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The Role of Educational Level and Gender in Vocational Journey: A Comparative Perspective on the Abilities and Values of High School and University Students

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ABSTRACT

This study aims to examine the vocational values of high school and private foundation university students in the Küçükçekmece district of Istanbul province based on gender and educational level. Utilizing a survey model, the research seeks to generalize students' vocational values and abilities within different educational settings. The study sample consists of a total of 616 high school students and 784 university students, randomly selected from three different high schools and a private foundation university. Participants exhibit diversity in demographic characteristics, including gender, type of school/faculty, grade level, and monthly income. Data were collected using the Personal Information Form, Vocational Values Inventory, and the Self-Assessment Inventory-Abilities scales. The findings indicate significant differences between high school and university students regarding vocational values and abilities. University students place greater emphasis on friendship, health, creativity, and helping, whereas high school students prioritize financial gain. In terms of gender differences, female students assign more importance to friendship, financial gain, and health values, while male students prioritize physical and creative values. Verbal ability was found to be higher among university students, while no significant differences were observed in numerical and spatial abilities. These findings highlight how vocational values and abilities vary between high school and university students based on gender and education level.

Keywords:
Vocational value, career choice, career counseling

1. Introduction

Career decision-making is a lifelong process that starts from childhood and is formed by the combination of information and advice that individuals receive about various professions and themselves (Inkson & Elkin, 2008; Patton & McMahon, 2006; Perry & Vanzandt, 2006; Yeşilyaprak 2000). Therefore, given the dynamic and complex nature of the career choice process, individuals need to manage this process with the proper guidance and support (Nathan & Hill, 2006; Taveira & Moreno, 2003; Turner & Lapan, 2005; Yeşilyaprak, 2011). Despite this importance, individuals make career decisions without considering the real world (Bright, Pryor, & Harpham, 2005). Since the career decision-making process involves a balance between meeting one's own needs and the needs of others, as well as reacting to external factors and the realities of life, careless decisions can negatively affect the later periods of people's lives.

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In Turkey, high school is the most important period for career choice. High school is a time when students make decisions about their future. If they choose to continue their education, they need to decide which profession they will choose, and if not, they need to decide what kind of jobs they will work after graduation (Yeşilyaprak, 2000). According to a study conducted by Korkut-Owen and Owen (2012), the top four reasons for students to choose a department at university are "interest in the field," "adequacy of the score obtained for this department," "suitability of the field to personality traits" and "high probability of finding a job." These findings emphasize how important it is for high school students to explore their hobbies, character traits, and professional ideals before deciding on a career. A student at the choice stage can only make the best choice for themself if they are aware of their skills, interests, and values and receive professional guidance on using these characteristics. Although various factors affecting career choice are discussed in the literature, the most important ones are ability (Field, 2008; Howe, 1998; Özyürek, 2013; Kaya, 2011; Krane & Tirre, 2005; Kuzgun, 2000; Pişkin, 2011; Rotundo, 2006); interest (Bratsch 2001; Hansen, 2005; Kuzgun, 2000; Özyürek, 2013; Yeşilyaprak, 2000); and vocational value (Bratsch, 2001; Brown, 2003; Gibson & Mitchell, 2001; Hartung, 2006; Kuzgun, 2006; Ng & Sears, 2010; Patton, 2000; Posner, 2010; Round & Armstrong, 2005; Super, 1995; Sverko, Babarovic, & Sverko, 2008; Zunker, 2006). Generally, high school years in Turkey are when students make important decisions about their career choices and future careers (Kuzgun, 2000). The most important factors affecting career choice are aptitude, interest, and professional values; therefore, students need to explore their hobbies, character traits, and professional ideals.

