

## Yükseköğretimde Hakkaniyet Üzerine Bir Araştırma

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**Öz:** Bu çalışmanın temel amacı, üniversite öğrencilerinin eğitimde hakkaniyet algılarını incelemek ve eğitimde hakkaniyet algıları ile çeşitli değişkenler arasındaki ilişkiyi tespit etmektir. Çalışma nicel araştırma yöntemlerinden tarama modelinde yürütülmüştür ve çalışmaya 906 üniversite öğrencisi katılmıştır. Bu kapsamda, veriler geçerliği ve güvenirliği sağlanmış 22 maddeden oluşan “Hakkaniyet Ölçeği” ile toplanmıştır. Sonuçlar, öğrencilerin eğitimde hakkaniyet algılarının “akademisyen-öğrenci iletişimi” alt boyutunda yeterli düzeyde olduğunu; ancak ölçeğin tamamı ve diğer boyutlar için orta düzeyde olduğunu ortaya koymuştur. Ayrıca, öğrencilerin eğitimde hakkaniyet algısı ile tüm değişkenler arasında istatistiksel olarak anlamlı farklılıklar ortaya çıkmıştır. Kadın öğrencilerin hakkaniyete dayalı eğitim algısı erkek öğrencilere göre daha yüksek çıkmıştır. Ayrıca, özel liseden mezun, daha prestijli ve köklü bir kurum olan 1. üniversiteye kayıtlı, ailesi şehir merkezinde ve büyükşehirde ikamet eden öğrencilerin hakkaniyet algısının daha yüksek olduğu ortaya konulmuştur. Buna karşın, yarı zamanlı işte çalışan öğrencilerin eğitimde hakkaniyet algılarının ise daha düşük düzeyde olduğu tespit edilmiştir. Ek olarak, aile geliri ve anne-baba eğitim düzeyi arttıkça öğrencilerin hakkaniyete ilişkin algılarının arttığı ortaya çıkmış fakat kardeş sayısı arttıkça öğrencilerin hakkaniyet algısının azaldığı görülmüştür. Sonuç olarak, cinsiyet, sosyoekonomik durum ve üniversitenin öğrencilerin eğitimde hakkaniyet algısını etkileyen kritik faktörler olduğu anlaşılmıştır. İleriki çalışmalarda, farklı üniversitelerde öğrenim gören öğrencilerin eğitimde hakkaniyete ilişkin algıları incelenebilir.

**Anahtar kelimeler:** Hakkaniyet, eğitimde hakkaniyet, yükseköğretim, sosyoekonomik durum, cinsiyet

## An Investigation of Educational Equity in Higher Education

**Abstract:** The primary purpose of this study is to investigate university students' educational equity perception and identify the relationship between their perceptions of educational equity and various variables. The study was conducted in a survey model, one of the quantitative research methods, and 906 university students participated in the study. A valid and reliable “Equity Scale” was structured comprising 22 items. The results revealed that students' perceptions of educational equity were adequate for the "professor-student communication"; however, it was on a moderate level for the total scale and other dimensions. Furthermore, statistically significant differences were uncovered between the perception of students regarding educational equity and all variables. Women perceived equity at a higher level. The students graduating from private high schools, enrolled at 1<sup>st</sup> university, and whose families dwell in the city center and metropolis demonstrated a higher level of perception. The perceptions of the students working part-time were discovered at lower level. Similarly, as the gross monthly household income and parental educational level increased, the perception of the students increased. Notwithstanding, as the

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number of siblings increased the perception of the students decreased. It was inferred that gender, socioeconomic status, and the university are critical factors influencing the educational equity.

**Keywords:** Equity, educational equity, higher education, socioeconomic status, gender

## **Introduction**

Higher education is a focus of human capital investment, which is a crucial metric of a nation's overall competitiveness. Countries strive to reinforce their higher education systems because, in the age of the information economy, the number and quality of human resources created via higher education are essential for ensuring national development (Chin-Shan & Hui-Juan, 2012). Higher education enables people to earn more, therefore the ones who have higher education attainment pay more taxes to the government (Ma et al, 2019). As a result, they need lower levels of social support (Ma et al, 2016). Thus, there is a great demand for higher education across the world. The enrolment rates in higher education have significantly increased between 1970 and 2020, according to the UNESCO (n.d.) database. An important aspect of a higher education system is equitable distribution, which is regarded as the most capable instrument for a nation's participation in the global economy and for ensuring equity (Hewlett-Thomas, 2009).

## **Literature Review**

Equity is described as making sure that each student has the chances they require based on their unique needs, talents, and experiences to achieve their full potential (Mizoguchi, 2020). Similarly, educational equity refers to the idea that everyone should have an equal chance to succeed regardless of their lifestyle, gender, ethnicity, religion, social status, or economic background (Wilson-Strydom, 2015). Thus, in an education system where equity is the main principle for assuring justice each student should be treated as a unique part of the system and treated fairly according to their special needs without considering their personal background and characteristics such as gender, the place they inhabit, how much money their family has, social status in the society, etc. In other words, no feature should make the students excluded from the educational society or nothing should leave them behind from their peers in terms of fulfilling educational aspirations and nothing should prevent them from obtaining a degree. However, those features have an effect on the students from access to university to graduation. For instance, individuals with low socioeconomic status have lower access to university from one generation to the next, whereas individuals with higher socioeconomic status have higher access to education across generations. Especially in economically developed societies, there is a continuum between the socioeconomic status of the family and the education of the child in that family (Erikson & Goldthorpe, 2002). Namely, the child's education and income progress in parallel with the socioeconomic status of the family.

In inequitable distributions, children from high-income families are in an advantageous position. At the primary level, children with different economic income levels are more fairly represented, while the representation of children from low economic income decreases as they move from middle school to high school, and at the higher education level, students in the large group with a representation rate of 60-97% come from high-income families. (UNICEF, 2015). In other words, as students' income level decreases, their access to higher education also decreases and socioeconomic status has a significant impact on students' access to higher education. For example, expenditures made during the preparation period for higher education have an impact on students' success in the university entrance exam, thus students from higher income groups have more opportunities to benefit from higher education services, while the opposite is the case for

students from lower income groups. In brief, an individual's capacity to attend higher education is significantly influenced by the socioeconomic status of the family (Gölpek, 2011).

Data from UNESCO (n.d.), which demonstrates that there has been an increase in the number of students enrolling in higher education globally from 2014 to 2019, supports the unequal access to higher education. These statistics, however, differ according to gender, income groups, and region. Female students are behind male students in higher education enrollment in low-income nations from 2014 to 2019, according to an assessment of the data. On the contrary, the number of female students enrolling in higher education exceeds the number of male students in middle-income, upper-middle-income, and high-income nations.

Similarly, gender-based higher education participation rates vary across countries, and when gender and geography are considered together, the results are even more striking, with girls coming from low-income families in rural areas 40 times less likely to participate in higher education than boys living in urban areas (Tilak, 2015). The situation is similar not only across the world but also in Turkey, where higher education degree attainment rates vary by region. In Turkey, the share of adults aged 25-64 with a higher education degree is 13% in the Southeastern Anatolia region and 32% in the Central Anatolia region, and there are regions with over 70% who have not even graduated from secondary education (Himmetoğlu et al., 2021). This demonstrates that different geographical regions and different conditions can be a barrier to access to higher education.

