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# THE RELATIONSHIP BETWEEN GENDER PERCEPTION AND ENTREPRENEURSHIP CHARACTERISTICS IN NURSING STUDENTS

HEMŞİRELİK ÖĞRENCİLERİNDE TOPLUMSAL CİNSİYET ALGISI İLE GİRİŞİMCİLİK ÖZELLİKLERİ ARASINDAKİ İLİŞKİ

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#### ABSTRACT

**Objectives:** The trend in the demand for nurses will be toward entrepreneur nurses in the next century. The study aimed to investigate the relationship between gender perception and the entrepreneurship characteristics of nursing faculty students.

**Methods:** This cross-sectional study was conducted with nursing students. The questionnaire form consisted of sociodemographic characteristics, "The Perception of Gender Scale" and "The University Students Entrepreneurship Scale". The relationship between the scales was tested with the Spearman correlation analysis. The Mann–Whitney U test and Kruskal-Wallis test were used when comparing the students' sociodemographic variables to scale scores.

**Results:** The study included 243 students with a mean age of  $20.86\pm1.06$  years, with female predominance (88.1%). The Perception of Gender Scale score was calculated to be  $103.74\pm15.52$  and, The University Students Entrepreneurship Scale score was calculated to be  $140.18\pm21.48$ . There was a statistically significant relationship between the Perception of Gender Scale and University Students Entrepreneurship Scale scores (r= 0.392; p=0.001).

**Conclusions:** The entrepreneurship levels of students increased as their positive attitudes towards gender increased in the study. The students who were men, first class, those who lived with their extended families and those who were born and raised in the eastern regions had a more patriarchal perspective. However, the gender perception of the students who were willing to continue postgraduate education and who were willing to work as academics was more positive and their entrepreneurship levels were higher than others in this study.

Keywords: Gender, Gender Perception, Entrepreneurship, Nursing Students.

#### ÖZET

Amaç: Gelecek yüzyılda, hemşire talebindeki eğilim, girişimci hemşireler yönünde olacaktır. Bu çalışmada hemşirelik fakültesi öğrencilerinin cinsiyet algısı ile girişimcilik özellikleri arasındaki ilişkinin araştırılması amaçlandı.

Yöntem: Kesitsel tipte olan bu çalışma, hemşirelik öğrencileri ile yürütülmüştür. Anket formunu sosyodemografik özellikler, "Toplumsal Cinsiyet Algısı Ölçeği" ve "Üniversite Öğrencileri Girişimcilik Ölçeği" oluşturdu. Ölçekler arasındaki ilişki Spearman korelasyon analizi ile test edildi. Öğrencilerin sosyodemografik özellikleri ile ölçek puanlarının karşılaştırılmasında Mann-Whitney U testi ve Kruskal-Wallis testi kullanıldı.

**Bulgular:** Çalışmaya yaş ortalaması 20.86±1.06 olan ve kadın ağırlıklı (%88.1) toplam 243 öğrenci dahil edildi. Toplumsal Cinsiyet Algısı Ölçeği puanı 103.74±15.52 ve Üniversite Öğrencileri Girişimcilik Ölçeği puanı 140.18±21.48 olarak hesaplandı. Toplumsal Cinsiyet Algısı Ölçeği ile Üniversite Öğrencileri Girişimcilik Ölçeği puanları arasında istatistiksel olarak anlamlı bir ilişki saptandı (r= 0.392; p=0.001).

**Sonuç:** Araştırmada öğrencilerin toplumsal cinsiyete yönelik olumlu tutumları arttıkça girişimcilik düzeylerinin de arttığı belirlendi. Erkek, birinci sınıf, geniş aile ile yaşayan ve doğuda bölgelerde doğup büyümüş öğrenciler daha ataerkil bir bakış açısına sahipti. Bu çalışmada lisansüstü eğitime devam etmek isteyen ve akademisyen olarak çalışmak isteyen öğrencilerin cinsiyet algılarının daha olumlu olduğu ve girişimcilik düzeylerinin diğerlerine göre daha yüksek olduğu belirlendi.

Anahtar kelimeler: Toplumsal Cinsiyet, Toplumsal Cinsiyet Algısı, Girişimcilik, Hemşirelik Öğrencileri.

