The Importance of the Open and Distance Education in terms of the Women's Preferences of Professional Field and the Women Employment¹

Seda Tekeli

Anadolu University
Faculty of Economy
Department of Labor Economics
Eskisehir
Turkey

Güler Günsoy

Anadolu University
Faculty of Economy
Department of Economics
Eskisehir
Turkey

Abstract

As it is constantly stressed, nowadays, the educated Labor force is the most important human capital factor that is effective for reducing the poverty by having positive impact on the labor supply, the labor force participation rate, the labor gains, the gender-based inequality problems, the employment and thereby the economic growth, economic development and human development. In the economic context, the socio- cultural exogeneity arising with especially the education of women that creates individual and societal gaining is the effective in solving lots of problems related with women based gender inequalities. The education of women has positive influence on the efficiency and the growth. In addition, the level of education is an important factor effecting the participation of women into labor force and the employment. The education, especially the vocational education, is seen as one of the tools that increase the human capitals of women. In this context, the providing of the education by the institutions of formal education and distance education is influential on ensuring the getting a profession and the becoming skilful. In this regard, open learning and distance education have an important and wide position in providing the necessary training for facilitating of women's choices of professional field selection and the registered employment of women. In this sense, demographic characteristics and programs (graduated or continuing) of women that benefit from Anadolu University Open and Distance Learning System going to be put forth and their occupational choices will be evaluated. After that evaluation, the importance of open and distance learning on clearing holdbacks in front of women's education will be tried to be explained.

Keywords: Education, Open and Distance Education, Employment, Employment of Women

1. Introduction

Various past theories one economic growth have emphasized that saving, physical capital, human capital, knowledge, technological progress and research—development activities are essential factors in promoting economic growth and explaining economic progress. In particular, education and all education-oriented activities and investments are required for the accumulation of human capital. The role of human capital in the growth process is undoubtedly crucial. In this context, the importance of human capital in economic growth and the relationship between human capital and education were examined in studies by Schultz (1961), Solow (1956), Nelson and Pelps (1966), Becker (1964), Denison (1964), Romer (1986), Rebelo (1992), Barro and Lee (1992), Lucas (1988), Mankiw Romer and Weil (1992), Barro and Sala-i Martin (1995).

¹This paper, presented at IDEC-2012 (International Distance Education Conference-2012) (13-15 December 2012) in United Arab Emirates-Dubai, is the state's re-arranged.

(Klasen, 2000: 2-3; Ünsal, 2007: 215-223; Berber, 2006: 179; Taban, 2011:120). The essay by Schultz, titled "Investment in Human Capital", which was published in 1961, investigated the importance of human capital in economic growth, and of education and education investments in human capital and human capital investments were stated (Schults, 1961: 1–17). Lucas (1988) stated that the long-term source of growth is human capital, and also emphasized the parallelism between the long-term increase in human capital and the sustainability of the growth. In addition, Lucas (1988) associated human capital directly with education, and defined human capital as the educated and skilled labor force, and defined human capital investments as any investment made for the labor force to be educated, skilled, qualified and productive (Berber, 2006: 179–180; Taban, 2010: 57).

In the literature includes various theoretical and empirical studies on the importance of education in accumulation of human capital and growth. In this context, female education and gender inequality in education affect productivity, growth, development and employment while also affecting many economic and socio-cultural fields, such as wages, fertility rate and acquiring legal, social, political rights, etc. (Klasen, 2000: 27–28; Dollar and Gatti, 1999: 3; Lagerlöf, 2003: 421). Female education contributes to economic, social, cultural and political fields. Vocational education is regarded as especially important to increase the human capital of women. In this context, both formal and non-formal educational institutions are effective in facilitating women to acquire skills and a profession. Many studies emphasize the importance of education, especially university and vocational education, in women's employment and participation in the labor force (Standing, 1976: 281–297; Tansel, 2002: 6–20; TÜSİAD and KAGİDER, 2008: 165–166).

Recent studies emphasized the influential factors in women's labor force participation and women's employment in countries and regions with different developmental levels. Such factors as wages, working conditions, economic crisis, black economy, education level, traditions, and family responsibilities influence the participation of women in labor force and their employment. These factors vary according to local economic, cultural, political and traditional characteristics. However, the effective factors in women's labor force participation and employment are education and education level, regardless of national development levels (The World Bank and DPT, 2009; Reynolds, Master, Moser, 1987; Günsoy and Özsoy, 2012; Günsoy and Tekeli, 2012). In this context, according to Bradbury and Kantz (2008), the reasons for women's low participation in labor markets and low employment in families in which men are in the labor market include such traditional issues as women's housework responsibilities for and child- and elderly care (Bradbury and Kantz, 2008: 6). McNown and Cano (2005) concluded that women's employment is directly related to education, wage and having children. They reported a positive relationship between female education level and wage level, whereas there was a negative relationship between education level and fertility (McNown and Cano, 2005: 521). In studies by Tremaine and Owen, 1984; Lunneborg, 1994; Gandhe, 1998; Kanwar, 1995a, 1995b; Chaudry, 1995; Sharma, 1995; Niemann and Romero, 2000; Phillip, 1993; Burnham, 1988, Hipp, 1997; and Kumar, 1999,a strong relationship was found between women's employment and education. Women's responsibilities due to the traditional family and social structure, such as having children, the number of children, the genders of the children, and responsibilities for family-child- and elderly care create inequality of opportunity in education for women (Kanwar and Taplin, 2001: 6-7).