An individual's level of education can be influenced by a variety of variables, including personal qualities like intelligence and talent as well as environmental factors like socioeconomic status, place of birth, culture, family involvement, and parental educational attainment. Various studies have examined the impact of parental educational attainment on children's education, and a positive relationship between these two variables has been discovered (Brunello & Checchi, 2003; Hashmi & Akhter, 2013; Havari & Savegnago, 2013; Rammohan & Dancer, 2008;). Regarding higher education studies, according to Horn and Bobbitt (2000), students with parents who have completed high school are less likely than those with parents who have completed higher education to have a bachelor's degree. In other words, as the educational level of parents increases, the likelihood of their children having a bachelor's degree increases in parallel. This is due to the fact that parents with higher education levels generally are more capable financially (Harper & Griffin, 2011; Rowan-Kenyon et al., 2008) of providing their children the fundamental knowledge and assistance in order to prepare for college and increase their competitiveness. In parallel, Roksa (2011) indicated that participants whose parents had a bachelor's degree or above had a 44% higher chance of having a bachelor's degree compared to participants whose parents had lower levels of education.

According to a study conducted in Turkey, the representation rate of students from families with higher levels of education in higher education increases with higher levels of parental education. In other words, higher levels of parental education increase children's access to higher education. Moreover, it is also observed that students with parents who have higher education levels are enrolled in undergraduate programs rather than associate degree programs. It was also established that students from families with higher education graduates enrolled in programs with higher entrance scores (medicine, dentistry, pharmacy). From this point of view, it can be claimed that parents' higher level of literacy enabled their children to perform better in higher education entrance exams (Ekinici, 2011).

The number of sibling, a determinant of socioeconomic status, has been identified to have an impact on students' access to education. Family size and income are among the factors affecting

an individual's education (Horn & Bobbitt, 2000). Accordingly, each extra sibling diminishes the possibility of being admitted to a university by approximately 6% (Dadon-Golan et al., 2018). Another factor shaping socio-economic status is geographical location, which is related to access to education. Access and educational equity are significantly impacted by students' residences. In Turkey, where it has been discovered that students living in urban areas have greater access to higher education. Additionally, when this data is compared in terms of gender, it is stated that men from rural areas are 10% more represented than women students. In simpler terms, students living in rural areas benefit from higher education services much less than those living in urban areas (Ekinci, 2011). As a result, living in remote areas not only has an impact on students' university preferences but also causes them to face difficulties in adjusting to new learning environments (Bui et al., 2019).

In terms of ensuring equity, it is very crucial that university resources are provided fairly to each student and that students can meet their academic, economic, social, and psychological needs with these resources. In higher education institutions, underserved students are the weakest and least likely to succeed (Bragg & Durham, 2012). Furthermore, equity cannot be attained unless the needs of underserved minority students are met by the institution (Dowd, 2007). Students who benefit from campus resources are more inclined to commit to the institution, which leads to better student outcomes (Saenz et al., 2011). That is, access to university alone is not enough to ensure equity unless the necessary support is in place to help students achieve their goals.

Although the Turkish higher education is expanding system, when the expenditures per student are analyzed, Turkey lags behind the average of OECD countries with 10,519 dollars, while the OECD average is 15,556 dollars (OECD, 2019). In addition, the amount of funds allocated to universities each year by the Council of Higher Education (CoHE) varies by university. Moreover, the amount of expenditure per student, the proportion of students benefiting from educational scholarships provided by universities, the number of activities related to social integration and inclusion for disadvantaged groups, the number of services provided in laboratories, the number of printed books and e-publications per student in libraries, etc. are different in each university; some universities spend relatively high expenditures on these areas, while others spend less, and some universities spend no expenditure at all (Council of Higher Education, 2020). As a consequence, students confront various physical, financial, social, and psychological problems at universities (Aygöl, 2018; Doğan, 2013; Kil et al., 2021; Topçu & Uzundumlu, 2012).

## **Research Questions**

It is apparently understood that there are various factors (such as gender, geography, parental education, parental socioeconomic level, the number of sibling, etc.) that prevent students from accessing higher education equitably, and there are several points where universities are insufficient (financial, physical, social, etc.) in terms of fair distribution of organizational resources to students in order to ensure fairness in terms of providing equitable education and training opportunities to students from different social and economic backgrounds.

The main purpose of this study is to determine the university students' educational equity perception. In line with this main purpose, this study seeks answers to the following questions.

1. How is the level of educational equity perception of the university students?
2. Does university students' educational equity perception differ according to the variables which are gender, type of high school that the students graduated from, part-time employment, university, gross monthly household income, the number of sibling, residential region of the family, and parental education level?

### **Significance of the Study**

Considering that higher education is a level that prepares a qualified labor force for the labor market, individuals who have involved and completed higher education in an equity-based system are likely to earn higher wages, lead healthier lives, participate more actively in society, and have less need for social support (Baum et al., 2010). In addition, equity addresses disadvantages among students through opportunities and social mobility, ensures fairness and open access for all, recognizes differences and creates an environment of respect, and provides access and opportunities for all, especially by reallocating resources and services to the students who need (Lalas et al., 2019). Therefore, understanding equity and creating an equity-based educational environment enables students who have been left behind and disadvantaged to participate in higher education and earn a degree through the equity-oriented opportunities offered at this level. By examining how students from different backgrounds at higher education levels perceive educational equity in this context, this study will play a significant role in highlighting the needs and issues of these students, who are trained as the educated workforce to meet the needs of the business world.

### **Method**

The purpose of this study is to investigate how undergraduate students at state universities perceive equity in higher education. The current study is a survey-type study. The general purpose of the survey research model is to reveal and determine the general characteristics of a group (Büyüköztürk et al., 2020).

### **Sample of the Study**

The population of this study consists of 38.172 students enrolled in undergraduate programs of six different faculties studying at three different universities in different regions of Turkey in the 2020-2021 academic year (Council of Higher Education, 2021a). According to Gürbüz and Şahin (2014), a total of 655 people represent the 38,712 people constituting the population of this study with a 99% confidence interval. The stratified sampling method, one of the random sampling methods, was used to form the sample of this research. For stratified sampling, homogeneous subgroups are determined from the population according to a variable that is thought to affect the research problem, and these subgroups are considered as a stratum. Then a list of each stratum is created. The sample size for each stratum is determined and at this stage, data are collected for each stratum based on a simple random sampling method (Büyüköztürk et al., 2020).

The stratification of the study was based on the years of establishment of the universities and the inclusion of the same faculties in the selected universities. The stratification within the scope of the study, attention was paid primarily to the years of establishment of the universities. The institution named as the first university is one of Turkey's oldest institutions and a research university that was founded in the 1960s (1967). The institution named as the second university is among the universities established in the 1990s (1992). The last university, named as the third university, is the newest of these institutions, established in the 2000s (2006). The second issue taken into consideration in the stratification was the presence of the same faculties in all three universities. Participants were selected from among students studying at the same faculties in all three universities. In other words, the participants were students from the Faculty of Education, Faculty of Economics and Administrative Sciences, Faculty of Communication, Faculty of Engineering, Faculty of Health Sciences-Nursing, and Faculty of Medicine. In this way, it was

ensured to address the differences between the equity perceptions of the students studying in the same faculties of different universities.

The sample of the study consists of 906 students, 320 male students, and 586 female students. When the university-based data were analyzed, 417 participants from the first university, 248 participants from the second university, and 241 participants from the third university constituted the sample of the study. Looking at the class distribution of the students, there were 441 participants at the 3<sup>rd</sup>-grade level and 465 participants at the 4<sup>th</sup>-grade level. Since 1<sup>st</sup> and 2<sup>nd</sup> grade students could not experience university life and campus life sufficiently due to distance education, it was predicted that they would not be able to answer the scale items properly. For this reason, only 3<sup>rd</sup> and 4<sup>th</sup> grade students who received face-to-face education and had experience of university and campus life were included in the study.

