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GENDER DIFFERENCE IN INTERNAL EDUCATIONAL MIGRATION: DISTANCE ANALYSIS BETWEEN HOMETOWNS AND UNIVERSITIES OF İSTANBUL

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Abstract

University education is one of the primary incentives for internal migration and most educational migration in Turkey is directed toward the city of İstanbul. In addition to vocational and academic achievement, university education also provides autonomy for young people by allowing them to live in different and perhaps distant areas from their families. In this article, we analyze students who have moved to İstanbul with regard to characteristics of gender and migratory distance in order to determine whether there is a gender difference in the realization of distant resettlement for education. To accomplish this, we use a database of students in the 2017-2018 academic year who applied for accommodation to the General Directorate of Credit and Hostels (KYK), which is the largest public institution that provides housing opportunities for university students in Turkey. This dataset includes 27,643 students, 49% of whom are female while 51% are male. Controlling for the demographic, social, and economic characteristics of the students and their scores on the university entrance exam, we reveal that male students move greater distances to study in universities and they have more opportunities to migrate to İstanbul from settlements farther away than female students.[3]

Keywords: Educational migration, distance analysis, gender, Istanbul.

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EĞİTİM AMAÇLI İÇ GÖÇTE CİNSİYET FARKLILIĞI: ÖĞRENCİLERİN YAŞADIKLARI YER İLE İSTANBUL'DAKİ ÜNİVERSİTELER ARASINDA MESAFE ANALİZİ

ÖZ

Üniversite eğitimi amacı ile göç önemli göç nedenlerinden biri olup, İstanbul ili Türkiye'de eğitim amaçlı göç hareketlerinin en yoğun olduğu ildir. Üniversite eğitimi, mesleki ve akademik kazanımın yanı sıra gençlerin ailelerinden farklı ve uzak yerleşim yerlerinde yaşamaları için de bir özerklik olanağı sağlamaktadır. Buna istinaden, bu makalede Türkiye'de üniversite eğitimi için ikamet ettikleri yerleri değiştirerek İstanbul ilindeki üniversitelerde eğitim alan öğrencilerin profilleri cinsiyet ve mesafe temelinde incelenmiştir. Bu çalışmada Türkiye'de üniversite öğrencilerine yurt olanağı sağlayan en büyük kamu kurumu olan Kredi ve Yurtlar Genel Müdürlüğü'ne (KYK) 2017-2018 eğitim-öğretim döneminde barınmak için başvuran öğrencilerin veri tabanı kullanılmıştır. Bu veri seti %49'u kadın, %51'i erkek toplam 27.643 öğrenciyi kapsamaktadır. Öğrencilerin demografik, sosyal, ekonomik karakteristikleri ve üniversiteye giriş sınavındaki başarı puanları kontrol edilerek bakıldığında, erkek öğrencilerin kadın öğrencilere göre İstanbul ilindeki üniversitelerde öğrenim görmek için daha uzak mesafelerden geldiklerini ve kadınlara göre daha uzak yerleşim yerlerinde yaşamaları olanağı elde ettiklerini göstermektedir.

Anahtar Kelimeler: Eğitim amaçlı göç, mesafe analizi, cinsiyet, İstanbul.

1. INTRODUCTION

1.1. Background

Education is one of the primary incentives for migration. Educational migration is defined as the movement of students from their hometowns to another city or country to study (Bingöl, 2019). With globalization and the development of transportation opportunities, the migration of university students to other cities, or even other countries, is increasing (Dustmann and Glitz, 2011). When the reasons for internal migration in Turkey are examined, "educational migration" is the second most frequently cited cause for migration in contemporary Turkey after "migration related to any member of the household" (46%), based on the Population and Housing Census (TURKSTAT, 2011). Some 17.7% of internal migrants relocate for study purposes in Turkey, revealing the importance of educational migration. In general, their relocation for higher education lasts longer than one year because the duration of university education is typically two to six years (4 -12 semesters) in Turkey and elsewhere, except in the case of short-term student exchange programs.

Notably, Turkey established 111 universities in 58 provinces between 2010 and 2016, and there are now no provinces without universities in the country (Günay D. and Günay A., 2011). In total, there were 206 universities and around 4 million university students in formal education in Turkey in the 2017-2018 academic year (Bingöl, 2019). There are 129 public universities (62.6%) and 77 (37.4%) foundation (private) universities; however, the number of private universities is steadily increasing. Within these institutions, there are 1,360 faculties for preferred subjects such as economics and administrative sciences, education, law, engineering, and medicine. University location plays an important role in the selection of faculties by students, as do their university exam scores (YKS).