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#### **INTRODUCTION**

Gender perception reflects the self-evaluation of individuals concerning gender-specific roles and responsibilities, which are determined according to social norms (Ponge, 2013). This self-evaluation of the individual means how an individual perceives the equality of women and men in social fields such as education, health, work, law and politics. Gender perception fundamentally indicates the personal approach to "gender equality" (Altınova and Duyan, 2013; Pryzgoda and Chrisler, 2000). There are significant differences between women and men in terms of participation in the labor force, education, domestic roles, and responsibilities (Hawkes and Buse, 2013; Goktan and Gupta, 2015; Ponge, 2013; United Nations, 2015; United Nations, 2020). The gender roles, are attributed to women in many cultures, are childcare, meeting the needs of family members and daily housework. These roles keep women outside of the social production and labor force and make them socially and economically dependent and consumers. The fact that women fall behind in education and labor due to gender inequality and, thus, become only consumers in society constitutes a barrier to the improvement and development of that society (Falkd and Hermle, 2018; Hawkes and Buse, 2013). The behavioral patterns that women acquire from society from the time they are born and the inequality of opportunity between genders make it difficult to develop leadership, autonomy, and entrepreneurship characteristics in the labor life of women (Henry et al., 2015).

"Entrepreneurship" is defined as individuals organizing any activity, managing risks and taking action in society (Andrade, Dal Ben and Sanna, 2015; Faugier, 2005). One common characteristic of successful entrepreneurs is being male (Artz, 2017; Klapper and Parker, 2011; Shinnar, Giacomin & Janssen, 2012). It is reported that cultural values and gender constitute obstacles for women to be successful entrepreneurs (Blackmore & Sawers, 2015; Henry et al., 2015; Shinnar, Giacomin and Janssen, 2012). Although it is reported that the number of female entrepreneurs has increased in the last 20 years, the dominance of men continues in corporate decision-making positions ((Blackmore and Sawers, 2015; Ma Cañizares and García, 2010).

One of the fields where female employment is the highest in the world is the healthcare sector and, specifically, the nursing profession (Wan Chik et al., 2012; World Health Organization [WHO], 2008). Nurse entrepreneurs play a key role for patients and healthy individuals by ensuring the best treatment, care, education, and consulting services with an innovative approach, expanding the range of services, and increasing the quality of nursing care (Boore and Porter, 2011; Faugier, 2005; Sharp, 2014). For that reason, entrepreneurship is considered to be one of the recently defined roles of nursing. It is reported that the trend in the demand for nurses will be towards entrepreneur nurses throughout the world in the next century (Bodur, 2018; Boore and Porter, 2011; Elango, Hunter and Winchell, 2007; Sharp, 2014). However, most of the nurses across many countries are women, which causes the nursing profession to be exposed to gender inequality (Carvalho, Rui and Santiago, 2009; Faugier, 2005). Male nurses with postgraduate education receive quick promotions to management positions and earn higher incomes in senior positions, indicating it is necessary to look at the entrepreneurship potential of nurses from a gender perspective (Brown, 2009; McDonald, 2013). On the other hand, it is also reported in the literature that male nurses are discriminated against during nursing education and their professional life (Arnaert et al., 2018; Bodur, 2018; Boore and Porter, 2011; Kouta and Kaite, 2011; McLaughlin, Muldoon and Moutray, 2010; Nurluöz and Esmailzadeh, 2011; Sharp, 2014). Integrating knowledge and skills focused on entrepreneurship in nursing education and encouraging students by revealing their innovative and creative aspects will contribute significantly to professional development (Arnaert et al., 2018; Bodur, 2018; Boore and Porter, 2011; Kouta and Kaite, 2011; Nurluöz and Esmailzadeh, 2011; Sharp, 2014). So far, no research has been found in the literature that evaluates together the gender perceptions and entrepreneurship characteristics of nursing students. The aim of the study was to investigate the relationship between gender perception and the entrepreneurship characteristics of nursing students.

#### MATERIAL AND METHOD

#### **Study Design and Sample**

This cross-sectional research was carried out between March 2018 and July 2018. Nursing students of Health Sciences University, Gulhane School of Nursing in Turkey in the 2017-2018 academic year. The universe of the study composed of 414 nursing students. The sample size was calculated as at least 200 students at an 95% confidence level and 5% error margin. Although it was aimed to reach entire

population, 259 students were volunteered to participate. Sixteen students were excluded from the study, as they did not fill in the questionnaire completely. The study sample consisted of 243 students. The aim of the study was explained by the researchers in a classroom setting, and the students were invited to participate in the study. Students who did not participate in the study were directed to another class. Consent and questionnaire forms were distributed to the students who volunteered to participate in the study.