### **Data Collection Process & Data Analysis**

The scale used within the scope of the study was made available to the students online via a Google Docs form. The scale was sent to the students through email by the staff in charge of the faculties to be applied after receiving ethical approval from Hacettepe University Ethics Commission for the study through the Hacettepe University Institute of Educational Sciences. In addition, with the ethics committee permission obtained from Hacettepe University, the necessary correspondence was carried out to obtain permission from all faculties of three different universities within the scope of the study through Hacettepe University Institute of Educational Sciences. The data obtained were analyzed using SPSS 26 program for the pilot study, and AMOS 24 program was utilized to analyze the data of the main study.

Within the scope of the study, Independent Groups T-Test and One-Way Analysis of Variance (ANOVA) were conducted to determine whether students' perceptions of educational equity differed on the basis of various demographic information regarding the research problem. Before starting these analyses, it was examined whether the data were normally distributed and other analysis methods were initiated according to the result of normality analysis. As a result of the analysis conducted on the 906-person data set, the Skewness and Kurtosis coefficients of all factors of the scale and the total scale vary between -.019 and -.462. Skewness and Kurtosis coefficients between +1 and -1 indicate that the data are normally distributed (Büyüköztürk et al., 2021).

### **Data Collection Tools**

The data collection form consists of three parts. The first part is the "Voluntary Participation Form", the second part is the "Demographic Information Form" and the third part is the "Equity Scale".

The equity scale was developed within the scope of this study. That's why, the process related to the scale development principles of DeVellis (2014) was pursued. First, after a detailed literature review on the subject, an item pool consisting of 52 items in total was established. It was identified that it was appropriate to measure these items with a five-point Likert-type scale. Then, these items were examined by four different field experts. According to the feedback from the experts, some items were revised, and corrected. Also, some items were removed from the scope of the study. In this way, content validity was ensured.

After the item pool went through these stages and the necessary ethical permission was obtained, the scale with 43 items in total was applied to the students. The data collection process was carried out online with a form prepared in Google Docs due to the COVID-19 pandemic. In this way, a total of 219 university students were included in the pilot study. The data obtained were analyzed using SPSS 26 software. At this stage, Exploratory Factor Analysis (EFA) was applied. As a result of the EFA conducted with the data set of 219 participants, a scale consisting of 22 items and three factors was obtained. The eigenvalues of these factors were found to be between 2.861 and 6.918. Factors with eigenvalue scores exceeding 1 are considered significant (Can, 2013). Factor loading values ranged between .468 and .873. Factor loading values of .45 and above are considered good (Can, 2013) and the loading values of all items exceeded this limit. In addition, the total variance explained for the whole scale was 52.1%. In multi-factor scales, total variance ratios between 40% and 60% are considered sufficient (Scherer et al., 1988, as cited in Tavşancıl, 2014).

After this stage, 906 data were obtained for the main study. As a result of the reliability analysis, the reliability coefficients were calculated as .909 for Factor 1, .930 for Factor 2, .667 for Factor 3, and .891 for the total scale. Confirmatory Factor Analysis (CFA) was conducted with these data in the Amos 24 program. The goodness of fit values demonstrated  $\chi^2/df = 3.4$  acceptable fit, RMSEA=.05 good fit, RMR=.06 acceptable fit, CFI=.95 good fit, NFI=.93 acceptable fit, IFI=.95 good fit, GFI=.92 acceptable fit and AGFI=.91 acceptable fit (Kline, 2016; Gürbüz, 2021; Hu & Bentler, 1999, Jöreskog & Sörbom, 1993). As a result, since all the values obtained as a result of EFA and CFA were in accordance with the criteria specified in the literature, construct validity was confirmed. A valid and reliable measurement tool consisting of 22 items and three factors which were named as “fair distribution of organizational resources”, “professor-student communication” and “access” was constructed.

### Findings

The first research question was determined as "How is the level of educational equity perception of the university students?". The findings are presented in Table 1.

**Table 1**

#### *Educational Equity Perception Levels of Students in Higher Education*

Factor	$\bar{X}$	S
Fair Distribution of Organizational Resources	3.33	.90
Professor-Student Communication	3.48	.99
Access	2.61	.85
Total	3.21	.73

When Table 1 is examined, it is seen that the mean scores of the participants regarding the dimensions of the scale vary between 2.61 and 3.48. Considering the lower and upper limits of the scale rating, "1.00-2.60" was accepted as an inadequate level, "2.61-3.40" as a moderate level, and "3.41- 5.00" as an adequate level. It can be inferred that students consider that equity is provided at a medium level in the dimensions of fair distribution of organizational resources and access even though they think that equity is provided at a sufficient level in the professor-student communication factor.

### Findings Based on Gender Variable Regarding the Second Problem of the Study

The second problem of the study was determined as "Does university students' perception of equity differ significantly according to various variables?". The question "Does students' perception of equity differ significantly according to gender?" is one of the sub-dimensions of this problem. Table 2 displays the findings of the Independent Groups T-Test analysis to ascertain whether students' perception of equity in higher education reveals a significant gender difference.

**Table 2**

*Independent Groups T-Test Findings of Students' Educational Equity Perception According to Gender Variable*

Factor	Gender	n	$\bar{X}$	S	sd	t	p
Fair Distribution of Organizational Resources	Male	320	3.19	.92			
	Female	586	3.40	.87	904	3.479	.001*
Professor-Student Communication	Male	320	3.35	1.0			
	Female	586	3.55	.93	904	2.902	.004*
Access	Male	320	2.54	.89			
	Female	586	2.64	.82	904	1.737	.083
Total	Male	906	3.09	.77			
	Female		3.28	.69	904	3.675	.000*

p<.05

When the gender variable is taken into consideration, Table 2 reveals that students' perceptions of educational equity vary significantly in the sub-dimensions of fair distribution of organizational resources ( $t=3.479$ ,  $p<.05$ ) and professor-student communication ( $t=2.902$ ,  $p<.05$ ) as well as in the overall scale ( $t=3.675$ ,  $p<.05$ ).

On the basis of gender, women's ( $\bar{X}=3.40$ ) equity perception is higher than men's ( $\bar{X}=3.19$ ) in the fair distribution of organizational resources dimension, also under the dimension of professor-student communication the equity perception is higher for women ( $\bar{X}=3.55$ ) than men ( $\bar{X}=3.35$ ). Based on the total scores of the scale, women's ( $\bar{X}=3.28$ ) perception of equity is higher than men's ( $\bar{X}=3.09$ ).

### Findings Based on School Type Variable Regarding the Second Problem of the Study

The findings of the Independent Groups T-Test analysis to determine whether students' perceptions of educational equity in higher education show a significant difference according to the type of high school they graduated from are presented in Table 3.



**Table 3**

*Independent Groups T-Test Findings of Students' Educational Equity Perception According to Type of High School*

Factor	School Type	n	$\bar{X}$	S	sd	t	p
Fair Distribution of Organizational Resources	Public	742	3.33	.91	904	.297	.767
	Private	164	3.31	.86			
Professor-Student Communication	Public	742	3.48	1.00	904	.220	.826
	Private	164	3.47	.95			
Access	Public	742	2.57	.85	904	-3.052	.003*
	Private	164	2.78	.80			
Total	Public	742	3.21	.74	904	-.545	.586
	Private	164	3.24	.68			

\*p<.05

Table 3 reveals a statistically significant difference in the access sub-dimension ( $t=-3.052$ ,  $p<.05$ ). On the basis of high school type, students who attended private schools in high school ( $X=2.78$ ) exhibit a higher perception of educational equity than students who attended public schools ( $X=2.57$ ).

