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Investigation of empathic tendency and altruism levels in health services vocational school students

Dilek KOCABAŞ [a*], Mustafa Levent ÖZGÖNÜL[b]

[a] Akdeniz University, Faculty of Health Science, Department of Health Care Management, Antalya, Türkiye

[b] Akdeniz University, Faculty of Medicine, Department of History of Medicine and Ethics, Antalya, Türkiye .

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[a]https://orcid.org/0000-0002-7403-2924

[b]https://orcid.org/0000-0003-4135-1643

*Correspondence: Dilek KOCABAŞ

Akdeniz University, Faculty of Health Science, Department of Health Care Management, Antalya, Türkiye

e-mail: dkocabas@akdeniz.edu.tr

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ABSTRACT

Objectives: This research aims to examine the empathic tendencies and altruism levels of students.

Materials and Methods: This descriptive study was conducted with the students studying at Vocational School of Health Services between 15.10.2022-28.11.2022. The population of the research consists of 858 students studying at a college. The research sample consists of 408 volunteers who agreed to participate in the research. Socio-demographic form, Empathic Tendency and Altruism Scale were used in the data collection process.

Results: It was determined that the empathic tendency total score of the students participating in the study was 66.5±9.06 (min.20-max.100), and the total score of altruism was 65.2±8.73 (min.20-max.100). It was found that the empathic tendencies of the students differed according to gender. It was found that the level of empathic tendency of female students was higher than that of males. When the altruism behaviour is examined, it has been determined that the level of altruism differs according to the department of education and the status of being a health professional in the family.

Conclusion: It was determined that the empathic tendency and altruism levels of the students participating in the study were above the average. In addition, a moderate positive correlation was found between students' empathic tendencies and altruism levels. When the results of the research are evaluated, it is very important to plan and implement educational studies aimed at improving the professional values of students studying in health departments such as empathy and altruism.

Keywords:

Alturism, empathy, health education, professional values

1. INTRODUCTION

Empathy is an important component in human relations. Empathy is defined as process of the health professional puts themselves in the patient's shoes, entering the world of emotion, understanding their feelings and thoughts correctly, feeling what they feel and communicating this situation to the patient (1). Empathic tendency is the willingness to help the other person by understanding the feelings of the other person (2). In the delivery of health services, empathic tendency is important in establishing communication between the patient and the health professional. The empathic perspective of the health professional can enable him/her to look at the patient from his/her own point of view as well as from the patient's point of view (3). From this point of view, empathic tendency can be considered as understanding the patient's feelings, feeling their experiences and willingness to help the patient voluntarily. Studies show that individuals with high empathic tendency also have high willingness to help others (altruistic behaviour) (4-7).

Altruism is defined as a person's spontaneous willingness to help others (8). Comte, defines altruism

as "living for others" and argues that altruism is the basis of the moral situation (9). Altruism, which forms the basis of health service practices, is defined as considering the benefit of others as much as one's own benefit, trying to be useful to other people without any interest (10). Altruism is one of the professional values in health services and is closely related to love, compassion and sense of responsibility (11, 12).

Health professionals are a professional group based on service to humanity. The empathic tendency and altruistic behaviour of health professionals can build patients' sense of trust towards health professionals. The empathic tendency and altruistic behaviour of healthcare professionals may lead to a decrease in the emotional stress level of patients and an improvement in clinical outcomes (13). Kelm et al. (14) showed that empathic tendency and altruistic behaviour positively affect the mental health of health professionals as well as positively affecting the health of patients.

In the studies conducted in the literature, it is stated that empathy is a skill that can be developed through education (15, 16). Therefore, it is thought that examining the empathic tendency and altruistic behaviours of health services vocational school students is important in terms of teaching professional values and developing altruism skills. In the studies, although studies on empathic tendency and altruism behaviour with nursing and midwifery students were conducted (7, 17, 18), a limited number of studies on health services vocational school students were found. In this study, it was aimed to examine the empathic tendency and altruism levels of students studying in vocational school of health services.

2. MATERIALS AND METHODS

2.1. Place and Type of the Research

The study was conducted descriptively. The study was carried out with students studying at Burdur Mehmet Akif Ersoy University Vocational School of Health Services between 15.10.2022- 28.11.2022.

2.2. Population and Sample of the Research

The population of the research consists of 858 students studying at the Vocational School of Health Services. No sample selection was made in the study, it was aimed to reach the entire population and 408 students voluntarily participated in the study.

2.3. Data Collection Tools

In the study, Empathic Tendency and Altruism Scale were applied to the volunteers. In addition, the volunteers were asked questions including socio-demographic information about age, gender, income status and whether they chose their profession voluntarily or not.

