



EMPATHIC TENDENCIES AND EMPATHIC SKILL LEVELS OF NURSING STUDENTS: A DESCRIPTIVE AND CROSS-SECTIONAL STUDY

HEMŞİRELİK ÖĞRENCİLERİNİN EMPATİK EĞİLİMLERİ VE EMPATİK BECERİ DÜZEYLERİ: TANIMLAYICI VE KESİTSEL ÇALIŞMA

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Abstract

Objective: This descriptive and cross-sectional study was conducted to determine empathic tendencies and empathic skill levels of nursing students.

Methods: The population of this study consisted of 580 nursing students. Interviews were conducted with 412 students. The data were collected using a Personal Information Form, the Empathic Tendency Scale and the Empathic Skill Scale (ESS). Evaluation of the data was performed with calculation, t-test and analysis of variance (ANOVA).

Results: Among the students, 64.8% (n=267) were within the 20-22 age group, 87.6% (n=361) were female, and 27.2% (n=112) were enrolled in the fourth year. The mean of the Empathic Tendency Scale was 68.84±8.42, and the mean score on the ESS was 139.67±20.11. Empathic Tendency Scale and Empathic Skill Scale scores were statistically significant according to gender, age and class year ($p<0.05$). The mean scores of the female students on the Empathic Tendency Scale and Empathic Skill Scale were the highest for those in the 23-25 age groups and in the fourth year.

Conclusions: The result concluded that mean scores on the Empathic Tendency Scale and Empathic Skill Scale of nursing students were at a medium level. It is important to support students during their professional education.

Keywords: Empathy, nursing, students

Öz

Amaç: Tanımlayıcı ve kesitsel olan bu çalışma, hemşirelik öğrencilerinin empatik eğilim ve empatik beceri düzeylerinin belirlenmesi amacıyla yapılmıştır.

Yöntem: Bu çalışmanın evrenini 580 hemşirelik öğrencisi oluşturmuş, 412 öğrenciye ulaşılmıştır. Veriler kişisel bilgi formu, Empatik Eğilim Ölçeği ve Empatik Beceri Ölçeği aracılığıyla toplanmıştır. Bulguların değerlendirilmesinde yüzdelik, t testi ve varyans analizi (ANOVA) kullanılmıştır.

Bulgular: Araştırma kapsamına alınan öğrencilerin %64,8'i (n=267) 20-22 yaş grubunda, %87,6'sı (n=361) kız öğrencidir. Öğrencilerin %27,2'si (n=112) dördüncü sınıfta okumaktadır. Öğrencilerin Empatik Eğilim Ölçeği puan ortalaması 68,84±8,42, Empatik Beceri Ölçeği puan ortalamaları ise 139,67±20,11'dir. Cinsiyetlerine, yaşlarına ve sınıfına göre Empatik Eğilim Ölçeği ve Empatik Beceri Ölçeği puanları istatistiksel olarak anlamlı düzeyde farklılık göstermektedir ($p<0,05$). Empatik eğilim ve Empatik beceri puan ortalamaları kızlarda, 23-25 yaş grubunda ve dördüncü sınıflarda yüksek olduğu bulunmuştur.

Sonuç: Çalışma sonunda hemşirelik öğrencilerinin empatik eğilim ve empatik beceri puan ortalamaları orta düzeyde saptanmış olup, öğrencilerin bu konuda mesleki eğitimleri sırasında desteklenmeleri gerektiği düşünülmüştür.

Anahtar Kelimeler: Empati, hemşirelik, öğrenci



Introduction

Empathy is the ability to sense other people's emotions and to understand their internal state, including their thoughts and feelings.^{1,2} Barret-Lennard described empathy as a cyclical process characterized by three phases: empathic resonance, empathic communication, and the resulting received/perceived empathy.³ Dökmen addressed two dimensions of empathy, namely, empathic tendency (ET) and empathic skill (ES). Empathic tendency is the emotional component of empathy and demonstrates the potential of an individual to show empathy in daily life. Empathic skill, on the other hand, refers to an individual's ability to empathize.⁴ In this regard, empathy is considered an important communication skill in furthering people's understanding of each other.⁵ Orlando's theory calls attention to the reciprocal relationship between patient and nurse, wherein individualism plays a significant role. This theory suggests that the development of communication and empathy among patients and nurses is very important for determining the physical, emotional and social requirements of patients.⁶ An empathic approach is fundamental to the therapeutic relationship between nurse and patient.⁷ Patients express themselves in a more comfortable way when empathy skills are applied by the nurses. It has been found that patients experience relief from pain, improved pulse and respiration rate and a reduction in anxiety when they receive care in an interpersonal manner.⁸

