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The Relationship Between Nursing Students' University Quality of Life and Individual Innovation Situations

Hemşirelik Öğrencilerinin Üniversite Yaşam Kalitesi ile Bireysel Yenilikçilik Durumları Arasındaki İlişki

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ABSTRACT

Objective: This study was conducted to determine the relationship between nursing students' university quality of life and their individual innovativeness.

Methods: This descriptive, cross-sectional study was conducted with 402 student nurses studying in the nursing department of a university located in the northeast of Turkey between April and May 2019. "Descriptive Characteristics Form," "Individual Innovation Scale in Nursing," and "University Quality of Life Scale" were used to collect data. Data were analyzed using arithmetic means, standard deviation, skewness and kurtosis coefficients, t-test in independent groups, one-way analysis of variance (ANOVA), Welch ANOVA when group variances were not homogenous, Bonferroni for Post Hoc analyses and corrlation analysis.

Results: The mean score on the Individual Innovation Scale of the nursing students included in the study was 62.25 ± 7.85, and the innovativeness level was found to be "low." In the University Quality of Life Scale of the students, the mean scores were 18.32 ± 4.23 from the faculty–student communication sub-dimension, 13.17 ± 4.09 from the identity sub-dimension, 15.30 ± 2.68 from the social opportunities sub-dimension, 17.63 ± 3.63 from the participation in the decisions sub-dimension, 12.60 ± 2.56 from the student–student communication sub-dimension 10.10 ± 2.39 from the future sub-dimension, and 13.41 ± 2.47 from the classroom environment sub-dimension. It was revealed that there was a positive correlation between the Individual Innovation and University Quality of Life Scale scores of the participants. A significant increase was found ($P < .001$).

Conclusion: It was found that there was a positive and good correlation between the Individual Innovation and University Quality of Life Scale scores of nursing students, and a statistically significant increase was found in the University Quality of Life Scale score as the Individual Innovation levels increased.

Keywords: Nurse, student, quality of life, individual innovativeness

ÖZ

Amaç: Bu çalışma, hemşirelik öğrencilerinin üniversite yaşam kalitesi ile bireysel yenilikçilik durumları arasındaki ilişkiyi belirlemek amacıyla yapılmıştır.

Yöntemler: Kesitsel türde olan bu çalışma Nisan- Mayıs 2019 tarihleri arasında Türkiye'nin kuzeydoğusunda bulunan bir üniversitenin hemşirelik bölümünde okuyan 402 öğrenci hemşire ile yürütülmüştür. Verilerin toplanmasında "Tanıtıcı Özellikler Formu," "Hemşirelikte Bireysel Yenilikçilik Ölçeği" ile "Üniversite Yaşam Kalitesi Ölçeği" kullanılmıştır. Verilerin analizinde standart sapma, aritmetik ortalama, basıklık ve çarpıklık katsayıları, bağımsız gruplarda t-testi, tek yönlü varyans analizi (ANOVA), grup varyanslarının homojen olmadığı durumlarda Welch ANOVA, Post Hoc analizler için Bonferroni testleri ve korelasyon analizi kullanılmıştır.

Bulgular: Çalışma kapsamına alınan hemşirelik öğrencilerinin Bireysel Yenilik Ölçeği toplam puan ortalamasının (62,25±7,85) olup, yenilikçilik düzeyinin "düşük" olduğu bulunmuştur. Öğrencilerin Üniversite Yaşam Kalitesi ölçeğinden, "öğretim elemanı-öğrenci iletişimi alt boyutundan 18,32±4,23, kimlik alt boyutundan 13,17±4,09, sosyal olanaklar alt boyutundan 15.30±2.68, kararlara katılım alt boyutundan 17,63±3,63, öğrenci-öğrenci iletişimi alt boyutundan 12,60±2,56,

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gelecek alt boyutundan 10,10±2,39, sınıf ortamı alt boyutundan ise 13,41±2,47 olarak belirlenmiştir" Katılımcıların Bireysel Yenilikçilik ile Üniversite Yaşam Kalitesi Ölçeği puanları arasında pozitif yönde iyi seviyede bir ilişki olduğu ortaya çıkmış, Bireysel Yenilikçilik düzeyleri yükseldikçe Üniversite Yaşam Kalitesi Ölçek puanında istatistiksel olarak anlamlı bir artış olduğu saptanmıştır (P < ,001).

