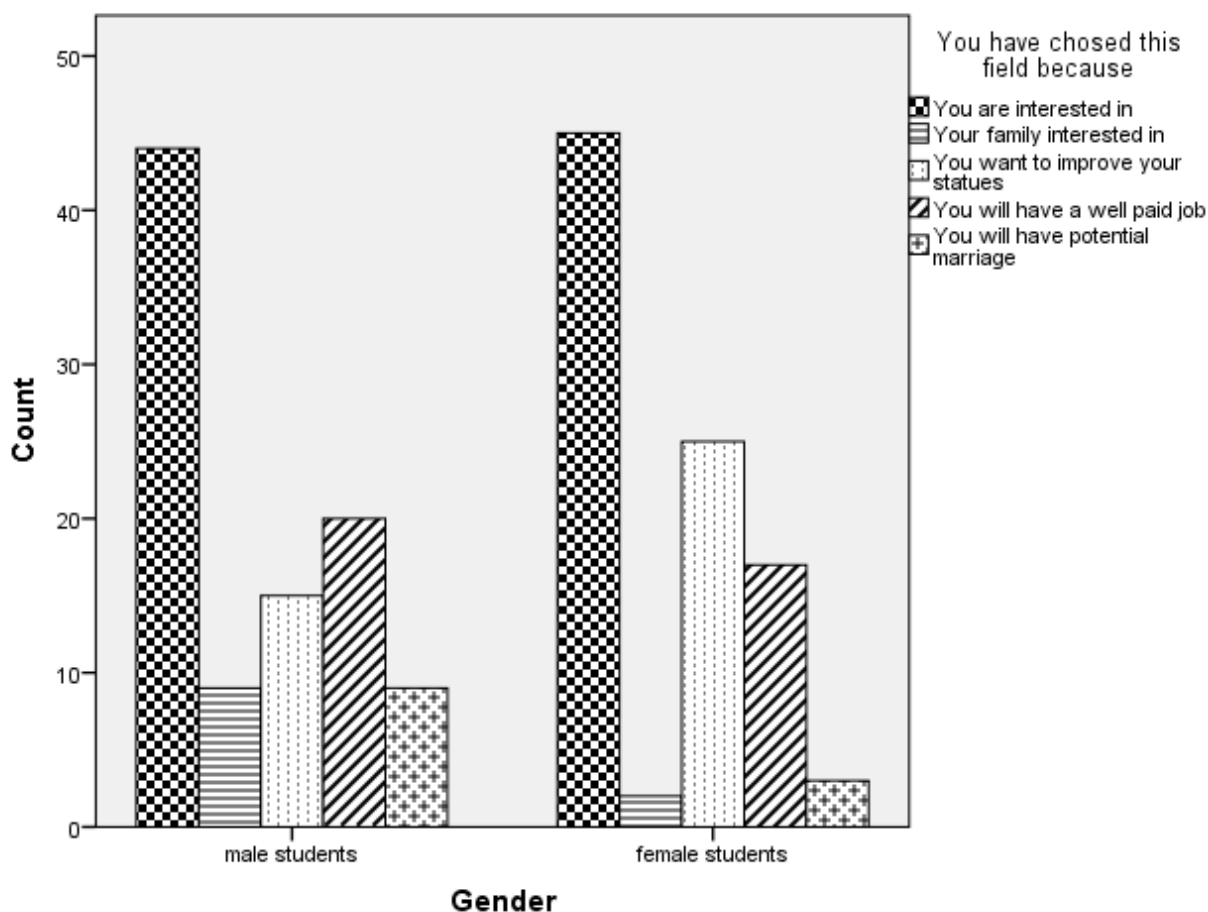
The results show that parents of sample students that had not higher education were 56.2%, while 43.8% of them had higher education. According to Anderson and Christopher (2004), children of parents with less than high school education are much less likely to proceed beyond high school than are the children of parents at other educational levels. And the children of parents with university degrees are more likely to complete university themselves than are the children of parents with lesser education. Basant and Sen (2012) found that children of parents who are well educated have better chance of becoming well educated themselves. Their study shows that parents' education is a significant factor in their children's educational participation. The impact of parental education increases dramatically as it changes from illiteracy to secondary, higher secondary to graduate education, with graduate education having the largest impact," states the paper.