Research on vocational values, one of the factors affecting career choice, became popular towards the end of the 20th century due to studies on topics such as our career choices, lifestyle choices, and life decisions. In addition to these developments, Brown's introduction of a theory known as the "value-based theory" of occupational choice in 1996 began to draw more attention to the impact of values on occupational choice. In a broad sense, occupational value can be defined as the satisfaction that a person expects and obtains from the advantages of an occupation as a result of choosing that occupation (Brown, 2003). A person's career choice is balanced with vocational values (Lent & Brown, 2013; Hirschi, 2018). People who make career choices by considering their occupational values can establish a solid and satisfying relationship with their chosen career. Empirical evidence suggests that aligning one's career path with personal values increases the chances of professional success. This alignment increases efficiency, especially for the individual and the organization (Posner, 2010). Vocational values vary depending on several factors. The most important is gender (Brown, 2003; Kuzgun, 2006; Ng & Sears, 2010). According to Brown (2003), girls value mental health, social interaction, and community service more than they value creative endeavors. Girls value social interaction and community service more, while boys value money and security more. Occupational values are also affected by the place of residence. One of the most important factors affecting an individual's occupational values is whether they reside in an urban or rural area. For example, students who plan to work in rural areas prioritize the importance of power and position (Kuzgun, 2006). Vocational values vary depending on factors such as gender and place of residence, and it can be said that these values significantly affect one's career choice and professional success. Individuals who make career choices by considering their occupational values can establish a satisfying and productive relationship with their chosen career.

Choosing the right field of study is very important because it shapes a student's career path and determines their future opportunities for success and fulfillment. When choosing a career while still studying in high school or university, students need help matching their careers with their skills and academic performance. One of the most important decisions students will make when deciding on their plans is their career (Adıgüzel, 2009). Their whole life will be affected by this choice. What a student wants to achieve through a lifetime of work will ultimately determine who they are. Many factors influence high school students' career choices. Through parents, teachers, and role models, students can identify which aspects of the career choice process they find more credible (Lent et al., 2002). It is also important to examine the methods students use in career choice. Every student has a different background, which shapes how they see the world. This background, shaped by the student's upbringing, character, and opportunities, will influence their career decisions. In addition, the students' perception of their environment, character, and opportunities will influence their chosen careers (Khaled et al., 2024). Since the environment may influence students as the primary factor in their career choices, this influence or impression they receive from others may cause them to decide on their career choice. In this case, people's ideas about continuing their education in their future lives may be influenced by their parents' educational background (Shahzad & Ahmed, 2014). This suggests that different

environmental elements may influence a student's career decision. A student's career choice may also be influenced by how they see themselves in a situation where personality is a determining factor. According to Splaver (1977), Morra et al. (2009), and Ferry (2006), personality is another determining factor affecting career choice, as some professions also require having personality traits appropriate to that field (e.g., salespeople should be sociable). These personality traits may affect their ability to seize career opportunities. Opportunity can impact students' perceptions of their future regarding the possibility of following specific career paths. The problem of poverty significantly impacts opportunities (Shahzad & Ahmed, 2014). A student's career choice is a critical decision that significantly affects their future professional life, and influences from parents, teachers, and the environment play an important role in this process. Personality traits and opportunities also determine career choice factors; poverty can significantly affect students' career opportunities and choices. Therefore, it can be said that it is of great importance for students to analyze themselves and their environment well and receive professional guidance when making career decisions.

When the studies in the literature are examined, it is seen that their abilities, interests, and social environment play an important role in students' career choices (Kazi & Akhlaq, 2017). Their family's income level may influence a student's career decisions at a certain period of their life. These decisions will have a significant impact on the student's future. Making the wrong decision can result in disappointment and failure, and according to the gender factor, men's career choices are influenced by their financial situation as they have to provide for their families. At the same time, women are more concerned with benefits and social values (Sax, 1994). According to a study by Eccles (1986), young women think that male-specific jobs are more challenging but not more important than female-specific jobs. According to Mudhovozi and Chireshe (2012), the sociodemographic component was found to have the most significant influence on career choice. Oyamo and Amoth (2008) reported that peer pressure, family, motivation from the media, and hero idealization are important factors in career choice.