When women's labor force participation and employment are evaluated globally, it is clear that there are crucial factors inhibiting female participation in the labor force and employment in Turkey. Studies by Aran, Çapar, Hüsamoğlu Şanalmış and Uraz (2009) Başlevent and Onaran (2003), Dayıoğlu and Kırdar (2009) Eyüboğlu, Özar and Tanrıöver (2000) Gündüz Hoşgör and Smiths (2006) İnce and Demir (2006) Kasnakoğlu and Dayıoğlu (1997) Taymaz (2009) in Turkey emphasized education as the factor that paves the way for women's participation in labor markets. Previous studies indicate that education not only strengthens participation in the labor force market and/or women's employment but also strengthen job competition skills of women, increases their self-respect and also the rates of women's labor force participation. Previous studies show that women's employability increases in parallel with education level. The employability of women university graduate thesis 73% compared with 3% for women with primary school education (The World Bank and DPT, 2009: 3–4).

In this context, open- and distance education is an important academic tool that provides education for all individuals without discrimination by country, region, class, age or gender, by utilizing technologies and opportunities for open and distance education (Hakan, 1996: 1–167).

According to Calvert (1986), distance education is a system that accords the right to education for individuals who want to receive education but who cannot otherwise benefit from education for various reasons. On the other hand, distance education is also effective in reducing the imbalance between education supply and demand (Aderinoye and Ojokheta, 2004).

Education is not a guarantee against poverty, social injustice and weakness. Instead, education is universally regarded as a basic requirement for organizing effectively against these conditions. Distance education shows rapid global growth, and provides education and learning opportunities for individuals who cannot otherwise receive education (Faith, 1988: 5-8; Suğur and Savran, 2006: 197). From another perspective, despite being not the only solution, education plays a crucial role in improving women's communal living (translated from "Tan, 2000: 23" by Suğur and Şavran, 2006: 197). As is understood from the statements that stress the importance of education, distance education for women can be particularly effective in addressing problems of gender inequality, acquiring a profession, women's labor force participation and employability. On the other hand, distance education also has important effects in reducing poverty, social injustice and weakness. Many studies have reported that open and distance education is a crucial tool in reducing gender inequality for women, especially in developing and poor countries. These studies also indicate that this education enables individuals who cannot attend standard educational establishments to be stronger and to acquire a profession. In addition, technology-based distance education methods are discussed as an alternative to post-high school education. According to Lewis, Alexander, and Farris (1997); Lewis et al., (1999); Waits and Lewis (2003), the use of distance education methods in further education establishments and registration for such forms of education are increasing (Setzer and Lewis, 2005:1). According Wildavsky (2001); Doherty (2002); Kennedy-Manzo (2002) and Trotter (2002), technology-based education in primary and secondary education provides flexibility in the student's schedule and also different education opportunities in schools and lessons (Setzer and Lewis, 2005:1). It is therefore concluded that open- and distance education have crucial externalities in of all ages and genders and of all education levels, and also in individual and socio-economic levels. It also plays an important role in acquiring a profession and fighting against poverty in developing and poor countries.

As stated previously, education has a significant effect on women's labor force participation and employment; levels in Turkey between 1988 and 2011are given in Tables 1 and 2, and in Figures 1 and 2.

As seen from Table 1 and Figure 1, in brief, women's labor force participation in Turkey increases according to education level: postgraduate women have the highest labor force participation, followed by those who are vocational school graduates and then those with general high school graduation.

As seen in Table 2 and Figure 2, women's employment in Turkey increases with education level. According to the education levels, the employment rate of the women university graduate is at the highest level and high school graduate and then vocational school graduate women are the following.

As is understood from Tables 1 and 2, vocational education and higher education play an important role in women's labor force participation. Gender inequality in education is important among the indicators of social gender inequality. In Turkey, women have no equal rights with men for access to higher education. In this context, open and distance education not only provides women with opportunities to reach and receive higher education and vocational education, but also plays a crucial role in decreasing the factors that prevent women from participating in the labor force, such as gender, age, settlement, class, income and other economic and socio-cultural inequalities.

2. Material and Method

2.1. Purpose and Importance

The purpose of the study is to create profiles of students who graduated from the School of Economics and Faculty of Management in Anadolu University Open Education between 1984 and 2012. Within the scope of female graduates, the programs from which women graduate determine the inclinations of women towards their vocational field. The analysis of the present study determines the importance of the educational background of women receiving open and distance education on accessing education and determining their preferences of vocational field. In this context, the importance of open and distance education in women's labor force participation is emphasized.

2.2. Method

The purpose of the study is to create graduate profile with the people who graduated from Anadolu University Open Learning, the School of Economics and Faculty of Management between the years of 1984–2012 regarding their gender, age, department, region and graduation year. The relationships between gender and age, department, region and graduation year were investigated via descriptive analysis. Relational analysis was conducted on women's inclinations towards professional field. Data for the period 1984–2012 were obtained from the Anadolu University Center for Research and Practice with Computer.

2.3. Demographic Characteristics of Graduates

There was limited data available on the demographic characteristics of graduates, so the analysis took into account the age, gender, department, faculty, region and graduation years of the graduates.

<u>Distribution According to Faculties:</u> The data showed that 1.658.601 (698.231 female and 960.370 male) students graduated in total, including two-year degree and bachelor's degree during the academic years 1984 to 2012. Of the graduates from open and distance education, 58% were male and 42% female. The distribution of graduates according to faculties is shown in Figure 3: 48% graduated from the Open Education Faculty, 35% of from the Faculty of Management and 17% from the School of Economics.

According to Figure 4, 48% of the graduates from the Open Education Faculty are female and 52% are male. Among programs related to the School of Economics and Faculty of Management, the proportion of female graduates is approximately half of that for male graduates. The proportion of female graduates of the Faculty of Management is 38% compared with62% for males. Similarly, the proportion of female graduates from the School of Economics is 33% compared with 67% for males. The reasons for the high rate of female graduates from the Open Education Faculties are that most programs within the Open Education Faculty are two-year license programs, which support the preferences of women to receive higher education over a shorter period and to more quickly participate in the labor market. According to Figure 4, the women's participation in higher education and graduation from higher education increase with longer education period.