Empathy is a teachable communicative skill.⁹ Empathic tendency and empathic skills should be taught in professional education as well as the professional implications that can be drawn from these.¹⁰ Many studies have reported that the empathic tendency and empathic skill scores of students are at medium levels.^{9,11-14} In studies conducted to understand the effectiveness of empathy training in nursing, it has been shown that empathy scores are statistically higher after the completion of training.¹⁵ Therefore, it is important to determine the empathic tendency and empathic and communication skills of undergraduate students and to accordingly improve the effectiveness of the courses teaching these skills.¹⁰ The courses focusing on the development of empathic skills, which include psychodrama and role taking and role model techniques, should be included as part of the academic curriculum in all health personnel training institutes.¹⁵ It is important to educate healthcare students on the importance of empathy as an inseparable part of their profession, to determine the empathic tendency of students and to improve their empathic skills.¹² This study was conducted to determine the empathic tendency and empathic skill levels of nursing students.

Methods

Setting, Study Design and Ethical Concerns

This study was designed as a descriptive and cross-sectional study. The research was conducted in the Department of Nursing of a health college between March 3 - April 1, 2017.

Study Population

The study population consisted of 580 nursing students studying at a health college in the 2016-2017 academic years. As this study involved no sampling, attempts were made to reach the entire universe of prospective study participants. The study was based on voluntary participation. Students who did not agree to participate in the study (114 students) and who failed to completely fill out the survey forms (54 students) were excluded from the study. Data analysis was

therefore carried out on 412 students. For data collection, the Personal Information form, Empathic Tendency Scale, and Empathic Skill Scale-B were used and personal interviews were conducted.

The Personal Information form consisted of 16 socio-demographic and work-related questions on a number of variables, such as gender, age, class, high school graduated from, the place where they lived the longest, income level, mother's and father's education level, family member who works in the healthcare field, whether they like their jobs, the area they are interested in working after graduation, the importance of empathy in nursing and the effect of their education on their motivation.

Empathic Tendency Scale

Developed by Dökmen (1988) to measure an individual's potential to develop empathy in their daily lives. It is composed of 20 statements, with responses arranged on a 5-point Likert-type scale. Approximately half of the scale contains negative sentences to counterbalance the tendency of the participants to mark 'yes'. The respondents express to what degree they agree with the view as referred to in the respective item by choosing the statements that correspond to values from 1 to 5. The items of the scale are stated in an inverse manner. The numbers marked function as the scores for the items, with negative statements being scored higher (1=agree to 5=disagree). The total score expresses the empathic tendency scores of the respondent. Higher scores indicate higher empathic tendency levels, while lower scores indicate lower empathic tendency. The Cronbach's alpha reliability coefficient for the scale is $r=0.82$. In our study, it was found to be 0.88.

Empathic Skill Scale

The Empathic Skill Scale-B form developed by Dökmen (1988) is based on six different problems encountered in daily life. Each problem is followed by 12 empathic responses that can be addressed to a person suffering from the stated problem. Therefore, the respondent is provided with a total of 72 empathic responses (12 for each problem) in written form. Respondents are asked to indicate the statement with the highest level of importance, and the one with the second highest level of importance, the third highest level of importance and the fourth highest level of importance. One of the 12 responses is irrelevant to the problem but was intentionally included to identify those who are not paying attention. There are six irrelevant responses in the scale. Respondents are asked to select four of the responses that follow each problem. After they have chosen a total of 24 responses, their performance is graded. Higher scores indicate a higher empathy level, while lower scores indicate a lower empathy level. The Cronbach's alpha reliability coefficient for the scale is 0.83. In our study, it was found to be 0.75 in our study

Statistical Analysis

The data collected was evaluated using SPSS software. Numbers, percentages and averages were used in the basic descriptive analysis of data. The Kolmogorov-Smirnov test was implemented to determine whether sample data was normally distributed. As the data had normal distribution and homogeneity of variances, the statistical analysis was conducted by parametric tests. The independent t-test was used to compare the mean scores of the two independent groups, while one-way analysis of variance (ANOVA) was used to

compare the means of three or more variables. Tukey's test was used to determine any significant differences between the groups based on the findings from the variance analysis. Research results were evaluated with a 95% confidence interval and $p < 0.05$ significance level.

Results

The students' mean score on the Empathy Skill Scale was 139.67 ± 20.11 and 68.84 ± 8.42 on the Empathy Tendency Scale (Table 1).