As a comprehensive contribution to the literature, this study offers several perspectives and insights. First, a comprehensive examination of the variables affecting high school and university students' career decisions helps us understand the important effects of education on career development. Moreover, revealing the differences between high school and university students' occupational values and abilities can help them make more informed decisions in their career planning process. Determining the effects of gender and educational level factors on career choice can contribute to academic institutions improving guidance and counseling services for students. Focusing on students' abilities and values, this study identifies the opportunities and barriers students face during their education. This information can be used to better structure educational policies and career counseling services. In particular, it promotes gender equality and helps to make the education system more inclusive by illuminating the role that gender differences play in this process. Moreover, by recognizing students' challenges when starting their careers and the resources they need, the business world can better identify and help new talent. By strengthening the link between business and education, this study provides insightful information for practitioners and academia, enabling young people to make more informed career decisions. By providing strategically important data to educators, career counselors, and policymakers, this study helps to create a more equitable and sustainable workforce in the long run. Based on this point, the research questions were determined as follows:

- Do vocational values and abilities of high school and university students differ significantly according to gender?
- Do vocational values and abilities of high school and university students differ significantly according to their level of education?

2. Methodology

2.1.Research Model

This study employed a survey technique to ascertain whether there are notable differences in occupational values and skills among high school and university students based on gender and educational level. These investigations are undertaken on the entire population or a specific group, sample, or subset of it to make a comprehensive assessment of the population, which comprises several elements (Creswell, 2017; Karasar, 2005).

2.2. Research Sample

The study encompasses three distinct high schools and a foundation university located in the Küçükçekmece district of Istanbul province. The research project comprises a cohort of student volunteers in various high schools and foundation institutions actively engaging in the study. The study sample was determined using maximum variation sampling. Maximum diversity sampling seeks to provide a relatively small sample that accurately represents the full range of individuals who may be involved in the topic being examined to the greatest possible degree (Patton, 2014). Table 1 displays the gender, school/faculty type, and grade level of the participants involved in the study. Furthermore, the participants had an average age of 17.49 and an average monthly income of 63,056 TL.

Table 1. *Participants' Demographic Characteristics*

		High School		*University*	
		f	%	*f*	%
Gender	Male	395	64,1	566	72,3
	Female	221	35,9	217	27,7
Type of School/Faculty of Education	Faculty of Education			258	18,4
	Faculty of Law			174	12,4
	Faculty of Humanities and Social Sciences			122	8,7
	Faculty of Islamic Sciences			123	8,8
	Faculty of Engineering			216	15,4
	Faculty of Economics and Administrative Sciences			12	0,9
	Faculty of Health Sciences			72	5,1
	Anatolian High Schools	272	19,4		
	Imam Hatip High Schools	91	6,5		
	Science High Schools	59	4,2		
Grade Level	1st grade	251	40,7	185	23,6
	2st grade	71	11,5	270	34,5
	3st grade	158	25,6	202	25,8
	4st grade	136	22,1	126	16,1

2.3. Data Collection Tools and Procedure

The following data collection tools were used in this study: the 'Personal Information Form,' 'Professional Values Inventory,' and 'Self-Assessment Inventory-Abilities.'

Personal Information Form: This form, created by the researchers, includes the variables of gender, grade level, age, level of education, and average monthly income of the students.

Vocational Values Inventory: The scale Atlı and Kaya (2016) devised to assess students' vocational values. The study utilized exploratory and confirmatory factor analyses to establish the construct validity of the Vocational Values Inventory. The exploratory factor analysis revealed that the inventory was organized to comprise 35 items and nine sub-dimensions (help, gain, creativity, health, friendship, teamwork, use of physical characteristics, leadership, and freedom). It was found that these nine factors accounted for 65% of the overall variability. The results of the confirmatory factor analysis suggested that the model fit indices ($\chi 2/sd=2.009$, GFI=.88, RMSEA=.048, SRMR=.053, CFI=.90) demonstrated a good fit between the model structure and the data. The inventory's reliability analysis involved using internal consistency coefficients and test-retest procedures. The internal consistency of the inventory was assessed using alpha coefficients, ranging from .70 to .83 for the sub-dimensions. These results indicate that the inventory demonstrated a good level of reliability. The correlation coefficients obtained from the test-retest reliability analysis varied from .61 to .82, suggesting that the inventory produced reliable and consistent data across time. The study analyzed Cronbach's alpha values for the forms administered to high school and university students individually. The values obtained for high school students are as follows: friendship (0.850), team (0.871), physical (0.704), leadership (0.796), freedom (0.745), earning (0.858), health (0.863), creative (0.813), and helping (0.851). The professional values of university students were as follows: .861 in friendship, .873 in team, .782 in physical, .793 in leadership, .711 in freedom, .832 in income, .845 in health, .794 in creative, and .850 in assisting.

