



ARAŞTIRMA / RESEARCH

Comparison of personality characteristics of nursing students with tattoo-piercing situations

Hemşirelik öğrencilerinin kişilik özellikleri ile dövme-piercing yaptırma durumlarının karşılaştırılması

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Abstract

Purpose: The aim of this study is to perform a comparison of the personality characteristics of nursing students and their status regarding tattoos and piercings.

Materials and Methods: The sample of this descriptive study consisted of the students of the nursing departments of one private and one public university in the year 2016-2017 (n=718). Data for the study was collected using an Information Form and the Hacettepe Personality Inventory via face to face interviews.

Results: 8.9% of the students were found to have tattoos, and 11% were found to have piercings. When the mean scores taken by the participants from the Hacettepe Personality Inventory were compared according to their status regarding having tattoos and piercings, a statistically significant difference to the advantage of those without tattoos was found in the social adaptation dimension. No differences in the Hacettepe Personality Inventory mean scores of the students were found according to their status regarding having piercings.

Conclusion: A majority of the students were found to not have tattoos and piercings. No significant difference could be found between the tattoo/piercing statuses of the students and their personality characteristics. These results are thought to be related to the cultural values the students were raised with and the dynamics of the society they live in.

Key words: Nursing, student, characteristic, tattoos, piercings

Öz

Amaç: Bu araştırmanın amacı üniversite öğrencilerinin kişilik özellikleri ile dövme-piercing yaptırma durumlarını karşılaştırmaktır.

Gereç ve Yöntem: Tanımlayıcı olarak yapılan bu araştırmanın örneklemini bir vakıf ve bir devlet üniversitesinde 2016-2017 eğitim-öğretim yılında tüm sınıflarda öğrenim gören 718 öğrenci oluşturdu. Araştırmanın verileri, araştırmacılar tarafından oluşturulan yapılandırılmış bilgi formu ve Hacettepe Kişilik Envanteri kullanılarak yüz yüze görüşme yöntemi ile toplandı.

Bulgular: Öğrencilerin %8,9'unun dövme, %11,'sinin ise piercing yaptırdığı belirlendi. Hacettepe Kişilik Envanterinden öğrencilerin aldıkları ortalama puanlar incelendiğinde, sosyal uyum boyutunda dövme yaptırmayan öğrencilerin, ortalama puanlarının istatistiksel olarak anlamlı düzeyde yüksek olduğu belirlendi. Öğrencilerin piercing yaptırma durumlarına göre ise Hacettepe kişilik envanterinden aldıkları puan ortalamaları arasında istatistiksel olarak anlamlı bir farklılık bulunmadı.

Sonuç: Öğrencilerin büyük bir çoğunluğunun dövme veya piercing yaptırmadığı belirlenirken, kişilik özellikleri ile dövme veya piercing yaptırma durumları arasında anlamlı bir farklılık bulunmadı. Bu sonucun öğrencilerin yetiştiği kültürel değerle ve içinde bulunduğu toplumun dinamikleriyle alakalı olabileceği düşünülmektedir.

Anahtar kelimeler: Hemşirelik, öğrenci, kişilik, dövme, piercing

INTRODUCTION

From a behavioral perspective, personality is the visible expressions seen in the mental, bodily, and spiritual characteristics of an individual¹. Additionally, factors such as the priorities of an individual, preferences, and how one wants to be perceived by the environment may play roles in the formation of personality². Thus, especially young individuals prefer various applications on their body to express themselves and their identity. Two of these applications, which are becoming more widespread daily, are tattoos and piercings. These applications, which are accepted as body modifications by Kaatz et al, are seen as an effort by adolescents to control their identity and changing body³. Individuals who make changes to their bodies through these applications think that body art has a meaning of control or ownership over the body and thus ensures individuality and uniqueness^{4,5}.

Today, tattoo and piercing applications are very common among young and adult individuals. While the rate of having tattoos and piercings is reported to be 30-50% in international literature, in studies where these applications were evaluated on a one by one basis in our country, these rates can be seen to vary between 12.3-20.5%⁶⁻⁹.