#### **Data Collection**

The two-part questionnaire was developed after the literature review by the researchers (1,5,8,10,11,14). The first part consisted of 32 questions including sociodemographic questions, including students' age, gender, class, family structure, region of residence, participation in club activities, entrepreneurship characteristics and career plans after graduation. The second part included the "Perception of Gender Scale (PGS)" and "University Students Entrepreneurship Scale (USES)".

#### **Perception of Gender Scale**

The PGS was developed by Altınova & Duyan in 2013 to evaluate the gender perception of individuals (Altınova and Duyan, 2013). PGS consists of 25 single-dimension items on a five-point Likert-style scale. In each item, participants express their opinion about the described situation as "5=strongly agree," "4=agree," "3=neutral," "2=disagree," or "1=strongly disagree." The score range is between 25 and 125 points. Cronbach's  $\alpha$  was reported as 0.87 in the original study. High scores obtained from the scale indicate that gender perception is positive (Altınova and Duyan, 2013).

### **University Students Entrepreneurship Scale**

The USES was developed by Yılmaz and Sunbul in 2009 to determine the entrepreneurship level of university students. The scale consists of 36 single-dimension items (Yılmaz and Sunbul, 2009). In the five-point Likert-style scale, each item is graded as "1=never," "2=seldom," "3=sometimes," "4=often," or "5=very often." The score range of the scale is between 36 and 180 points. Participants are classified as "very low entrepreneurship" (36-64 points); "low entrepreneurship" (65-92 points); "moderate entrepreneurship" (93-123 points); "high entrepreneurship" (124-151 points) and "very high entrepreneurship" (152-180 points). Cronbach's  $\alpha$  was reported as 0.90 in the original study (Yılmaz and Sunbul, 2009).

#### **Study outcomes**

The primary outcome of the study was to investigate the relationship between gender perception and the entrepreneurship characteristics of nursing students. Secondary outcomes of the study were to evaluate the gender perception and entrepreneurship characteristics of students according to various characteristics such as class, sex, and family structure.

#### **Data Analysis**

Statistical Package for Social Sciences (SPSS) for Windows, Version 20.0. (IBM Corp., Armonk, NY, USA) software was used for the statistical analysis of the data. The data are shown as number and percentage calculations for the variables determined by counting and as the mean  $\pm$  standard deviation for the variables determined by measurement. For comparative statistics, whether the sample shows normal distribution was analyzed with the Kolmogorov-Smirnov test. As the data did not show normal distribution characteristics, nonparametric tests were used. The PGS and USES were evaluated based on total mean scores, and the relationship between the two scales was tested with the Spearman correlation analysis. The values of correlation coefficient were evaluated as r=0.2–0.39 "weak correlation," r=0.4–0.59 "moderate correlation," and r=0.6–0.8 "strong correlation" (Akoglu, 2018). Cronbach's  $\alpha$  was calculated to determine the internal consistency value of both scales in this study. The Mann–Whitney U test and Kruskal-Wallis test were used when comparing the students' sociodemographic variables to scale scores. In statistical decisions, p<0.05 level was considered to be an indicator of a significant difference.

### RESULTS

The sample size of the study was 243 nursing student. The mean age of the students was  $20.86\pm1.06$  (18-24 years), 88.1% (n=214) were female, 42.4% (n=103) were third class. In the study 14.4% (n=35) lived with their extended family, and 38.3% (n=93) were from the Central Anatolia Region. Parental education was less than eight years in 69.1% (n=168) of mothers, and 43.2% (n=105) of fathers. Parental working status was 96.7% (n=235) among fathers and 25.5% (n=62) among mothers (Table 1). Because of not filling the questionnaire completely, 16 students were excluded from the study.