Self-Assessment Inventory - Abilities Form: This study was developed by Kuzgun (1988). The Self-Assessment Inventory has 230 questions measuring individuals' self-perception in 3 skills, 11 interests, and nine professional values. In this study, the 30-item abilities form was used. The internal consistency coefficient of the inventory varies between .58 and .92 in the subscales. As a result of the test-retest application to determine the stability of the inventory, the reliability level of the subscales ranged between .58 and .73. The validity of the inventory was determined by looking at the degree of reflecting the expected differences in terms of abilities and interests among 1902 students from different high schools who responded to the inventory. The CSI was administered to students in the final year of eight high schools, three providing general education and five providing vocational education. Significant differences were found between the schools' mean scores at the 0.01 level (Kuzgun, 1988). In this study, Cronbach's alpha internal consistency coefficient was re-examined. For high school students, the coefficient was .837 for verbal ability, .860 for numerical ability, and .815 for shape-space ability. For university students, verbal ability was .858, numerical ability was .879, and shape-space ability was .836.

2.4. Data Collection and Analysis

This study utilized a survey technique to ascertain whether there are significant differences in occupational values and abilities between high school and university students based on gender and degree of education. The study collected data from students enrolled in various high schools and a foundation university located in Küçükçekmece, Istanbul. The data were gathered willingly through direct personal interaction. The collected data were imported into the SPSS 25.0 software. Due to 24 outliers, these values were omitted from the data analysis. To assess the data's normality, we analyzed kurtosis and skewness values. It was found that the data displayed a normal distribution between the acceptable range of +1.5 and -1.5, as shown in Table 2 (Tabachnick & Fidell, 2013). The study employed an independent samples t-test to ascertain if there were significant differences in professional values and abilities based on gender and amount of schooling.

Table 2. *Descriptive Analysis Results of High School and University Student's Professional Values and Abilities*

		N	*Mean (M)*	*Standard Deviation*	*Skewness*	*Kurtosis*
High School Students	1. Friendship	617	28.42	7.17	-.991	.494
	2. Team	617	25.05	8.07	-.495	-.521
	3. Physical	617	16.28	7.85	.375	-.386
	4. Leadership	617	26.16	7.47	-.518	-.367
	5. Freedom	617	20.70	5.75	.859	.032
	6. Profit	617	30.03	6.95	-1.353	1.396
	7. Health	617	27.42	8.41	-.813	-.261
	8. Creativity	617	24.75	7.95	-.439	-.509
	9. Help	617	27.14	7.71	-.769	-.083
	10. Verbal Ability	617	29.51	5.45	-.061	-.331
	11. Numerical Ability	617	26.51	6.52	-.177	-.448
	12. Shape-Space Talent	617	26.44	5.97	.116	-.340
University Students	1. Friendship	784	29.31	6.66	-1.120	.826
	2. Team	784	25.79	7.61	-.608	-.279
	3. Physical	784	15.50	8.28	.428	-.647
	4. Leadership	784	25.88	7.01	-428	-.542
	5. Freedom	784	20.99	5.12	-.721	-.110
	6. Profit	784	28.73	6.77	-.939	.238
	7. Health	784	29.39	7.06	-1.088	.466
	8. Creativity	784	25.72	7.03	-.488	-.376
	9. Help	784	28.97	6.59	-.937	.188
	10. Verbal Ability	784	30.88	5.47	-.317	-.250
	11. Numerical Ability	784	26.42	6.77	-.106	-.592
	12. Shape-Space Talent	784	26.38	6.19	.102	-.554

