# Women in Academia in Turkey: Challenges and Opportunities 

Meltem İnce YENİLMEZ*


#### Abstract

This study has explored the status of Turkish women in the academic profession in post-secondary educational institutions. In the course of the research, it is examined the status of the Turkish women, which is discovered bettered those of other developed European countries considering their generally low participation in the labour market. It is also attempted to find out some plausible reasons behind the current high number of female academicians in Turkey. A look at the distribution of female academicians across the different disciplines revealed that there are more women in disciplines that are traditionally considered feminine. Furthermore, the number of female academia at the entry level is high, but not many of them make it to the top, an indication that the academic profession is not immune to gender discrimination. This situation persists even when these women have attained the highest educational qualification. An obvious reason for this is that women in the academic profession have to contend with certain level of gender inequality as well as stereotype either in the promotion or their personal choices that are further promoted by the patriarchal structure of these institutions. These barriers are quite invisible as a result of their sociocultural acceptance, but they also affect the area women choose to specialize in as well as choosing whether or not to climb the academic ladder. Even with this discovery, it was also observed that the number of female academicians and professors is on a steady increase across all the disciplines. Others findings of this study are that traditional family duties expected of women such as housekeeping, domestic chores, catering for the children and others usually affect their academic efficiency and the overall potentials of these women. It is suggested that in breaking this barrier, the family, the government and the women themselves have their roles to play. At the family level, conscious efforts should be paid to the division of tasks between male and female children. The government can also come up with legislations tailored at intervening and outlawing discrimination of any sort. Finally, the means of changing this trend may largely depend on the women themselves, their awareness


[^0]of discriminatory structures and the willingness to challenge gendered organisational cultures.
Keywords: Woman Academics, Gender Roles, University Education, Sexual Division of Labour

## Türkiye'de Akademide Kadınlar: Zorluklar ve Fırsatlar

## Özet

Bu çalışma ortaöğretim sonrası eğitim kurumu olan akademide Türk kadının statüsünü araştırmaktadır. Araştırma sürecinde, kadınların işgücü piyasasına düşük katılımı dikkate alınmış ve akademik anlamda bazi gelişmiş Avrupa ülkelerine kiyasla daha iyi konumda olan Türk kadınlarının durumunu incelenmiştir. Aynı zamanda, Türkiye'de yüksek sayıda olan kadın akademisyenlerin ve bu mesleği tercih nedenleri araştırılmaktadir. Farklı disiplinlerde çalışan kadın akademisyen dağılımına baktığımızda, genelde kadın branşı olarak kabul edilen bölümlerde daha çok kadın olduğu gözlemlenmektedir. Bununla beraber, kadın akademisyen sayısının başlama düzeyinde yüksek olmasına karşın, pek çok kadın akademisyenin üst düzey mevkilerde yer alamamasınm sebebi mesleki cinsiyet ayrımcilığının yaşanmasının bir göstergesidir. Bu durum kadınların yüksek eğitimde yeterli olmaları durumunda da devam etmektedir. Bunun en bilinen nedeni, akademide kadinların kurumlar içerisinde gerek terfi gerekse kendi kişisel tercihleri için ataerkil yapıdan kaynaklanan cinsiyet eşitsizliği ile uğraşmak zorunda olmasıdır. Bu yaklaşımlar, toplum içerisinde sosyokültürel yapı olarak kabul edilmesinden dolayı insanlar tarafidan çok yadırganmaz. Ama kadınların akademik alanda ilerlerken tercih ettikleri uzmanlık alanlarını etkileyebilmektedir. Bu durum baz alındığında, kadın akademisyenlerin ve profesörlerin sayısı tüm disiplinlerde göreceli olarak artış göstermektedir. Bu çalışmanın diğer bir vurgusu da çocuk ile ev isleri, temizlik ve yemek yapmak gibi kadınlardan beklenen geleneksel aile görevleri ne yazık ki kadınların akademik verimliliklerini ve potansiyelleri olumsuz etkilediği yönündedir. Bu durumun ortadan kaldırılması için kadınların kendileri başta olmak üzere ailelere ve devlete de önemli görevler düşüğü bilinmektedir. Aile düzeyinde, bilinçli yaklaşımlar ile erkek ve kız çocuklar arasındaki iş bölümüne dikkat edilmelidir. Devletler ise ayrımcilğ̆ın her türlüsünün yasaklanması için yasaları yeniden düzenleyebilir ya da ayrımcılığa müdahale edebilir. Son olarak, bu yaklaşımın değişmesi büyük ölçüde kadınların kendilerine ve ayrımcı tutumlara karşı gösterdikleri farkındalığa ve cinsiyetçi örgütsel kültürleri degiştirme isteklerine bağlıdır.
Anahtar kelimeler: Kadın Akademisyenler, Cinsiyet Rolleri, Universite Eğitimi, Cinsiyetler arası Iş Bölümü

## INTRODUCTION

Turkish women academicians have made their mark in the different higher educational institutions spread across the country especially as it concerns recruitment and training. Notwithstanding, they continue to face challenges with regards to combining their profession and their family obligations. ${ }^{1}$ Generally, the participation of Turkish women in the la-

[^1]bour market is low. As at 2015, this number was put at $30,3 \%^{2}$. On the gender inequality index, Turkey is ranked $68^{\text {th }}$ and the number of females graduating from post-secondary institutions is said to be $42 \%$ less than the EU's figure. While various reports on gender equality see Turkey close to the bottom, the story is different when it comes to the representation of women in the academic profession. What we find in the representation of Turkish women in academia is a record that betters those of countries with higher egalitarianism, countries like Sweden and Norway. According to Özbilgin and Healey ${ }^{3}$, the number of female professors in Turkey is put at $23 \%$, a figure which by their estimation is relatively high when compared with most developed Western European countries and the United States. How this came about could be answered going back to history. In 1914, when the Ottoman Empire was still running, a university for women was established. Until that time, women were forbidden from accessing higher education. This situation changed after series of agitations. When the University for Women was first established, Istanbul University and the women that enrolled were put in separate buildings. Twenty-two women enrolled and courses available were Literature, Mathematics and Natural Sciences. Following the collapse of the Ottoman Empire (immediately after the First World War), Turkey faced severe economic crisis and one of the steps taken to ameliorate the situation was to close down the women university while the rector of the Istanbul University was instructed to allow the females students take lectures with their male counterparts. The rector rejected this idea as it was contrary to the Islamic beliefs. Consequently, he came up with an alternative arrangement that will allow women attend classes at different hours. The women rejected this arrangement and demanded the same level and quality of education as their male counterparts. Eventually, in 1921, coeducation at the University began. Some women took advantage of the economic crisis and started to teach as early as the 1920s. By 1954, the first female dean had emerged while a woman rector followed 20 years later.