It was also interesting to investigate the gender differences in terms of being a parent to a female or male student. Would female students have parents who were both better educated than the male students? In the process of comparing significant differences between groups, a Chi-square test was used. The statistical significant differences exist between genders in terms of their fathers education ( $\chi^2=17.772$ ,  $p<.013$ ), and mothers' education ( $\chi^2=15.549$ ,  $p<.030$ ).

The study shows that parents education positively effected enrolment of female student in higher education more than male students.

### **5.3 What motivates students to attend higher education?**

Responses to five items are presented in figure 5.1. As it is shown, the most cited motivation of students' attending subjects was their own interest (47.0%) with the almost same rate for both gender (45.3 % male students and 48.9% female students). Improving social statues is in the second level with 21.2% with 15.5% for male students and 27.2% for female students; having a well paid job is stayed in third place with 19.6% for both gender and 20.6% for male students and 18.5% for female students. 6.4 of students chose the subject because of potential marriage prospect with 9.3% for male students and 3.2% for female students. Only 5.8% of students enrolled in those subjects because of parental pressure with 9.3% for male students and 2.2% for female students.



**Figure 5.1 Reasons for attending medical sciences**

In the Iran's norm, typically entering into the medical sciences considered for two main reasons. Firstly acquire high social statues and secondly getting well paid job. Surprisingly in this study majority of students from both gender addressed their own interest and there was no significant differences between them in terms of their parental education attainments. There was significant difference in terms of inspiring for a well paid job between Students with highly educated parents and once without highly educated parents. Students were aware of the role of higher education with well paid job.

Usually well educated women seem to have a good marriage opportunity. Shavarini (2005) found that the second strongest reason why young Iranian women pursue higher education is the hope that a college degree will help them find a 'suitable' husband. Higher education is

considered to raise women’s social value and thereby increase their chances of marrying into a higher-income/higher-class family. But this study shows that more male students enter higher education for this reason than female students.

## 5.4 What do the students want to do after graduation?

To find out what students aspire to do after graduation, they were asked to answer the following question: “What would you like to do after your graduation?” From three available answers, Table 5.4 shows the distribution of respondents in terms of their interests after graduation. More than half of them preferred to resume their studies in post graduate levels i.e. 66.5% of the total respondents of whom 70.4% were male and 60.4% were female students. This means that many students aspire to have further higher education which is considered a high career aspiration in the current Iranian context. 33.0% preferred to find a job right after graduation, of whom 28.6% were male and 37.5% were female students. Only one of the female respondents showed interest to stay at home (0.5 %). She studied Physiotherapy and came from a family, which is father had bachelor degree and mother had high school diploma. It was noticeable that she had chosen this subject to get a well paid job after graduation and her answer to the question: ‘Do you think you will find a job after graduation’ was ‘Yes’.

**Table 5.3 Future aspirations of students after graduation**

	<i>What would you like to do after graduation</i>		
	Resume education	work	Stay at home
Male students	70.4%	28.6%	0.0%
Female students	60.4%	37.5%	1.0%
Total	66.5%	33.0%	0.5%



In the study of the reasons why students enter postgraduate study, the OST (Office of science and Technology ,UK) states that the most highly cited reason was: “interested in the particular subject because they thought it would help in getting a suitable or better job” (Green & Powell, 2005).

It seems to be the most common reason in Iran as well. Postgraduate study enhance job opportunities as well as accessibility to well paid job. Higher levels of education tend to lower labor market risks. The higher level educated tend to face a more stable labor market (Obadic & Poric, 2008; Walter & Xie, 2008).

As mentioned before, the numbers of male students in postgraduate studies are more than female students in Iran. This study also shows that male students have more tendency for resuming their studies compare to female students.

## 5.5 The students’ attitudes about labour market and gender equality

Students were asked to answer the question: “Do you think you will find a job after graduation?”. From the 3 available answers, table 5.5 shows that majority of students in this study gave ‘yes’ answer to the possibility of finding job (89.1%), with 89.7% male and 88.6% female students. 10.4% were not sure about finding job, and gave ‘I don’t know’ answer with 10.3% male and 10.4% female students. Only one female student participated in this study from Physiotherapy field answered ‘No’ to this question.