Sonuç: Hemşirelik öğrencilerinin Bireysel Yenilikçilik ile Üniversite Yaşam Kalitesi Ölçeği puanları arasında pozitif yönde iyi seviyede bir ilişki olduğu ortaya çıkmış, Bireysel Yenilikçilik düzeyleri yükseldikçe Üniversite Yaşam Kalitesi Ölçek puanında istatistiksel olarak anlamlı bir artış olduğu saptanmıştır

Anahtar Kelimeler: Hemşire, öğrenci, Yaşam kalitesi, bireysel yenilikçilik

INTRODUCTION

Schools have a very important place in people's lives since they help students prepare for life socially and academically and to acquire a lot of knowledge and values besides their abilities. Similarly, universities are also responsible for the development of students both in the academic and social fields, and certainly, contribute to the professional and social goals of students.[1]

It is known that university life contributes to student development in numerous areas and helps to improve students' quality of life through research and counseling.[2] The concept of quality of life is defined as "the purpose of having access to a number of things so that individuals can improve themselves, make their lives easier, and be happy."[3] The concept of "quality of university life" addresses the university students and the university life experience of the students, and the subjective feelings, satisfaction, and dissatisfaction of the university students.[4]

It can be stated that the concept of quality of university life is an important factor for university students to have a successful learning process at the university and to gain all the qualifications required by their profession.[2] Changes in science and technology are constantly pushing people toward change and innovation. This state of necessity has also been reflected in educational institutions, and a more flexible and innovative structure than in the past has been emerged in this process.[5] Institutions providing nursing education should also be open to innovation in order to provide training for innovative nurses.[6,7]

Innovation is defined as "the renewal of science and technology to provide economic and social benefits, to create inventions, to be different" and is applied in health services to improve the quality.[8-10] Innovation was the theme of the International Council of Nurses (ICN) in 2009. The ICN states that "innovation is important for improving the quality of health care and that nurses working with individuals, families, and communities in all fields play a critical role in finding new information/methods/services."[11]

Rapidly growing scientific advances and technological innovations have affected all industries, and one of the most affected areas has been the health industry. Due to many factors such as changes and increases in the types of diseases, changes in expectations of society, technological developments, acceptance of cost-effective service approaches, new circumstances, and needs that arise in the health system necessitate changes and innovations.[12,13]

Today, nurses are expected to renew themselves in every stage of health services bring innovative approaches, not only provide quality nursing care in parallel with scientific, technological, economic, social, and societal changes and developments.[7,14-16] Looking at the literature, there was no study investigating the quality of university life and individual innovativeness levels of nursing students. The quality of university life will also increase when the students who will be the nurses of the future assume the role of researchers by using their innovative aspects and receive an education based on the current literature. It is considered that the quality of university life and individual innovativeness characteristics are important for university students to have a successful learning process at the university and to gain all the qualities required by their profession. From this point of view, it is of importance to investigate whether the characteristics of innovativeness have an impact on the quality of university life of nursing students. Therefore, the present study was conducted to determine the relationship between the quality of university life of nursing students and their individual innovativeness status.

Research Question

Is there a relationship between the university life quality of nursing students and their individual innovativeness?

What are the factors affecting the university life quality of nursing students?

What are the factors affecting the individual innovativeness of nursing students?

METHODS

Research Design

This is descriptive, cross-sectional research.

Place of the Research

The study was conducted at the Atatürk University Faculty of Nursing.

Study Population and Sample

The study population consisted of 1023 students studying from the nursing faculty of a university in eastern Turkey between 2018 and 2019. No sample selection was performed in the study. All students who volunteered to participate in the study and who were accessible were included in the study. Students who did not agree to participate in the study, who were unavailable or absent at the time of data collection, and who filled out the form incompletely were not included in the study. Since it was aimed to reach the entire universe, no sampling method was used. A total of 402 students who agreed to participate in the research and gave full answers to all questions in the scales were included in the research sample. The study was conducted with 402 students.

Data Collection

The research data were collected by the researchers in the classroom environment, face-to-face in about 15 minutes using a questionnaire between April and May 2019. In addition to the introductory questions to collect descriptive characteristics of the students, the Individual Innovativeness Scale (IIS) and the Quality of University Life Scale (QULS) were used.