Istanbul ranks first in the number of universities (61), the number of faculties, and the number of students at the provincial level. In addition, being the most populous city in the country, Istanbul ranks first in terms of most demographic, economic and social indicators, as well as in the number of immigrants (TURKSTAT). Istanbul hosts 13 public universities, 48 foundations (private) universities, and 328 faculties. All student-preferred faculties or departments are available in Istanbul (Bingöl, 2019) where there are 756,774 university students or 18.8% of all university students in Turkey.

1.2. The Significance and the Aim of the Study

The central role of gender in understanding the migration process has been highlighted in the literature (Curran, et al., 2006). In sociological analysis, education is usually identified as a determinant of migration. However, the causal link between education and migration, in other words, migration for education and specifically the role of gendered inequalities for accessing migratory movement for education have received less attention. University years are important for young people and post-secondary schooling usually coincides with their transition to adulthood. For this reason, educational migration is often the first independent migratory movement for young adults (Bingöl, 2019) and it can be considered the first step in their individualization.

Continuing education in a different settlement creates the potential for individualization and liberation for young people. Particularly, being able to continue university education in a settlement that is far from the place of residence of the family is related to the recognition of this opportunity and freedom, as well as academic success. In the context of nationally and globally increasing women's

involvement in university education (TURKSTAT, 2021; Leathwood and Read, 2008) whether female students can use this opportunity as much as male students, depending on the gender ideology of the society, is a valuable research area. Although the effect of gender has been examined for international student mobility, it has not been investigated within the framework of student migration within Turkey (Raghuram and Sondhi, 2021).

The main purpose of this article is to analyze whether there is a gender difference among educational migrants to Istanbul, specifically in terms of distance from the students' hometowns. The further aim of the study is to reveal which specific factors affect migration distance and whether there is a difference between the genders depending on these factors. For these purposes, this study focuses on female and male students who were enrolled in a university in Istanbul during the 2017/2018 education year. In this way, our study fills a gap in the literature on gender and educational migration by revealing the relationship between gender and the distance between the place of residence of the student and their parents.

1.3. Discussions on Migration and Education

Discussions on migration and education in the academic literature are mainly framed on either the effect of migration on the educational attainment of different socio-demographic groups or the effect of educational status on migration (Dustmann and Glitz, 2011). Williams (2009) argues on the gender dimension of the relationship between educational attainment and migration in Nepal. Among its many results, the retrospective analysis of this study showed that educational attainment was positively associated with out-migration for males, but not for females. In the prospective analysis, educational attainment was found to have a positive relationship with out-migration for both females and males. In another example, a study conducted in Spain (Valverde and Vila, 2003), investigated the effect of people's origins on educational attainment. The regression analysis in this study found that migrants to Spain were less educated than native residents.

There are more studies on international educational migration than internal educational migration and many focus on immigration movements within the European Union and students who travel to the United States to study. In general, these works examined the reasons behind student migration. Educational migration from Northern Ireland to Britain (McQuaid and Hollywood, 2008; Cairns and Smyth, 2009), go to the UK (Brooks and Waters, 2011), Canada to the USA (McCarthy, et al., 2012) and Luxembourg's educational migration movements (Kmiotek-Meier and Karl, 2016) can be given as examples of international educational migration.

The number of studies on this subject in Turkey, however, is quite limited. As with studies conducted in other countries, Berker (2009) investigated how education in Turkey is affected by internal migration. Notably, Berker found that middle and high school completion rates for the native population decreased due to internal migration. He also found that this negative effect is higher for those with low income compared to those with higher income.

1.4. The Cost of Educational Migration

Migration for university education brings with it some financial needs. In the literature, there are studies with findings that the distance away from the family is associated with the needs of

students and it is preferred to get an education in closer places to reduce financial needs. Alm and Winters (2009), studied intrastate college student migration in the US state of Georgia. Using gravity analysis, they found that greater distances to the closest University System of Georgia (USG) institution have a significantly negative effect on student enrollment in USG schools. In a study by Agasisti and Bianco (2007) in Italy, the authors stated that "students tend to choose the nearest university to reduce living expenses", and a study by Sà, Florax, and Rietveld (2004) found that "distance has a negative effect on student movements over space. Higher distances deter students from going to those universities."