When the studies questioning the reasons for young individuals having tattoos and piercings done were examined, these applications were seen to be largely related to aesthetic appearance. In another study conducted with university students, individuals were found to have these applications done to emphasize their individuality and increase their attractiveness. When the characteristics of people who have these applications done were examined in studies in our country, alcohol, tobacco, and substance use was seen to be higher and academic success rates were seen to be lower⁸. Individuals in this group were also found to have higher aggressive behavior characteristics and to start sexual activity at earlier ages^{8,9}. Factors such as the close environment people interact with, social class, and lifestyle affect personality characteristics¹⁰. University education constitutes an important phase in one's life for personality development. Bodily, mental, and spiritual changes occur in this phase^{11,12}.

The personality characteristics of people affect their social appearance anxiety¹³. For this reason,

especially in the university phase, where personality characteristics and personality accommodation is mature, whether the tattoo and piercing applications of the students constitute an indicator for personality characteristics is among the important questions to be asked⁸.

It is known that personality characteristics are closely related to having tattoos and piercings done. The attention given to tattoo and piercing applications among students has increased recently¹⁴. These applications, because of breaking body integrity, can cause many serious problems such as Hepatitis C, AIDS, and infection^{15,16}. By determining the students that have an inclination to have tattoos and piercings done beforehand, these health problems are thought to be possible to decrease. For this reason, the aim in our study was to compare the personality characteristics of nursing students and their status regarding tattoos and piercings.

MATERIALS AND METHODS

The universe of this descriptive study consisted of the students of the nursing departments of one private and one public university in the year 2016-2017 (N=918). No sample selection was made in the study and the whole universe was tried to be reached. The study was performed with 718 students who volunteered, continued the school in the dates when the study was conducted, and presented a valid question form between October and December 2016. A total of 200 students were excluded from the study. Forty-three students didn't complete question form while 157 students didn't agree to participate the study. Permission from the Medipol University Non-Interventional Studies Board of Ethics was taken for the study (43037191-604.01.01-E.94444)

Instruments

Data were collected using the Information Form and the Hacettepe Personality Inventory (HPI). Before the study, the students were provided with information about the study and written informed consent forms were received. Data were collected via face to face interviews during 20-30 minutes.

Information form

As a result of literature review^{6,8,12,16}, the Information Form consisted of 10 questions

included characteristics such as age, gender, class, school achievement status, parents' education and economic status which can be affected personality traits, tattooing and piercing situations.

Hacettepe Personality Inventory (HPI)

The HPI consists of 8 sub-scales each with 20 items. Personal adaptation dimension consists of 4 sub-scales (self-realization, emotional resolve, neurotic inclinations, psychotic symptoms). Social adaptation dimension consists of 4 sub-scales (family relations, social relations, social norms, antisocial inclinations). General adaptation scores obtain by calculating a total of scores related with 8 sub-scales. High personal adaptation scores indicate that the individual is self-confident and aware of his talents and is determined emotionally. High social adaptation scores show that the individual's family relationships and social abilities are well. Having 20 items for each sub-scale and 8 for the validity (V) scale, the inventory consists of 168 questions.

The validity and reliability test of the HPI was performed by Ozguven through the intermittent repeating of the inventory on various groups, and as the general result of the reliability tests, the reliability coefficients of the sub-scales were determined to be between 0.58 and 0.92, with a mean value of 0.82¹⁷.

The HPI is an inventory that has a "mandatory choice method" in item answers, with each item being answered as Yes/No. In the scoring of the HPI, each correct answer in the sub-scales is assigned one point. In our study, the Cronbach Alpha value of the Hacettepe Personality Inventory was found to be 0.92. This inventory consisted of B and G points. Point B indicates whether the person is in an advocacy position or not as the person answer the inventory. Increased point B is interpreted as negatively. If the point B in the inventory is 2 on a subscale and 8 or more in total, it must be invalid and not included in the score. Point G is a validity score related to the inventory completion behavior. The 8 point is the highest value of the validity score. In practice, if point G is 5 or less, the inventory is considered invalid and is not included in the score.

The superior aspects of the Hacettepe Personality Inventory are performing a large number of reliability studies on the inventory with intermittent repetition method and the high cronbach alpha value. The weakness aspects of this inventory are a plenty of items and difficult evaluation of the

inventory.