Individual Innovativeness Scale

It was developed by Hurt et al[17] in 1977. The original scale consists of a total of 20 items. Turkish validity and reliability of the scale on nurses was conducted by Sarıoğlu Kemer and Altuntaş[18] in 2017. Before starting the study, necessary permissions were obtained for the use of the scale. The scale consists of a total of 18 items and 3 sub-scales. In addition, it consists of 5 innovation types according to the score ranges taken from the scale. The lowest and highest scores of the 5-point Likert-type scale are 18 and 90, respectively. The Cronbach's alpha coefficient of the scale was 0.82. In this study, Cronbach's alpha coefficient was calculated to be 0.86.

The scale divides individuals into 5 different categories according to their characteristics. According to their score, individuals who scored 82 points and above were categorized as innovative, those who scored in the range of 75-82 were categorized as pioneers, those who took 66-74 points were categorized as inquisitive, those with 58-65 points were categorized as skeptics, and those scored 57 points and below were categorized as a traditionalist.[18]

Quality of University Life Scale

It was developed by Doğanay and Sarı[19] in 2004. The scale consists of 33 items and 7 sub-scales. Quality of University Life Scale is a scale including 33 items with 7 constructs. These constructs are: "Instructor-Student Relationship" (6 items), "identity" (5 items), "social opportunities" (5 items), "attendance to decisions" (6 items), "student-student relationship" (4 items), "future" (3 items), "classroom environment" (4 items). The lowest and highest scores of the 5-point Likert type scale (1=strongly disagree, 5=strongly agree) are 33 and 165, respectively. The Cronbach's alpha coefficient of the scale total was 0.85. In this study, Cronbach's alpha coefficient was calculated to be 0.88.

Evaluation of the Data

The data were evaluated by the researchers in the Statistical Package for the Social Sciences 20.0 package program in a computer environment. In the analysis of the data, arithmetic means, standard deviation, skewness and kurtosis coefficients, independent samples t-test, one-way analysis of variance (ANOVA), Welch ANOVA for non-homogeneous group variances, Bonferroni test for post-hoc analysis, and correlation analysis was used. The normal distribution of the data was tested. The normal distribution of the scale was evaluated by skewness and kurtosis values.

Ethical Aspect of the Study

Before starting the research, the approval of the Atatürk University Faculty of Nursing ethics committee dated 2019-2/11 and the research permit from the faculty administration were obtained. After informing the participating students about the research, verbal consent was obtained from the individuals who agreed to participate in the research

RESULTS

Table 1 presents the distributions of the sociodemographic characteristics and the distributions of the IIS and QULS score averages of the participants. Of the individuals included in the study, 74.4% were female, 48% were in the 20-21 age group, 72.1% were graduates of Anatolian/Science high school, and 47.8% were senior students. It was found that 65.4% of the participants had a balanced income, 90.8% were working in an income-generating job, 93.5% had an unemployed mother, and 65.2% had an employed

Table 1. Distribution of the Participants' Descriptive Characteristics and the Comparison of the Individual Innovativeness Scale and Quality of University Life Scale Total Score Averages According to These Characteristics

Specifications	Number	%	Individual Innovation Scale	Testing and *P*	University Quality of Life Scale	Testing and *P*
Gender						
Woman	299	74.4	62.46 ± 8.08	*t*=0.921	99.98 ± 12.60	*t*=1.589
Man	103	25.6	61.64 ± 7.14	*P*=.113	102.32 ± 13.62	*P*=.113
Age						
18-19[1]	71	17.7	61.73 ± 7.74	*F*=3.493	102.45 ± 9.88	*F*=0.424
20-21[2]	193	48.0	62.11 ± 7.14	***P*=.031**	98.82 ± 12.47	*P*=.655
22 and above[3]	138	34.3	62.71 ± 8.84	3>1	102.07 ± 14.51	
Graduated high school						
Normal high school	52	12.9	61.01 ± 8.83	*F*=1.622	103.30 ± 13.62	*F*=0.942
Anatolian/science high school	290	72.1	62.16 ± 7.82	*P*=.184	100.05 ± 12.83	*P*=.420
Health vocational high school	39	9.7	64.61 ± 6.21		100.87 ± 12.27	
Other	21	5.3	62.19 ± 8.10		100.57 ± 13.15	
Class						
Class 1[1]	101	25.1	62.12 ± 6.88	*F*=7.111	102.25 ± 9.47	*F*(Welch)*=1.973
Class 2[2]	29	7.2	62.44 ± 8.46	***P*=.007**	101.51 ± 11.79	*P*<.122
Class 3[3]	80	19.9	64.88 ± 7.68	**4,3>1,2**	97.35 ± 15.97	
Class 4[4]	192	47.8	68.44 ± 8.35		100.90 ± 13.04	
Income level						
Income less than expenses	97	24.1	61.60 ± 8.05	*F*=0.591	99.30 ± 15.33	F=0.667
Income equals expense	263	65.4	62.36 ± 7.57	*P*=.554	101.07 ± 11.95	*P*=.514
Income more than expenses	42	10.4	63.09 ± 9.14		100.42 ± 12.54	