2.3.1. Empathic Tendency Scale (ETS)

ETS is a scale developed by Dökmen (19) to measure the empathy skills of individuals in their daily lives. The reliability value of the scale is 0.82. In the scale, the participants are expected to express their opinions on each item by scoring each item from 1 to 5. The highest score that can be obtained from the scale is 100 and the lowest score is 20. A high score on the scale means that the empathic tendency is high.

2.3.2. Altruism Scale

The scale was developed by London and Bower (20) and adapted into Turkish by Akbaba (21). The reliability value of the scale is 0.85. The highest score that can be obtained from the five-point likert-type scale is 100 and the lowest score is 20. The altruism scale has four sub-dimensions: family, sociability, benevolence and responsibility. A high score on the scale means that the level of altruism is high.

2.3.4. Socio-Demographic Information Form

The socio-demographic information form consisted of a total of 8 questions including age, gender, income, department, whether they chose the profession willingly or not, parental education level and the status of having a health professional in the family.

2.4. Data Collection

Approval from Akdeniz University Clinical Research Ethics Committee (70904504/541) and written permissions from Burdur Vocational School of Health Services Directorate were obtained before the study. The data were collected by using face-to-face interview technique from the students who were

studying at the Vocational School of Health and who volunteered to participate in the study.

2.5. Data Analysis

The analyses were performed using JAMOVI statistical programme. In the analysis of the data, number, percentage, mean and standard deviation were used as descriptive statistics. Whether the data showed normal distribution was evaluated by Kolmogorov-Smirnov test. Since it was determined that it showed normal distribution, analyses were made using Independent Sample t-test, One-Way ANOVA and Post-Hoc tests in the parametric test group.

2.6. Limitations

The study reflects the findings related to the empathic tendencies and altruism behaviours of the students participating in the study. The findings obtained from the study cannot be generalised to all students.

3. RESULTS

Participating in the study; 58.6% of the students were under the age of 20 and 41.4% were 20 years and over. It was found that 74.5% of the students were female. Of the students participating in the study, 30% were studying in First and Emergency Aid, 37% in Anaesthesia, 26% in Operating Room Services and 7% in Physiotherapy departments. When the mother education level of the students was analysed, it was found that 55.1% were primary school graduates. When the father's education level was analysed, it was found that 33.1% were high school graduates and 32.1% were primary school graduates. 84% of the participants stated that they chose the department willingly. 75% of the students stated that there were no health professionals in their families.

As a result of the correlation analysis performed to evaluate the relationship between empathic tendency and altruism levels of the students, a moderate positive relationship was found ($r=0.318$; $p<0.001$) (Table 1).

The mean total score of the altruism scale of the students was 63.3±9.06. In the study, it was found that the altruism level of the students differed according to the department of study. According to the results of the Tukey-b test conducted to determine the groups causing this difference, the difference caused by the students whose department was First and Emergency Aid and the students whose department was Physiotherapy. The altruism level of the students whose department was Physiotherapy ($\bar{x}$= 64.8) was significantly higher than that of the students whose department was First and Emergency Aid ($\bar{x}$= 61.6).

In the study, it was determined that the altruism level of the students differed significantly according to whether they had a health professional in their family or not, and the altruism level of the students who had a health professional in their family ($\bar{x}$ = 65.6) was higher than those who did not ($\bar{x}$= 62.6). In addition, it was determined that the level of altruism differed significantly according to the condition of choosing the department willingly, and the students who chose the department willingly ($\bar{x}$= 63.7) were higher than those who did not ($\bar{x}$= 61.5). It was found that the family dimension score of the altruism scale differed significantly according to the status of being a health professional in the family, and the students who had a health professional in their family ($\bar{x}$ = 18.0) were higher than those who did not ($\bar{x}$= 17.3).

Table 1: The Relationship Between Students' Altruism Scale Score and Subscale Scores and Empathic Tendency Scale Score (N=408)

	1	**2**	**3**	**4**	**5**	**6**
1. Altruism Scale Total	1					
2. Family Sub-dimension	0.523	1				
3. Social Sub-dimension	0.732	0.124	1			
4. Benevolence Sub-dimension	0.706	0.260	0.260	1		
5. Responsibility Sub-dimension	0.606	0.135	0.295	0.249	1	
6. Empathic Tendency Total	0.318	0.241	0.150	0.706	0.251	1

Table 2: Comparison of the Socio-Demographic Characteristics of the Students and the Means of the Altruism Scale and its Subscales (N= 408)