### Findings Based on Part-Time Employment Variable Regarding the Second Problem of the Study

The results of the Independent Groups T-Test analysis conducted to determine whether students' perceptions of educational equity in higher education display a significant difference according to the variable of part-time employment are reported in Table 4.

**Table 4**

*Independent Groups T-Test Findings of Students' Educational Equity Perception According to Part-Time Employment*

Factor	Part-Time Employment	n	$\bar{X}$	S	sd	t	p
Fair Distribution of Organizational Resources	Yes	157	3.17	.88	904	-.2.509	.013*
	No	749	3.36	.90			
Professor-Student Communication	Yes	157	3.39	1.03	904	-1.221	.223
	No	749	3.50	.98			

Access	Yes	157	2.43	.89	904	-2.775	.006*
	No	749	2.65	.83			
Total	Yes	157	3.07	.73	904	-2.688	.008*
	No	749	3.24	.72			

\*p<.05

When Table 4 is examined, it is apparent that students' perceptions of educational equity display a significant difference in the fair distribution of organizational resources ( $t=-2.509$ ,  $p<.05$ ) and access ( $t=-2.775$ ,  $p<.05$ ) sub-dimensions and in the total scale ( $t=-2.688$ ,  $p<.05$ ) according to the variable of working part-time. The educational equity perception of the students who don't work in a part-time job regarding those dimensions and total scale respectively ( $\bar{X}=3.36$ ; 2.65; 3.24) is higher than the ones who work as a part-timer ( $\bar{X}=3.17$ ; 2.43; 3.07).

### Findings Based on University Variable Regarding the Second Problem of the Study

One-way analysis of variance (ANOVA) was conducted to determine whether students' perceptions of educational equity differed significantly according to the university variable. The findings of the analysis are presented in Table 5.

**Table 5**

*One-Way ANOVA Findings of Students' Educational Equity Perception According to University Variable*

Factor	University	n	$\bar{X}$	S	F	p	Difference (Games-Howell)
Fair Distribution of Organizational Resources	1 <sup>st</sup> University	417	3.38	.86	5.407	.005*	1-2
	2 <sup>nd</sup> University	248	3.17	.92			
	3 <sup>rd</sup> University	241	3.40	.92			
Professor-Student Communication	1 <sup>st</sup> University	417	3.45	1.0	.540	.583	
	2 <sup>nd</sup> University	248	3.49	.96			
	3 <sup>rd</sup> University	241	3.53	1.0			
Access	1 <sup>st</sup> University	417	2.67	.78	4.509	.011*	1-2
	2 <sup>nd</sup> University	248	2.47	.87			
	3 <sup>rd</sup> University	241	2.64	.92			

\*p<.05

When Table 5 is examined, it is demonstrated that students' perceptions of educational equity display significant differences in the sub-dimensions of fair distribution of organizational resources ( $F=5.407$ ,  $p<.05$ ) and access ( $F=4.509$ ,  $p<.05$ ) according to the university variable. Concerning the fair distribution of organizational resources, the students who are enrolled at 1<sup>st</sup> university ( $\bar{X}=3.38$ ), the most well-known and prestigious one, have a higher equity perception

than the ones who are studying at 2<sup>nd</sup> university ( $\bar{X}$ =3.17). Also, the students studying at 3<sup>rd</sup> university ( $\bar{X}$ =3.40) displayed a higher perception of equity than the ones who are registered at 2<sup>nd</sup> university ( $\bar{X}$ =3.17). On the basis of access, the students attending 1<sup>st</sup> university ( $\bar{X}$ =2.67). demonstrated a higher equity perception than the one who are attending 2<sup>nd</sup> university ( $\bar{X}$ =2.47).

### Findings Based on Gross Monthly Household Income Variable Regarding the Second Problem of the Study

One-way analysis of variance (ANOVA) was conducted to determine whether students' perceptions of educational equity differed significantly according to gross monthly household income variable. The findings of the analysis are presented in Table 6.

**Table 6**

*One-Way ANOVA Findings of Students' Educational Equity Perception According to Gross Monthly Household Income Variable*

Factor	Gross Monthly Household Income	n	$\bar{X}$	S	F	p	Difference (Games-Howell)
Fair Distribution of Organizational Resources	Low	355	3.23	.96	3.402	.034*	
	Medium	448	3.39	.86			2-1
	High	103	3.40	.80			
Professor-Student Communication	Low	355	3.40	1.02	2.109	.122	
	Medium	448	3.54	.97			
	High	103	3.54	.97			
Access	Low	355	2.36	.90	28.978	.000*	
	Medium	448	2.73	.79			2-1 3-1
	High	103	2.93	.64			3-2
Total	Low	355	3.09	.77	9.283	.000*	
	Medium	448	3.29	.70			2-1
	High	103	3.34	.62			3-1
	Total	906	3.21	.73			

\*p<.05

When Table 6 is analyzed, it is indicated that there is a significant difference between the total scale (F=9.283, p<.05), the fair distribution of organizational resources (F=3.402, p<.05), and access (F=28.978, p<.05) sub-dimensions of educational equity according to the gross monthly household income variable. The students whose families have low monthly income has lower

equity perception ( $\bar{X}=3.23$ ) than the ones whose families' income is at a medium level ( $\bar{X}=3.39$ ) under the fair distribution of organizational resources. In the access dimension, the students whose families have medium and high level of income has higher equity perception ( $\bar{X}=2.73$ ; 2.93) than the ones whose families have low income ( $\bar{X}=2.36$ ). Also, the students whose families have high income perceive higher educational equity ( $\bar{X}=2.93$ ) than the ones whose families have medium income ( $\bar{X}=2.73$ ). Similarly, in the total scale, as the income gets higher the equity perception of the student increases.

### Findings Based on the Number of Sibling Variable Regarding the Second Problem of the Study

One-way analysis of variance (ANOVA) was conducted to determine whether students' perceptions of educational equity differed significantly according to the number of sibling variable. The findings of the analysis are presented in Table 7.

**Table 7**

*One-Way ANOVA Findings of Students' Educational Equity Perception According to the Number of Sibling Variable*

Factor	The Number of Sibling	n	$\bar{X}$	S	F	p	Difference (Tukey)
Fair Distribution of Organizational Resources	1	68	3.23	1.01	2.333	.073	
	2	339	3.25	.90			
	3	240	3.44	.84			
	4 and more	259	3.36	.91			
Professor-Student Communication	1	68	3.36	1.07	1.861	.135	
	2	339	3.40	1.03			
	3	240	3.55	.92			
	4 and more	259	3.55	.98			
Access	1	68	2.69	.84	5.943	.001*	
	2	339	2.71	.79			2-4
	3	240	2.63	.88			3-4
	4 and more	259	2.43	.87			

\*p<.05

When Table 7 is examined, it is revealed that there is a significant difference between the access dimension ( $F=5.943$ ,  $p<.05$ ) and students' perceptions of educational equity. According to the results of the Tukey test, the perception of the students with two siblings ( $\bar{X}=2.71$ ) was higher

than the perception of students with four or more siblings ( $\bar{X}=2.43$ ). Similarly, the perception of students with three siblings ( $\bar{X}=2.63$ ) was higher than the perception of the students with four or more siblings ( $\bar{X}=2.43$ ).

### Findings Based on the Residential Region of the Family Variable Regarding the Second Problem of the Study

One-way analysis of variance (ANOVA) was conducted to identify whether students' perceptions of educational equity differed significantly according to the residential region of the family variable. The findings of the analysis are presented in Table 8.