Statistical analysis

Statistical Package for Social Sciences (SPSS) Version 21.0 was used for statistical analysis (IBM Corp., Armonk, NY, USA). The descriptive statistics were evaluated with number, percentage, mean and standard deviation. The Kolmogorov-Smirnov test was used to evaluate normal distribution. T test was used to compare difference between two groups while One-Way ANOVA test was used to compare difference among three and more groups. P value < 0.05 was considered statistically significant.

RESULTS

When the individual characteristics of the nursing students were examined, it was determined that average age was 21.36 ± 2.65 years and 82.7% were female. Information regarding the socio demographic characteristics of the participants was given in Table 1.

When the tattoo and piercing related characteristics of the nursing students were examined, 8.9% were found to have tattoos, and 11% were found to have piercings, with 23.4% of those without either thinking to have tattoos in the future and 8.1% considering piercings.

When whether at least one of the parents of the participants had tattoos or piercings was examined, 6.1% of the participants were found to have this characteristic. 62.7% of the friends of the nursing students were found to have tattoos, and 61.6% were found to have piercings. 11.4% of the participants thought that a person with a tattoo was strong, and 9.2% thought the same way for people with piercings. 57.9% of the participants stated that there was a negative attitude against tattoos in their environment, with 56% stating the same for piercings. 39.3% of the nursing students thought that having tattoos was a form of self-expression, and 35.1% thought the same about piercings (Table 2).

When the nursing students were examined with regard to substance habits, 23.7% were determined to use tobacco with a mean of 16.16 ± 7.8 cigarettes a day, while 17% used alcohol with a mean of 1.57 ± 0.5 units a day with wine (11.4%) being the most frequently consumed type of alcohol. When the mean scores taken from the Hacettepe

Personality Inventory were evaluated, the nursing students were found to have a mean score of 87.49 ± 20.84 in the general adaptation dimension. The personal adaptation mean score was 39.71 ± 12.86 with the mean score for self-realization being 12.14 ± 3.37 , emotional resolve being 8.91 ± 3.78 , neurotic inclinations being 9.46 ± 4.07 ,

and psychotic symptoms being 9.20 ± 3.80 . The social adaptation dimension mean score was 47.78 ± 10.08 with the mean scores for the sub dimensions of this dimension being 12.48 ± 3.90 for family relations, 12.51 ± 3.48 for social relations, 12.07 ± 2.73 for social norms, and 10.73 ± 3.54 for antisocial inclinations (Table 1).

Table 1. Distribution of the students according to socio demographic characteristics (N=718)

Variable	Category	n	%
Age (years)	Mean: 21.36 ± 2.654 (Interval: 18-43)		
Class	1 st Class	200	27.9
	2 nd Class	152	21.2
	3 rd Class	202	28.1
	4 th Class	164	22.8
Mother Education	Elementary- literate	450	62.6
	Middle	130	18.1
	High	102	14.2
	University	36	5.0
Family economic status	Very poor	12	1.7
	Poor	56	7.8
	Medium	470	65.5
	Good	174	24.2
	Very Good	6	0.8
Gender	Female	594	82.7
	Male	124	17.3
Academic success	Very poor	14	1.9
	Poor	46	6.4
	Medium	324	45.1
	Good	284	39.6
	Very Good	250	7.0
Father education	Elementary	264	36.8
	Middle	152	21.2
	High	200	28.7
	University	86	11.4
Tobacco use	Never used	494	68.8
	Quit	54	7.5
	Uses	170	23.7
Alcohol use	Never used	566	78.8
	Quit	30	4.2
	Uses	122	17.0
Sleep duration (Weekdays)	Mean: 6.91 ± 1.196 (Interval: 4-10)		
Sleep duration (Weekend)	Mean: 8.45 ± 1.482 (Interval: 5-12)		

When the mean scores taken by the participants from the HPI were compared according to the class the nursing students were in, a statistically significant difference to the advantage of the sophomores was found ($p=0.002$) in the social adaptation dimension, with no other differences in any dimensions or sub dimensions ($p>0.05$). When the mean scores taken by the participants from the HPI were compared

according to the academic success of the nursing students, a statistically significant difference to the advantage of those who thought their academic success was very poor was found ($p=0.002$) in the personal adaptation dimension, with no other differences in any dimensions or sub dimensions ($p>0.05$), (Table 1).