Although migration has a cost, data-driven studies point to an increase in internal migration for educational purposes in Turkey. Işık (2009) evaluates internal educational migration between 1995 and 2000. For this purpose, Işık used TURKSTAT's "General Population Census 2000, Migration Statistics" and the Student Selection and Placement Centre's (ÖSYM) higher education statistics (2000-2001, 2005-2006, and 2007-2008). After giving information about the development of universities in Turkey, he mentioned that migration for educational purposes has increased due to the overall increase in the number of universities and students. He pointed out that a large portion of educational migrants moves to Istanbul, Ankara, and Izmir -for example, 15% of students migrate to Istanbul.

The most important financial need that arises as a result of educational migration is accommodation, and there are various housing options whose availability depends on the number of migratory students and the structure of the city in question. For Istanbul, is expected that a city with so many universities and students will have a high accommodation need. Accordingly, the city hosts 22 dormitories with a capacity of 23,925 affiliated with the General Directorate of Credit and Hostels. Dormitories run by the private sector provide another 41,919 beds, and 11,850 accommodations are run by foundations or associations working for the public benefit. Those run by universities account for another 35,449 and thus, the total bed capacity of officially registered dormitories in Istanbul is 113,143 (KYK Database).

Outside of dormitory living, students can live alone or with friends in rental housing and many students studying at private universities maintain residences in Istanbul and live there with their families. The Council of Higher Education (YÖK) has records for all university students in Turkey, however, there is no information about the residence of students before university, so we cannot perfectly estimate the number of educational migrants in Istanbul. However, considering that 75% of students in private universities and 50% of students in state universities will reside in Istanbul[4], it is estimated that approximately 262,328 students migrated to Istanbul in the 2017-2018 academic year.

When we look at the number of students applying to the General Directorate of Credit and Hostels in the 2017-2018 academic year, a group that meets a large part of the student accommodation need, it is seen that meets 412,637 students across Turkey and 30,238 students in Istanbul apply to stay in dormitories. That number represents approximately 12% of the students coming to Istanbul for university education.

[4] There is no written source on this subject, and it is the expert opinion of the General Directorate of Credits and Hostels.

2. DATA AND METHODOLOGY

2.1. Data Sources

The primary data source is the database of students that applied to KYK dormitories in Istanbul over the 2017-2018 educational period. In this database, there are 27,643 students from around the country: specifically, from 80 cities and 714 districts. City centers are considered central districts and therefore there are 794 possible migration flows from students' hometowns to Istanbul. According to the provisions of the "Regulation of Hostel Administration and Operation", students are prohibited from applying for dorms if they are already residents of the city/town where the dorm is located. For instance, students that live in Istanbul cannot apply to stay in KYK dormitories. In other words, this database covers only migrants. Further, there is no information in this study about how long the students who come to Istanbul will remain there, so all students in this database are considered migrants, regardless of the duration of their stay.

Of the student database in Istanbul, 49% are female and 51% are male. In addition, 54.3% of the students enroll in public universities and 45,7% enroll in private universities. At the country level, the proportion of students at private universities and applications to KYK dormitories is low; however, in the case of İstanbul, the data covers an equally distributed number of students from public and private universities. This is related to the fact that accommodation opportunities for students are much more expensive in Istanbul compared to other cities. In addition, the high cost and duration of in-city transportation cause students to prefer to stay in public dormitories.

All students living in dormitories are provided with a meal plan which is worth more than the dormitory fee. This means that, in essence, they live for free because although students pay a monthly fee to stay in the dorms, they are fed during their stay. This approach to housing directly reflects the low socio-economic levels of the students who apply for accommodation in dormitories.

The KYK dataset includes the location of the university and the student's hometown, plus information on the demographic, social, economic, and university entrance exam success status of 27,643 students. The dependent variable for this study is the distance in km. Since students come to Istanbul from 794 different settlements, the distances between the residences of the students' families (cities/districts) and the city of Istanbul are obtained using the website of the General Directorate of Highways, and added as a new variable to the data set. that Including gender as the main independent variable, independent variables are divided into four different groups The independent variables used in the study were selected from those that could be effective in the university choices of the students. Literature on determining factors in university selection guided us in deciding as well as grouping the independent variables. In a total of four groups of independent variables, the first group includes demographic variables, the second group includes family characteristics, the third group includes students' success-related variables and finally, the fourth group includes variables for economic status. The variables, type of variables, coding, and definitions for those groups are provided in Table 1.