2.5. Ethical

This study was done by the principles outlined in the Declaration of Helsinki and received approval from the Human Research Ethics Committee of Istanbul Sabahattin Zaim University. The given permission number is

24.05.2024-2024/04. Data collection commenced upon the completion of ethical approval and legal approvals. The Istanbul Governorship and Istanbul Provincial Directorate of National Education have issued the necessary authorizations. Participants were initially given comprehensive information regarding the study's objectives, confidentiality policy, and participation requirements. Sharing participants' data was optional, and contact details were given if they wanted to obtain the research findings.

3. Findings

The results of the independent sample t-test analysis conducted to determine whether high school students' professional values and abilities differ significantly according to gender are presented in Table 3.

Table 3. *Findings on Vocational Values and Skills of High School Students by Gender*

	Gender	*N*	*M*	*Sd*	*df*	*t*	*p*
1. Friendship	Female	395	28,4962	6,92284	614	.418	.676
	Male	221	28,2443	7,60227			
2. Team	Female	395	24,5696	7,74545	614	1.971	.049*
	Male	221	25,9412	8,57063			
3. Physical	Female	395	15,2405	7,47248	614	4.296	.000*
	Male	221	18,1086	8,20072			
4. Leadership	Female	395	25,6734	7,58319	614	2.121	.034*
	Male	221	27,0000	7,18901			
5. Freedom	Female	395	20,1646	5,84319	614	3.090	.002*
	Male	221	21,6471	5,46579			
6. Profit	Female	395	29,8962	6,84060	614	.588	.557
	Male	221	30,2398	7,16249			
7. Health	Female	395	27,3316	8,31541	614	.305	.760
	Male	221	27,5475	8,60833			
8. Creativity	Female	395	23,7056	7,98374	614	3.721	.000*
	Male	221	26,5656	7,54390			
9. Help	Female	395	28,0456	6,96568	614	4.417	.000*
	Male	221	25,5113	8,68102			
10. Verbal Ability	Female	395	30,0076	5,36935	614	2.829	.005*
	Male	221	28,7195	5,51140			
11. Numerical Ability	Female	395	26,4456	6,47596	614	.301	.763
	Male	221	26,6109	6,64165			
12. Shape-Space Talent	Female	395	26,0152	5,85222	614	2.322	.021*
	Male	221	27,1765	6,13119			

According to the information in Table 2, it was determined that high school students' vocational values of friendship [t(614)=.418, p>.05], gain [t(614)=.588, p>.05], health [t(614)=.305, p>.05] did not differ significantly according to gender. In addition, high school students' professional values of team [t(614)=.1.971, p<.05], physical [t(614)=.4.296, p<.05], leadership [t(614)=2.121, p<.05], freedom [t(614)=3. 090, p<.05], helping [t(614)=3.721, p<.05] and creativity [t(614)=4.417, p<.05] values differed significantly according to gender. Among these values, team, physical, leadership, freedom, and creativity were significantly higher in male students, whereas help was significantly higher in female students.

Once again, the study revealed no statistically significant disparity in the numerical aptitude of high school pupils based on gender [t(614)=.301, p>.05]. Furthermore, the study revealed substantial gender differences in verbal ability [t(614)=2.829, p<.05] and shape-space ability [t(614)=2.322, p<.05]. The study revealed that women outperformed men in linguistic ability, but males excelled in shape-space ability.

The results of the independent sample t-test analysis conducted to determine whether university students' professional values and abilities differ significantly according to gender are presented in Table 4.