**Table 5.4 students attitudes about possibility of employment**

	<i>Do you think you will find a job after graduation</i>		
	yes	No	I don't know
Male students	89.7%	0.0%	10.3%
Female students	88.6%	1.0%	10.4%
Total	89.1%	0.5%	10.4%

According to World Health Organization (WHO), human and physical resources indicators rate in Iran in 2009 per 10,000 population were: Physicians 28.3, Dentists 4.2, Pharmacists 16.7 and Nursing and midwifery 35.2 and ranking 88 between countries in the 2000-2010 (World Health Organization, 2011). To develop more, Iran needs more graduates in this section. It is also important to mention that among educated population, the higher educated is less likely to be unemployed and attaining higher levels of education is more important to women than to men to escape unemployment.

Another question asked students attitudes about employment rate of previous graduated students within gender. From five different items in this section participants showed their attitudes about job opportunity among two genders. As illustrated in Table 5.6 and 5.7, from 190 students who answered these question 61% claimed that all of previous male students had got job, while for previous female students it was 39.9%. From 32 percent were checked ‘most of them’ for previous male students and 43.1% for previous female students, 0.5% answered ‘few of them’ for previous male students and 3.7% for previous female students and 6% chose ‘I don’t know’ for previous male students and 11.7% for previous female students. While only one participant supposed that there was one previous male student who could not get a job. For question related to employment of previous male and female students, it is quite obvious that both gender were aware of employment situation as well as gender issues and gave almost same answers. Student’s attitudes also displayed their beliefs for more job opportunity for men in job market.

**Table 5.5 Do you know how many male students who graduated before have got a job**

	<i>you know how many male students who graduated before have got a job</i>					Total
	None of them	Few of them	Most of them	All of them	I don't know	
Male	0	1	32	55	7	95
Female	0	0	29	61	5	95
Total	0.0%	0.5%	32.0%	61.0%	6.0%	100%

**Table 5.6 Do you know how many female students who graduated before have got a job**

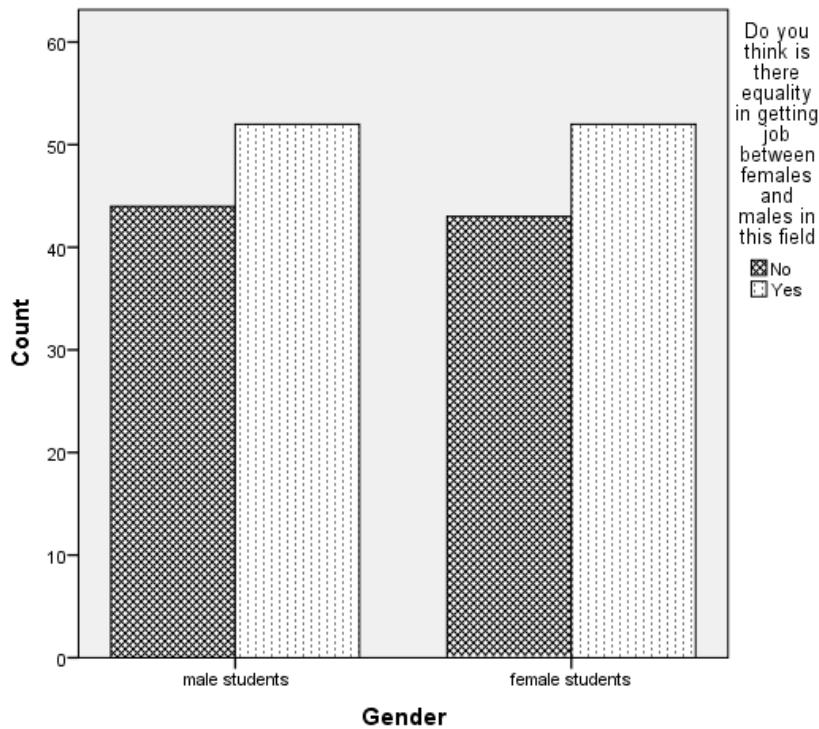
	<i>you know how many female students who graduated before have got a job</i>					
	None of them	Few of them	Most of them	All of them	I don't know	Total
Male	3	5	37	33	15	93
Female	0	2	44	42	7	95
Total	1.6%	3.7%	43.1%	39.9%	11.7%	100%