<u>Distribution by Years and Gender:</u> While examining the distribution of graduates by gender and year, programs were evaluated separately as associate degrees and license programs. According to this analysis, the rate of females graduating from association degrees declined between 1991 and 2010, whereas it increased between 1984–1990 and from 2011 until the present.

The distribution of female graduates from the association degree and license programs shows a decline in male graduates. While the rate of male graduates increased from 1991 to 2005, this rate has been decreasing since 2005. In conclusion, the proportion of females graduating with association degree has rapidly increased compared to proportion of male graduates.

Unlike female graduates of association degrees, the proportion of female graduates from license programs increased during the study period (see Figures 7 and 8). In the first years of the Open and Distance Education System, the proportion of female graduates from license programs was 25%, which has since nearly doubled to 41%.

Nevertheless, the overall proportion of female graduates from license programs of the three faculties is low compared with the proportion of males. However, unlike female graduates, the rate of male graduates is currently declining. Males represented 75% of graduates during the first years of the study period, compared with 59% in 2011 and afterwards.

<u>Distribution of Graduates by Program:</u> Figure 9, 10 and 11 show the gender distributions of graduates from the various faculties according to the program from which they graduated. According to Figure 9, all three faculties have male than female graduates. This difference is quite great for the license program graduates. The total number of female graduates was 344.410 between 1984–2012, compared with 397.982 male graduates. The total number of female bachelor graduates was 353.821 compared with 562.388 males. Figures 10 and 11 show the gender distribution as percentages.

As seen in Figure 10, of all association degree graduates, there were fewer female graduates (46%) than males (54%) during the period 1984–2012. As seen in Figure 11, of all bachelor graduates, the rate of females (39%) is lower than that of males (61%) during the period 1984–2012.

<u>Distribution by Departments:</u> A detailed explanation is given above about the proportions of male and female graduates from license programs and association degree programs within the Open Education Faculty, the School of Economics and Faculty of Management. This section examines the distribution of graduates by genders on the basis of departments, to determine whether this effects women's participation in professional fields. As seen in Figure 12 shows female association graduates,19% of females gained association degrees within the Faculty of Management, followed by the Department of Midwifery, the Department of Public Relations and Identification, and the Department of Health Facilities.

Evaluating female and male association degree graduates according to departments, the proportions of male graduates were higher in the first years of the study period but the proportions of female graduates subsequently increased.

After examining the distribution of female association degrees according to departments, this was repeated for bachelor graduates. As seen in Figure 14, more than half of the female bachelor graduates (62%) during the period 1984–2012 studied at the Department of Management, followed by: the School of Economics>Public Management >Preschool Teaching.

The gender distribution shows that most of bachelors graduates of the Preschool Teaching and English Teaching Departments are women, whereas there are equal proportions of female and male bachelor graduates from the of the School of Economics, Department of Management and the Public Management Department.

<u>Distribution by Age:</u> Figure 16 shows the gender distribution of association degree graduates by age groups. It can be concluded that the all graduates include the individuals at the age of 30 and over.

Figures 17–20 show the age distribution of female and male bachelors and association degree graduates according to department. As seen in Figure 16, 64% of total female association degree graduates were women aged 30 and over. As seen in Figure 17, 77% of total bachelor graduates are men aged 35 and over 35.

Unlike female association degree graduates, most female bachelor graduates are women aged 25 or over.

Comparison by gender shows a similar age distribution—Individuals aged 25 and over comprise 65% of male graduates.

<u>Distribution by Region</u>: The distributions of the bachelor and association degree graduates by the regions during the period of 1984–2012 are shown in Figures 21–24. As seen in Figure 25,31% of the bachelor and association degrees between 1984 and 2012 were based in Marmara Region, compared with 23% for Central Anatolia and 13% for the Aegean Region.

As seen in Figure 22, nearly half of male association degree graduates are from Central Anatolia (22%) and Marmara (22%).

Central Anatolia awarded 30% of female bachelor degrees, followed by the Aegean Region (19%) and Marmara Region (17%), respectively.

As seen in Figure 24, most male bachelor degrees were awarded in the Marmara Region (35%), followed by Central Anatolia (17%) and the Mediterranean Region (10%), respectively.

2.4. Findings and Evaluation

It was determined that a total of 1.658.601 students graduated from both association degree and license programs (698.231 female and 960.370 male) during the study period. Males comprise 58% of the open- and distance graduates, whereas women represent 42%. Women represent 48% of graduates from the Open Education Faculty is 48%, compared with 52% for male graduates. Within the School of Economics and Department of Management, there is approximately double the percentage of male (62%) to female (38%) graduates. Similarly, females represent 33% of all graduates from the School of Economics, compared with 67% male graduates. According to this data, we can state that the rate of the male graduates is higher than the rate of female graduates from Open Education Faculty, the School of Economics and Department of Management.

Open- and distance education was put into practice in 1982–1983. The number of men who received education during this period was much greater than the number of women (Suğur and Şavran, 2006: 199, translated from "Tekin and Demiray, 1989"). However, during the period 1984–2012, there was an increase in the number of women who received education.

In this context, the rate of females graduating with association degrees decreased between 1991 and 2010, but increased from 1984–1990 and from 2011 until today. In this context, we can state that women who become unemployed or left the labor market due to the global and economic crises start to receive open and distance education to facilitate their personal development and increase their professional knowledge and skills during the period they spend out of the labor market. However, in terms of all graduates, the proportion of female graduates from the license programs of all three faculties is lower than that for males. The rate of male graduates is declining by years while that of female graduates is on the rise. As emphasized by Kramarae (2001) and Kanwar and Taplin (2001), women comprehended the importance of open and distance education much better due to the benefits of open and distance education for the women, their families and the society. In this context, open and distance education provides the only educational opportunity for women who has jobs and have children without hindering their family, work and responsibilities for the society.