Table 2. Distribution of the students according to their tattoo and piercing related characteristics (N=718)

	Tattoo				Piercing			
	Yes		No		Yes		No	
	n	%	n	%	n	%	n	%
Did you ever get any tattoos/piercings?	64	8.9	654	91.1	84	11.7	634	88.3
If no. Are you planning to?	168	23.4	494	68.8	58	8.1	586	81.6
If yes. Are you planning to get a new one done?	56	7.8	10	1.4	50	7.0	42	5.8
Does any of your parents have any tattoos/piercings?	44	6.1	674	93.9	44	6.1	674	93.9
Does any of your friends have any tattoos/piercings?	450	62.7	268	37.3	442	61.6	276	38.4
Do you think that people with piercings/tattoos are strong people?	82	11.4	636	88.6	66	9.2	652	90.8
Does anyone in your environment have negative attitudes towards tattoos/piercings?	416	57.9	302	42.1	402	56.0	316	44.0
Do you think tattoos and piercings constitute a way of self expression?	282	39.3	436	60.7	252	35.1	466	64.9

Table 3. Hacettepe Personality Inventory scores of the students (N=718).

	n	\bar{x}	\pm sd	Min	Max	Full value
General Adaptation(GU)	718	87.49	20.845	44	143	160
Personal Adaptation (KU)	718	39.71	12.869	12	72	80
Self realization (KG)	718	12.14	3.376	3	20	20
Emotional resolve (DK)	718	8.91	3.785	1	19	20
Neurotic Inclinations (NE)	718	9.46	4.073	1	20	20
Psychotic Symptoms (PB)	718	9.20	3.803	1	19	20
Social Adaptation (SU)	718	47.78	10.082	28	71	80
Family Relations (Aİ)	718	12.48	3.970	4	20	20
Social Relations (Sİ)	718	12.51	3.481	4	20	20
Social Norms (SN)	718	12.07	2.734	6	19	20
Antisocial Inclinations (AE)	718	10.73	3.547	3	20	20

Table 4. Hacettepe Personality Inventory scores of the students according to personal characteristics (N=718)

		n	General Adaptation			Personal Adaptation			Social Adaptation		
			\bar{x}	\pm sd	F/p	\bar{x}	\pm sd	F/p	\bar{x}	\pm sd	F/p
Class	Freshman	200	87.28	21.121	1.471 0.210	40.29	12.911	0.501 0.735	46.99	10.485	4.319 0.002
	Sophomore	152	89.34	21.965		38.84	12.607		50.50	10.735	
	Junior	202	87.21	19.862		39.10	12.419		48.11	9.209	
	Senior	164	84.95	19.885		40.11	13.060		44.84	9.217	
Academic success	Very poor	14	97.14	21.404	1.471 0.210	53.29	13.732	4.543 0.001	43.86	7.883	0.724 0.576
	Poor	46	82.61	17.799		37.22	11.139		45.39	8.923	
	Medium	324	85.65	20.151		37.64	12.015		48.01	10.010	
	Good	284	89.24	21.186		40.99	12.895		48.25	10.294	
	Very Good	50	91.28	24.687		44.32	15.612		46.96	10.990	
Mother Education	Elementary	450	83.30	19.171	3.913 0.004	36.58	11.93	3.883 0.004	46.72	9.647	2.963 0.020
	Middle	130	84.37	21.906		38.85	13.212		45.52	10.720	
	High	102	89.49	19.499		41.39	12.458		48.10	9.328	
	University	36	100.50	23.096		47.22	12.614		53.28	11.575	
Father Education	Elementary	264	85.72	21.699	3.087 0.027	38.64	13.658	2.096 0.100	47.08	10.276	3.436 0.017
	Middle	152	91.63	21.408		42.29	13.243		49.34	10.688	
	High	206	84.89	17.897		38.58	11.134		46.31	8.890	
	University	82	93.76	23.379		42.24	13.764		51.51	10.868	
Economic Situation	Very poor	12	71.67	9.973	7.150 0.000	33.67	8.311	7.014 0.000	38.00	1.789	4.996 0.001
	Poor	56	75.89	16.283		32.89	9.923		43.00	7.888	
	Medium	470	86.39	20.628		38.83	12.786		47.56	10.115	
	Good	174	95.63	20.658		44.99	12.613		50.64	10.118	
	Very Good	6	77.33	1.528		31.00	.000		46.33	1.528	