Salehi Esfahani and Shajari (2010), argue that participation of the Iranian women in the labor market has been quite low compared to men, and the gender gap in this respect has been much wider in Iran compared to most countries in the world. This situation has started to change in the past two decades and female labor force participation has been on the rise. They also found that education, especially at the tertiary levels, has a very large impact on the women labor force, but not of men. Govinda (2008) noted that secondary and higher levels of education provide the highest returns for women’s empowerment in terms of employment opportunities. Also empirical evidence from Latin America, Asia, and Africa shows that better schooling for girls increases female entry into formal or wage employment (Gupta & Malhotra 2006; Nam 1991; Glick & Sahn 1997; Morrison & Johannes, 2004; Task Force on Education and Gender Equality 2005).

Furthermore, in line with the policies of Islamization that determined the “gender appropriateness” of each specialization, policy makers wants to ensure that there are enough female physicians to treat the country's 35 million women and girls.

In the Longwe Framework, conscientization is defined as the “conscious understanding of the difference between sex and gender, and an awareness that gender roles, including the sexual division of labor, are culturally determined and can be changed” (Leach 2003), and “sexual division of labor should be fair and agreeable to both sides” without the domination of one sex by the other (March et al. 1999). To find that how students respond to the equality or inequality in job market among gender, they were required to answer another question. Figure 5.2 illustrated that both gender have nearly similar attitude about equality and inequality in the job market. A little more than half of participants (54.5 %), believed that there was equality between genders in getting job with 54.2% for male students and 54.7%

for female students. While 45.5% with ‘No’ answer to question display inequality in the job market with 45.8% for male students and 45.3% for female students.



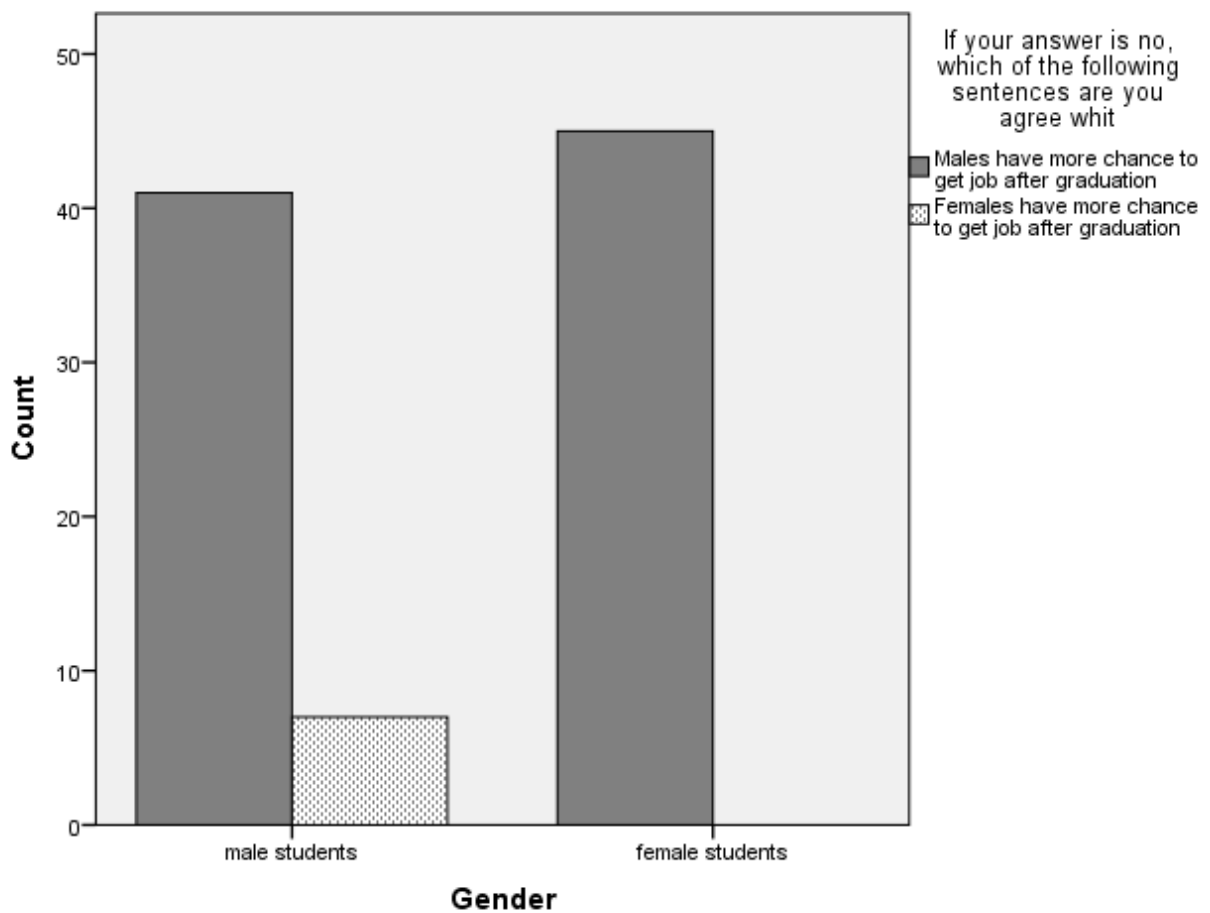
**Figure 5.2: Attitudes about equality between genders in job market**