The situation today is positive with regards to the presence of women in academics, and this puts the country on par with developed countries. This is surprising especially as Turkey grapples with a lot of gender-related challenges at the fundamental and secondary levels of education compared with these more developed western nations. Data made available by the Council on Higher Education ${ }^{4}$ for the 2013/2014 academic year reveals

[^2]that out of the 133,000 academic staff in Turkish universities, women made up $42 \%$. The majority of the universities in Turkey are state owned, and $40 \%$ of all the academic staff in these state-owned universities is female. The report also adds that the number of female academic staff in private universities in the country could be as much as $50 \%$. For the EU, the average is $38 \%$, and in countries like the United Kingdom, Norway and the United States, the average is $41 \%$.

Further, the number of women in the different academic disciplines in Turkish universities is also encouraging and better than what is obtainable in some EU countries. In the medical sciences, for instance, $35 \%$ are women while the EU average is $17 \%$. In engineering, the number of female academia is between $20 / 24 \%$ as against the EU's $8 / 14 \%{ }^{5}$ This goes to indicate that Turkey has a higher presence of women in some so called male dominated disciplines. These achievements do not indicate gender equality in academia, especially when we take some other factors into cognizance. For example, only $25 \%$ of Turkish women are professors while $35 \%$ are associate professors. A step further reveals an increase in the percentages that might indicate that women in the academia struggle to move up the academic ladder regarding getting promotions. Also, of the 184 universities in Turkey as at 2014, only 14 of them have females as their rector, which represents $8 \%$. At the level of deans, the percentage of women in such position is $9 \%$. Still we believe that the proportion of women in the academic profession is on the positive especially when compared with their presence in other areas like manufacturing. One of the questions to be answered next is what has enabled Turkish women to record better progress in academia? Therefore, this paper explores the issues of women academicians in Turkish universities. It focuses on their overall status, the facilitators of their success and the challenges they face. It also looks at the academic some quantifiable differences in the distribution of women across the various academic disciplines and the possibility of the academic profession being a gendered institution.

## FEMALE LECTURERS IN POST-SECONDARY INSTITUTIONS

According to Koker ${ }^{6}$ the formative years of Turkish higher education was between 1930 and 1950. During this period, three new higher educational institutions were formed in the cities of Istanbul and Ankara, and the first set of women academia began their career in the 1932/33 academic year.

[^3]Since that time, the number of women in the academic profession has continued to grow. As education spread to other Turkish cities between the 1950s and 70s, more universities were built. During this time, the number of universities according to $\mathrm{Ozel}^{7}$ rose to eight while the number of women academicians surpassed the number of the female students. As the country continued to grow and develop and more universities were built, the need for competent hands to teach in these institutions also increased accordingly. To close down the academic gap between the less developed eastern parts of the country and the developed western areas of the country, the Turkish Republic started to construct new universities in the eastern regions of the country, a development that continued into the 1980s. Reports of the statistics of Republic of Turkey Higher Education Council show that while the number of female teaching at higher institutions of learning in Turkey used to be about $25 \%$, the number of female students across these universities climbed to about $26 \%$. The implication of this is that there was little or no change in the number of female academicians as most of the newly established universities were located in the eastern part of the country, an area that was not appealing to them.

In the 1980s, there was a military coup and with the coup came a new legislation on higher education. This legislation gave most of the powers of approval of higher education to The Council of Higher Education (YÖK). Within this duration, many institutions were upgraded and given university status. Also, universities many new universities were founded. With this development and the previous policy of establishing more universities in the eastern part of the country, the capacity for people to access higher education was broadened, and the gap that existed between the east and west was reduced. The 1990s saw the continuation of the same expansion process of the universities. Along with the expansion, efforts were also made to maintain a balance regarding spread. Twenty-two new universities were formed bringing the number to 51 . While these new universities were being formed, medium-sized cities within the east parts of the country got priority, and. Therefore, the population of female students rose to as much as $35 \%$, and that of female academician rose to $31.7 \%$ as shown in Table 1. The number of universities so far in the county has been on the increase since the 1990s when private universities were. As of 2006, the figure released by The Council of Higher Education shows that the country had 53 state universities and 25 private universities. Female students in these institutions constitute about $42.8 \%$ of the total while the rate of female lecturers stood at 38.9\%

[^4]A close examination of Table 1 reveals that in the last 50 years, the number of women in the academic profession has increased rapidly while the same can be said about the number of women professors from $3 \%$ to 28.8 \%. Moreover, now that the rate of female lecturers has reached $41 \%$, the estimation, therefore, is that the number of female professors will also rise. In summary, with the passage of time, the participation of women in the different branches and levels of the academic profession will continue to increase. What this suggests is that the situation of women in the country's higher education (even in the scientific branches) is not temporary. It is quite the opposite as their place has become more secure and institutionalized over time.

Table 1. The Rate of Male and Female Academicians between 1950 and 2014

| Year | Number <br> of female <br> lecturers | Number <br> of male <br> lecturers | Rate of <br> female <br> lecturers | Rate of <br> male <br> lecturers | Number <br> of female <br> professors | Number <br> of male <br> professors | Rate of <br> female <br> professor | Rate of <br> male <br> professors |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $1950-$ <br> 1951 | 256 | 1235 | 17.1 | 82.9 | 12 | 345 | 3.4 | 96.6 |
| $1960-$ <br> 1961 | 625 | 2543 | 19.7 | 80.3 | 33 | 469 | 6.6 | 93.4 |
| $1970-$ <br> 1971 | 1972 | 7302 | 21.3 | 78.7 | 130 | 1531 | 7.8 | 92.2 |
| $1980-$ <br> 1981 | 4227 | 12062 | 26.0 | 74.0 | 313 | 1932 | 13.9 | 86.1 |
| $1990-$ <br> 1991 | 10929 | 23553 | 31.7 | 68.3 | 974 | 3801 | 20.4 | 79.6 |
| $2000-$ <br> 2001 | 24361 | 43519 | 35.9 | 64.1 | 2181 | 6623 | 24.8 | 75.2 |
| $2001-$ <br> 2002 | 26154 | 45136 | 36.7 | 63.3 | 2350 | 7179 | 24.7 | 75.3 |
| $2002-$ <br> 2003 | 28205 | 47885 | 37.1 | 62.9 | 2546 | 7641 | 25.0 | 75.0 |
| $2003-$ <br> 2004 | 29858 | 48946 | 37.9 | 62.1 | 2785 | 8079 | 25.6 | 74.4 |
| $2004-$ <br> 2005 | 31434 | 50662 | 38.3 | 61.7 | 3020 | 8361 | 26.5 | 73.5 |
| $2005-$ <br> 2006 | 32858 | 51927 | 38.9 | 61.2 | 3149 | 8692 | 26.6 | 73.4 |
| $2006-$ | 35590 | 51307 | 40.9 | 59.1 | 4250 | 10886 | 28.1 | 72 |
| 2010 | $3010-$ | 36782 | 52018 | 41.3 | 60.4 | 4317 | 11006 | 28.8 |
| 2014 |  |  |  |  |  |  |  |  |