Table 1. Mean Scores of Empathic Skill Scale (ESS) and Empathic Tendency Scale (ETS)

Scales	Min-Max	X \pm ss
Empathic Skill Scale (ESS)	41-93	139.67 \pm 20.11
Empathic Tendency Scale (ETS)	90-207	68.84 \pm 8.42

Regarding the socio-demographic data, 87.6% of the students were female, 64.8% were between 20 and 22 years of age (the mean age was 21.3 ± 1.4), and 27.2% were fourth-year students. To continue, 48.5% of the students resided the longest period

of their lives in the province, and 63.3% of the students' mothers and 58.5% of the students' fathers were primary school graduates (Table 2).

Table 2 presents a comparison of the students' mean scores on empathic skills and empathic tendencies according to their demographic features. The findings show that the mean scores for the ETS and ESS were higher and had a statistically significant difference for women compared to men, the age group of 23 and 25 compared to the age groups of 17-19 and 20-22, fourth-year students compared to other year levels, students who lived in a city centers compared to those who lived in towns or rural areas, and students whose fathers graduated from university compared to those whose fathers graduated from high school/primary school/are literate ($p < 0.05$). Furthermore, the mean scores on the ETS and ESS were found to be higher for the students whose mothers graduated from university than for the students whose mothers graduated from high school/primary school/are literate, but no significant difference was found for mothers' education level and the mean ETS scores ($p < 0.05$).

Table 2. Comparing the mean scores of empathic skill and empathic tendency according to students' characteristics (n=412)

Variables	n	%	ESS X \pm ss	ETS X \pm ss	t/F EBÖ/EEÖ	p EBÖ/EEÖ
Gender						
Female	361	87.6	141.16 \pm 20.26	69.43 \pm 8.27		
Male	51	12.4	129.13 \pm 15.51	64.70 \pm 8.41	t = 4.073/3.814	0.000***/0.000***
Age						
17-19	115	27.9	138.14 \pm 15.90	68.62 \pm 8.02		
20-22	267	64.8	138.44 \pm 18.73	68.49 \pm 8.19	F = 11.877/3.738	0.000***/0.025*
23-25	30	7.3	156.46 \pm 34.73	72.86 \pm 10.9		
Class						
First year	95	23.1	137.46 \pm 15.26	69.35 \pm 8.10		
Second year	99	24.0	137.75 \pm 20.12	66.31 \pm 8.39	F = 5.984/7.642	0.001**/0.000***
Third year	106	25.7	136.37 \pm 20.89	67.66 \pm 8.64		
Fourth year	112	27.2	146.37 \pm 21.61	70.08 \pm 7.57		
The place where he/she has lived the longest						
City	200	48.5	143.08 \pm 21.54	70.27 \pm 8.46		
Town	141	34.2	138.80 \pm 19.08	68.41 \pm 7.25	F = 8.742/8.327	0.000***/0.000***
Village	71	17.2	131.82 \pm 15.15	65.69 \pm 7.25		
Mother's educational level						
Literate (not attended any school)	56	13.6	137.34 \pm 16.94	65.19 \pm 6.77		
Primary school	261	63.3	139.37 \pm 21.42	69.10 \pm 8.13	F = 0.857/4.646	0.463/0.000***
High school	80	19.4	141.68 \pm 19.31	70.32 \pm 9.08		
Bachelor's degree	15	3.6	144.47 \pm 16.44	70.33 \pm 11.83		
Father's educational level						
Literate (not attended any school)	23	5.6	137.22 \pm 22.50	65.00 \pm 7.65		
Primary school	241	58.5	137.75 \pm 17.25	68.07 \pm 7.75	F = 2.962/4.844	0.032*/0.003**
High school	110	26.7	141.95 \pm 21.74	70.74 \pm 8.61		
Bachelor's degree	38	9.2	142.98 \pm 20.11	71.63 \pm 10.82		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

A large majority (90.3%) of the students agreed that empathy was important in nursing, 49.5% wanted to work as a clinic nurse after graduating, 63.6% stated that they voluntarily chose this profession, and 49.3% felt that their current education had an impact on their motivation (Table 3).

Table 3 presents a comparison of the mean scores for the empathic skills and empathic tendencies of the students according to their views on the profession of nursing. The mean scores on the empathic tendency and empathic skill

levels of the students were higher for students who thought of empathy as being important in nursing, students who wanted to be an academic member after graduation, students who willingly chose the nursing profession, and students who loved their profession on account of the nursing education they had received, and a significant relationship was determined between all these variables and the empathic tendency levels ($p < 0.05$).

Table 3. Comparing the average scores of empathic skill and empathic tendency according to students' perceptions on nursing profession (n=412).