Table 4. *Findings on University Students' Professional Values and Abilities by Gender*

	Gender	*N*	*M*	*Sd*	*df*	*t*	*p*
1. Friendship	Female	566	29,7756	6,35032	781	3.028	.003*
	Male	217	28,0737	7,28736			
2. Team	Female	566	25,9700	7,43854	781	1.111	.267
	Male	217	25,2949	8,03151			
3. Physical	Female	566	14,6678	8,13901	781	4.582	.000*
	Male	217	17,6590	8,27501			
4. Leadership	Female	566	25,8710	6,96738	781	.008	.993
	Male	217	25,8664	7,14503			
5. Freedom	Female	566	21,1325	4,87781	781	1.210	.227
	Male	217	20,6037	5,68376			
6. Profit	Female	566	29,1378	6,52012	781	2.639	.009*
	Male	217	27,6452	7,29018			
7. Health	Female	566	29,8375	6,76601	781	2.764	.004*
	Male	217	28,1982	7,66560			
8. Creativity	Female	566	25,6572	6,97575	781	4.319	.000*
	Male	217	25,8341	7,15763			
9. Help	Female	566	29,6254	6,23303	781	.315	.753
	Male	217	27,2350	7,18248			
10. Verbal Ability	Female	566	31,3675	5,30979	781	4.013	.000*
	Male	217	29,6313	5,69377			
11. Numerical Ability	Female	566	26,2244	6,91881	781	1.256	.209
	Male	217	26,9032	6,35193			
12. Shape-Space Talent	Female	566	26,0618	6,24979	781	2.419	.016*
	Male	217	27,2535	5,95238			

According to the information in Table 3, it was determined that university students' professional values of the team [t(781)=1.111, p>.05], leadership [t(781)=.008, p>.05], freedom [t(781)=1.210, p>.05] and creativity [t(781)= .315, p>.05] did not differ significantly according to gender. In addition, it was found that high school students' values of friendship [t(781)=3.028, p<.05], physical [t(781)=4.582, p<.05], earning [t(781)=2.639, p<.05], health [t(781)=2.764, p<.05] and helping [t(781)=4.319, p<.05] of professional values differed significantly according to gender. It was found that female university students had significantly higher friendship, earning, and health values, while males had significantly higher physical and creative values.

Again, it was found that there was no significant difference in the numerical ability of university students in terms of ability according to gender [t(781)=1.256, p>.05]. In addition, it was found that verbal ability [t(781)=4.013, p<.05] and shape-space ability [t(781)=2.419, p<.05] levels differed significantly according to gender. This difference was found to be in favor of women in verbal ability and favor of men in shape-space ability.

The results of the t-test analysis conducted to determine whether the vocational values and abilities of the students participating in the study differed significantly according to their high school or university education status are presented in Table 5.

According to the information in Table 5, the values of team [t(1399)=1.766, p>.05], physical [t(1399)=1.787, p>.05], leadership [t(1399)=.719, p>.05] and freedom [t(1399)=.979, p>.05] among the professional values of the participants in the study did not differ significantly according to their high school or university education. In addition, friendship [t(1399)=2.416, p<.05], gain [t(1399)=3.517, p<.05], health [t(1399)=4.656, p<.05], creativity [t(1399)=2.414, p<.05] and help [t(1399)=4.787, p<.05] values were found to differ significantly according to the level of education. This difference favored university students in friendship, health, creativity, and help and high school students in the value of gain.

Again, it was found that there was no significant difference in numerical [t(1399)=.240, p>.05] and shape-space [t(1399)=.155, p>.05] abilities of university students according to their educational status. Verbal ability was found to differ significantly in favor of university students [t(1399)=4.013, p<.05].

Table 5. *Findings Regarding the Level of Education of High School and University Students*