Source: The Council of Higher Education (2014), OECD (2015). ${ }^{8}$

[^5]
## FEMALE ACADEMICIANS IN TODAY'S HIGHER EDUCATION

As access to education was determined by sex, ethnicity, race and one's social, economic status ${ }^{9}$, the possibilities for women to have greater access to higher education and to pursue a scientific career largely depended on factors that are political, historical, social, cultural and financial. Academic education of women and their access to an academic career is considered as a significant pointer to the level of self-determination in the educational system and the share of women in the social values in a country. For instance, in the past female faced certain kinds of discriminations. According to Sandler ${ }^{10}$ there are examples of women who for example began their undergraduate programs hoping to become doctors when they finish settling for medical laboratory technicians while others with the desire to become scientists are relegated to teaching high school sciences.

Additionally, it has consistently been a matter of grievance that the number of women working in scientific circles is low compared to their male counterparts. Nevertheless, the fact remains that the number of female academicians in Turkish universities is better than those of many developed nations. The situation of the Turkish women in the scientific circle is not unique to the country alone. In many countries, fewer women participate in the sciences. In summary, Turkey, without a doubt, is a nation where the number of women with higher education is low in comparison with other EU countries, where discrimination against women persists, and economic difficulties still triumph most times. The facts remain: women who are highly qualified stand a better chance of finding a teaching job in a higher institution of learning in the country compared to their counterparts with the same qualifications in EU countries. It is a case of situational irony that requires careful examination.

[^6]Table 2. showing the number and rates of malelfemale students and lecturers in Turkish post-secondary institution

| Number of students and <br> lecturers | Number of <br> female | Number of <br> males | Total | Rate of <br> female | Rate of male |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Among the newly registered <br> higher education | 288896 | 360611 | 649457 | 44.5 | 55.5 |
| Among the total students | 987914 | 1322004 | 2309918 | 42.8 | 57.2 |
| Among the lecturers | 32642 | 49608 | 82250 | 39.7 | 60.3 |
| Professors | 3141 | 8527 | 11668 | 26.9 | 73.1 |
| Associate professors | 1806 | 3750 | 5556 | 32.5 | 67.7 |
| Assistant professors | 4838 | 10033 | 14871 | 32.5 | 67.5 |
| Research assistants | 12916 | 15833 | 28749 | 44.9 | 55.1 |

Source: The Council of Higher Education (2014), OECD (2015). ${ }^{11}$

Table 2 shows that the greater number of women are in the lower levels but of importance is that the number of female researchers assistants has almost matched their male counterparts. According to Ozel ${ }^{12}$, there are two principal reasons for this.The first of these reasons is that men prefer other professions due to the low-income that was the situation in academics and as a result, the gap created these men left has been filled with women. The second is that women advance in the career ladder much slower. It is also expected that the number of female professors would be over $30 \%$ soon. The reason for this assumption is that becoming a professor is much easier once, and academician has attained the position of associate professor.

As for the female students, the number of newly registered of higher education $(44.5 \%)$ is greater than that of the female students in total ( $42.8 \%$ ). The implication of this is that since the number of female students acquiring university education is increasing over time, there is a significant probability that the number of female academicians will also increase. In the 2006/2010 academic years 39,840 women were academicians out of the 62,193 (Table 1). This number constitutes $40.9 \%$ of all academic employment, making Turkey one of the best in Europe regarding the participation of women in the teaching profession at the university level. Despite this, a careful study of the representation of the rank of men and women reveal

11 The Council of Higher Education (2014), accessed on 18 July 2016 and retrieved from http://www.yok.gov.tr/documents/10348274/10733291/TR'de+Yükseköğretim+Sistemi2. pdf/9027552a-962f-4b03-8450-3d1ff8d56ccc; OECD (2015), accessed on 18 July 2016 and retrieved from http://www.oecd.org/edu/education-at-a-glance-19991487.htm
12 Ali Özel, `The Status of the Female Academicians in Turkish Universities During the Process of EU Admission`, Journal of Applied Sciences, 7, 2007, s. 3678-3686.
that the percentage of women goes down as we climb up the academic ladder. As a result, women are mostly at the lower levels. There are more women as research assistants while their lowest number is at the level of professor.

Individuals who had had benefitted the most from the reforms Atatürk carried out when he established the Turkish Republic in 1923 have been the working women. Atatürk made giant reforms over the rights of women and secularism. After the Republic had been set up in 1923, girls had access to equal education rights. They also had equal opportunities in admission into educational institutions and in acquiring their diplomas without considering whether they are from rural or urban areas. As of 2006, the number of women studying at different universities in Turkey stood at $42 \%$. According to Ozkanli and Korkmaz ${ }^{13}$, throughout Turkey's history, in every period of modernization, women's rights generally and their right to education have been one of the priorities that can be seen clearly especially both during the administrative reforms (Tanzimat) between 1839-1876 at the end of the Ottoman Empire and during the Atatürk period between 1923-1938 after the establishment of the Republic. Women have been granted political support and valuable opportunities in their admission to and advancement in educational and scientific systems for a very long time.

Thirdly, until the late 1980s, the universities in Turkey were more involved in providing education for the elite. This assumption is because, before this period, only a fraction of the population had access to university education and consequently, it was seen as a privilege. A system like this could only have been to the advantage of females who come from wealthy homes than males who are from low-income families. That is, discrimination in education according to Öncü ${ }^{14}$ was not sex-based but on social axis. The admission of women who came from wealthy families into universities was also due to the absence of a central examination.

The expansion of the higher education sector in Turkey happened at a time the country was struggling with financial difficulties. With this came the deterioration in pay and condition of service in the state-owned universities as against the new private ones. The salaries of academicians were so low that some male academicians had to take up other jobs to support themselves. This also made the academic profession lose its attraction for so men who are supposed to be the breadwinner of their homes.

[^7]This agrees with the gender queues argument of Reskin and Roos ${ }^{15}$ that suggests that the changing market conditions may lead to the feminizing of previously contested jobs. Finally, Neusel et al. ${ }^{16}$ say that the Turkish state has not expressed any significant resistance against women taking up teaching positions in higher institutions of learning neither has it raised any significant concern against the admission of women to higher education as students. This lack of male dominance in higher education enabled equal and regular admission for women.