**Table 8**

*One-Way ANOVA Findings of Students' Educational Equity Perception According to the Residential Region of the Family Variable*

Factor	Residential Region of the Family	n	$\bar{X}$	S	F	p	Difference (Tamhane's T2)
Fair Distribution of Organizational Resources	Countryside or village	84	3.22	.93	.585	.674	
	Town or county	188	3.38	.93			
	City center	222	3.30	.88			
	Metropolis	404	3.34	.88			
	Another country	8	3.50	1.11			
Professor-Student Communication	Countryside or village	84	3.33	1.05	1.951	.100	
	Town or county	188	3.54	.96			
	City center	222	3.47	.96			
	Metropolis	404	3.47	1.01			
	Another country	8	4.28	.93			
Access	Countryside or village	84	2.25	.99	6.336	.000*	
	Town or county	188	2.52	.94			
	City center	222	2.61	.83			3-1
	Metropolis	404	2.73	.75			4-1
	Another country	8	2.50	.79			

\*p<.05

When Table 8 is analyzed, it is illustrated that there is a significant difference between the dimension of access ( $F=6.336$ ,  $p<.05$ ) and students' perceptions of educational equity. According to the results of Tamhane's T2 test, the equity perception of the students whose families dwell in the city center ( $\bar{X}=2.61$ ) and metropolis ( $\bar{X}=2.73$ ) is higher than the ones whose families dwell in the countryside or village ( $\bar{X}=2.25$ ).

### Findings Based on the Parental Education Level Variable Regarding the Second Problem of the Study

One-way analysis of variance (ANOVA) was conducted to identify whether students' perceptions of educational equity differed significantly according to the parental education level variable. The findings of the analysis are presented in Tables 9 and 10.

**Table 9**

*One-Way ANOVA Findings of Students' Educational Equity Perception According to the Mother's Education Level Variable*

Factor	Mother's Education Level	n	$\bar{X}$	S	F	p	Difference (Tamhane's T2)
Fair Distribution of Organizational Resources	Not graduated	110	3.32	.87	.485	.747	
	Primary School Graduate	306	3.35	.92			
	Secondary School Graduate	101	3.41	.93			
	High School Graduate	224	3.27	.88			
	University Graduate	165	3.32	.87			
Professor-Student Communication	Not graduated	110	3.57	.90	.969	.424	
	Primary School Graduate	306	3.51	.96			
	Secondary School Graduate	101	3.53	.96			
	High School Graduate	224	3.47	1.0			
	University Graduate	165	3.36	1.0			
Access	Not graduated	110	2.23	.88	.7000	.000*	
	Primary School Graduate	306	2.61	.89			2-1
	Secondary School Graduate	101	2.67	.89			3-1
	High School Graduate	224	2.67	.79			4-1
	University Graduate	165	2.73	.72			5-1

\* $p<.05$

When Table 9 is examined, it is observed that there is a significant difference between the dimension of access ( $F=7.000$ ,  $p<.05$ ) and students' perceptions of educational equity. Also, based on Tamhane's T2 Test, it is inferred that the educational equity perception of the students whose mothers graduated from primary school, secondary school, high school, and university ( $\bar{X}=2.61$ ; 2.67; 2.67; 2.73) is higher than the ones whose mothers do not have any graduation degree ( $\bar{X}=2.23$ ).

**Table 10**

*One-Way ANOVA Findings of Students' Educational Equity Perception According to the Father's Education Level Variable*

Factor	Father's Education Level	n	$\bar{X}$	S	F	p	Difference (Games-Howell)
Fair Distribution of Organizational Resources	Not graduated	40	3.13	.92	.910	.457	
	Primary School Graduate	231	3.32	.92			
	Secondary School Graduate	112	3.36	.91			
	High School Graduate	243	3.39	.89			
	University Graduate	280	3.29	.87			
Professor-Student Communication	Not graduated	40	3.36	.98	1.186	.315	
	Primary School Graduate	231	3.49	.98			
	Secondary School Graduate	112	3.58	.94			
	High School Graduate	243	3.55	1.0			
	University Graduate	280	3.40	1.0			
Access	Not graduated	40	2.12	.93	5.636	.000*	
	Primary School Graduate	231	2.52	.88			
	Secondary School Graduate	112	2.57	.93			4-1
	High School Graduate	243	2.66	.83			5-1
	University Graduate	280	2.72	.74			5-2

When Table 10 is reviewed, it is indicated that there is a significant difference between the dimension of access ( $F=5636$ ,  $p<.05$ ) and students' perceptions of educational equity. According to Games-Howell Test, the educational equity perception of the students whose fathers graduated from high school and university ( $\bar{X}=2.66$ ;  $2.72$ ) is higher than the ones whose fathers do not have any graduation degree ( $\bar{X}=2.12$ ). Likewise, the educational equity perception of the students whose fathers have university degree is higher than the ones whose fathers graduated from primary school ( $\bar{X}=2.52$ ).

## **Discussion and Conclusion**

### **Conclusion and Discussion Related to the First Problem of the Study**

Regarding the first problem of the study, which investigates the university students' level of perception based on educational equity it was concluded that students' perception of equity was at a moderate level in the dimensions of fair distribution of organizational resources and access, and at a sufficient level in the dimension of professor-student communication.

The moderate level in the dimension of fair distribution of organizational resources may be related to the fact that the study sample includes students studying at three different universities. Since the establishment years of these three different universities are different, their institutionalization levels and the amount of educational funding they receive from the state are also different. For instance, the first and well-established university's annual grant is 1.341.646.000 TL while the third one receives only 207.909.000 TL (Council of Higher Education, 2021). In addition to the different amounts of grants allocated to each university, the amounts spent on various expenses within the university (research, development and innovation; management and support program, health, etc.) vary according to universities. For example, the amount spent per student is 40,739 for the second university, 7,627 TL for the first one. (Council of Higher Education, 2020). Therefore, it is likely that a newly established university with less and limited funding would be able to offer limited resources to its students, whereas a well-established research university with substantial funding would be able to provide resources to all its students in an equitable manner. Apart from that, OECD data is also in line with these findings; when the expenditures per student are analyzed, Turkey lags behind the average of OECD countries (OECD, 2019). It can be said that students' perception of equity regarding the fair distribution of organizational resources is likely to be at a medium level since students are not provided with sufficient expenditures and disadvantaged students may not be supported with an equitable distribution for students from different backgrounds to achieve the targeted outcomes in higher education.

It is considered that the socioeconomic level of the students may have been effective in the moderate level of students' perception of equity in the access dimension. As a matter of fact, as stated in OECD (2021), Turkey is among the countries with the highest poverty score and this situation affects students' access to higher education. In addition to socioeconomic status, gender is another factor affecting the perception of access to higher education. According to UNESCO data, both women's and men's access to higher education increases in countries with higher economic income levels. Considering that our country has a high poverty score, it can be claimed that the perception of equity for the access dimension, which was determined to be at a medium level in the findings of the study, is consistent with these findings.

In addition, geographical location also affects equity in access to higher education; students living in different regions have different access to higher education. It is expected that a student



living in a village or rural area will have different perceptions of equity in access to higher education than a student living in a metropolitan area or in relatively more developed regions of the country. For example, in Turkey, the share of adults between the ages of 25-64 who have graduated from higher education is 13% in the Southeastern Anatolia region and 32% in the Central Anatolia region, and there are regions where the rate of those who have not even graduated from secondary education is over 70% (Himmetoğlu et al., 2021). In other words, there are differences in higher education access rates according to the regions where students live. It can be inferred that students' perceptions of equity in access to higher education are influenced by their general socioeconomic status and the geographic regions in which they are located. Therefore, the fact that the perception of the access dimension is at a medium level supports these data.