**Table 1.** The sociodemographic characteristics of the students (n=243)

Characteristic	Mean±SD	Μ	inMax
Age	20.86±1.06	18-24	
		n	%
Sex	Female	214	88.1
	Male	29	11.9
	First class	83	34.2
Class	Third class	103	42.4
	Fourth class	57	23.5
Family structure	Nuclear	208	85.6
	Extended	35	14.4
	Marmara	37	15.2
	Aegean	37	15.2
Region of residence	Mediterranean	27	11.1
Region of residence	Black Sea	24	9.9
	Central Anatolia	93	38.3
	Eastern/South-Eastern Anatolia	25	10.3
Mothers' education status	<8 years	168	69.1
moments cuucanon status	≥8 years	75	30.9
Fathers' education status	<8 years	105	43.2
	≥8 years	138	56.8
Mothor's working status	Working	62	25.5
Mother's working status	Not working	181	74.5
Father's working status	Working	8	3.3
Father's working status	Not working	235	96.7
Doution of the state	Yes	148	60.9
Participating in club activities	No	95	39.1
	Women have higher entrepreneurship	26	10.7
	characteristics	20	10.7
	Men have higher entrepreneurship	27	11.1
How do you evaluate	characteristics	21	11.1
entrepreneurship according to	Entrepreneurship characteristics are equal for	75	30.9
sexes?	both genders	15	50.5
	Entrepreneurship is a characteristic	106	43.6
	independent from gender		
	No idea	9	3.7
Nursing is a job that men are	Yes	6	2.5
ashamed of.	No idea	20	8.2
	No	217	89.3
Believing in finding a job after	Yes	189	77.8
graduation	Neutral (n=50)/No (n=4)	54	22.2
Willing to continue	Yes	201	82.7
postgraduate education after graduation	No	42	17.3
Willing to work as an	Yes	134	55.1
"Academician" after graduation	No	109	44.9

In this study, the PGS mean score was 103.74 $\pm$ 15.52 (Table 2). The Cronbach's  $\alpha$  value was 0.92 for the PGS in the current study. There were statistically significant differences in the PGS scores by some of the study variables, including "class," "sex," "family structure," "region of residence," "assessment of entrepreneurship according to sex," "nursing is a job that men are ashamed of," "willing to continue postgraduate education," and "willing to work as an academician after graduation" (p<0.05) (Table 3).

**Table 2.** The Students' PGS and USES scores characteristics and the relationship between PGS and USES scores (n=243)

Scales	Mean±SD	Minimum	Maximum	Range of score	r	р
PGS	$103.74 \pm 15.52$	34	125	25-125	0.202	0.001
USES	$140.18 \pm 21.48$	78	180	36-180	- 0.392	0.001

r=Spearman Correlation analysis

Characteristics		PGS			USES		
Characteristics		Mean±SD	р	test	Mean±SD	р	test
Class	First class	$100.16 \pm 16.58$	0.04	6.432ª	$135.83 \pm 20.68$	0.01	9.411ª
	Third class	$105.75 \pm 13.06$			$140.00 \pm 21.22$		
	Fourth class	$105.35 \pm 17.30$			146.82±21.76		
g	Female	105.51±14.35	0.001	4.218 <sup>b</sup>	139.69±21.76	0.27	1 100h
Sex	Male	90.69±17.77	0.001		143.76±19.20		1.108 <sup>b</sup>
	Nuclear/other	104.69±15.30	0.01	0 402h	139.98±22.34	0.01	0.041h
Family structure	e Extended $98.14\pm15.93$ <b>0.01</b> 2.483	2.483 <sup>b</sup>	141.34±15.62	0.81	0.241 <sup>b</sup>		
	Marmara	103.59±13.72		16.927ª	138.76±21.88		
	Aegean	104.43±14.79			137.11±16.70		
	Mediterranean	107.26±11.71			143.52±20.79		
Region of residence	Black Sea	105.75±14.42	0.005		139.25±22.15	0.594	3.694 <sup>a</sup>
residence	Central Anatolia	105.03±16.95			142.23±22.81		
	Eastern/South-						
	Eastern Anatolia	92.44±14.63			136.48±22.79		
Participating in	Yes	102.93±16.13	0.265	o oo ch	143.22±20.78	0.010	a a ch
club activities	No	105.01±14.52	0.365	0.906 <sup>b</sup>	135.44±21.79	0.018	2.36 <sup>b</sup>
How do you evaluate entrepreneurship according to sexes?	Women have higher entrepreneurship characteristics Men have higher entrepreneurship characteristics Entrepreneurship characteristics are equal for both sex Entrepreneurship is a characteristic independent from sex	100.73±14.60 94.22±18.39 103.08±16.74 107.95±12.13	0.002	16.739ª	132.69±22.52 137.85±24.89 142.51±22.80 141.63±19.83	0.136	6.999ª
	No idea	$97.00{\pm}19.46$			$132.22 \pm 5.61$		
Nursing is a job	Yes, agree	88.50±15.66			$133.00 \pm 20.52$		
that men are	No idea	$97.65 \pm 15.84$	0.009	9.513ª	$134.35 \pm 18.20$	0.345	2.129 <sup>a</sup>
ashamed of	Not agree	$104.73 \pm 15.21$			140.91±21.74		
Believing in	Yes	104.26±16.19			141.70±21.67		
finding a job after graduation	Neutral (n=50)/No (n=4)	101.93±12.91	0.079	1.758 <sup>b</sup>	134.83±20.05	0.021	2.311 <sup>b</sup>
Willing to continue	Yes No	104.71±15.16 99.14±16.53	0.036	2.097 <sup>b</sup>	142.17±21.28 130.62±20.02	0.001	3.208 <sup>b</sup>