## DISTRIBUTION OF WOMEN ACROSS ACADEMIC FIELDS

Despite the number of women that are in the academic profession in Turkey, there are still some areas that remain male-dominated. According to Qurlic ${ }^{17}$, however, women are beginning to encroach into these so-called male dominated professions and closing the gaps as well. With this in mind, it is important to state that the gender barrier is prevalent in the field of science and technology in higher education ${ }^{18}$. This is so because, for a very long period, women were more into courses in teaching and the social sciences as against courses in engineering and natural science ${ }^{19}$. This is a similar situation in many countries, even the ones that also have a large number of women in the academic profession. On another hand, out of a desire to keep a balance between domestic life and career due to their social role, many women are usually more inclined to take up teaching positions and others like nursing and secretarial duties. The demands of these posts seem like an extension of their traditional domestic roles, like being a wife or mother. Özgüç ${ }^{20}$ says that even in some countries like Saudi Arabia and Austria with different social traits, $100 \%$ of the teachers in the kindergarten schools in these countries can be women. Thus such preferences ended up splitting professions into male and female categories.

15 Barbara F. Reskin and Patricia A. Roos. Job Queues, Gender Queues: Explaining Women's Inroads into Male Occupations, (Philadelphia: Temple University Press, 1990).
16 Ayla Neusel, Christiane Bradatsch and Yalçın Gülşen. 'The Higher Education System as a Factor Determining the Scientific Career of Women', Women in Academic Life 9, 1996, s. 366-393.

17 Guy Ourliac, 'The Feminisation of Higher Education in France: Its History, Characteristics and Effects on Employment', European Journal of Education 23, 1988, s. 281-292.
18 Clair Donovan, Barbara Hodgson, Eileen Scanlon and Elizabeth Whitelegg, 'Women in Higher Education: Issues and Challenges for Part-Time Scientists', Women's Studies Intl. Forum 28:, 2005, s. 247-258.
19 Anita K. Chan, 'Gender, School Management and Educational Reforms: A Case Study of a Primary School in Hong Kong', Gender Education 16, 2004, s. 491-510.
20 Nazmiye Özgüç, Kadınların Coğrafyası (İstanbul: Çantay Kitabevi, 1998).

Table 3. The Ratios of Female Academicians in Different Fields, 2014

| Fields | The number <br> of females <br> lecturers | The number <br> of males <br> lecturers | Total <br> number of <br> lecturers | Percentage <br> of female <br> lecturers | Percentage <br> of female <br> professors |
| :--- | :--- | :--- | :--- | :--- | :--- |
| Humanities | 4157 | 5686 | 9843 | 42.2 | 39.4 |
| Natural <br> Science | 3184 | 4358 | 7542 | 42.2 | $\mathbf{2 3 . 8}$ |
| Medical <br> sciences | 13096 | 15641 | 28737 | 45.6 | $\mathbf{3 3 . 7}$ |
| Social <br> sciences | 7626 | 11593 | 19219 | 39.7 | $\mathbf{2 2 . 8}$ |
| Agricultural <br> sciences | 1217 | 2982 | 4199 | 30 | $\mathbf{2 8 . 1}$ |
| Engineering/ <br> technology | 4522 | 9218 | 13740 | 32.9 | $\mathbf{1 8 . 3}$ |
|  |  |  |  |  | $\mathbf{2 7 . 6}$ |
| Total | 33802 | 49478 | 83280 | 40.6 |  |

Source: The Council of Higher Education (2014), OECD (2015). ${ }^{21}$

Nonetheless, a look at the distribution of female academia across the different areas in Turkish universities still reveals the significant difference compared to what the situation is in other countries. There is no concentration in certain fields neither is there a deficiency in others. Women are virtually in every field. Even in natural sciences where women seem to be having some difficulties penetrating, the number of female lecturers is put at $42.2 \%$ while $23.8 \%$ of professors in this area are women. In engineering, another area where Turkish women, like their counterparts in other climes, seem to be having problem entering, the number of female lecturers in Turkey is stood at $32.9 \%$ and of the total number of professors in that area, $18.3 \%$ of them were females. Comparing this with Japan, Tokol ${ }^{22}$ says that only about $2.3 \%$ of Japanese women apply to study engineering. The second is the medical sciences where the rate of female academicians is $45.6 \%$, and the rate of female professors is $33.7 \%$. Language and literature have the highest rate of female professors with $39 \%$, and this is the only field where the rate of female professors exceeds that of female academicians, which shows that Turkish female academicians have diverged from

21 The Council of Higher Education (2014), accessed on 18 July 2016 and retrieved from http://www.yok.gov.tr/documents/10348274/10733291/TR'de+Yükseköğretim+Sistemi2. pdf/9027552a-962f-4b03-8450-3d1ff8d56ccc; OECD (2015), accessed on 18 July 2016 and retrieved from http://www.oecd.org/edu/education-at-a-glance-19991487.htm
22 Aysen Tokol, 'Women Workforce of the World', (Tebliğ, Proceeding of Women Workforc of Turkey I, Ankara, 1999), s.19-27.
the traditional expectations and pursued different areas of study. Hence, there is a possibility that the rate of female professors in this area might decrease contrary to the other areas in the near future.

## WOMEN IN ACADEMIC EMPLOYMENT

In Turkey, one of the safest jobs for a woman is teaching as it has fewer work hours, longer holiday periods, which helps in keeping a balance between the clash of their domestic and professional life when compared with other occupation ${ }^{23}$. Teaching apart from being seen as appropriate is also perceived as high status for Turkish women, especially as it keeps attracting more and more of them with their increasing education. The number of women teaching in universities in Turkey rose since the inception of the Turkish Republic. From 7\% in 1933, this figure increased to about $40 \%$ by 2010 academic year (She Figures 2012). The major influx of female into the academic profession occurred in the $1980 \mathrm{~s} / 1990$ s as a result of the boom in the university sector in which more academicians were needed ${ }^{24}$. According to Healey et al. ${ }^{25}$, the number of universities increased from 29 in 1990 to 70 in 2004, thus increasing access to the sector. Another plausible reason for this is that some male academicians left their jobs for greener pastures in the private sector of a newly liberalized economy. ${ }^{26}$

The number of women in the different academic disciplines varies. While their number is high in some, others record a little presence. For instance the 2012 She Figures reveals that the percentage of women in medical sciences (nursing, physical treatment and rehabilitation, domestic science) is very high, whereas, in engineering, and agriculture, the percentage is low. As Tan ${ }^{27}$ puts it, this indicates that female academicians prefer disciplines that are seen as socially suitable for women.