father. There was no statistically significant difference between the average total score of the IIS in terms of gender, graduated high school, income level, pain employment, and parental employment ($P > .05$). It was found that the total score average of the IIS was significantly higher in those who were 22 years of age or older and in those who were junior and senior students ($P < .031$). In addition, there was no statistically significant difference between the descriptive characteristics and the QULS scores of the nursing students ($P > .05$) (Table 1).

*Welch ANOVA test values were utilized when group variances were not homogenous.

Table 2 presents the distributions of the participants' professional characteristics and the distributions of the IIS and QULS score averages. Of the students, 78.4% were found to choose his/her university willingly, 55% wanted to become a nurse, 55% chose it since his/her university entrance exam score was sufficient for nursing, and 63.7% did not choose nursing, but it was desired by his/her family. In addition, it was found that 64.2% of the nursing students were considering working in a public hospital after graduation, and 62.2% were not considering to change his/her profession. It was found that the total score average of the IIS was significantly higher for students who were willing to become a nurse and did not intend to change their profession ($P < .002$). In addition, there was no statistically significant difference between the professional characteristics and the QULS scores of the nursing students ($P > .05$) (Table 2).

The IIS total score average (62.25 ± 7.85) (min: 32, max: 86) of the nursing students included in the study was found to be "low" (Table 3). Looking at the IIS sub-scales, the average score received from the idea leadership sub-scale was 24.97 ± 4.51 (min: 9, max: 35) and the average score received from the change-resistance sub-scale was 22.11 ± 4.87 (min: 11, max: 35) and they were "moderate" level, and the average score received from the risk-taking sub-scale was 15.16 ± 2.93 (min: 4, max: 20) and it was found to be at a "high level."

Considering the lowest and highest observed and expected scores taken in the QULS, which measures the quality of university life of the students, the instructor–student communication sub-scale score was 18.32 ± 4.23, identity sub-scale score was 13.17 ± 4.09, social facilities sub-scale score was 15.30 ± 2.68, participation in decisions sub-scale score was 17.63 ± 3.63, student–student communication sub-scale score was 12.60 ± 2.56, the future sub-scale score was 10.10 ± 2.39, and classroom environment sub-scale score was 13.41 ± 2.47 (Table 3).

According to the IIS classification of the students (Table 4), it was found that 27.6% were traditionalist toward innovations, 39.8% were skeptical, 26.1% were inquisitive, 5.0% were pioneer, and 1.5% were innovative (Table 4).

DISCUSSION

In order to determine the relationship between nursing students' university quality of life and individual innovation status, the findings of this study were discussed in light of the literature.

It was found that there was a statistically significant difference ($P < .05$) between the age, years in university, and willingness in choosing the profession of the students and the scores they

Table 2. Distribution of the Participants' Professional Characteristics and the Comparison of the Individual Innovativeness Scale and Quality of University Life Scale Total Score Averages According to These Characteristics

Specifications	Number	%	IIS	Testing and *P*	UQLS	Testing and *P*
The situation of making the university choice voluntarily						
Yes	315	78.4	62.22 ± 7.87	*t* = 0.134	101.00 ± 11.24	*t* = 1.247
No	87	21.6	62.35 ± 7.83	*P* = .893	99.05 ± 17.62	*P* = .213
The state of choosing to become a nurse voluntarily						
Yes	221	55.0	65.85 ± 7.95	*t* = 5.680	101.09 ± 12.70	*t* = 0.873
No	181	45.0	61.53 ± 7.70	***P* = .032**	99.96 ± 13.13	*P* = .383
Situation of choosing nursing because the score is enough						
Yes	221	55.0	61.62 ± 7.63	*t* = 1.773	100.97 ± 12.87	*t* = 0.671
No	181	45.0	63.02 ± 8.07	*P* = .077	100.10 ± 12.93	*P* = 0.503
Situation of choosing nursing due to family desire						
Yes	146	36.3	62.17 ± 8.41	*t* = 0.164	99.67±12.43	*t* = 1.062
No	256	63.7	62.30 ± 7.54	*P* = .870	101.09 ± 13.14	*P* = .289
Preference for work after graduation						
Clinical nurse in government hospital	258	64.2	61.67 ± 8.05		100.86 ± 12.11	
Clinical nurse in a private hospital	23	5.7	62.04 ± 8.23	*F* = 1.188	103.69 ± 21.40	*F*(Welch)*=
University hospital clinical nurse	20	5.0	63.30 ± 8.24		100.25 ± 10.07	0.871
Academic nurse	81	20.1	63.69 ± 6.97	*P* = .315	100.80 ± 9.79	*P* = .487
Responsible nurse	20	5.0	63.15 ± 7.66		92.75 ± 20.30	
Contemplation of changing profession						
Yes	152	37.8	60.69 ± 7.69	*t* = 3.149	101.50 ± 13.81	*t* = 1.113
No	250	62.2	63.20 ± 7.81	***P* = .002**	100.02 ± 12.30	*P* = .266