		N	*M*	*Sd*	*df*	*t*	*p*
1. Friendship	High School	616	28,4165	7,16797	1399	2.416	.016*
	University	784	29,3125	6,66230			
2. Team	High School	616	25,0519	8,06833	1399	1.766	.078
	University	784	25,7946	7,61057			
3. Physical	High School	616	16,2771	7,85250	1399	1.787	.074
	University	784	15,5038	8,27774			
4. Leadership	High School	616	26,1621	7,46613	1399	.719	.472
	University	784	25,8827	7,01733			
5. Freedom	High School	616	20,7050	5,74969	1399	.979	.328
	University	784	20,9936	5,11689			
6. Profit	High School	616	30,0259	6,95015	1399	3.517	.000*
	University	784	28,7296	6,76807			
7. Health	High School	616	27,4230	8,41560	1399	4.656	.000*
	University	784	29,3890	7,05754			
8. Creativity	High School	616	24,7516	7,94851	1399	2.414	.016*
	University	784	25,7194	7,02761			
9. Help	High School	616	27,1410	7,70970	1399	4.787	.000*
	University	784	28,9719	6,59341			
10. Verbal Ability	High School	616	29,5559	5,45321	1399	4.013	.000*
	University	784	30,8814	5,46905			
11. Numerical Ability	High School	616	26,5057	6,52570	1399	.240	.810
	University	784	26,4196	6,76790			
12. Shape-Space Talent	High School	616	26,4360	5,97094	1399	.155	.877
	University	784	26,3852	6,18713			

4. Discussion and Conclusions

This study attempted to examine the occupational values and talents of high school and university students based on gender and educational level characteristics. The results indicated no significant differences between male and female high school students' friendship, earning, and health values. Furthermore, it was shown that there were significant gender differences in high school students' vocational values about teamwork, physicality, leadership, freedom, assistance, and innovation. Male students exhibited much higher levels of team, physical, leadership, freedom, and creativity values, whereas female students demonstrated significantly higher levels of helping value. Upon reviewing the literature, a study conducted by Atlı and Kaya (2017) analyzed the vocational values of high school students based on their gender and desired career fields. The study found that female students' top three vocational values were friendship, assistance, and occupational health. Male students' top three vocational values were money gain, companionship, and help. These findings indicate notable gender disparities in the values associated with teamwork, physical fitness, leadership, independence, cooperation, and innovation. Male students rated teamwork, physical fitness, leadership, freedom, and innovation much higher, and female students rated cooperation significantly higher. Cooperation is the most esteemed professional value among female pupils. Multiple research in the literature (Cowan & Khatchadourian, 2003; Ekren, 2001; Gini et al., 2007; Wied, Branje, & Meeus, 2007) consistently indicate that girls are more prone to forming social connections and have greater empathic tendencies. Meikle (2008) conducted a study on the professional values of university students and discovered that female students placed a higher importance on assisting others than male students. The survey revealed minimal disparity in male and female students' top three occupational priorities, including friendship, financial gain, and well-being. This demonstrates that additional research in the existing body of literature corroborates this discovery. According to Atlı and Kaya (2016), the occupational values of male students consist of friendship, money gain, and assistance. According to this survey, male students placed greater importance on health, friendship, and income in their professional values, whereas female students valued help, friendship, and money.

According to the gender of university students, there is a significant difference between the verbal and shape-space abilities of male and female students; the difference favors the former in verbal ability and the latter in shape-space. Male university students have significantly higher values for physical appearance and creativity, while female students have significantly higher values for friendship, income, and health. Once again, there was no significant difference in the numerical ability of university students according to their gender. However, it was found that there were significant differences between genders in verbal ability and shape-space ability levels. This difference was found to be in favor of males in figure-space ability and favor of females in verbal ability. When the studies in the literature are examined, it is seen that female students prioritize masculine values (rational, ambitious, talented, responsible, independent, freedom, exciting life, comfortable life) that prioritize caring for others more than male students. Male students also prioritize values traditionally considered feminine, such as universality, though not to the same extent as female students. This aligns with Koca's (2010) findings, which highlight a gradual shift in gendered value perceptions, suggesting that male students increasingly recognize the importance of empathy and inclusivity in diverse social and professional contexts. Incorporating such values into their decision-making reflects broader societal changes in gender roles and expectations. The findings of the study show that gender roles have an impact on specific professional values. For example, "helping" is considered an appropriate professional value for girls. Students may have preconceived ideas about specific career values that are appropriate for them, especially in career counseling, but are not socially acceptable due to gender role expectations. In general, for men, the possibility of earning money from a career is a much more important factor than for women. Among students who did not choose a career in science or engineering, genuine interest in a career was found to be a more critical factor for women than for men (Dick & Rallis, 1991). However, among the group of academically well-prepared students, none of these gender inequalities are evident. The professions of law, business, and medicine attracted more academically well-prepared women than engineering, accounting for half of all career choices. These women may see advanced math and science courses as excellent general college preparation rather than specific preparation for a particular career.