Table 3. The comparison of some characteristic of students to PGS and USES scores (n=243)

Ozdemir et al.	The Relationsh	ip between Gender P	Gender Perception and Entrepreneurship				tics in dents.
postgraduate education after graduation							
Willing to work	Yes	106.90±13.92			143.07±22.15		
as an "Academician" after graduation	No	99.87±16.56	0.001	3.398 <sup>b</sup>	136.61±20.15	0.024	2.252 <sup>b</sup>
a= Kruskal Wallis Test,	b= Mann-Whitney U-test.						

According to students' scores of the PGS there was a statistically significant differences between three class (H=6.432; p=0.04). It was found that the first-class students' PGS score had low (100.16±16.58) than the others (Table 3). There were statistically significant differences between the first- and third-class students' PGS scores (z=2.153; p=0.031) and, the first and fourth class students' PGS scores (z=2.168; p=0.03), while there was not a statistical difference between the third and fourth class students' PGS scores (z=0.258; p=0.611).

It was determined that the students living in Eastern and Southeastern Anatolia Regions had a lower PGS score (92.44 $\pm$ 14.63) than the students living in all other regions (Table 3). There were statistically significant differences between Marmara and Eastern/South-Eastern Anatolia (z=2.685; p=0.007), Aegean and Eastern/South-Eastern Anatolia (z=2.936; p=0.003), Mediterranean and Eastern/South-Eastern Anatolia (z=3.665; p=0.001), Black Sea and Eastern/South-Eastern Anatolia (z=2.962; p=0.003), Central Anatolia and Eastern/South-Eastern Anatolia (z=3.739; p=0.001). In comparisons analysis there was not a statistically significant differences between other five regions.

When the responses given to the "How do you evaluate entrepreneurship according to sexes?" question were examined, the PGS score of the students who agreed that "Men have higher entrepreneurship characteristics" was the lowest  $(94.22\pm18.39)$ , and the PGS score of students who agreed that "Entrepreneurship is a characteristic independent from sex" was higher  $(107.95\pm12.13)$  than all other groups (H=16.739; p=0.002) (Table 3). It was determined that the significant differences between PGS scores of the students who agreed that "Men have higher entrepreneurship characteristics," and the students who agreed that "Entrepreneurship characteristics are equal for both sex" (z=2.212; p=0.027), and the students who agreed that "Men have higher entrepreneurship characteristics" and, the students who agreed that "Entrepreneurship is a characteristic independent from sex" (z=3.576; p=0.001). There was not a statistically significant differences between other groups comparisons.

When the responses given to the "Nursing is a job that men are ashamed of" question were examined, the PGS score of the students who answered that "Yes" was the lowest ( $88.50\pm15.66$ ), and the students who answered that "No" was higher ( $104.73\pm15.21$ ) than all other groups (H=9.513; p=0.009) (Table 3). According to the PGS scores, it was found that the significant difference between the students' responses to "Nursing is a job that men are ashamed of " question the students who said that "Yes" and students who said that "No" (z=2.368; p=0.018). There was not a statistically significant differences between other groups comparisons.