23 Feride Acar, Ayşe Güneş Ayata and Demet Varoğlu, Gender -Based Discrimination: The Case of Education Sector in Turkey. Ankara: Prime Ministry General Directorate T. C. Statü and Problems of Women, 1999.
24 Serap Palaz, "Gender Segregation in the Turkish Institutes of Higher Education Employment." (The International Association for Feminist Economics 2000 Conference, August, Istanbul: Boğaziçi University, 1999)
25 Geraldine Healy, Mustafa Özbilgin and Hanife Aliefendioğlu, 'Academic Employment and Gender: A Turkish Challenge to Vertical Segregation', European Journal of Industrial Relations, 11 (2), 2005, s. 247-264.
26 Ferhunde Özbay, 'Kadınlarin Ev ici ve Ev dışı Uğraşlarındaki Değişme', Şirin Tekeli (eds.) 1980'ler Türkiyesinde Kadın Bakış Açısından Kadınlar (Istanbul: İletişim Yayınlar1, 1993).
27 Mine Tan, 'Bir Kadın Mesleği: Öğretmenlik', Necla Arat (eds.), Kadın Gerçeklikleri, İstanbul: Say Yayınları.

Table 4. Number of academicians in the Higher Education Sector, 20014

|  | Number of <br> women | Number of men | Total | Women \% |
| :---: | :---: | :---: | :---: | :---: |
| Natural Sciences | 3184 | 4358 | 7542 | 42.2 |
| Engineering/ <br> technology | 4522 | 9218 | 13740 | 32.9 |
| Medical sciences | 13096 | 15641 | 28737 | 45.6 |
| Agricultural sciences | 1217 | 2982 | 4199 | 29 |
| Social sciences | 7626 | 11593 | 19219 | 39.7 |
| Humanities | 4157 | 5686 | 9843 | 42.2 |
| Total | 33802 | 49478 | 83280 | 40.1 |

Source: The Council of Higher Education (2014), OECD (2015). ${ }^{28}$

The representation of women in engineering and technology is poor because technical issues are seen as areas reserved for men. Agriculture is another surprising area, especially as $70 \%$ of the women in the labour force in Turkey, are employed in agriculture. ${ }^{29}$ This, unfortunately, is not replicated in the academic field of agriculture where the number of women academicians at stood at only $29 \%$. The employment of women and their ranks in these universities also varies based on factors such as location of the institution and the type of institution. Universities in Ankara, Istanbul, and Izmir employ $47.2 \%$ of women in the academic profession and $58.1 \%$ of the total number of women employed. Women's share in total academic employment in these main cities is close to equal with women constituting $46.4 \%$ of total while it is $31.4 \%$ in the others. Similarly, women's achievements regarding ranks are also higher in these main cities as compared to the remaining towns. Women's share at all levels are higher in Istanbul, Izmir and Ankara, particularly at the professor and associate professor levels it is almost double as opposed to other cities (Table 5) These results besides indicating the lower education levels of women in relatively remote areas also indicate geographical immobility of women. It is also due to higher patriarchal structures in the remote areas as compared to these cities. ${ }^{30}$

[^8]Table 5. Distribution of Women in Academia by Ranks and Geographical Location, 2012/13

|  | Istanbul, Izmir and Ankara | Others |
| :---: | :---: | :---: |
| Total | 46.4 | 31.4 |
| Professors | 31.5 | 15.8 |
| Associate Professors | 43.8 | 21.8 |
| Assistant Professors | 41.6 | 25.1 |
| Lecturers | 50.9 | 31.1 |
| Language Instructors | 73.2 | 41.4 |
| Specialists | 53.4 | 36.7 |
| Research Assistant | 48.8 | 37.9 |
| Others | 71.4 | 33.3 |

Source: YOK, $2014^{31}$

Just like the uneven distribution of women in the academic profession across geographical regions, the representation of women and their ranking also varies from universities to universities especially whether such universities are private or public. The representation of women in private universities is almost at par with their male counterparts but re less represented at the professorial level as Table 6 indicates.

Table 6. Distribution of Women Academicians in Public \& Private Universities, 2012/2013

|  | Public | Private |
| :---: | :---: | :---: |
| Total | 37.7 | 47.9 |
| Professor | 26.6 | 18.2 |
| Associate professor | 33.9 | 35.2 |
| Assistant professor | 30.3 | 38.4 |
| Lecturer | 36.9 | 51.5 |
| Language instructor | 53.6 | 74.8 |
| Specialist | 44.8 | 44.5 |
| Research assistant | 42.8 | 51.5 |
| Other | 75.0 | 0.0 |

Source: YOK, 2014 ${ }^{32}$

31 Republic of Turkey Higher Education Council Student Selection and Placement Center, 2015. The numbers of the lecturers with respect to their academic status.

32 Republic of Turkey Higher Education Council Student Selection and Placement Center, 2015. The numbers of the lecturers with respect to their academic status.

## OCCUPATIONAL SEGREGATION INDEX (OSI) IN ACADEMIA

Occupational segregation index by sex is defined as: Index $=1 / 2 \sum_{i}\left|M_{i}-F_{i}\right|$ in the literature where $M_{i}$ represents percentage of males in LF who are in this occupation and $F_{i}$ represents percentage of females in LF who are in this occupation. Therefore, the index value equals to zero means no one needs to change. Index value equals to 100 means all occupations are either completely male or completely female. Applying occupational segregation index (OSI) on the data retrieved from the Institute of Higher Education (YOK) and She Figures (2012) on the academician employed across the different universities in Turkey reveals that although the level of discrimination is low, there remains an overall glass ceiling in the academic profession. Men and women are concentrated in different disciplines, and ranks, with the number of women dropping as they approach the highest rank. A close examination of men and women reveals that the female academicians at the research assistant and the instructor's level come closest to matching the number of their male counterparts. These levels therefore record the lowest segregation value. According to Acer (1998: 318), this is because women can find jobs easily at the level of research assistant because an undergraduate university degree is a minimum qualification.

Table 7. Occupational Segregation Index and Number of Academic Staff, 2011

|  | Number of women | Number of <br> men | \% of women |
| :---: | :---: | :---: | :---: |
| Professor | 4250 | 10886 | 28 |
| Associate/ Assistant <br> professors | 9989 | 18248 | 35 |
| Instructors | 3898 | 4290 | 48 |
| Research Assistant | 17453 | 18883 | 48 |
| Total | 35590 | 52307 | 40 |

Source: She Figures $2012^{33}$

The OSI is explanatory when we calculate it by rank and disciplines. The table below shows the OSI numbers and percentage of men and women across the various disciplines at the level of professor.