The data set is obtained with the permission of the KYK. Authors declare that the data has not been shared with third parties, information has been used and results have been presented according to the rules of scientific ethics without any distortion in the data set.

2.2. Limitations

Istanbul has a large settlement spanning two continents. For this reason, the location of universities also widely differs. In the analyses and evaluations made in this study, the specific location of the universities was not taken into account separately, and the analyzes were made by using a reference central point in Istanbul for all students. However, students who start to study at a university in Istanbul and settle in this city will use different places of the city for their daily needs, and they will have to reach the central points for transportation during their travels between their hometown and İstanbul.

Table 1. Variables that are used in the study

Variable Type	Variable	Values	Explanation
Demographic	Distance (dependent variable)	Taken values between **54.6 km** and **1,884 km**	Distance between the students' hometowns and Istanbul in kilometers.
	Gender	**0:** Male **1:** Female	Gender of students.
	Age of students	**1:** Under 18 Years, **2:** Age 18, **3:** Age 19, **4:** Age 20, **5:** Age 21, **6:** Above Age 21	Age of students (Both continuous and categorical used.)
	Hometown City Type	**1:** Small City (under 349,999 population) (27 cities), **2:** Medium City (between 350,000 and 749,999 population) (34 cities), **3:** Metropol (Over 750,000 population) (30 cities)	Cities that are grouped by population size.
	Hometown City District Type	**1:** Central District, **2:** Outer District	Districts that are grouped by their location.
Family characteristics	Marital Status of Parents	**1:** Married, **2:** Single	Marital status of students' parents.
	Vital Status of Parents	**1:** Both Mother and Father Alive, **2:** At Least One Dead	Vital status of students' parents.
	Disability of Parents	**1:** Not Disabled, **2:** At Least One Disabled	Disability status of students' parents.

	Number of Siblings	Taken values between **0** and **12**.	Number of siblings that study at any education level.
Success	Duration of University	**1:** 2 Years, **2:** 4 Years and above	Duration of university attendance.
	Base Score	Taken values between **159.1** and **541.1**	Base score of universities where students study.
	Score Percentage	**1:** Under 10%, **2:** Between 10% - 19.99%, **3:** Between 20% - 29.99% **4:** Between 30% - 39.99%, **5:** Between 40% - 49.99%, **6:** Between 50% - 59.99%, **7:** Above 60%	Success scale of students created from universities' base score. The maximum score in YKS is 560, so the formula is [1-(Base Score/560)]. (Both continuous and categorical used.)
Economic status	Income	**1:** No Income, **2:** Between 0 TL - 999.99 TL, **3:** Between 1,000 TL - 1,999.99 TL, **4:** Between 2,000 TL - 2,999.99 TL, **5:** Between 3,000 TL - 3,999.99 TL **6:** Between 4,000 TL - 4,999.99 TL, **7:** Over 5,000 TL	Total income for students and their families. (Both continuous and categorical used.)

2.3. Methodology

In this study, descriptive and multivariate analyses were performed. Firstly, we create cross-tabs with the mean distance. Using these cross-tabs, we then look for differences between gender and other variables by distance.

Secondly, a multiple linear regression model is created that will reveal to what extent the variables affect distance. This model also reveals how effective the determinants are on educational migration to Istanbul for university.

We used the Least Squares method to find the best approximation for the data. Least Squares is a method that Miller (2006) calls "a procedure, requiring just some calculus and linear algebra, to determine what the "best fit" line is to the data."

The dependent variable in this study is distance, while the independent variables are age, income groups, score percentage groups, marital status of parents, the vital status of parents, disability of parents, number of siblings who also study, and the duration of university attendance.

In addition, some dummy variables are created. To examine the role of gender in the distance we used gender as a dummy variable (Dfi) among female students (reference: male). Two dummy variables are also created from the hometown city type by taking small cities as the reference variable.