During the study period, the Department of Management awarded 519 association degrees to female graduates, followed by the Department of Midwifery; Public Relations; Identification; and Health Facilities Department. More than half of the female bachelor graduates during the period 1984–2012 were from the Department of Management. Other departments with higher numbers of female graduates are the School of Economics, Public Management and Preschool Teaching. When bachelor awards are evaluated according to regions, most graduates of Preschool Teaching and English Teaching departments are female. This indicates that this sector has a strong influence on women's choice of educational field. Most women are employed in the agricultural (41%) and service (43%) sectors, whereas the professional fields to which women are attracted include: teaching, midwifery and nursing, health facilities management, public relations, banking and insurance. On the other hand, these professional fields are more open to female participation in the labor force and employment, and also fulfill the social and individual duties and responsibilities of women.

Most male and female graduates from the Open Education Faculty of the School of Economics and Department of Management were aged 30 and above. In terms of gender, individuals aged 30 and over comprised 64% of total female association degree graduates. Most female bachelor graduates were aged 25 and over. In this context, women who are 30 or above prefer association degree programs to gain professional skills required for participation in the labor force. Women who are in the labor market prefer association degree programs to increase their professional efficiency, to avoid burdening the family budget with training costs and to complete their professional training in a short time.

Of those graduating from association degree and license programs during 1984–2012, 31% were from Marmara Region, compared with 23% for Central Anatolia and 13% for the Aegean Region.

Most female association degree graduates were from Marmara Region, whereas most male graduates were from the Central Anadolu Region. In this context, the traditional mentality that is dominant in the region and lifestyle determine the professional fields entered by women. During the study period, open and distance education was not a determining factor in women's access to association and license degree programs for women living in the eastern part of Turkey.

3. Conclusion

Since Adam Smith, education has been known as an investment inhuman capital. Especially since the 1950s, investment inhuman capital revealed the significant relationship between economy and education. In this context, Becker (2002) defined the present era as the "human capital era" and emphasized that the success of individuals, societies and economies depends on the density, variety and efficiency of investments in human capital. In their study, Psacharopoulos and Patrinos (2004) determined the benefits of education and investments on education at social and individual level as follows: the individualistic benefit of education is more than the social benefit; investment in female education is more beneficial than investment in male education; high education is most beneficial in terms of individualistic benefits than any other education level (Kavak, 2010: 25–26).

Together with globalization and change, education is required for the development and growth of global economies and to increase employment. In particular, educated women are the symbol of individual and societal development. Vocational education directly affects the quality of the labor force and employment, and also determines the national accumulation of human capital. In this context, the provision of education by both formal and non-formal training organizations is effective in guaranteeing women's ability to gain skills and acquire a profession. The increase of employment both globally and in Turkey parallels the increase in education level.

University and vocational education is an important educational level that determines women's participation in labor markets, their efficiency and their wage levels. In this context, this system provides education for individuals who would otherwise be unable to attend more traditional forms of education. On the other hand, this system is also effective in reducing the problems and imbalance between education supply and demand, especially in developing countries.

Eskişehir Anadolu University is the first university to provide open- and distance university and vocational education in Turkey. University and vocational education is therefore available for all individuals irrespective of gender, society, class and region. Over one and a half million (1,658,601) individuals graduated from the Anadolu University, which has a diversifying structure that exceeds the traditional education system, and fulfills an important role in providing university and vocational education.

The data used in the study was evaluated according to gender, showing that women in Turkey, benefit from distance- and open education as much as men. In terms of departments, female association degree graduates increased during the study period. It is concluded that women mostly preferred Midwifery, Nursing, Public Relations and Identification, Health Facilities Management departments, which help women fulfill their family responsibilities and their wish for employment. The age analysis showed that women over 30 mostly prefer association degree programs, and the most women participating in license programs were aged25. Therefore, open- and distance education is not only beneficial for women who want to participate in the labor market but also allows those who work under flexible conditions to continue their professional development. In this context, the Anadolu University Open and Distance Education System continually revises its education system, fields and education materials both for individuals who want to participate in the labor market and those who are already employed. This system is continually adapted to changing work and education conditions. The geographical analysis showed that most graduates live in the western part of Turkey, and that open- and distance education was not a determiner in access to association degree or license programs for women living in the eastern part of the country.

In conclusion, most participants in open and distance education in Turkey are male. Social gender discrimination, regional inequalities, poverty, economic problems and socio-cultural limitations prevent women accessing university and vocational education and benefiting from education. Open and distance education can therefore be regarded as a tool that enables women to overcome these obstacles and to access education. The increase in female graduates within the open- and distance education system supports this foresight. Globally, open- and distance education is preferred by various people without discrimination of age, gender, race, marital status, region, income, etc. Throughout Turkey, it is necessary to establish policies to develop open- and distance education materials; methods that will overcome the educational obstacles that limit female employment; and to develop women's professional skills.

References

- Aderinoye, R. ve K. Ojokheta. (2004). "Open-Distance Education as a Mechanism for Sustainable Development: Reflections on the Nigerian Experience", The International Review of Research in Open and Distance Learning, Vol. 5, No.1, April.
- Berber, M. (2006). İktisadi Büyüme ve Kalkınma, Derya Kitabevi, Trabzon.
- Bradbury, K. ve J. Kantz. (2008). "The Responsiveness of Married Women's Labor Force Participation to Income and Wages: Recent Changes and Possible Explanations", Federal Reserve Bank of Baston, Working Papers, No: 08-7, November.
- Dollar, D. ve R. Gatti. (1999). "Gender Inequality, Income, and Growth: Are Good Times Good for Women", Policy Research Report on Gender and Development Working Paper Series, No. 1, The World Bank.
- Dünya Bankası ve Devlet Planlama Teşkilatı (2009). Türkiye'de Kadınların İşgücüne Katılımı: Eğilimler Belirleyici Faktörler ve Politika Çerçevesi, Beşeri Kalkınma Sektörü ve Orta Asya Bölgesi, Rapor No: 48508-TR.
- Faith, K. (Ed.), (1988). Toward New Horizons for Women in Distance Education: International Perpectives, London, New York: Routledge, http://books.google.com.
- Günsoy, G. ve C. Özsoy (2012). "Türkiye'de Kadın İşgücü, Eğitim ve Büyüme İlişkisinin Var Analizi" Finans Politik ve Ekonomik Yorumlar Dergisi, Sayı: 568, Yıl:49, Haziran. ss.23-42.