### Conclusion and Discussion Related to the Second Problem of the Study

The second problem of the study investigating whether the university students' educational equity perception differs according to different variables that are identified as gender, type of high school that the students graduated from, part-time employment, university, gross monthly household income, the number of sibling, residential region of the family, parental education level, the essential results, and the associated debate are presented as follows.

Significant differences were discovered when students' perceptions of educational equity were examined according to the *gender variable*; in the overall scale, women's perception of equity was higher than men's, particularly in the fair distribution of organizational resources and professor-student communication dimension. Future studies may delve into greater depth about the cause of this situation. In the access dimension, no gender-based difference was discovered. In this regard, when the number of students by gender is analyzed, it is observed that there is no significant difference between male and female students in terms of the number of newly enrolled students and the total number of students at this level. For example, the total number of female students enrolled in undergraduate programs in higher education is 2,224,529, while the total number of male students is 2,452,128 (Higher Education Information Management System.b, n.d.). From this point of view, it can be deduced that access based on gender has been provided in an equitable manner.

The type of high school that the students graduated from, part-time employment, gross monthly household income, the number of sibling, the residential region of the family, and parental education level are the variables that point out the *socioeconomic status*; that's why, the key findings of these variables are discussed together. The significant differences are mostly displayed in the dimension of access and fair distribution of organizational resources. The results are listed below:

- Based on *high school type*, students who attended private schools in high school exhibit a higher perception of educational equity than students who attended public schools in the access dimension.
- Based on *part-time employment*, it was revealed that students' perceptions of educational equity display a significant difference in the fair distribution of organizational resources and access sub-dimensions and in the total scale according to the variable of working part-time. The educational equity perception of the students who don't work in a part-time job regarding those dimensions and total scale respectively is higher than the ones who work as a part-timer.

- Regarding the *gross monthly household income* variable, the students whose families have low monthly income have lower level of equity perception than the ones whose families' income is at a medium level under the fair distribution of organizational resources. Similarly, in the access dimension and total scale, as the income gets higher the equity perception of the student increases.
- Parental education level is also discovered to be a significant factor that affects the students' educational equity perception in the access dimension. It is inferred that the educational equity perception of the students whose mothers graduated from primary school, secondary school, high school, and the university is higher than the ones whose mothers do not have any graduation degree. Similarly, the educational equity perception of the students whose fathers graduated from high school and university is higher than the ones whose fathers do not have any graduation degree. Likewise, the educational equity perception of the students whose fathers have university degrees is higher than the ones whose fathers graduated from primary school. That is, as the educational level of the parent gets higher the educational perception of the students gets higher, especially in the access dimension.
- Concerning *the number of sibling*, the perception of the students with two siblings is higher than the perception of students with four or more siblings. Similarly, the perception of students with three siblings is higher than the perception of students with four or more siblings.
- According to the *residential region of the family*, the equity perception of the students whose families dwell in the city center and metropolis is higher than the ones whose families dwell in the countryside or village.

These results indicate that the educational equity perception of the students is affected by all the variables pointing out socioeconomic status. Socioeconomic status is one of the key points of perception of equity by university students. As the socioeconomic status of the family increases, the university students have a higher perception of accessing the university.

The results of the current study support the findings of the related studies in the literature. Higher education is a major problem and concern for low-income students and their families (Bootman & Long, 2016). For example, Horn and Bobbitt (2000) claim that as parents' level of education increases, the likelihood of their children having a bachelor's degree increases in parallel. Also, Roksa (2011) finds that participants whose parents have a bachelor's degree or higher have a 44% higher chance of having a bachelor's degree compared to participants whose parents have lower levels of education. Even in different countries around the world (e.g. Italy, Bulgaria, Romania, and Luxembourg), it has been demonstrated that individuals whose parents have at least a high school or university degree are much more likely to pursue higher education than those whose parents do not have these degrees (Atherton et al., 2016). Apart from these international studies, the results of research conducted in Turkey are also in line with the current study claiming that socioeconomic status is an important factor in attending higher education (Ekinci, 2011; Gölpek, 2011).

Okhidoi (2016) reported that family socioeconomic status is an important predictor of university access and also suggested that female students are more likely to access university than male students. Although the current study revealed that socioeconomic status is an important factor in accessing university, no significant difference was observed in terms of gender. In addition,

Karen (2002) stated that students with low-income levels in the USA have low rates of access to higher education (Karen, 2002). Samples from Africa and India delivered by Atherton et al. (2016) are similar to the present findings; the richest one-fifth of Ghana's population is seven times more likely to attain higher education than the poorest two-fifths of the population while in India those whose families are in the highest income group are 20 times more likely to enter higher education than the poorest. Al Qudsi (2003) added that enrollment and attrition rates for students are influenced by family financial disparities in Arab nations. Namely, socioeconomic status plays a crucial role in both gaining admission to the university and ensuring a fair distribution of resources in the education and training process.

In the current study, the students coming from low-income families and working at part-time jobs have a lower level of equity perception. Berlanga et al. (2016) emphasized the importance of financial support, arguing that grants and scholarships provide financial assistance to children from low-income families and increase equity. Also, equity cannot be attained unless the needs of underserved minority students are met by the institution (Dowd, 2007). As it is obvious that when students in need aren't supported by the institutions they are enrolled in, which leads to inequitable situations. That's why, underserved students are the weakest and least likely to succeed (Bragg & Durham, 2012). In other words, these situations may end up in low academic success or dropping out of the university in the end; thus, the students should be treated with an equitable manner in order for them to achieve the same results as their peers.

Aygül (2018), stated that university students cannot meet their basic needs and struggle to continue their studies because they lack sufficient economic resources, also scholarships, loans or dormitory facilities are insufficient for them. As a result of this, students have to find a job and work in order to continue their education. In this regard, Goldrick-Rab (2014) argues that financial aid enables students to overcome significant financial constraints and that financial aid helps students to concentrate and spend more time on their studies as they are less likely to work in paid jobs. Moreover, Berlanga et al. (2016) emphasized the importance of financial aid, arguing that grants and scholarships provide financial assistance to children from low-income families and increase equity. These studies highlight that when universities do not offer the necessary financial aid to students and do not provide financial equity, students attempt to cover their education expenses by working at a job and this situation leads to a differentiation in students' perceptions of educational equity.

The findings related to the number of sibling and the residential region of the family are also parallel with the other studies. For example, Dadon-Golon et al. (2018) assert that one more sibling reduces the possibility of being admitted to a university by approximately 6%. As the number of siblings increases, the expenses automatically get higher, so it is understandable that the ones who have fewer siblings have more easily access to university and have a higher perception of equity. This situation is compatible with the results of the current study.

The results of the study conducted by Ekinçi (2011) and Bui et al. (2019) are consistent with the current study which claims that the educational equity perception of the students varies depending on the residential region of the family. Thus, it can be deduced that rural areas may prevent students from accessing universities. In other words, in remote and backward areas there is a lack of opportunities for students to attend university. That's why, students' perceptions of educational equity are lower if their parents live in the countryside or in a village.