The representation as a formula of the whole regression model is as follows:

$$Y_{di} = (b_0 + b_1 Df_i + b_2 A_i + b_3 Inc_i + b_4 Pm_i + b_5 Pv_i + b_6 Pd_i + b_7 Ns_i + b_8 Du_i + b_9 Sp_i + b_{10} Dm_i + b_{11} Dmed_i + b_{12} Dcc_i) + e_i$$

3. RESULTS

We present the results of the descriptive statistics and the results of regression analysis. Firstly, descriptive findings are given and the relationship between variables and gender by distance is investigated. Secondly, regression models that include all the variables are created before we later examine how the variables affect distance.

3.1. Results of Descriptive Statistics

Summary statistics of quantitative variables such as distance, age, income, base score, percentage of score, and number of siblings are presented in Table 2.

In total, 49.97% (13,812) of the students in our research sample are female and 50.03% (13,831) are male. The fact that the distribution of the dormitory application by gender is almost equal shows that there will be very few errors due to distribution in the results of the analysis.

Table 2. Summary Descriptive Statistics of Quantitative Variables by Gender

VARIABLE	GENDER											
	FEMALE				MALE				TOTAL			
	Min.	Max.	Mean	Std. Dev.	Min.	Max.	Mean	Std. Dev.	Min.	Max.	Mean	Std. Dev.
Distance (in km)	54.6	1,884.0	**748.2**	443.2	54.6	1,884.0	**870.1**	452.8	54.6	1,884.0	**809.2**	452.2
Age	16	39	**19.7**	1.8	16	38	**20**	2.1	16	39	**19.9**	2.0
Income	0	20,256.9	**2,097.4**	1,785.7	0	17,785.2	**1,913.0**	1,760.8	0	20,256.9	**2,005.1**	1,775.7
Base Score	165.7	530.0	**325.3**	90.3	159.1	541.1	**331.69**	97.1	159.1	541.1	**328.5**	93.8
Percentage of success	5.3%	70.4%	**41.9%**	16.1%	3.3%	71.5%	**40.7%**	17.3%	3.3%	71.5%	**41.3%**	16.7%
Number of student siblings	0	12	**1.4**	1.4	0	11	**1.4**	1.4	0	12	**1.4**	1.4

All variables except distance show similar results according to gender. The average distance between the student's hometown and Istanbul is 809.2 km. This distance is 870.1 km for male students and 748.2 km for female students. Compared to female students, male students move on average 121.8 km more for university education.

Secondly, chi-square analysis is applied to all variables, and we ask whether there is a difference between variables according to gender. When chi-square probability values are examined, differences between genders by hometown city type, the vital status of parents, and disability of parents are all evident, while there are no differences in other variables.

Lastly, we examine how the distance changes for each gender according to all variables by creating cross-tabs between gender and variables by distance.

In general, it is observed that female students move a minimum of 581.5 km and a maximum of 1,039.4 km, according to all demographic and socio-economic levels. Male students move a minimum of 623.7 km and a maximum of 1,130.4 km. While it is observed that both male and female students under the age of 18 move the longest distance on average, we find that students with an income of 5,000 TL and above moved the shortest distance. Here, the highest difference is 204.6 km and the lowest difference is 13.8 km. The group with the highest difference is the cohort with at least one parent deceased, and the group with the lowest difference is the cohort with single parents.

Before examining the demographic and socio-economic characteristics of the students according to gender and distance, it should be noted that male students move greater distances than female students in all demographic and socio-economic characteristics and subgroups.

If we then begin to analyze demographically, it would be correct to first look at the results according to age. Here, it is observed that students of both genders under 18 years old move the greatest distances. After the age of 18, the distance and the difference between male and female students increase.

When we examine distance according to city type, we see that distance decreases as the hometown city size grows for both genders. However, the largest distance difference between male and female students (136.9 km) is found in medium-sized hometown cities.

When we look at the district type, we see that distance is not affected by central district or outer district residence for female students. Meanwhile, male students who come from central districts move 60.2 km further than those who come from outer districts.

If the social status of the students is examined, we find that being children of married parents greatly increases the distance for both genders. Male students with married parents move an average distance of 226.9 km more than those with single parents, while female students average 116.9 km more than their single-parent counterparts. Students of both genders with at least one deceased parent move greater distances than those with two living parents. In addition, the difference in distance between males and females is greater in students with at least one deceased parent.

In the last indicator of social status, it is seen that students who have at least one disabled parent travel 98.4 km more for males and 71.9 km more for females compared to those whose parents are not disabled.

When we look at income, which is the only economic indicator, we find both male and female students who declare no income move to Istanbul from greater distances. As income increases, the distance and the difference between males and female decreases. While the distance difference between male and female students with no income is 118.9 km, the difference between students with an income above 5,000 TL is 41.8 km.