33 Retrieved from: http://data.europa.eu/euodp/sv/data/dataset/she-figures-2013-gender-in-research-and-innovation (accessed on 18 July 2016)

Table 8. Number of Senior Academic Staff by Field of Science and Sex, 2011

|  | Number of women | Number of men | \% of female |
| :---: | :---: | :---: | :---: |
| Natural Sciences | 404 | 1167 | 25.7 |
| Engineering/technology | 486 | 2060 | 19.1 |
| Medical sciences | 2091 | 3816 | 35.4 |
| Agricultural sciences | 242 | 995 | 19.5 |
| Social sciences | 667 | 1795 | 27.1 |
| Humanities | 359 | 1052 | 25.5 |
| Total | 4249 | 10885 | 28.1 |

Source: She Figures $2012^{34}$

Most of the researches about vertical segregation in the literature deal with higher education sector, especially universities. The table 8 shows that vertical segregation at its highest operates in agriculture, engineering. The share of female academic staff at the level of professor is always lower than the share of their male counterparts at the same level. Women are thus relatively more present at the lower levels of the academic career. The share of female professors among female academic staff varies between $19.1 \%$ and $35.4 \%$ with the highest proportions being recorded in medical sciences ( $35.4 \%$ ). When looking at the different fields of study separately (Tables 7 and 8), it can be noted that, in 2010, on average, the proportion of women among grade A academic staff was the highest in the medical sciences, humanities and social sciences ( $35.4 \%, 27.1 \%$ and $25.5 \%$ ) in contrast, to engineering and technology and agricultural science where the percentage stood at 19.1 and 19.5 respectively. The implication of this is that the Glass ceiling is still very high in engineering and agriculture.

Regarding to horizontal segregation, the study of the differences between girls and boys in education as well as the segregation on the labour market and in research occupations can be analysed. In Turkish academia, the Western European form of horizontal sex segregation became more prevalent in the last decade. ${ }^{35}$ Two underlining reasons have been given

[^9]for this. The first of these reasons is that since the1980s, Turkey has been following a neo-liberal economic system. This has upturned government policy on labour market regulation and has also diluted the ideology of sex equality previously pursued by the state as part of a set of gradually disintegrating and polarising Republican principles. Secondly, political parties and other economic institutions in oppositions to the principles of secularism emerged. These parties and institutions advocated for sex segregation in clear opposition to the principles of secularism. These two changes led to a paradigm shift in social attitudes, which rivalled the relaxation of the previous government's ideology and policy of combating sex-typing and discrimination. Hence, the image of Republican Turkish women who were expected, with a strong nationalist sentiment, to 'self-sacrifice' and 'pioneer' in the advancement of the Turkish nation in every branch of civilisation has lost its influence on a generation of young women graduates and their families. ${ }^{36}$

## CONCLUSION

The study has focused on Turkish women academia in post-secondary institutions. The declaration of Turkey as a republic in the 1920s brought about certain chain reactions among which was the recognition of the rights of women. The recognition of their rights inevitably played a role in the increasing number of female academicians in universities across Turkey; a figure we believe will continue to rise steadily. These women are represented in almost every area of academics; sometimes they are very represented in some regions more than others. In whatever branch they are found, they can climb up the academic ladder. Also, they also enjoy equal rights in salaries and remunerations like their male counterparts.

As seen in the distribution of women in the academic profession across the main fields in Turkey, the result is different from what is obtainable in other countries. Unlike some other countries, there is no over accumulation or concentration in some areas as the presence of the women is felt in virtually all areas. Another revelation from this study is that the reason for the number of women we find in the sciences cannot be attributed to chance. It is rather a situation that over the course of time has become firmer and institutionalized. Even with their low number in the sciences, Turkish women have more presence in the academic profession compared

[^10]to their colleagues in other EU countries and the world, consequently meeting the EU criteria.

From this study, it can be also said that there exists gender segregation in higher education in Turkey, as might be the case in some other climes. Traditional family duties expected of women such as housekeeping, domestic chores, catering for the children and others usually affect their academic efficiency and the overall potentials of these women in the academic profession. In other words, society expects them to be women/mothers first and while every other activity they might be into irrespective of the label comes in second place. Therefore, female academicians are left with the option of not getting married or struggle with some of the challenges of their academic career and their family needs. These and more are some obstacles they encounter on their way to the top. To further help women achieve their potentials as academicians, it is imperative that such women with little children be granted mother academicians longer durations for academic advancement. Also, it is also important to consciously eliminate the assumed stereotypical roles given to men and women. This can begin at the level of the family and pre-school. Conscious efforts should be paid to the division of tasks between male and female children. For instance, the female children can be asked to do some of the so-called chores the society ascribes to male vis-à-vis. In addition to the above, we believe the opening of crèche within the universities will also be important.

The number of women in the academic profession in Turkey is quite high compared to other EU countries. This is despite the of the fact that the overall participation of Turkish women in the labour market is among the lowest in the EU; not to mention the low level of education of women compared to their male counterpart. Consequently, many would consider the high representation of women in academic employment as a situational irony.

Thirty-eight per cent of women were in the Turkish university sector as at 2004. In this number, certain differences still existed between them and their male counterparts especially regarding their distribution across the various academic discipline and their academic positions. As for the aspect of distribution, we find more women in disciplines that are traditionally considered feminine. The number of women also dwindles as they get to the top of their academic ladder, an indication that academia is not free from gender discrimination even when they have attained the highest educational qualification. An obvious reason for this is that women in
the academic profession have to contend with the certain level of gender inequality as well as stereotype either in the promotion or their personal choices which are further promoted by the patriarchal structure of these institutions. These barriers are quite invisible as a result of their sociocultural acceptance, but they also affect the area women choose to specialize in as well as choosing whether or not to climb the academic ladder. Though Turkish women have attained professional careers for some eight decades, the traditional family ideology and gender division of labour, which assigned career and domestic roles to women and breadwinner roles to men, remains the common main frame of reference. ${ }^{37}$

Girls are socially predisposed to study in areas that are suitable for female character and occupations that have good work schedules in Turkey. This leads to under-representation of women in certain fields and horizontal occupational segregation in the labour market, also in academic employment. Also, they add that patriarchal family structures are still strong in Turkey. It is a society that sees men as the breadwinners and women as homemakers. This division in the role of gender also reflects in the Turkish proverbs that say "the female bird makes the nest", meaning the women preserve the home. Women being the female birds are required to handle predominantly domestic work beside any market work they are engaged in creating a double burden for women and sometimes gender role clashes.