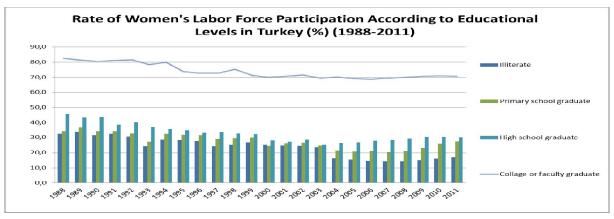
- Günsoy, G. ve S. Tekeli (2012). "Türkiye'de Asgari Ücretin Kadın İstihdamı Üzerindeki Etkisine İlişkin Zaman Serisi Analizi", 3. Uluslararası Ekonomi Konferansı, TEK-UEK 2012 Bildiri Kitabı, 1-3 Kasım, İzmir.
- Hakan, A.(1996). Uzaktan Öğretim Yöntemiyle Eğitim Veren Anadolu Üniversitesi Fakültelerinin Tanıtımı ve Batı Avrupa Açıköğretim Programlarının Değerlendirilmesi, Anadolu Üniversitesi Yayınları, No:915. Eskişehir.
- Kanwar, A.S. ve M. Taplin (2001). "Brave New Women of Asia: How Distance Education Changed Their Lives", The Commonwealth of Learning, http://www.col.org.
- Kavak, Y. (2010). 2050'ye Doğru Nüfusbilim ve Yönetim: Eğitim Sistemine Bakış, TÜSİAD, Birleşmiş Millet Nüfus Fonu, Yayın No: TÜSİAD-T/2010/11/506, İstanbul.
- Klasen, S. (2000). "Does Gender Inequality Reduce Growth and Development? Evidence From Cross- Country Regressions Policy", World Bank Policy Research Report Working Paper, No. 7.
- Kramarae, C. (2001). "The Third Shift: Women Learning Online", American Association of University Women Educational Foundation, Washington, www.aauw.org/learn/research/.../third shift.
- Lagerlöf, N.-P. (2003). "Gender Equality and Long- Run Growth", Journal of Economic Growth, 8, 403-426.
- McNown, R. ve C. R. Cano. (2005). "A Time Series Model of Fertility and Female Labour Supply in the UK", Applied Economics, 37.
- Reynolds, L. G.; S. H. Master; C. H. Moser. (1987). Economics of Labor, Prentice Hall, New Jercy.
- Schultz, Theodore W. (1961). "Investment in Human Capital", The American Economic Review, Vol.51, No.1, March, s.1-17.
- Setzer, J. C., and Lewis, L. (2005). Distance Education Courses for Public Elementary and Secondary School Students: 2002–03 (NCES 2005–010), U.S. Department of Education. Washington, DC: National Center for Education Statistics.
- Standing, G. (1976). "Education and Female Participation in The Labour Force", International Labor Review, Vol. 114, No.3, ss. 281-298.
- Suğur, S. ve T. Gönç Şavran. (2006). "Türkiye'de Açıköğretim Sisteminin Toplumsal Cinsiyet Açısından İncelenmesi", Ankara Üniversitesi SBF Dergisi, 61/3, ss. 193-214.
- Taban, Sami (2011). İktisadi Büyüme-Kavram ve Modeller, Nobel Yayınevi, Ankara.
- Tansel, A. (2002). "İktisadi Kalkınma ve Kadınların İşgücüne Katılımı: Türkiye'den Zaman-Serisi Kanıtları ve İllere Göre Yatay Kesit Kestirimleri", ERC Working Papers in Economics, 01/05T, Economic Research Center, Middle East Technical University.
- TÜİK Resmi İnternet Sitesi, İşgücü İstatistikleri Veritabanı (http://www.tuik.gov.tr)
- TÜSİAD ve KAGİDER (2008). Türkiye'de Toplumsal Cinsiyet Eşitsizliği: Sorunlar, Öncelikler ve Çözüm Önerileri, Yayın No. TÜSİAD-T/2008-07/468, Yayın No. KAGİDER-001.
- Ünsal Erdal M. (2007). İktisadi Büyüme, İmaj Yayınevi, Ankara.

Table 1: Women's Labor Force Participation in Turkey (%, Aged 15+) According to Education Level (1988–2011)