According to Iranian customs and morel, men are expected to provide the economic needs of the family, so they are given the priority in gaining job opportunities. Consequently, the improvement of women’s employment beyond the economic factors involves the modification of thoughts and attitudes of Iranians toward women’s employment and suitable propaganda as well as a vast reformation in the legal system (Kaar, 2000). However, gender views towards women’s employment show some improvement, and although occupations are still divided into feminine and masculine in the minds of Iranians, the very principle of women employment is accepted today (Rafatjah, 2004).

In the process of comparing significant differences between groups, a Chi-square test was used. There were not, statistically, significant differences between genders in terms of their Attitudes about equality between genders in the job market ( $\chi^2 = .006$ ,  $p < .937$ ).

This study displays a consciousness among two genders about inequality in the job market. In terms of gender inequality in job market, both female and male students have come to common view. It shows a very huge attitude change between old and young generations in Iran.

Students who answered 'No' to previous question, were required to answer another question to find out their thoughts about which gender had more chance in job market. As illustrated in Figure 5.3, from 45 female students who answered this question all agreed that males have more chance to get job after graduation. While 85.4% of male students who answered (48) agreed with their classmates, 14.5% disagreed and said that females had more chance to get job.

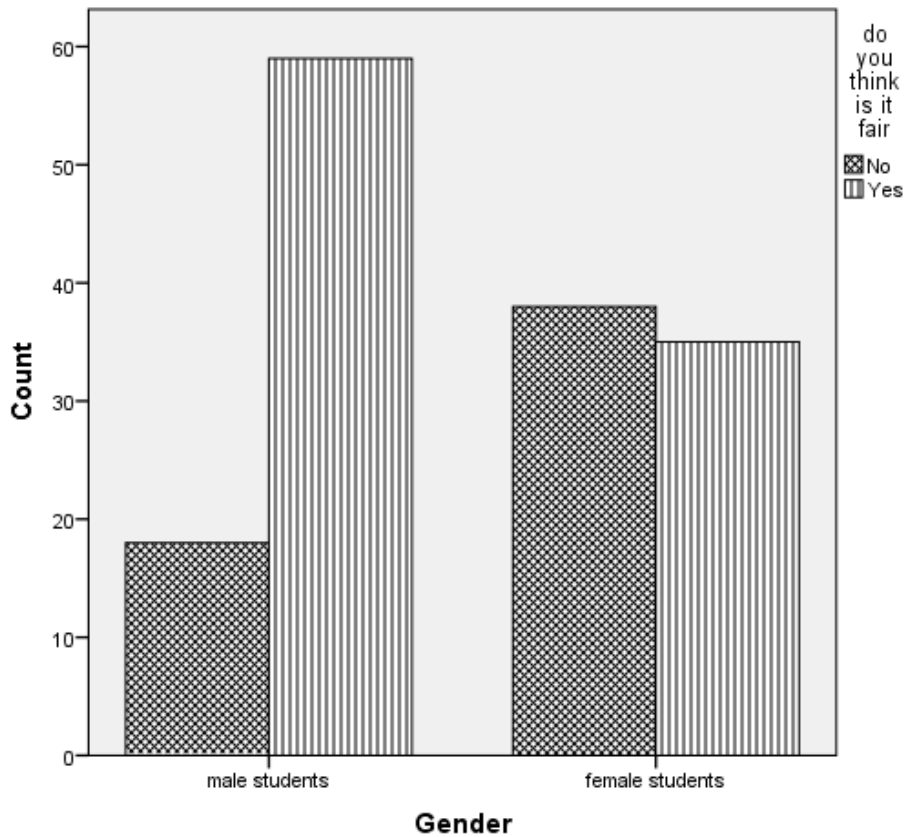


**Figure 5.3: Opportunity in job market by gender**

Rafatjah (2011) argue that socio-cultural obstacles are among the biggest obstacles for women's employment in Iran. The gender differentiation of the labor market is mainly based on the social factors' interpretations of gender. According to Pourghasem (2002) 50.3% of respondents consider the prejudices concerning women's and men's employment as the most important obstacle for the employment of women. More than half of employees believe that gender plays a crucial role in their selection from graduates who seek jobs. Most officials also believe that men should be given preference in employment due to their responsibility for providing family expenditures.

This study shows that, although the students think female students have a good chance to get a job (figure 5.2, table 5.6), they are still aware that there is no equality between genders in the job market. The result indicates that there are statistically significant differences between genders in the attitudes about opportunity in the job market by gender ( $\chi^2=7.097$ ,  $p<.008$ ).

Connect to previous question and to find how participants in this study evaluated equality or inequality in the job market in terms of fairness, they were asked following question. 'Is creating more job opportunities for only one gender, fair? Figure 5.4 shows that from 150 answers (from total 194 participants) 37.3% gave 'No' answers and 62.7% said 'Yes'. A little more than half of female students, who answered this question, said that it was not fair, while others believed it to be fair. It is surprising that even though female student know that males have more chance to get a job (Figure 5.3), they believe that it is fair