Clashes between the gender role of women to their families and their career has been identified as one of the reasons women academicians in Turkey choose to remain at lower positions rather than climbing the ladder. This is despite increased economic participation rates of women and changes in women and men's relative contribution to the family formation and economy. The social ideology of household fails to keep up the rate of change in the labour market, where the myth of male breadwinner has long been put to the test by couples with dual career, single income earners and other alternative family formations in the country. Regardless of an apparent increase in the number of women in academic employment, social norms are still slow to adapt to this change in men and women's roles in the domestic and work domains. Women are the ones with the responsibility of managing the household affairs; men 'help' rather than share the domestic tasks. As a result, women in academia, especially those in high positions, find it much more difficult to reconcile their family, domestic

[^11]and academic obligations as both are time consuming. They are largely content with (or perhaps resigned to) their dual roles, and often normalized the burden caused by domestic work by failing to question the role distribution. This may lead to voluntary stay of women in lower ranks, indicating that the main factor causing this self-selection is not the incapability of women but is the clashes between gender roles. Unlike women, men do not have to worry about such responsibilities so their concentration on attaining the height of their profession is unhindered.

On the other hand, the importance of education in women's economic independence and emancipation cannot be overemphasized. Education affects virtually every aspect of human endeavours. When girls/women get education, they are able to take care of themselves hence child and maternal mortality rates are reduced. An educated woman will also provide equal access to education for her children irrespective of gender and their production is higher. Due to the restrictions on the headscarf which begun in the years following the military coup, an increasing number of female students were dismissed from higher education and universities because they wore the headscarf. This ban has denied thousands of women access to education temporarily or permanently and it has been seen as a threat to the secular order of Turkey. However, today's Turkey is quite different in comparison to the secular state that was emerging a few decades in the past. On one hand, the ban to headscarf was abolished by the higher education council on 2007. Therefore girls/women can go to schools and universities with their headscarves. Also the ban to using headscarf in public personnel and state employees has been lifted on 2013. As a result of these developments in Turkey, the obstacles behind women's higher education or career prospects, especially from their rights of freedom of expression and religion have been sorted out.

Another important issue that has to be taken into consideration is rebalancing some of the institutional regulations on the law basis. This could be in the form of legislations tailored at intervening and outlawing discrimination of any sort. These legislations on their own cannot challenge institutional discrimination due to the slow pace of change in the social and domestic structures as it concerns changes in women career and academic pattern. The means of changing this trend may largely depend on the women themselves, their awareness of discriminatory structures and the willingness to challenge gendered organisational cultures. In other aspects, the heteronormative structure in labor market in gendered orga-
nized culture does not let lesbian, bisexual or trans-women academicians to be in academia. Unfortunately, universities are heterosexual places and unsafe for those people. They are largely affected by cultural beliefs and patriarchal system. Therefore, it is important to ask how personal knowledge and experience of academicians can change the academia, make it safer and create the number of available resources and spaces for LGBT academics since visibility is the foremost conception on the disruption of heteronormativity on the universities.

## RERERENCES

Acar, Feride. Women and University Education in Turkey, Higher Education in Europe,1993, 18(4), 65-77.
Acar, Feride. Women's University Faculty of Turkey', Ayşe Berktay Hacımirzaoğlu (eds.), 75 Türkiye Üniversitelerinde Kadın Öğretim Üyeleri, Istanbul: Foundation Publications, s. 313- 321.
Acar, Feride. Türkiye'de Kadin Akademisyenler: Tarihsel Evrim ve Bugünki Durum'.
Akademik Yașamda Kadın: Frauen in der akademischen Welt, Hasan Coșkun (eds.), Turkish-German Cultural Affairs, s. 75-87.
Acar, Feride; Ayata, Ayşe Güneş; Varoğlu, Demet. Gender -Based Discrimination: The Case of Education Sector in Turkey. Ankara: Prime Ministry General Directorate T. C. Satatü and Problems of Women, 1999.
Chan, Anita K. Gender, School Management and Educational Reforms: A Case Study of a Primary School in Hong Kong, Gender Education 16, 2004, s. 491-510.
Donovan, Clair; Hodgson, Barbara; Scanlon, Eileen; Whitelegg, Elizabeth. Women in Higher Education: Issues and Challenges for Part-Time Scientists', Women's Studies Intl. Forum 28, 2005, s. 247-258.
Ecevit, Yıldız. Çalışma Yaşamında Kadın Emeğinin Kullanımı ve Kadın - Erkek Eşitliği, Kadın-Erkek Eşitliğine Doğru Yürüyüş: Ĕ̆̆itim, Çalışma Yaşamı ve Siyaset, (İstanbul: TUSIAD, 2000).
Healy, Geraldine; Özbilgin, Mustafa; Aliefendioğlu, Hanife. Academic Employment and Gender: A Turkish Challenge to Vertical Segregation, European Journal of Industrial Relations, 11 (2), 2005, s. 247-264.
Köker, Eser. Türkiye'de Kadın, Eğitim ve Siyaset: Yükseköğrenim Kurumlarında Kadının Durumu Üzerine Bir İnceleme (Basılmamış Doktora Tezi, Ankara University, 1988).
Neusel, Ayla; Bradatsch, Christiane; Gülşen, Yalçın. The Higher Education System as a Factor Determining the Scientific Career of Women', Women in Academic Life 9, 1996, s. 366-393.
Öncü, Ayşe. Turkish Women at Professional Professions, Nermin Abadan-Unat, (eds.) içinde Women in the Turkish Society, (Ankara: Sosyal Bilimler Dernegi Yayını, 1978).
Özbay, Ferhunde. Kadınlarin Ev ici ve Ev dışı Uğraşlarındaki Değişme, Şirin Tekeli (eds.) 1980'ler Türkiyesinde Kadın Bakış Açısından Kadınlar (Istanbul: İletişim Yayınları, 1993).
Özbilgin, Mustafa. A Cross-Cultural Comparative Analysis of Sex Equality in the Financial Services Sector in Turkey and Britain. (Doktora Tezi, University of Bristol, 1998).
Özbilgin, Mustafa; Healey, Geraldine. The Gendered Nature of Career Development of University Professors: The Case of Turkey, Journal of Vocational Behavior, 64(2), 2004, s. 358-371.