Variables	n	%	ESS X±ss	ETS X±ss	t/F ESS-/ ETS	p ESS-/ ETS
Importance of empathy in nursing						
Important	372	90.3	139.98±20.42	69.03±8.32	t = 0.355/3.389	0.723/0.001**
Not important	40	9.7	136.98±17.05	58.28±8.17		
Profession desired to serve after graduation						
Clinic nurse	204	49.5	137.26±16.36	68.37±7.58	F = 2.626/4.687	0.054/0.003**
Academician	121	29.4	143.35±23.86	71.04±9.46		
Administrative nurse	35	8.5	142.91±25.58	67.28±8.64		
Out of the professional field	52	12.6	138.44±18.83	66.63±7.96		
Choosing to be nurse						
Willingly chosen	262	63.6	148.35±18.43	69.59±8.06	F = 2.425/4.638	0.090/0.010*
Unwillingly chosen	36	8.7	138.19±20.88	65.27±8.83		
Undecided	114	27.7	143.19±23.11	68.25±8.82		
Impact of current education on loving his/her profession						
Impacted positively	203	49.3	148.17±18.29	70.77±8.30	F = 2.167/11.02	0.116/0.000***
Impacted negatively	69	16.7	143.99±27.00	67.05±7.92		
Unchanged	140	34.0	139.74±18.44	66.81±8.59		

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Discussion

Empathy involves the ability to facilitate communication in daily life. The development of positive interpersonal relationships has a direct effect on the nursing profession^{16,17}. Therefore, it is important that nursing students learn empathic sensitivity and gain empathic skills during the course of their nursing education. This study, which was conducted to determine the empathic tendency and empathic skill levels of nurse candidates, found that the students' mean score on empathy skills was 139.67±20.11. The mean score on empathy skills in other studies conducted on the same subject and involving nursing students were reported to be 129.4 by Uncu et al.¹⁴, 124.7 by Acaroğlu and Duman¹⁷, 137.6 by Özyazıcıoğlu et al.¹⁸, 124.1 by Yiğitbaş et al.¹², and 163.6 by Karaca et al.¹⁰ In a study by Cevahir et al.¹⁹ involving midwifery students, the mean score on empathy skills was reported as 135.35. Our findings show similarities to those presented in the literature. The mean score on the empathic skills was reported to be higher in the study by Karaca et al., which can largely be attributed to the fact that the study involved first-year students in one school, without any control group.¹⁰ With the minimum possible score on the scale being 62 and the maximum, 219, the findings from our study as well as the others indicate that the empathic skills of the nursing students are generally at medium levels.

The nursing students' mean score on empathic tendency was determined to be 68.84±8.4. The mean score on empathy tendency in other studies conducted on the same subject and involving nursing students were reported to be 69.9±9.3 by Uncu et al.¹⁴, 69.55 by Tutuk et al.¹¹, and 75.91 by Arifoğlu et al.²⁰ In the case of final-year nursing students, the mean score on empathy tendency was found to be 66.07 by Yiğitbaş et al.¹², and 68.45 by Karaca et al.¹⁰, while for midwifery students, the mean score was reported to be 69.59 by Bekmezci et al.¹³ These results show similarities to our findings. With the lowest score possible on the scale being 20 and the highest score, 100, the mean scores on the empathic tendency of the nursing students were above the medium level but did not reach higher levels. Montanari et al.²¹ and Carranza²², on the other hand found that the mean scores on empathic tendency of the nursing students in their study were high. In contrast to these two studies, the empathy levels of the nursing students in

Turkey were found to be at medium levels according to the literature. Richardson⁷ found that teaching student nurses about care, compassion and empathy significantly increases their empathy scores. This finding therefore suggests the importance of promoting the teaching of empathic tendency and empathic skills for student nurses in Turkey.

In comparing the mean scores on empathic tendency and empathic skill according to gender, it was found that the mean scores of females were higher than those of the males, with a statistically significant difference being found between them. Çakmak and Demirbaş reported that the empathic tendency score averages of the female students were higher than those of the male students' (70.85±8.30) and that there was a significant difference between their empathic tendencies.²³ Previous research on empathic tendency and empathic skill in the areas of nursing and healthcare, including studies by Montanari et al.²¹, Uncu¹⁴, Yiğitbaş¹², Carranza²², Fields et al.²⁴, Nazik and Arslan²⁵ and Şen et al.²⁶, found similar results in their studies. Yiğitbaş et al.¹² associated this with the assumption that women are intuitively more sensitive in their instincts, while Şen et al.²⁶ stated that this may be associated with the assumption that women are more emotional than men. Çakmak and Demirbaş²³ stated that girls and boys go through different socialization processes due to the community and culture they live in, and that since these socialization processes attribute different gender roles to girls and boys, girls are perceived as being more emotional and more sensitive towards empathy. Our results are in parallel with those found in the literature.