| Years | Illiterate | Literate without any graduation | Primary school graduate | Secondary or vocational high school gradutae | High school graduate | High school equivalent vocational school graduate | Collage or faculty graduate | Elementary school graduate |
|-------|------------|--|-------------------------------|--|----------------------------|---|-----------------------------------|----------------------------------|
| 1988 | 32,3 | 31,7 | 34,3 | 19,5 | 45,7 | 52,5 | 82,5 | : |
| 1989 | 33,9 | 36,0 | 36,8 | 21,7 | 43,2 | 46,4 | 81,3 | : |
| 1990 | 31,6 | 34,8 | 34,2 | 19,1 | 43,7 | 51,1 | 80,5 | : |
| 1991 | 32,4 | 33,9 | 34,2 | 19,2 | 38,8 | 49,6 | 81,1 | : |
| 1992 | 30,6 | 30,3 | 32,6 | 17,4 | 40,3 | 51,4 | 81,6 | : |
| 1993 | 24,3 | 17,5 | 27,3 | 14,3 | 37,2 | 48,5 | 78,4 | : |
| 1994 | 28,5 | 25,3 | 32,3 | 17,2 | 35,8 | 42,1 | 79,9 | : |
| 1995 | 28,4 | 25,0 | 31,8 | 15,9 | 34,9 | 46,4 | 73,8 | : |
| 1996 | 27,6 | 26,6 | 31,6 | 14,1 | 33,0 | 44,9 | 72,6 | : |
| 1997 | 24,2 | 21,3 | 28,9 | 15,7 | 33,4 | 49,0 | 72,7 | : |
| 1998 | 25,1 | 22,2 | 29,4 | 15,7 | 32,6 | 47,1 | 75,3 | : |
| 1999 | 26,8 | 24,9 | 29,9 | 17,2 | 32,2 | 42,5 | 71,4 | : |
| 2000 | 25,2 | 22,2 | 24,5 | 15,3 | 28,1 | 42,4 | 70,1 | 7,9 |
| 2001 | 24,8 | 24,2 | 26,0 | 15,7 | 27,2 | 40,3 | 70,8 | 6,7 |
| 2002 | 24,4 | 22,4 | 26,7 | 18,4 | 28,5 | 39,0 | 71,5 | 10,7 |
| 2003 | 23,6 | 21,1 | 24,8 | 19,9 | 25,2 | 36,4 | 69,5 | 11,9 |
| 2004 | 16,6 | 17,9 | 21,4 | 20,6 | 26,1 | 39,4 | 70,3 | 10,4 |
| 2005 | 15,6 | 18,2 | 20,9 | 22,7 | 26,9 | 36,8 | 69,1 | 12,0 |
| 2006 | 14,7 | 18,0 | 21,1 | 22,9 | 27,9 | 36,2 | 68,8 | 13,5 |
| 2007 | 14,4 | 17,3 | 20,5 | 22,7 | 28,4 | 36,4 | 69,4 | 16,0 |
| 2008 | 14,5 | 18,5 | 21,1 | 21,6 | 29,1 | 38,3 | 70,0 | 16,9 |
| 2009 | 15,0 | 19,2 | 23,3 | 22,8 | 30,4 | 39,1 | 70,8 | 18,0 |
| 2010 | 16,3 | 20,4 | 25,7 | 24,6 | 30,4 | 39,8 | 71,0 | 19,9 |
| 2011 | 17,1 | 21,4 | 27,5 | 25,4 | 30,3 | 39,2 | 70,8 | 21,1 |

Source: TÜİK Official website, Labor force Statistics Database. (http://www.tuik.gov.tr/20.11.2012)

Figure 1: Rate of Women's Labor Force Participation According to Education Levels in Turkey (%) (1988–2011)



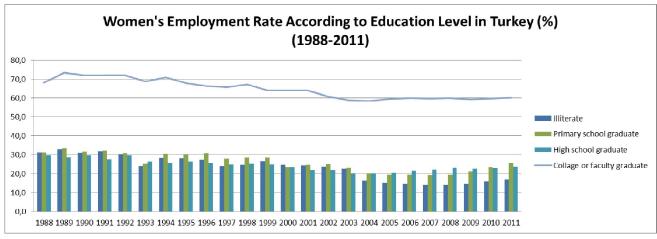
Reference: TÜİK Official website, Labor Force Statistics Database. (http://www.tuik.gov.tr/20.11.2012)

Table 2: Women's Employment Rate according to Education Level in Turkey (%), (15+) (1988–2011)

| Years | Illiterate | Literate without any graduation | Primary school graduate | Secondary or vocational high school gradutae | High school graduate | High school equivalent vocational school graduate | Collage or faculty graduate | Elementary school graduate |
|-------|------------|---------------------------------------|-------------------------------|---|-------------------------|--|-----------------------------------|----------------------------------|
| 1988 | 31,2 | 29,7 | 31,0 | 12,9 | 29,6 | 41,1 | 68,0 | : |
| 1989 | 32,7 | 33,3 | 33,5 | 16,4 | 28,7 | 36,2 | 73,2 | : |
| 1990 | 30,7 | 33,2 | 31,7 | 14,9 | 29,8 | 40,5 | 71,9 | : |
| 1991 | 31,8 | 33,1 | 32,2 | 15,1 | 27,5 | 37,7 | 71,9 | : |
| 1992 | 30,1 | 29,1 | 30,5 | 14,0 | 29,6 | 40,8 | 71,9 | : |
| 1993 | 24,0 | 16,7 | 25,3 | 11,0 | 26,5 | 38,7 | 68,8 | : |
| 1994 | 28,1 | 24,0 | 30,4 | 13,7 | 25,7 | 31,7 | 70,8 | : |
| 1995 | 28,0 | 24,5 | 30,1 | 12,9 | 26,5 | 35,5 | 67,8 | : |
| 1996 | 27,2 | 26,1 | 30,5 | 12,1 | 25,5 | 35,5 | 66,3 | : |
| 1997 | 24,0 | 20,8 | 27,8 | 12,6 | 24,8 | 35,0 | 65,7 | : |
| 1998 | 24,7 | 21,7 | 28,4 | 13,5 | 25,3 | 37,1 | 67,1 | : |
| 1999 | 26,6 | 24,3 | 28,4 | 14,0 | 24,9 | 33,2 | 63,8 | : |
| 2000 | 24,7 | 21,2 | 23,6 | 13,3 | 23,5 | 35,6 | 63,8 | 7,6 |
| 2001 | 24,5 | 23,6 | 24,7 | 12,6 | 21,8 | 32,0 | 63,8 | 5,9 |
| 2002 | 23,8 | 21,7 | 25,2 | 14,9 | 21,7 | 29,7 | 60,9 | 9,7 |
| 2003 | 22,4 | 19,8 | 23,1 | 16,7 | 20,1 | 28,9 | 58,9 | 11,0 |
| 2004 | 16,3 | 17,4 | 20,1 | 17,1 | 20,1 | 28,9 | 58,3 | 9,4 |
| 2005 | 15,3 | 17,4 | 19,4 | 19,1 | 20,6 | 28,0 | 59,4 | 10,6 |
| 2006 | 14,5 | 17,2 | 19,5 | 19,2 | 21,5 | 28,6 | 59,9 | 11,6 |
| 2007 | 14,2 | 16,6 | 19,1 | 19,4 | 22,1 | 28,8 | 59,8 | 13,7 |
| 2008 | 14,2 | 17,4 | 19,5 | 17,8 | 23,1 | 30,4 | 60,0 | 14,5 |
| 2009 | 14,5 | 17,5 | 21,1 | 18,2 | 22,4 | 29,0 | 59,3 | 14,7 |
| 2010 | 15,9 | 19,0 | 23,5 | 20,0 | 22,8 | 30,8 | 59,7 | 16,6 |
| 2011 | 16,8 | 20,0 | 25,6 | 21,4 | 23,8 | 31,3 | 60,1 | 18,2 |