IIS, Individual Innovation Scale; UQLS, University Quality of Life Scale. * Welch ANOVA test values were taken when group variances were not homogeneous.

Table 3. Individual Innovativeness and Quality of University Life Scale Total and Sub-Scale Score Averages of the Nursing Students

	Scales	Number of Items	Min-Max	X ± SS
Individual Innovation Scale	Thought leadership	7	9-35	24.97 ± 4.51
	Resistance to change	7	11-35	22.11 ± 4.87
	Risk taking	4	4-20	15.16 ± 2.93
	IIS total score	18	32-86	62.25 ± 7.85
University Quality of Life Scale	Instructor–student communication	6	6-30	18.32 ± 4.23
	Identity	5	5-25	13.17 ± 4.09
	Social facilities	5	5-25	15.30 ± 2.68
	Participation in decisions	6	6-30	17.63 ± 3.63
	Student–student communication	4	4-19	12.60 ± 2.56
	The future	3	3-15	10.10 ± 2.39
	Classroom environment	4	6-20	13.41 ± 2.47
	Total	33	43-161	100.58 ± 12.89

took from the IIS, and that their innovativeness score averages were higher. It was concluded that older nursing students have higher individual innovativeness characteristics. Looking at years in university, the mean individual innovativeness score average of the senior students was 68.44 ± 8.35, and this score average was found to be higher than that of freshman, sophomore, and junior students. In the literature, it is stated that education, knowledge, and experience related to the profession affect innovative behavior by being open to new ideas and ensuring self-confidence.[20] Our study results are in parallel with the studies in the literature. It was found that the individual innovativeness score averages of the students who willingly chose the nursing profession included in the study were higher. In the literature, it is stated that individual and professional factors affect innovative behaviors.[20] The lower average innovativeness score of students who did not choose the nursing profession willingly suggests that they are less motivated to solve problems related to the profession.

When the nursing students in this study were asked about the fields they wanted to work for the future, 64.2% were found to want to work as a clinical nurse in a public hospital, 20.1% wanted to work as an academic nurse, and 5% wanted to work as a service nurse (Table 2). In their study on entrepreneurship with nursing students, Dolu et al[21] found that 38.5% of students want to work as a clinical nurse, 35.1% as an educator, and 22% as an executive nurse. In another study, it was reported that 28.3% of the students wanted to work as educators, 23.4% as service nurses, 11.3% as research assistants, 28.7% as administrators, and 8.3% in other services.[22] In the study conducted by Nazik and Arslan,[23] it was found that 35.6% of the students wanted to work as a manager, 37.2% as a clinician nurse, and 27.2% as an academic nurse after graduation. Looking at the literature, it was found that the majority of the students who participated in the study generally wanted to become clinical or service nurses in hospitals and a fifth of them wanted to become academic nurses after their graduation.

Table 4. Distribution of Individual Innovativeness Types of Nursing Students

Innovation Classification	N	%
Traditionalist	111	27.6
Skeptical	160	39.8
Interrogator	105	26.1
Pioneer	20	5.0
Innovator	6	1.5
Total	402	100.0

Considering the individual innovativeness scores of students, it can be stated that the students in this research sample have a skeptical and timid attitude toward accepting innovativeness. It is known that the majority of society needs to adopt the innovation before skeptics accept any innovation.[18] Looking at the literature, the results vary in this aspect. In some studies, it was found that most of the nursing students are "traditionalists" against innovations [24, 25], and in some other studies, it found that nursing students are "innovative at a low level."[26-29] In the study of Tarhan and Doğan[29] and Kartal et al.[30] students were found to be "moderately innovative" and "inquisitive" toward innovations, whereas Erol et al[31] found in their study that students were "skeptical" about innovations, and Çelik et al[32] stated that nurses were "skeptical" about innovations. These results are similar to the results of this study. On the other hand, according to some studies conducted with nursing students, students have been shown to have "leading" and "inquisitive" characteristics toward innovations.[8,33-35] Some studies conducted with nurses have reported that nurses have "pioneering" and "inquisitive" characteristics toward innovations.[36,37] It is believed that these differences are influenced by the regional culture of the studied place, the personal characteristics of individuals, and their level of education.