F: One-Way ANOVA Test

Table 5. Hacettepe Personality Inventory scores of students according to having piercings and tattoos (N=718)

		n	General adaptation			Personal adaptation			Social adaptation		
			\bar{x}	\pm sd	t p	\bar{x}	\pm sd	t p	\bar{x}	\pm sd	t p
Tattoos	Yes	64	86.34	18.454	-0.326	41.94	13.051	1.027	44.41	8.450	-1.993
	No	654	87.60	21.087	0.745	39.49	12.851	0.305	48.11	10.179	0.047
Piercings	Yes	84	84.33	20.934	-1.045	38.64	13.606	-0.570	45.69	9.854	-1.433
	No	634	87.91	20.831	0.297	39.85	12.785	0.569	48.06	10.095	0.153

t=T test

When the mean scores taken by the participants from the HPI were compared according to the education status of their parents, a statistically significant difference to the advantage of university graduates was found ($p=0.004$, $p=0.020$) in the general adaptation and social adaptation dimensions, with the scores of university graduate mothers being different in a statistically significant manner in the personal adaptation dimension ($p=0.004$) and no difference in the mean scores of fathers ($p>0.05$), (Table 1).

When the mean scores taken by the participants from the HPI were compared according to their economic status, a statistically significant difference to the advantage of those who defined their economic status as good was found in all dimensions ($p=0.000$, $p=0.001$), (Table 1). No statistically significant difference was found between the mean HPI scores of the nursing students and their age, gender, tobacco/alcohol use, and weekday/weekend sleep durations ($p>0.05$).

When the mean scores taken by the participants from the HPI were compared according to their status regarding having tattoos and piercings, a statistically significant difference to the advantage of those without tattoos was found ($p=0,047$) in the social adaptation dimension. No differences in the HPI mean scores of the nursing students were found according to their status regarding having piercings ($p>0.05$), (Table 3).

DISCUSSION

As a result of the examination of our study data, most of the students were found not to have tattoos or piercings. The number of studies exhibiting the frequency of these applications in our country is very limited. In studies performed with university students in our country, rates for having tattoos or piercings was found to be between 12.3% and 20.5%^{8,9}. In the study of Forbes (2001) it was

determined that 25-33% of the students had at least one of tattooing or piercing. When results of the national studies had similar with this study, it was found that the rates were high in the study of Forbes¹⁸. Alongside this, in studies abroad, these rates were found to be 6.4%-23% for tattoos and 20.2% for piercings^{19,20}. In the literature, there are also studies stating that these applications have a rate of 30-50% among the 18-23 age group^{6,7}. These results, when compared to this study, show that the frequency of these applications is greater abroad. In another study performed by Ekinci at all with high school students, the frequency of tattoos was determined as 4.8% and the rate of piercings was found to be 7%²¹. These results are lower than ours. It is considered to affect these results that the sample group was composed of high school students whose family influence dominates on independent decision-making.

In this study, the status of the students regarding desiring tattoos or piercings in the future was found to be low. On the other hand, in a study by Majori et al, students who don't have tattoos or piercings were concluded to become willing to have them done in the future, paying attention to the subject²⁰. Therefore, the cultural characteristics of the society the students were raised in and the point of view of the society regarding these applications is thought to affect the frequency of these applications.