		(1 2 .0)
	n	%
Very low entrepreneurship	3	1,2
Low entrepreneurship	51	21,0
Moderate entrepreneurship	132	54,3
High entrepreneurship	57	23,5

Table 4. The distribution of the students according to their USESS scores (n=243)

The USES mean score was calculated as  $140.18\pm21.48$  for this study (Table 2). The Cronbach's  $\alpha$  value was 0.95 for USES in the current study. According to the USES classification, 1.2% of the students (n=3) had very low, 21.0% (n=51) had low, 54.3% (n=132) had moderate and 23.5% (n=57) had high levels of entrepreneurship (Table 4). It was determined that there were statistically significant differences between the students' USES scores and the variables examined in this study, including "class," "participation in club activities," "believing in finding a job after graduation," "willing to continue postgraduate education," and "willing to work as an academician after graduation" (p<0.05) (Table 3).

It was found that the fourth class students' USES score had higher ( $146.82\pm21.76$ ) than the other two class (H=9.411; p=0.01) (Table 3). According to the USES scores, there were statistically significant differences between the first and fourth class students' scores (z=2.908; p=0.004) and, the third and fourth class students' scores (z=2.280; p=0.023), while there was not a statistical difference between the first and third class students' scores (z = 1.207; p=0.227).

When examined the relationship between the students' PGS and USES scores, there was a positive and low correlation between the mean PGS and USES scores was found (r=0.392; p=0.001) (Table 2).

## DISCUSSION

## Gender perception according to some characteristics of students

The students' gender perception level was found to be quite high in this study (Table 2). The results in relation to class, sex and family structure (Table 3) were similar to the gender perception patterns described in the literature (Sis Celik et al., 2013). According to results to improve the gender perception of nursing students, specific groups such as "first class", "male" and "students living with their extended families" might be evaluated more cautiously in the education process, and they might be guided towards activities that would evoke positive attitudes. Gender perception is exhibited by individuals' selfevaluation in relation to gender-specific roles, and responsibilities are determined according to social norms (Altinova and Duyan, 2013). In a study carried out in Turkey that evaluate the gender perceptions of university students, more patriarchal approaches were reported by the following groups: the students at lower class compared to the students at higher class, male compared to female and those living with their extended families compared to those with nuclear families (Sis Çelik et al., 2013). According to result of this study, the gender perception of the students who lived in the "eastern regions" were significantly lower than other regions, in accordance with the cultural norms of that regions (Table 3). Gender may vary according to the region of origin of the family. Eastern Turkey is more patriarchal in terms of gender compared to other regions of the country (Ökten, 2009; Özpulat, 2016). The results obtained in this study also support those data. Behaviours specific to gender should not be evaluated independently from the environment in which the students were born and raised. The students who moved to large cities from eastern regions for their university education might be considered to be an opportunity group for improving gender perceptions.

In this study, the gender perception of students who supported the statement "Men have higher entrepreneurship characteristics" was significantly lower compared to other students. However, the gender perception of the students who supported the statement "Entrepreneurship is a characteristic independent from gender," which directly reflects a perspective of gender equality, was significantly higher than all the other students (Table 3). These results might be interpreted to be that most of the nursing students do not discriminate by gender in relation to entrepreneurship. No literature was found related to this issue, that's why this result could not be compared to literature. Being "male" is one of the characteristics of being a successful entrepreneur (Artz, 2014; Klapper and Parker, 2011; Shinnar, Giacomin & Janssen, 2012). The most significant barriers for women to being successful entrepreneurs are cultural norms and gender is reported in the literature (Henry et al., 2015; Shinnar, Giacomin & Janssen, 2012).

The gender perception level of students who answered "No" for the question "Nursing is a job that men are ashamed of" was significantly higher than those who answered "Yes." (Table 3). All around the world, the number of female nurses is disproportionally higher than the male nurses. This situation is considered as both an advantage and disadvantage for the male nurses (Brown, 2009; McDonald, 2013; Kouta and Kaite, 2011). It is reported that society adopted the male nurse image to a great extent in Turkey (Arslan, Ağacdiken and Alkan, 2016; Kaya, Turan and Öztürk, 2011). In that context, it might be interpreted that the majority of nursing students naturally accept the existence of men in the nursing profession.