Finally, we examine the indicators of educational success. Looking at the duration of university study, we see that students from both genders come from closer distances to attend 4-year universities than those who attend 2-year university programs. This difference is greater for male students. Thus, the difference in distance between male students and female students is greater for 2-year universities.

Since there is a central university entrance exam in Turkey, when all factors are considered, it is evident that the score percentage will affect students' choices more than other variables. For this reason, analyzing according to score percentages gives us more information than other variables in terms of understanding possible differences between genders in student choice of school. Considering that the number of female and male students is approximately the same, and there is no difference between the "score percentage groups" and “gender” distributions according to the chi-square results, measuring the distance between the genders by score percentage groups will enable us to find accurate results. Table 3 shows the average distances according to gender and university entrance (YKS) performance.

Table 3. Percentage Success Groups X Gender by Mean of Distance

PERCENTAGE GROUPS	FEMALE	MALE	TOTAL	DIFFERENCE
Under 10%	789.3	**875.5**	841.0	86.2
Between 10-19.99%	668.1	**708.7**	692.6	40.5
Between 20-29.99%	695.9	**785.9**	743.6	90.0
Between 30-39.99%	680.2	**822.8**	746.2	142.6
Between 40-49.99%	690.2	**804.3**	737.5	114.0
Between 50-59.99%	794.7	**932.1**	861.8	137.4
Over 60%	915.5	**1,073.0**	997.9	157.4
TOTAL	**748.2**	**870.1**	**809.2**	**121.8**

As mentioned, for all success levels, male students move greater distances than female students to study. When we look at the percentage groups, less successful students move longer distances in both genders. Furthermore, as success decreases, the average distance difference tends to increase.

3.2. Results of Regression Analysis

The results of the multiple linear regression analysis that was performed to investigate the relation between distance and other variables are presented and interpreted in the following section.

First, we investigate any possible multicollinearity, autocorrelation, and heteroscedasticity problems. Secondly, the significance of the model is examined and in the final part, the results are interpreted.

One way to test whether there is a multicollinearity problem between dependent variables is through Variance Inflation Factor (VIF) values. VIF values less than 10 indicate that there is no multicollinearity. (Büyükuysal and Öz, 2016) Since the VIF values obtained in this study are less than 10 (between 1.002 and 2.327) for all variables, we can say there are no multicollinearity problems.

To test the autocorrelation problem, we use Durbin-Watson (DW) test statistics. A DW value close to 2 means there is no autocorrelation problem. (Uysal and Günay, 2001). Our DW value is calculated as 2.002, so we can also say there are no autocorrelation problems.

To see if there is a heteroscedasticity problem, we use the Breusch-Pagan test, wherein a p-value below an appropriate threshold (0.05 at 95% confidence level) indicates assumed heteroscedasticity. Our probability (p) value is calculated as 0.0001. Based on this result, we can say there is a heteroscedasticity problem in the model. In response, we use robust standard errors.

After careful consideration of the above problems and potential problems, the significance of the model should be checked. The probability value (p) of the model is 0.000, so we can safely say that the model is significant. Table 14 represents the results of the model.

Table 4. Results of Multiple Linear Regression Analysis

Variables in the model	B	Robust Std. Errors	Sig.*
(Constant)	419.021	42.879	0.000
Gender (reference : Male)			
Female	-93.436	4.883	0.000
Age	34.281	1.305	0.000
Income Groups	-53.846	1.677	0.000
Marital Status of Parents (reference : married)			
Divorced or Widowed	-84.904	9.591	0.000
Vital Status of Parents (reference : alive)			
At least one Deceased	31.919	11.325	0.005
Disability of Parents (reference : not disabled)			
At least one Disabled	49.833	18.434	0.007
Score Percentage Groups	17.451	2.167	0.000
Duration of University Attendance	-35.855	3.732	0.000
Number of Siblings who Study	105.645	2.040	0.000
Hometown City Type (reference : small cities)			
Metropol	-174.192	8.750	0.000
Medium	-124.943	9.726	0.000
Hometown District Type (reference : upstate)			
City Center	13.267	4.879	0.007

a. Dependent Variable: Distance

* 95% Confidence Level

As seen in Table 14, all variables are associated with distance.