The statistical analysis of the nursing students according to age indicated that the 23-25 age group had the highest mean scores on empathic tendency and empathic skill. A significant relationship was found between the ages of the nursing students and their mean scores on empathic tendency and empathic skill. Some of the studies in the literature suggest that there is no significant relationship between age and mean scores on empathic tendency and empathic skill.^{16,20} While others suggest that as the age increases, empathic tendency also increases.²⁵ The results from this study align with those reported in the latter cited, suggesting that there is an

improvement in empathic tendency and empathic skill levels as the age increases.

The statistical analysis of the nursing students according to their year level indicated that the fourth-year students had the highest mean scores on empathic tendency and empathic skill, with there being a significant difference found among the different year levels ($p<0.01$). Saeidi et al.²⁷ found a significant difference between first- and final-year students in terms of their empathy scores, and final-year students were found to be much more empathetic. Nazik and Arslan²⁵ and Mete and Gerçek²⁸ also found that fourth-year students had higher scores on the empathic skill scale than the students in other grades. In contrast, Cevahir et al.¹⁹ reported that first-year students had the highest mean scores on empathic skill. Uncu et al.¹⁴ found similar results for first-year students but determined that the second-year students had the highest average. While our study found that although the first-year students did not have the lowest mean scores on empathic tendency and empathic skill, these scores can nonetheless be improved by developing a curriculum that offers more support in this area.

The empathic tendency and empathic skill levels of the nursing students were analyzed according to their longest place of residence. The nursing students whose longest places of residence were city centers had high scores on empathic tendency and empathic skill levels, while the students who lived in villages or towns had lower values, with there being a statistical difference among the places where the students resided ($p<0.001$). This finding is similar with the findings of the study by Bekmezci et al.¹³ study on midwifery students. However Nazik and Arslan²⁵ did not find any significant difference between the longest place of residence and scores on the empathic skill scale. The results from our study suggest that the empathic skills of the students who had at one time or another lived in towns or villages improve after they arrive to city centers. This could be due to the limitations of the social development opportunities in the living spaces.

This study also evaluated the empathic tendency and empathic skill levels of the nursing students according to their parents' education levels. It was found that the students whose parents were university graduates had higher mean scores on empathic tendency and empathic skill, with there being a significant relationship between the parents' education levels and the mean scores on empathic tendency and empathic skill ($p<0.05$). Bekmezci et al.¹³ conducted a study on midwifery students and found there to be no statistical difference between the education levels of the parents and scores on empathic tendency and empathic skill. Uncu et al.¹⁴, however, found that the students whose mothers were university graduates had higher mean scores on the empathy skill scale compared to those of other students. Arifoğlu et al.²⁰ conducted a study on nursing students where they did not find there to be a significant relationship between the parents' education level and the students' scores on empathic tendency and empathic skill. The results from our study indicate that as the parents' education levels increase, the empathic skills of the students also increase, which may suggest that highly educated parents contribute to the development of empathy skills in their children.

The study examined the empathic tendency and empathic skill levels of students according to their views of the nursing profession. The mean scores on the empathic levels of the students who believed that empathy was important in nursing, who wanted to be an academic member after graduation, who willingly chose the nursing profession, and who loved their profession as a result of the nursing education they had thus far received were higher than those of the others, with there being

a significant relationship found between the empathic levels and all of these variables ($p<0.01$). This result indicates that nursing students who understand the importance of empathy in their professions, who are open to professional development, and who willingly choose their profession have greater empathic tendencies. Çınarlı et al.²⁹ also found that students who willingly chose their profession had higher scores on the empathic tendency scale.

The research results indicate the following:

-The total scores on the empathic tendency and empathic skill scale of the nursing students participating in the research are at a medium level,

-The students' gender, age, class, longest place of residence, and their parents' education level affect the empathic tendencies and the empathic skills of them,

-A medium level positive relationship exists between the empathic tendencies and the empathic skills of the nurses.

From these results, it can be recommended that empathic tendency and empathic skills be taught as part of the education process and that the courses directed towards this type of instruction be included in the academic curriculum to promote greater empathy in the students.

Compliance of Ethical Statement

Ethical permission was acquired for the research by the Clinical Research Ethical Board (Decision number: 2017/16 on March 1, 2017). This study was conducted based on the voluntary participation of the students.

Conflict of Interest

There are no conflicts of interest.

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Author Contribution

All authors contributed equally to the preparation of the article

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