Ozel,Ali. The Status of the Female Academicians in Turkish Universities During the Process of EU Admission, Journal of Applied Sciences, 7, 2007, s. 3678-3686.
Özkanll, Özlem; Korkmaz, Adil. Academic Women in Turkey: The Structure of Attitudes Towards Role Conflict (The Global Awareness Society International Ninth Annual International Conference Proceedings Book, New York, ABD, May 2000).
Özgüç, Nazmiye. Kadınların Coğrafyası (İstanbul: Çantay Kitabevi, 1998).
Palaz, Serap. Gender Segregation in the Turkish Institutes of Higher Education Employment. (The International Association for Feminist Economics 2000 Conference, August, Istanbul: Boğaziçi University, 1999)
Peker, Resat M. Internal Migration and the Marginal Sector. Eser Kahveci, Nadir Sugur and Theo Nichols, Work and Occupation in Modern Turkey (eds.), (London: Mansell, 1996).
Perna, Laura W. The Benefits of Higher Education: Sex, Racial/Ethnic and Socioeconomic Group, Review on Higher Education 29, 2005, s. 23-52.
OECD (2015), accessed on 18 July 2016 and retrieved from http://www.oecd.org/ edu/education-at-a-glance-19991487.htm Ourliac, Guy. The Feminisation of Higher Education in France: Its History, Characteristics and Effects on Employment, European Journal of Education 23, 1988, s. 281-292.
Republic of Turkey Higher Education Council Student Selection and Placement Center, 2014. The numbers of lecturers at high education programs at graduate level according to their field.
Republic of Turkey Higher Education Council Student Selection and Placement Center, 2015. The numbers of the lecturers with respect to their academic status.
Reskin, Barbara F.; Roos, Patricia A. Job Queues, Gender Queues: Explaining Women's Inroads into Male Occupations, (Philadelphia: Temple University Press, 1990).
Sandler, Bernice. Women in higher education, What Constitutes Equity? (Paper Presented at the 27th National Conference on Higher Education, 1972).
She Figures, 2012. Retrieved from: http://data.europa.eu/euodp/sv/data/dataset/ she-figures-2013-gender-in-research-and-innovation, accessed on 18 July 2016.
Tan, Mine. Bir Kadın Mesleği: Öğretmenlik, Necla Arat (eds.), Kadın Gerçeklikleri, İstanbul: Say Yayınları.
The Council of Higher Education, 2006. Retrieved from http://siteresources.world-bank.org/EXTECAREGTOPEDUCATION/Resources/444607-1192636551820/ Turkey_Higher_Education_Paper_062907.pdf , accessed on 18 July 2016.
The Council of Higher Education, 2014. Retrieved from http://www.yok.gov.tr/ documents/10348274/10733291/TR'de+Yükseköğretim+Sistemi2.pdf/9027552a-962f-4b03-8450-3d1ff8d56ccc, accessed on 18 July 2016.
Tokol, Aysen. Women Workforce of the World, (Tebliğ, Proceeding of Women Workforce of Turkey-I, Ankara, 1999), s.19-27.
TUIK, ‘Istatistiklerle Kadin', 2016. Retrieved from: http://www.tuik.gov.tr/PdfGetir.do?id=18619


[^0]:    * Assoc. Prof., Yasar University, Department of Economics

[^1]:    1 Feride Acar, 'Women and University Education in Turkey`. Higher Education in Europe, 18(4), 1993, s. 65-77.

[^2]:    2 TUIK, 'Istatistiklerle Kadin', 2016. Retrieved from: http://www.tuik.gov.tr/PdfGetir. do?id=18619

    3 Mustafa Özbilgin and Geraldine Healey, `The Gendered Nature of Career Development of University Professors: The Case of Turkey`, Journal of Vocational Behavior, 64(2), 2004, s. 358-371.
    4 Republic of Turkey Higher Education Council Student Selection and Placement Center, 2015. The numbers of the lecturers with respect to their academic status.

[^3]:    5 Republic of Turkey Higher Education Council Student Selection and Placement Center, 2014. The numbers of lecturers at high education programs at graduate level according to their field.
    6 Eser Köker, `Türkiye’de Kadın, Eğitim ve Siyaset: Yükseköğrenim Kurumlarında Kadının Durumu Üzerine Bir İnceleme ` (Basılmamış Doktora Tezi, Ankara University, 1988).

[^4]:    7 Ali Ozel, `The Status of the Female Academicians in Turkish Universities During the Process of EU Admission`, Journal of Applied Sciences, 7, 2007, s. 3678-3686.

[^5]:    8 The Council of Higher Education (2014), accessed on 18 July 2016 and retrieved from http://www.yok.gov.tr/documents/10348274/10733291/TR'de+Yükseköğretim+Sistemi2. pdf/9027552a-962f-4b03-8450-3d1ff8d56ccc; OECD (2015), accessed on 18 July 2016 and retrieved from http://www.oecd.org/edu/education-at-a-glance-19991487.htm

[^6]:    9 Laura W. Perna, `The Benefits of Higher Education: Sex, Racial/Ethnic and Socioeconomic Group', Review on Higher Education 29, 2005, s. 23-52.
    10 Bernice Sandler, "Women in higher education, What Constitutes Equity?" (Paper Presented at the 27th National Conference on Higher Education, 1972).

[^7]:    13 Özlem Özkanlı and Adil Korkmaz, "Academic Women in Turkey: The Structure of Attitudes towards Role Conflict" (The Global Awareness Society International Ninth Annual International Conference Proceedings Book, New York, ABD, May 2000).
    14 Ayşe Öncü, `Turkish Women at Professional Professions`, Nermin Abadan-Unat, (eds.) içinde Women in the Turkish Society, (Ankara: Sosyal Bilimler Dernegi Yayını, 1978).

[^8]:    28 The Council of Higher Education (2014), accessed on 18 July 2016 and retrieved from http://www.yok.gov.tr/documents/10348274/10733291/TR'de+Yükseköğretim+Sistemi2. pdf/9027552a-962f-4b03-8450-3d1ff8d56ccc; OECD (2015), accessed on 18 July 2016 and retrieved from http://www.oecd.org/edu/education-at-a-glance-19991487.htm
    29 Yıldız Ecevit, 'Çalışma Yaşamında Kadın Emeğinin Kullanımı ve Kadın - Erkek Eşitliğĭ', Kadın Erkek Eşitliğine Doğru Yürüyüus: Eğitim, Çallşma Yaşamı ve Siyaset, (İstanbul: TUSIAD, 2000).
    30 Feride Acar, 'Women's University Faculty of Turkey', Ayşe Berktay Hacımirzaoğlu (eds.), 75 Türkiye Üniversitelerinde Kadın Öğretim Üyeleri, Istanbul: Foundation Publications, s. 313-321.

[^9]:    34 Retrieved from: http://data.europa.eu/euodp/sv/data/dataset/she-figures-2013-gender-in-research-and-innovation (accessed on 18 July 2016)
    35 Feride Acar, Türkiye'de Kadin Akademisyenler: Tarihsel Evrim ve Bugünkü Durum'. Akademik Yașamda Kadın: Frauen in der akademischen Welt, Hasan Coșkun (eds.), Turkish -German Cultural Affairs, s. 75-87.

[^10]:    36 Mustafa Özbilgin, 'A Cross-Cultural Comparative Analysis of Sex Equality in the Financial Services Sector in Turkey and Britain.' (Doktora Tezi, University of Bristol, 1998).

[^11]:    37 Resat M. Peker, 'Internal Migration and the Marginal Sector.' Eser Kahveci, Nadir Sugur and Theo Nichols, Work and Occupation in Modern Turkey (eds.), (London: Mansell, 1996).