First of all, when we look at gender as our main inquiry, female students move 93.4 km shorter distances than males. Secondly, when we look at other demographic variables, we see that as age increases by one unit, distance increases by 34.2 km. We also find that students who reside in metropolises move 174.1 km further than students who reside in small cities, and students who reside

in medium-sized cities move 124.9 km shorter than their small-city counterparts. Moreover, students who reside in city centers move 13.2 km longer distances than students who reside in upstate regions.

Thirdly, when we look at social variables, students whose parents are single move on average 84.9 km shorter distances than students whose parents are married. Students with at least one deceased parent move 31.9 km further than students whose parents are both living. Students with at least one disabled parent move 49.8 km further than students whose parents are not disabled. In addition, as the number of siblings increases by one unit, the distance increases by 105.6 km.

Lastly, when we look at the economic variable “income” and variables about success, we find that as income increases by 1,000 TL, distance decreases by 53.8 km. In addition, as the success of students decreases by 10%, the distance increases by 17.4 km, and as the duration of university increases by 1 year, the distance decreases by 35.8 km.

4. CONCLUSION

In Turkey, as in the rest of the world, women's participation in university education is increasing. Since university students are mostly individuals who live with their family income, who are not seen as an adult by society and family, but as an adult candidate at the most; the decision in which field and where they will receive this education is not a purely personal decision. The influence of parents and sometimes even extended family members on these decisions is influenced by socially constructed norms. The fact that young people receive education in a city different from their families, especially in a metropole city far from their families' residence, is also an indicator of the acceptance of their being individuals and adults by the family and society. This study shows the role of gender in the steps taken by young people in university education and the gender inequality for female students to move far from their families for university education.

Istanbul is the center of attraction for Turkey's largest number of immigrants, not only for its employment opportunities but also for its educational opportunities. As a result of this situation, Istanbul is home to almost one-fifth of all university students in Turkey. In this study, we examine what affects the distance traveled for educational migration to Istanbul, specifically based on gender. Our results specifically show that students move a significant distance to study in Istanbul, the average distance between the hometown of students and that city is being 809.2 km. If we examine distance in terms of gender, male students move an average of 870.1 km, while female students move an average of 748.2 km. Male students move a greater distance than females, with the average distance difference between males and females being 121.8 km.

As for the students in general, in student groups with different characteristics (different demographic, economic, and success groups, students with different family characteristics), male students migrate to a longer distance from their families than female students.

In conclusion, we can clearly see that male students move greater distances than female students for university education. The fact that this difference persists not only in general but also in subgroups with different characteristics suggests that the gender norm, which keeps young women more under control than young men, can turn into inequality in terms of women's educational opportunities.

The most important factor in university selection is a student’s YKS exam score. As we see from the results, successful students move greater distances to study at universities that offer quality education in Istanbul.

The second most important factor affecting students' choices is economic accessibility. Studies conducted on this subject have generally found that distance increases with increasing income. Notably, the opposite was observed in this study. As a student's income decreases, the distance between their hometown and Istanbul increases. There could be multiple reasons for this, one of which is that families with higher incomes prefer to send their children to closer schools, especially private universities. Another reason could be related to the geographic location of İstanbul. The cities far from Istanbul are poorer and less developed, thus prospective students face more economic challenges when considering post-secondary education in a city further from home.

The relationship of educational migration with the opportunities that an individual will obtain is not limited to the education period, but also has an impact on the shaping of further employment opportunities (Courtois, 2019). Istanbul is in a central position in terms of Turkey's job market, therefore graduate education in İstanbul may turn into an opportunity for employment. The fact that young women from more distant cities do not have equal opportunities with young men increases gender-based inequality for post-education as well as education periods.

Finally, this study can be expanded upon in Istanbul, where inquiries could be made on why women prefer to migrate shorter distances than men for their education. Policymakers could take advantage of such information to develop more rational and appropriate policies for universities. Because Turkish universities did not provide face-to-face education due to the Covid-19 pandemic, applications for the dormitories were not received in the 2020-2021 academic year. It is therefore a matter of great curiosity how students will choose universities and dormitories for the 2021-2022 academic year. Future studies could investigate if and how student preferences have changed, and whether the Covid-19 pandemic has had an effect on educational migratory distance differences between female and male students. Examining the impact of epidemic conditions on in-country university education mobility and previously observed social inequalities will be important for understanding the relationship between education, gender, and migration.

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