Another striking result of this study was that the gender perception of students who were willing to continue postgraduate education and who were willing to work as an academician was significantly higher than that of students who were not willing to continue their education (Table 4). In accordance with these results, it is anticipated that egalitarian colleagues will contribute to professional development and improvement in terms of gender in the near future.

### Entrepreneurship to some characteristics of students

The students' entrepreneurship level was found to be quite high in this study (Table 2, Table 4). Approximately eight out of ten students (77.8%) demonstrated moderate and high entrepreneurship characteristics (Table 4). It was found that the students' entrepreneurship levels increased as they were closer to graduation (Table 4). In recent years, university education in many countries has focused on young people's innovation, creativity, and entrepreneurship, according to the requirements of the age (Artz, 2017; Boore and Porter, 2011; Goktan and Gupta, 2015). Entrepreneurship is considered to be key to economic development (Goktan and Gupta, 2015). Contrary to the current study, in a study conducted with students who had a university education in Health Management in Turkey, it was reported that the entrepreneurship level of the first-class students was highest and there was no difference between classes (Gemlik and Kıraç, 2013). It was thought that the difference between the two studies was caused by the difference in university departments.

The nursing students who believed that they would find a job after graduation had significantly high entrepreneurship levels in this study, (Table 3). In that respect, it is important that students to be aware of their entrepreneurship roles and encouraged to participate in various activities to improve their skills during their education. Career planning after graduation is associated with entrepreneurship (Bodur, 2018). As is described in the literature and, also detected in the current study that the entrepreneurship levels of those who were willing to continue postgraduate education and willing to work as an academician was significantly higher than the students who were not willing to continue education (Çakır Dolu, Dönmez Temuçin and Arslan Özkan, 2016). It is important to evaluate and support the entrepreneurship characteristics of students within the scope of academic consulting as carried out by academicians at universities and raise their awareness of postgraduate education in accordance with their knowledge and skills.

In the current study, no difference was determined between the entrepreneurship levels of students according to sex (Table 3). In a study carried out with university students in Turkey, it was determined that there was no relationship between the sex and entrepreneurship levels of students (Gemlik and Kıraç, 2013). In a study carried out with business students in four countries of different cultures, it was reported that the entrepreneurship orientation of men was higher than that of women (Goktan and Gupta, 2015). It was thought that this difference was caused by the fact that different aspects of entrepreneurship were discussed in the studies.

#### The relationship between gender perception and entrepreneurship

One of the main results of this study was that the students' gender perception levels increased as their entrepreneurship level increased (Table 2). Although there are a limited number of studies that discuss gender and entrepreneurship separately in the literature, no observational study was found so far that evaluates both together (Andrade, Dal Ben, Sanna, 2015; Arnaert et al., 2018; Bodur, 2018; Boore and Porter, 2011 Carvalho, Rui & Santiago, 2009; Elango, Hunter & Winchell, 2007). According to this data, if the gender perception of nursing students is positive, in other words, as their attitudes towards gender become increasingly egalitarian, their entrepreneurship levels also increase. In that respect, it is considered that the gender perception of colleagues might be improved to accelerate entrepreneurship in nursing.

## **Study limitations**

The limitations of the study were due to the new structure in the nursing school there were not second class students, when the study conducted in, and the study can only be generalized for the nursing school because of the cross-sectional study design.

#### CONCLUSION

According to the main result obtained in this study, the entrepreneurship levels of students increased as their positive attitudes towards gender increased. Other significant results obtained in this study were that men, first class students, those who lived with their extended families and those who were born and raised in the eastern regions had a more patriarchal perspective. However, the gender perception of the students who were willing to continue postgraduate education and who were willing to work as academician was more positive and, their entrepreneurship levels were higher than others in this study.

The gender perception and entrepreneurship levels of nursing students should be determined and learning activities might be improved and carried out by academicians in an effort to train entrepreneurial nurses of both genders. Providing new data on nursing students and nurses in different cultures may enhance different perspectives on the matter. Future studies should focus on the impact of gender and entrepreneurship education and practices on the development of students.

#### **Conflicts of Interest Statement**

No conflicts of interest have been declared by the authors.

**Ethics Committee Approval**: The study was approved by The Scientific Research Ethics Board of the University XXXXXX (Date: May 22, 2018; Approval Number: 18/147).

**Informed Consent:** Participants were informed about the scope of the study, and their verbal and written consent was obtained.

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