While almost half of the students thought that these applications were a method of self expression, they didn't think that someone who has tattoos or piercings done is a strong person. In a study by Umar, almost half (44.1%) of the students thought that piercing was an indicator of a desire to show oneself, with most of the students (77.3%) thinking that this application stemmed from a desire to be different⁹. In a similar study in literature, participants thought that tattoos and piercings gave individuals a chance to show themselves as different and unique²². Horne et al. (2007) study, as the answers

of the students were examined by gender, it was determined that the women have done these applications for the their body image while the men have done them in order to be included in this group²³. When the answers of the students were evaluated, it was thought that they preferred such applications to explain themselves to others through nonverbal messages and that this behavior type may be significant in understanding the communication types of students.

Most of the students think that there is a negative attitude in their environment towards those with tattoos and piercings. In a study by Swami et al, the attitudes of people without tattoos and piercings towards those with them were found to be very positive²². In another study, health workers were reported to have a negative approach towards patients with tattoos, with these people not getting the desired, sufficient, and effective care they desire²⁴. In this context, the importance of the social point of view on the subject shouldn't be ignored.

When the scores the students took from the personality inventory were compared with the scale cut point, the high general adaptation mean score showed that (87.28) the personalities of the students were adaptable, while only medium levels of adaptation can be exhibited in the personal adaptation and social adaptation sub dimensions. When the personality characteristics of the students were compared to their personal characteristics, sophomores were found to be more adaptable than the other classes. The personal adaptations of the students who thought that their academic success was very poor were also better than the other groups. Additionally, students with high parental education and better economic statuses were found to have better adaptation in all dimensions. In the study of Boraoglu (2010), the personality characteristics of nursing students were evaluated with 5 factor personality inventory and it was seen that they have higher average score on the subdimensions of social tendency, intellectual tendency and focusing²⁵. In the study conducted by Ji and his/her friends(2001), the average scores of nursing students were seen high on the dimensions of extroversion and intuitive sense. On the bases of these results, it is thought that the personal characteristics of nursing students have dominant features in terms of concordance²⁶. In the other studies conducted with university students it is determined that the nursing students had higher

scores on the subdimensions of compliance/compatibility, responsibility and openness to experience^{27,28}.

When the personality inventory scores of the students were compared to their tattoo statuses, those who didn't have tattoos were found to have significantly higher scores in the social adaptation dimension. No differences between the piercing statuses of the students and their personality inventory scores could be found. In a study by Wohlrab et al, students with tattoos had significant difference in the acceptability sub dimension, with no other differences among groups in other sub dimensions²⁹. Similarly, Nathanson et al (2006) performed a study with university students where they applied a five factor personality analysis, and couldn't find a relationship between tattoos, piercings, and personality characteristics³⁰. In a study where Swami et al tried to determine personality types in adult individuals who did and did not have tattoos with multiple scales, no significant differences between groups was found. However, individuals with tattoos had higher scores in the Extroversion, willingness to experience, and uniqueness dimensions compared to those without ²². In the study of Yucel (2015), it was found that individuals having tattooed have a higher score in the sub-dimension of self-management and cooperation according to the Temperament and Character Inventory³¹. Other studies abroad support these findings^{22,32,33}. The smaller age interval in the study group in our study compared to these studies is thought to be reflected to study results. Alongside this, the students and their social and cultural environment are also thought to affect the views of the students on this matter, preventing them from gaining positive attitudes and behaviors regarding tattoos and piercings.

According to the results of our study, a majority of the nursing students were found to not have tattoos and piercings while also not thinking to have them done in the future. Most of the students view tattoos and piercings as a way of self expression. No significant difference could be found between the tattoo/piercing statuses of the nursing students and their personality characteristics. It can thus be seen that no inferences on the personality characteristics of the students who have tattoos/piercings can be made. However, with studies with larger sample groups in different age groups, this information can be suggested to be retested. When certain studies in

the literature were examined, the differences in the personality characteristics of the students were thought to stem from the education process in the departments they studied at.

For this reason, studies to exhibit the personality characteristics of the students according to departments are thought to be needed. A long side this, in all similar studies, it was found that students viewed tattoo/piercing applications as a way of self expression and expression of individuality. Thus, studies like this are thought to exhibit important results in the recognition of the communication and personality expression of the students. The results of this study recommend that it can be performed on more nursing students and social sciences students and quasi-experimental studies for increasing the knowledge of students about piercing.

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