The fact that students choose personality as the "most" significant factor in their career choice and then "definitely make a career choice" because they "make the career choice on their own" supports what the literature has been saying for a long time. Students need to be confident in who they are and know themselves well enough to base their career decisions on this confidence (Borchert, 2002). Both career decision-makers perceived their interests, values (i.e., expected outcomes and working conditions), and abilities as important factors in terms of the choice options they both expected to pursue and eliminate, supporting the importance of personal factors in the selection process (Betsworth & Fouad, 1997; Lent et al., 1994). Almost all students thought motivation was the most important factor in career choice (Khaled et al., 2024). A career choice model was created based on the variables affecting career decisions. Two separate models were made for each career choice category. These models were based on "Academic Achievement" to predict career choice. The findings showed that previous grades are the most important factor in career choice, although all other factors are important. However, in the model for forced careers, only previous degree grades were important (Shahzad & Ahmed, 2014). A strong correlation was found between healthcare workers' job satisfaction and altruism, the value of serving others (Valentine et al., 2011). This research suggests that people interested in professional values that include altruistic behaviors for healthcare workers will have more job satisfaction. In Rognstad and Aasland's (2007) study, nursing students' highest-ranked professional values were helping others, communicating with them, and having a stable job. According to the study, school counselors play a small role in assisting students to make appropriate career decisions. It also shows that young people are open to influence and are influenced by their peers and the media regarding career decision-making. It also emphasizes the importance of teachers in inspiring and motivating their students (Kazi & Akhlaq, 2017). Another factor that attracts students to careers in the workplace. According to the study, parents' jobs do not put pressure or influence on students attending these institutions. It also shows that girls tend to be more oriented and dependent on their peers for guidance (Alemu, 2013). In conclusion, personality, motivation, academic achievement, and personal factors are important in students' career choices. Research emphasizes the importance of students making more conscious career choices by recognizing their interests, values, and abilities. In addition, external factors such as peers, teachers, and the media also impact students' career decisions. These findings suggest that providing career counseling and guidance services to students is critical in increasing their future professional success and job satisfaction.

5. Limitations and Recommendations

There are some limitations in this study, which aims to compare the vocational values and abilities of high school and foundation university students in the Küçükçekmece district of Istanbul province, according to the factors of gender and level of education. One of the limitations of this study is that the sample is limited to high school and foundation university students in Küçükçekmece district of Istanbul province. This may limit the generalizability of the findings and make it difficult to determine whether the same results are valid for students in other regions. In addition, the limitations of the data collection tools used in the study and the accuracy of the data based on the participants' subjective opinions are among the other limitations to be considered. To generalize the results of the study to a broader audience, it is recommended that future studies should include students from different cities and various educational institutions. In addition to quantitative data, qualitative data can be collected to obtain more in-depth information on students' professional values and abilities. In addition to factors such as educational level and gender, examining other variables such as socioeconomic status, family structure, and cultural factors may contribute to a more comprehensive understanding of career choices. Especially in the vocational guidance activities that school guidance services are responsible for, the development of inaccurate gender role perceptions about professions should be avoided. The dynamic structure of vocational values is subject to change over time. It will not be sufficient to identify students' vocational values only once. Encouraging students to identify changes in their vocational values and helping them reshape their value hierarchy are important elements of this process. Therefore, policymakers need to organize continuous in-service training for students to adhere to the vocational guidance program throughout the process. This study can be renewed in various faculties of universities in different regions of Turkey (e.g., medicine, engineering, law, business/administrative sciences, education, etc.) to see more clearly the impact of gender on individual values and, thus, on career choice. Such studies would allow for the observation of how socioeconomic characteristics and regional culture interact to shape national culture.

6. References

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