Source: TÜİK Official website, Labor force Statistics Database. (http://www.tuik.gov.tr/20.11.2012)

Figure 2: Women's Employment Rate According to Education Level in Turkey (%) (1988–2011)



Source: TÜİK Official website, Labor force Statistics Database. (http://www.tuik.gov.tr/20.11.2012)

Percentage of Graduates According to the Faculty (1984-2012)

Distance Education Economy Business

17%

Figure 3: Percentage of Graduates According to Faculty

Figure 4: Gender Distribution of Graduates According to Faculty

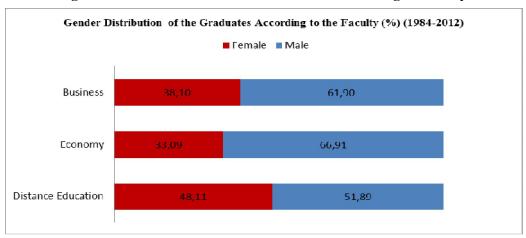


Figure 5: Distribution of Female Association Degree Graduates by Year

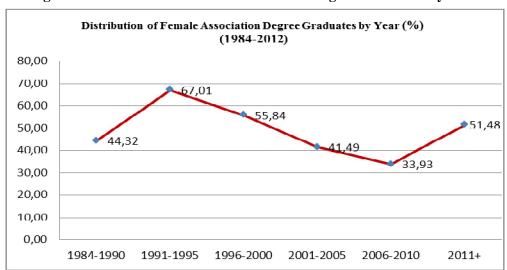


Figure 6: Distribution of Female and Male Association Degree Graduates by Year

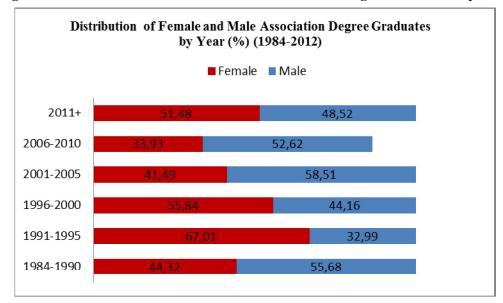


Figure 7: Distribution of Female Graduates from License Programs by Year

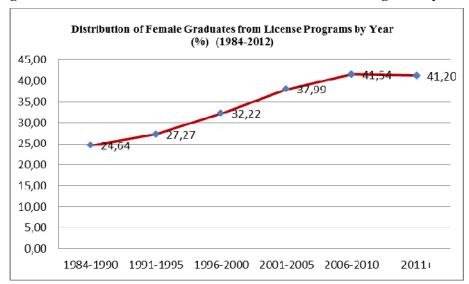
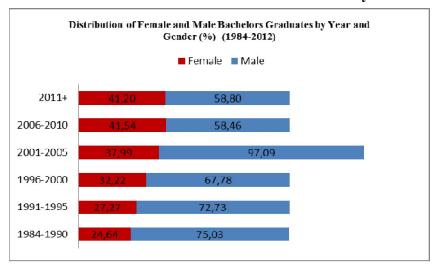


Figure 8: Distribution of Female and Male Bachelor Graduates by Year and Gender



Total Female and Male Graduates by Program(1984-2012)

■ Female ■ Male

License 353.821 562.388

Associate 344.410 397.982

Figure 9: Total Female and Male Graduates by Program

Figure 10: Distribution of Association Degree Graduates by Gender

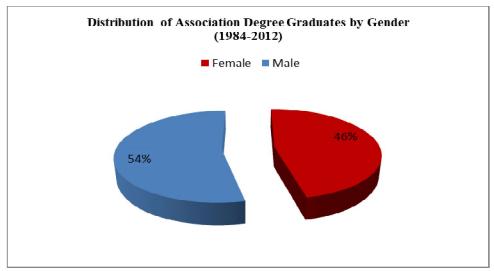


Figure 11: Distribution of Bachelor Graduates by Gender

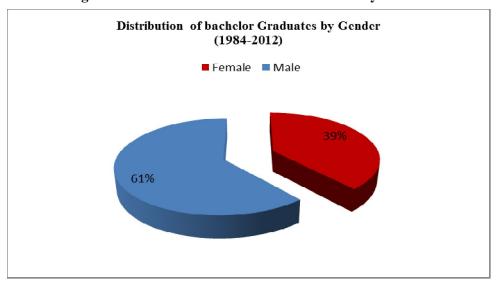


Figure 12: Distribution of Female Association Degrees by Department

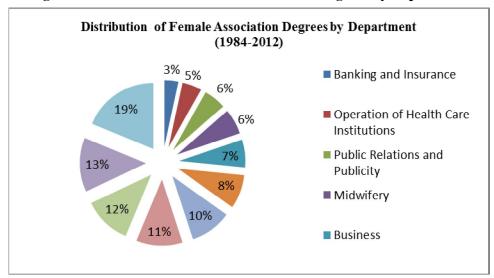


Figure 13: Gender Distribution of Association Degree Graduates by Department

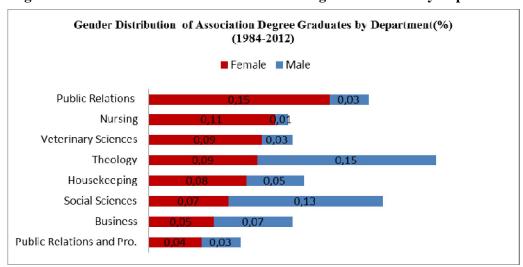
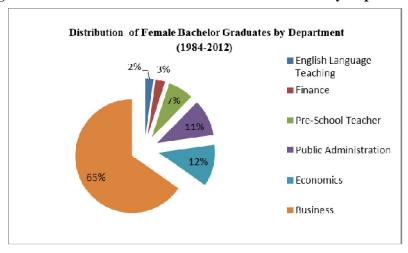