The current study revealed that the *university* variable is a significant factor that affects the student's educational equity perception. The students who are enrolled at 1<sup>st</sup> university, the most well-known and prestigious one, conceive that organizational resources are distributed more fairly than the ones who are studying at 2<sup>nd</sup> university. This can be related to the different amounts of funds distributed to the universities. The data from the Council of Higher Education (2021b), consolidates this finding of the study; the amount of funds provided by the Council of Higher Education varies considerably for the three universities involved in the study ("1,341,646,000 TL", "516,577,000 TL" and "207,909,000 TL"). Accordingly, the expenditures per student are 18,761 TL, 40,739 TL, and 7,627 TL, respectively, from the oldest to the youngest university in the study. Furthermore, the rate of students in these universities benefiting from university scholarships is 3.57% for the oldest institution and 0% for the others. Likewise, the number of activities related to social integration and inclusion for disadvantaged groups is 15, 12, and 8 respectively. That is, the amount of investment provided to the students differs in the three universities within the scope of the study, in other words, these three universities offer their resources to their students at different levels. It can be concluded that these differences affect students' perception of the fair distribution of organizational resources. Apart from that, this finding is in congruence with the finding that students confront various physical, financial, social, and psychological problems at universities (Aygül, 2018; Doğan, 2013; Kil et al., 2021; Topçu & Uzundumlu, 2012). The differences and problems at universities faced by the students may lead them to have a lower perception level of equity. For this reason, it can be inferred that the status of the universities as having an institutional and well-established structure, the different sociocultural structures of the universities, and the rate of distributing the budget to students create differences in students' perceptions of equity. Apart from that, the reason why the students studying at 3<sup>rd</sup> university displayed a higher perception of equity than the ones who are registered at 2<sup>nd</sup> university can be investigated in further studies. In terms of access, the students attending 1<sup>st</sup> university indicated a higher equity perception than the ones who are attending 2<sup>nd</sup> university.

In the access dimension, it was assumed that the relatively higher perceptions of the students studying at a well-established institution compared to the ones at other institutions might be associated with the socioeconomic level of the students. As a result, a two-way chi-square test for binary variables was applied to determine whether there was a relationship between gross monthly household income, parental educational level, and the university variable.

According to the results of the distribution of the students participating in the study according to the gross monthly household income related to the university, 27.6% of the students with low family income are studying at the first university, while 37.5% are studying at the second university. In other words, the share of students with low family income is larger in the second university. An analysis of the distribution of students with middle and high-family income in universities reveals that the majority of students with middle and high-income families study at the first university. While 55.8% of the students from middle-income families attend the first university, 21% of them attend the second university. In a similar vein, the proportion of students from high-income households at the first and second universities, correspondingly, was 67% and 20.4%.

According to the results of maternal education level, the proportion of students whose mothers do not have any degree is 50.9% in the second university, while the proportion in the first university, i.e. the well-established university, is only 17.3%. However, this situation reversed as the level of mother increased. For instance, whereas the percentage of students whose mothers were

university graduates was 69.1% at the first university, this rate was calculated as 20% at the second university. Similarly, the proportion of students with fathers who graduated from primary school was 35.5% in the second university and 27.7% in the first university. Notwithstanding the rate of students whose fathers were university graduates was 19.6% in the second university and 65.4% in the first university.

In other words, it may be concluded that the majority of students who have attended the first university, the more prestigious and established one, come from families with substantially higher levels of education and income. Parallel with this finding, Williams and Filippakou (2010) claim that access to elite higher education institutions is largely restricted to students from privileged upper-class groups. Also, Erişken (2019) stated in his study that students' families' educational levels and socioeconomic and cultural traits differ significantly depending on the university. Furthermore, it was revealed that the family's socioeconomic level makes a difference not only in access but also in access to prestigious universities (Erişken, 2019), which is consistent with the results of the current study. In short, in terms of access, the fact that the students attending the first university, the most prestigious and well-known, have a higher perception of equity than those attending the second university can be explained by their socio-economic status and higher levels of parental education.

### **Implications for Further Studies**

Although all of the participants in this study are enrolled in public universities, there are differences in their perceptions of educational equity. For this reason, the Council of Higher Education may implement new policies and improve existing policies within the framework of equity, especially on issues such as academic and financial support for disadvantaged students, increasing expenditures per student, increasing scholarship rates and scholarship amounts allocated to students, improving services such as shelter-nutrition-social activities-counseling provided to students.

University administrations can initiate additional equity-based policies (discounted/ free shelter- meals, and scholarships, etc.) especially for socio-economically disadvantaged students, and revise their policies accordingly, as well as enhance the number of expenditures per student and activities for social integration and inclusion to establish a more equitable education system.

Further studies may be conducted on the concept of equity in different higher education institutions. In particular, to determine whether there is a distinction based on the type of university, students' perceptions of educational equity can be compared concerning the years of establishment of different universities. In addition, the level of students' perceptions of educational equity between state universities and foundation universities can also be analyzed.

**Ethics Committee Approval Information:** This research was carried out with the permission of Hacettepe University Scientific Research and Publication Ethics Committee with the decision dated 07/12/2020 and numbered E-51944218-300-00001354113

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## Geniş Özet

### Giriş

Alanyazın incelendiğinde öğrencilerin yükseköğretime adil bir şekilde erişimini engelleyen çeşitli faktörler (cinsiyet, coğrafya, ebeveyn eğitimi, ebeveyn sosyoekonomik düzeyi, kardeş sayısı vb.) olduğu görülmektedir. Ayrıca, üniversitelerin farklı sosyal ve ekonomik geçmişlerden gelen öğrenciler için eşit eğitim ve öğretim fırsatları sunma konusunda adaleti sağlamaya yönelik örgütsel kaynakların adil dağıtımı açısından yetersiz kaldığı (finansal, fiziksel, sosyal vb.) birçok nokta olduğu anlaşılmaktadır. Bu sebeple, bu çalışmanın temel amacı, üniversite öğrencilerinin

eğitimde hakkaniyet algısını belirlemektir. Bu temel amaç doğrultusunda, bu çalışmada aşağıdaki sorulara yanıt aranmaktadır.

1. Üniversite öğrencilerinin eğitimde hakkaniyet algısı ne düzeydedir?

2. Üniversite öğrencilerinin eğitimde hakkaniyet algısı cinsiyet, mezun olunan lise türü, yarı zamanlı çalışma, üniversite, aylık toplam aile geliri, kardeş sayısı, ailenin yaşadığı bölge ve anne-baba eğitim düzeyi değişkenlerine göre farklılaşmakta mıdır?

## Yöntem

Bu çalışmanın amacı, devlet üniversitelerinde öğrenim gören lisans öğrencilerinin yükseköğretimde hakkaniyeti nasıl algıladıklarını araştırmaktır. Bu çalışma tarama türünde bir çalışmadır. Tarama araştırma modelinin genel amacı, bir grubun genel özelliklerini ortaya çıkarmak ve belirlemektir (Büyüköztürk vd., 2020).

Bu araştırma seçkisiz örnekleme yöntemlerinden tabakalı örnekleme yöntemi ile oluşturulan 320 erkek ve 586 kız olmak üzere toplam 906 öğrenciden oluşmaktadır. Veriler üç farklı devlet üniversitesinden toplanmıştır, birinci üniversiteden 417 katılımcı, ikinci üniversiteden 248 katılımcı ve üçüncü üniversiteden 241 katılımcı çalışmanın örneklemini oluşturmuştur. Öğrencilerin sınıf dağılımına bakıldığında 3. sınıf düzeyinde 441, 4. sınıf düzeyinde ise 465 katılımcı bulunmaktadır. Katılımcılar Eğitim Fakültesi, İktisadi ve İdari Bilimler Fakültesi, İletişim Fakültesi, Mühendislik Fakültesi, Sağlık Bilimleri-Hemşirelik Fakültesi ve Tıp Fakültesi öğrencilerinden oluşmuştur.