In a study conducted by Argon and Köşterelioğlu,[38] it was found that the average quality of life scores of university students studying in different fields was in a similar range. Looking at the perceptions of the students in this study regarding the sub-scales of the QULS, the dimension with the highest perceived quality was in the "Instructor–Student Communication" sub-scale, followed by the "Participation in Decisions," "Social Facilities," "Classroom Environment," "Identity," and "Student–Student Communication" sub-scales. These results can be considered an indicator that students evaluate their communication with instructors positively and that they study in a democratic environment. Participation in the decision is also an effective tool for "innovation, change, adoption of ideas, and changing social attitudes."[38] For this reason, the involvement of students in decision-making processes during their university education will make a great contribution to the education of democratic individuals and the development of a democratic administration in universities. Moreover, this will also make a positive contribution to the personal development of students. From the perspective of quality of life, the dimension that university students perceive at the lowest level is the "Future" dimension. The most basic reason that may be related to this is believed to be the employment problem after graduation.

Table 5. Relationship Between the Participants' Quality of University Life and Individual Innovativeness Scale Score Averages

Scales	Thought Leadership	Resistance to Change	Risk Taking	IIS Total Score
UQLS	$r=0.624$	$r=0.790$	$r=0.811$	$r=0.715$
	$P=.004$	$P=.006$	$P=.010$	$P=.012$

IIS, Individual Innovation Scale; UQLS, University Quality of Life Scale.

This is because, even if students graduate, they must meet certain criteria (such as KPSS) in order to be appointed.

In the study conducted by Erol et al[31] in 2018, the individual innovativeness characteristics of nursing students were found to be very low, and in the study conducted by Ertuğ and Kaya,[26] it was reported that nursing faculty students were "innovative at a low level" and were in the inquisitive category according to the innovativeness categories. A study by Yilmaz et al[39] found that the innovative behavior of head nurses is at a good level. In other studies conducted on nurses, it was found that nurses were generally in the inquisitive group according to individual innovativeness scores. In the study by Başoğlu and Durmaz,[33] it was stated that nurses in Generation X have an inquisitive nature, while nurses in generation Y are pioneers. In another study investigating the innovativeness of healthcare professionals by generations, it was reported that Generation X has a pioneering nature and Generation Y has an inquisitive nature.[40] In this study, it was found that, unlike the literature, the majority of nurses are skeptical about innovations. Although young generations can easily access knowledge, it is believed that they have insufficient desire to learn new things, and potential to conduct research to put into practice, and also their high level of skeptical approach may be due to the high number of patients that they have to provide care for, various institutional policies, provision of services to humankind, and the principle of not harming individuals during the provision of care. Considering the literature, it is noted that people with high inquisitive characteristics rarely take the lead in implementing these new ideas, although they have an opinion in terms of innovation in society, they are cautious about innovations, and they spend a lot of time thinking about innovations before adopting them.[18] Our study results show that the innovative characteristics of the students studying in the nursing department are low and that these aspects need to be improved.

In the study, the relationship between the QULS score average and the IIS score average of the participants was investigated by Pearson correlation analysis and the results were presented in Table 5. It was found that there was a positive and good level of relationship between the participants' IIS and QULS scores, and a statistically significant increase was found in the QULS score with an increase in the IIS score ($P < .012$).

In line with these results, it is recommended to develop the innovative characteristics of the students studying in the field of nursing, to increase their interest in innovations, to provide an appropriate educational environment, and to use new scientific and technological education methods.

In addition, activities that will allow students to develop themselves should be planned in order to nurture students' creativity and improve their university life quality.

Ethics Committee Approval: Ethics committee approval for this study was received from Atatürk University Faculty of Nursing Ethics Committee (Date: 29.04.2020, No: 0012).

Informed Consent: Verbal informed consent was obtained from all participants who participated in this study.

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