**Figure 5.4: Inequality in job market, fairness by gender**

In the national research of “Iranians Values and Attitudes” the respondents were asked that in cases, where a man and a woman with similar capabilities apply for a job, which one should be employed. 51.5% of men and 37% of women (which formed 45% of total respondents) replied that in situations like Iran, the man should be employed. Only 11% of total respondents believed that the women should be employed (Values and Attitudes of Iranians ,Ministry of Islamic Culture, 2003).

It is worth noting that in spite of recent socio-cultural changes, a large section of Iran’s labor market is still masculine, and although the number of highly educated women has significantly increased and most of them are willing to be employed, the average rate of women employment in Iran does not exceed 12% (Rafatjah, 2011).

## 5.6 Summary

There was significant difference between male and female students in terms of parental education attainment. Female students in particular, had more educated parents than male students. In terms of motivation, the most cited motivation of students' attending subjects was their own interests with almost the same rate for both genders. In addition, improving social statuses, having a well paid job, having a successful marriage and parental pressure were all had their impacts. There was significant difference in terms of inspiring for a well paid job between students with highly educated parents and ones without highly educated parents. Students were aware of the role of higher education with well paid job. Also this study found differences between male and female students in terms of potential marriage attitudes, more male students entered higher education for this reason than female students.

In terms of student aspiration what to do after graduation, more than half of them wanted to continue their education in postgraduate levels. This study showed that male students had more tendency to continue their studies compare to female students.

In terms of job opportunities, most of the students gave " Yes" answers. It means that there was a good job availability in the job market. It confirms the latest research that the unemployment rates are low amongst highly educated people and it is more important to women than to men.

Furthermore the study revealed that students were aware of employment situation for previous graduated students as well as gender issues.. The study shows that although there are good chances for female students to get a job, it is not the same in comparison to opportunities for male students. It was also shown that both genders were aware of equality and inequality between genders in terms of job vacancies available to both genders in the market. The study displayed a consciousness among two genders in terms of inequality in the job market.