Figure 14: Distribution of Female Bachelor Graduates by Department



Gender Distribution of bachelor Degrees by Department (%) (1984-2012) Business **Economics** Public Administration ■ Female Pre-School Teacher Male Finance English Language Teaching 0,000 0,200 0,400 0,600 0,800 1,000 1,200 1,400

Figure 15: Gender Distribution of Bachelor Degrees by Department

Figure 16: Distribution of Bachelor and Association Degree Graduates by Age Group

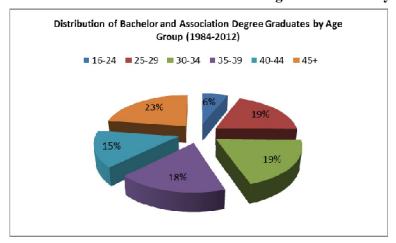


Figure 17: Distribution of Female Association Degree Graduates by Age Group

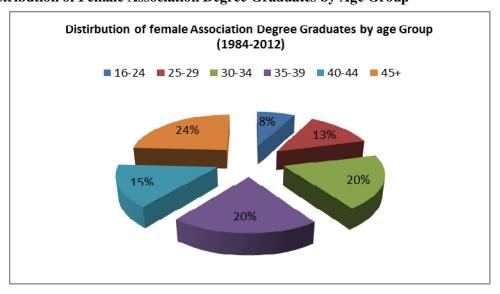


Figure 18: Gender Distribution of Association Degree Graduates by Age Group

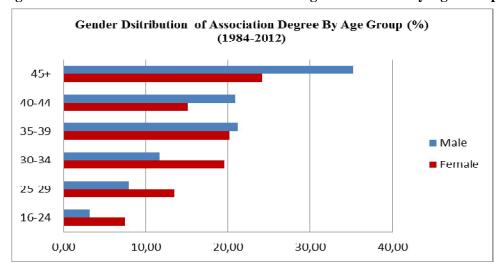


Figure 19: Distribution of Female Bachelors by Age Group

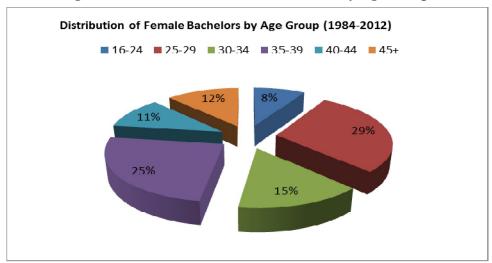


Figure 20: Gender Distributions of Bachelor Graduates by Age Group

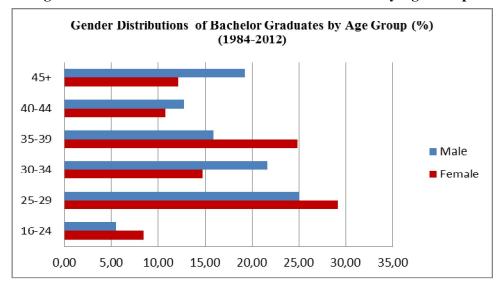


Figure 21: Distribution of Bachelors and Association Degree Graduates by Regions

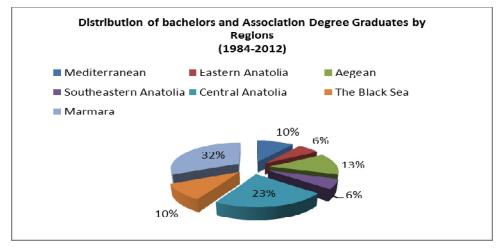


Figure 22: Gender Distribution of Association Degree Graduates by Regions

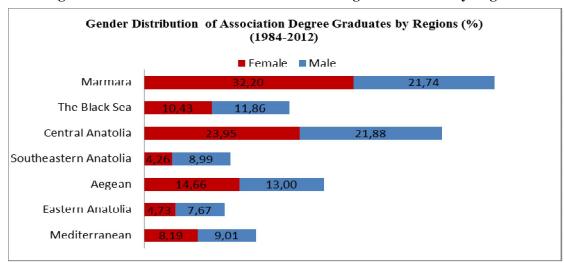
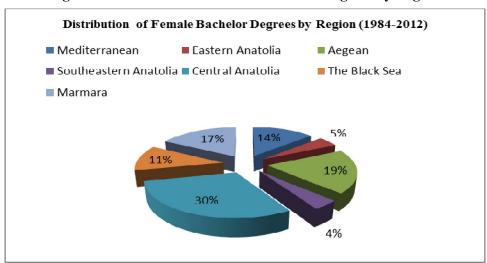


Figure 23: Distribution of Female Bachelor Degrees by Region



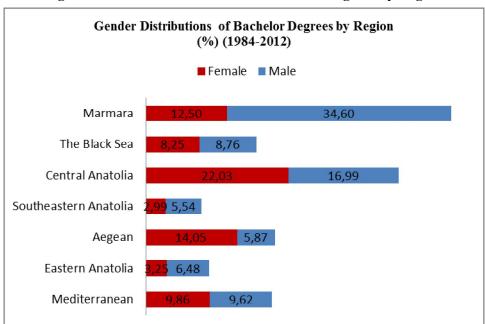


Figure 24: Gender Distributions of Bachelor Degrees by Region