Veriler pilot çalışma için SPSS 26 programı kullanılarak analiz edilmiş, ana çalışmanın verilerinin analizinde ise AMOS 24 programından yararlanılmıştır. Çalışma kapsamında öğrencilerin eğitimde hakkaniyet algılarının araştırma problemine ilişkin çeşitli demografik bilgiler temelinde farklılaşıp farklılaşmadığını belirlemek amacıyla Bağımsız Gruplar T-Testi ve Tek Yönlü Varyans Analizi (ANOVA) yapılmıştır. Çalışmanın verileri “Hakkaniyet Ölçeği” kullanılarak toplanmıştır. Bu kapsamda, 219 katılımcı ile pilot uygulama yapılmış ve bu veriler Açıklayıcı Faktör Analizi (AFA) ile analiz edilmiştir. AFA sonucunda 22 madde ve üç faktörden oluşan bir ölçek elde edilmiştir. Ölçeğin, açıklanan toplam varyans oranı %52,1’dir.

Güvenirlilik analizi için Cronbach Alpha güvenirlik katsayısı toplam ölçek için .891 olarak hesaplanmıştır. Ana uygulamada ise Amos 24 programında Doğrulayıcı Faktör Analizi (DFA) gerçekleştirilmiştir. Uyum iyiliği değerleri  $\chi^2 /df = 3.4$  kabul edilebilir uyum, RMSEA=.05 iyi uyum, RMR=.06 kabul edilebilir uyum, CFI=.95 iyi uyum, NFI=.93 kabul edilebilir uyum, IFI=.95 iyi uyum, GFI=.92 kabul edilebilir uyum ve AGFI=.91 kabul edilebilir uyum göstermiştir (Kline, 2016; Gürbüz, 2021; Hu & Bentler, 1999, Jöreskog & Sörbom, 1993). Sonuç olarak, AFA ve DFA sonucunda elde edilen tüm değerler literatürde belirtilen kriterlere uygun olduğu için yapı geçerliliği doğrulanmıştır. Toplam 22 madde ve üç faktörden oluşan geçerli ve güvenilir bir ölçek aracı oluşturulmuştur.

## Bulgular

Araştırmanın birinci problemine ilişkin bulgular incelendiğinde öğrenciler, akademisyen-öğrenci iletişimi faktöründe hakkaniyetin yeterli düzeyde sağlandığını düşünmelerine rağmen, öğrenciler örgütsel kaynakların adil dağılımı ve erişim boyutlarında hakkaniyetin orta düzeyde sağlandığını düşünmektedirler.

Araştırmanın ikinci problemine yönelik bulgular incelendiğinde, öğrencilerin hakkaniyete yönelik algıları cinsiyete göre değişmektedir. Özellikle, kadın öğrencilerin örgütsel kaynakların adil dağılımı ve akademisyen-öğrenci iletişimine yönelik hakkaniyet algıları daha yüksek çıkmıştır.

Mezun olunan lise türüne göre, özel liselerden mezun olan öğrencilerin hakkaniyet algıları devlet okulundan mezun olanlara göre yüksek çıkmıştır.

Yarı zamanlı çalışma durumunda ise, yarı zamanlı işte çalışmayan öğrencilerin hakkaniyet algıları yarı zamanlı işlerde çalışan öğrencilere göre yüksek çıkmıştır.

Üniversite değişkeni de öğrencilerin hakkaniyet algısında anlamlı farklılıklar oluşturmuştur. Özellikle örgütsel kaynakların adil dağılımı alt boyutunda birinci üniversiteye yani en prestijli ve köklü üniversiteye kayıtlı öğrencilerin hakkaniyet algısı yüksek çıkmıştır. Üniversiteye erişim boyutunda da birinci üniversiteye kayıtlı öğrencilerin hakkaniyet algısı benzer şekilde yüksek çıkmıştır.

Aile geliri değişkenine göre ise, örgütsel kaynakların adil dağılımı alt boyutunda aylık toplam aile geliri düşük olan öğrencilerin hakkaniyet algısı, aile geliri orta düzeyde olan öğrencilere göre daha düşük çıkmıştır. Erişim boyutunda ise aile gelir düzeyi orta ve yüksek olan öğrencilerin hakkaniyet algısı, aile gelir düzeyi düşük olan öğrencilere göre daha yüksek çıkmıştır. Ayrıca, ailesi yüksek gelire sahip olan öğrenciler, ailesi orta gelire sahip olanlara göre, daha yüksek hakkaniyet algısına sahiptir. Benzer şekilde, ölçek toplamında da aile geliri arttıkça öğrencilerin hakkaniyet algılarının arttığı görülmektedir.

Toplam kardeş sayısı değişkeni de öğrencilerin hakkaniyet algısında önemli bir farklılığa sebep olmuştur. Toplam iki veya üç kardeş olan öğrencilerin eğitimde hakkaniyet algıları toplam dört ve daha fazla kardeşe sahip öğrencilerden daha yüksek çıkmıştır.

Ailenin yaşadığı bölgeye göre bakıldığında, özellikle üniversiteye erişim boyutunda ailesi şehir merkezlerinde ve büyükşehirlerde yaşayan öğrencilerin hakkaniyet algıları ailesi kasaba ve köylerde yaşayan öğrencilere göre yüksek çıkmıştır.

Aile eğitim düzeyi değişkeni ile hakkaniyet algıları arasında da önemli farklar elde edilmiştir. Anne eğitim düzeyi ortaokul, lise ve üniversite olan öğrencilerin hakkaniyet algıları annesi okula gitmemiş öğrencilerden yüksek bulunmuştur. Benzer şekilde, baba eğitim düzeyi lise ve üniversite olan öğrencilerin hakkaniyet algısı, babası herhangi bir eğitim kademesinden mezun olmayan öğrencilerin hakkaniyet algısına göre yüksek çıkmıştır. Ayrıca, babası üniversite mezunu olan öğrencilerin hakkaniyet algısı babası ilkokul mezunu olan öğrencilerden yüksek çıkmıştır.

## **Sonuç ve Tartışma**

Üniversite öğrencilerinin eğitimde hakkaniyete dayalı algı düzeylerini araştıran çalışmanın birinci problemine ilişkin olarak, öğrencilerin hakkaniyet algısının örgütsel kaynakların adil dağılımı ve erişim boyutlarında orta düzeyde, akademisyen-öğrenci iletişimi boyutunda ise yeterli düzeyde olduğu sonucuna ulaşılmıştır.

Örgütsel kaynakların adil dağılımı boyutunda ortaya çıkan orta düzey algı, çalışmanın örneklemine üç farklı üniversitede öğrenim gören öğrencilerden oluşması ile ilgili olabilir. Bu üç farklı üniversitenin kuruluş yılları farklı olduğu için kurumsallaşma düzeyleri ve devletten aldıkları eğitim fonu miktarı da farklıdır. Bu sebeple, bu faktörlerin öğrencilerin algılarında farklılık yarattığı düşünülebilir.

Çalışmanın ikinci alt boyutunda yer alan tüm değişkenler ile öğrencilerin hakkaniyet algısı arasında anlamlı farklılıklar olduğu ortaya çıkmıştır. Bu sonuçlar, öğrencilerin eğitimde hakkaniyet algısının sosyoekonomik durum ile ilişkili tüm değişkenlerden etkilendiğini açıkça göstermektedir. Sosyoekonomik durum ve üniversite değişkenleri öğrencilerinin hakkaniyet algısının kilit noktalarından biridir. Ailenin sosyoekonomik durumu yükseldikçe üniversite öğrencilerinin üniversiteye erişim algısı da yükselmektedir. Mevcut çalışmanın sonuçları, literatürdeki ilgili çalışmaların bulgularını destekler niteliktedir.