In terms of finding a job, the study shows that although the students think female students have a good chance of employment, it is not yet equal to chance of getting job for male students.



# **6- CONCLUSION: IMPLICATIONS AND RECOMMENDATIONS**

## **6.1 Introduction**

The following chapter concludes the study with a summary of the findings, and suggestions for future research. Delimitation is also discussed in this chapter.

The present study investigated the enrollment of students in the Tabriz University of Medical Sciences. It looked at the students' social background, factors that significantly influenced their selection of subjects and how they evaluated job market. The following factors were examined: gender, parents' education, basics of field selection, job availability and attitudes towards gender equality and inequality in job market.

The study was conducted at the Tabriz University of Medical Sciences which is the largest state's university in the Northwest of Iran. The study made use of questionnaire, which utilized the SPSS data analysis software. A sample of 194 students from four fields (Medicine, Pharmacy, Dentistry and Physiotherapy) in the final year of their studies. They were asked to fill out a questionnaire in the faculties' libraries. The aim was that to obtain data from the same number of both male and female students.

## **6.2 Main findings**

This paper provides clear evidence of the trend toward rising rates of female participation in higher education over time in the Islamic Republic of Iran. Descriptive statistics revealed that almost half of the sample came from families with highly educated parents. There were significant differences between male and female students in terms of parental education attainments. The study showed that parents' education positively affected enrolment of female student in higher education more than male students and father's education was more significant. In terms of students' motivations for attending those subjects, majority of them from both gender addressed their own interest. There are no significant differences between

genders in terms of their parental education attainments. There is significant difference in terms of inspiring for a well paid job between students with highly educated parents and those without highly educated parents. Students were aware of the role of higher education in well paid jobs in the market. Study also shows another difference between male students and female students in terms of potential marriage attitudes. Usually well educated women seem to have a good marriage opportunity but this study indicated that more male students enter higher education for this reason than female students.

In terms of students aspiration after graduation the study pointed out that more than half of them preferred to continue their studies in post graduate levels. It means most of students aspire to have further education which is considered a high career aspiration in the current Iranian context. The study showed that male students have more tendency for postgraduate studies compare to female students. Among students who want to find a job after graduation, female students were more than male students.

In terms of students' attitudes towards labor market, majority of students from both genders had positive expectation of finding a job after graduation. It revealed that there was a good chance of getting a job among Medical Sciences graduates.

In terms of students' attitudes towards the rate of employment for previous graduated students within gender, the study showed that both gender were aware of employment situation as well as gender issues and gave almost same answers. Students' attitudes also revealed their beliefs about more job opportunities for men in the job market.

In terms of students' attitudes about equality or inequality in job market among genders the study showed that both gender have nearly similar attitude about equality and inequality in job market. A little more than half of participants believed that there was equality between genders in getting job while others disagreed and thought otherwise, i.e. there was inequality in the job market within genders. There were not statistically significant differences between genders in terms of their attitudes about equality between genders in the job market.

In terms of finding out the students' attitudes towards which gender had more chance in job market, all female students and majority of male students who answered this question agreed in that the male students had more chances to get a job after graduation. This study showed that although the students thought female students had a good chance in labor market, they

were still aware that there was no equality between genders in the job market. The result indicates that, statistically, there are significant differences between genders in their attitudes towards opportunities in the job market by gender. The study displayed a consciousness among two gender about inequality in the job market.

In terms of students' attitudes towards inequality in the job market and fairness within genders, a little more than half of female students who answered this question, said that it was not fair while most of male students found that it was fair. It is surprising that even though majority of female students knew that males had more chances of getting jobs, some also found that it was fair.

## **6.3 Conclusion**

The empowerment process is not a constant, but rather a continuing, development that involves many changes and whereby an individual or group is able to strengthen and exercise the ability to act to gain control and mastery over life, community, and society. As long as empowerment is a process of both thought and action, it is dynamic and constantly evolving (Foster-Fishman et al., 1998; Staples, 1990).

Empowering women through education implies that women will be fully supported to join male counterparts in acquiring formal education and the appropriate skills that will enable them compete favorable in the job market or in the life market (United Nations Development Fund for Women 2001). A woman's level of education, her employment status, particularly employment for cash, and media exposure are expected to be positively related to empowerment (Mason, 1986; Kishor, 2000). Women who are educated and employed are likely to be better equipped with the information and the means needed to function effectively in the modern world. Together these factors are expected to influence women's inherent abilities as well as their attitudes towards gender roles. In addition, according to Roudi-Fahimi and Moghadam (2003), the benefits of female education for women's empowerment and gender equality are broadly recognized:

- As female education rises, fertility, population growth, and infant and child mortality fall and family health improves.

- Increases in girls' secondary school enrollment are associated with increases in women's participation in the labor force and their contributions to household and national income.
- Women's increased earning capacity, in turn, has a positive effect on child nutrition.
- Children—especially daughters—of educated mothers are more likely to be enrolled in school and to have higher levels of educational attainment.
- Educated women are more politically active and better informed about their legal rights and how to exercise them.

Iranian women have proved their aim to change their lives and to transform the society in a more active way than before. Povey (2001) mentioned that “Iranian women have shown a great deal of courage, imagination and commitment to struggle for their gender interests”. Their first step of capacity building and empowerment through education were taken; women's access to higher education has improved significantly in recent years.

It seems that there are further steps ahead including getting into employment, higher professional and administrative jobs and into the decision making process. Undoubtedly rising education will affect women's employment and subsequently increase their share of employment in professional and technical jobs, however, it is not the only reason for the persistence of patriarchy restricting women's access to the labor market. There are many factors that contribute to this trend such as political and cultural issues.

An important policy implication of these findings is that tertiary education, especially at the graduate level, may play an important role for women to break the barriers against the expansion of their roles in the economy. This is mainly important because it could help address at least three important policy challenges: alleviating unemployment, diversifying the economy, and empowering women (World Bank, 2007).

These changes are necessary conditions for women's empowerment and in Iran, we nonetheless have a far reaching target to achieve.

## **6.3 Limitation**

The study investigated students' attitudes through questionnaire survey and results were assessed in terms of the student's self-reported answers. It would have been useful to take other social background elements such as parents' employment statuses and family income as they are considered to be some of the most influential factors in education especially when female education comes into consideration.

The study sample was limited by subjects and study's year, as well as the researcher's restricted time and limited budget to conduct more substantial amount of sample respondents for the study.

## **6.4 Recommendation**

There has been a dramatic change in the recent years in higher education in terms of female enrolments, where all fields of study are "feminized", more women than men enrolled – except for engineering. In 2007-2008 academic year, women comprised 66% of all students in the field of Medical Sciences; 68% of those in the arts; 62% in the basic sciences; and 59% in the human sciences. The formerly male dominated field of agriculture and Veterinary Medicine witnessed a 52% female enrolment. Engineering, however, has remained the bastion of masculinity. In 2007–2008, 73% of all engineering students were men, compared to 27% of women (Mehran, 2009). It would be a useful study if consequences of such enrollment and future employment possibilities were investigated in these fields.

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# APPENDIX

## Survey Questionnaire

- 1- Gender: Male  Female
- 2- Field: Medicine  Physiotherapy  Pharmacy  Dentistry
- 3- Father's Education: Illiterate  Primary school  Secondary school   
High school diploma  College degree  Bachelor degree   
Master degree  PHD
- 4- Mather's Education: Illiterate  Primary school  Secondary school   
High school diploma  College degree  Bachelor degree   
Master degree  PHD
- 5- You have chosed this field because...
  - a) You are interested in
  - b) Your family interested in
  - c) You want to improve your statues
  - d) You will have a well paid job
  - e) You will have potential marriage
- 6- What would you like to do after graduation? Resume education  Work   
Stay at home
- 7- Do you think you will find a job after graduation? Yes  No  I don't know
- 8- Do you know how many female students who graduated before have got a job?  
All of them  Most of them  Few of them  None of them  I don't  
know

9- Do you know how many male students who graduated before have got a job?

All of them  Most of them  Few of them  None of them  I don't  
know

10- Do you think is there equality in getting job between females and males in this field?

Yes  No

11- If your answer is no, which of the following sentences are you agree whit?

Males have more chance to get job after graduation?

Females have more chance to get job after graduation?

12- If so, do you think is it fair? Yes  No