SOCIO-DEMOGRAPHIC CHARACTERISTICS		TOTAL SCORE OF ALTRUISM SCALE AND TOTAL SCORE OF SUB-DIMENSIONS									
		Altruism Scale Total Score	t/F p	Family Sub-dimension Total Score	t/F p	Social Sub-dimension Total Score	t/F p	Benevolence Sub-dimension Total Score	t/F p	Responsibility Sub-dimension Total Score	t/F p
Age	20 years and under	62.9±8.42	t: -1.05* p: 0.297	17.5±2.45	t: 0.32* p: 0.74	13.3±4.44	t: -0.50* p: 0.61	15.7±3.59	t: -1.70* p: 0.08	16.4±2.93	t: -0.606 p: 0.54
	Over 20 years old	63.9±9.91		17.4±3.04		13.5±4.55		16.3±3.88		16.6±2.79	
Gender	Female	63.7±8.98	t: -1.39* p: 0.165	17.5±2.73	t: 0.15* p: 0.88	13.4±4.79	t: -0.10* p: 0.91	16.2±3.63	t: -2.55* p: 0.01	16.6±2.84	t: -1.09 p:0.27
	Male	62.3±9.28		17.5±2.65		13.4±4.38		15.2±3.90		16.2±2.97	
Department	First and Emergency Aid	61.6±8.21	F: 2.71** p: 0.04	17.1±2.44	F: 0.75** p: 0.52	12.1±4.35	F: 3.88** p: 0.01	15.9±4.08	F: 2.62* p: 0.06	16.1±2.71	F: 3.09 p: 0.03
	Anesthesia	61.9±8.47		17.3±3.10		13.0±4.24		14.6±3.10		17.2±2.62	
	Operating Room Services	63.4±9.35		17.7±2.91		14.0±4.61		16.0±3.71		16.2±2.84	
	Physiotherapy	64.8±9.27		17.8±2.55		13.7±4.34		16.4±3.57		17.0±3.00	
Income	Income Less Than Expenses	63.5±9.60	F: 0.06** p: 0.93	17.1±2.95	F: 1.94** p: 0.14	13.7±4.70	t: 1.49* p: 0.23	15.9±3.94	F: 0.27** p: 0.75	16.8±2.77	F: 1.74 p: 0.17
	Income Equal to Expense	63.2±8.35		17.7±2.52		13.0±4.08		16.1±3.54		16.4±2.94	
	Income More Than Expenses	63.4±10.1		17.7±2.47		13.9±5.16		15.8±3.76		16.0±2.90	
Mother education level	Primary School	63.1±9.26	F: 1.12** p: 0.34	17.4±2.89	F: 0.93** p: 0.43	13.4±4.19	F: 0.26** p: 0.85	16.0±3.80	F: 2.63** p: 0.06	16.2±2.79	F: 2.19 p: 0.09
	Middle School	64.7±8.48		17.8±2.08		13.1±4.54		16.6±3.65		17.2±2.87	
	High School	62.5±8.20		17.2±2.64		13.6±4.74		15.1±3.40		16.5±2.91	
	University	65.1±12.67		17.6±3.04		14.1±6.56		16.5±4.27		16.9±3.46	
Father education level	Primary School	62.2±9.22	F: 0.93** p: 0.42	17.1±3.10	F: 1.41** p: 0.43	13.1±3.93	F: 1.04 p: 0.37	15.8±3.60	F: 0.86** p: 0.46	16.2±2.80	F: 0.60 p: 0.61
	Middle School	64.0±9.19		17.8±2.27		13.9±4.21		15.6±4.21		16.7±3.01	
	High School	63.7±8.26		17.7±2.63		13.2±4.68		16.3±3.45		16.6±2.58	
	University	64.1±10.60		17.3±2.49		14.0±5.82		16.3±3.78		16.6±3.59	
Selecting the department	Yes	63.7±8.99	t: 1.82* p: 0.06	17.5±2.68	t: 1.42* p: 0.15	13.4±4.42	t: -0.41* p: 0.68	16.1±3.67	t: 1.06* p: 0.29	16.7±2.85	t: 14.9 p< 0.001
	No	61.5±9.30		17.0±2.84		13.6±4.81		15.5±4.00		15.3±2.71	
Is there a health professional in the fa-	Yes	65.6±9.83	t: 2.96* p< 0.001	18.0±2.93	t: 2.49* p: 0.01	14.7±4.80	t: 3.48* p< 0.001	16.5±3.88	t: 1.54* p: 0.12	16.4±3.29	t: -0.41 p: 0.67
	No	62.6±8.68		17.3±2.60		13±4.29		15.8±3.66		16.5±2.73	

*Independent Groups t Test, **One Way Analysis of Variance

Table 3: Socio-Demographic Characteristics of Students Comparison of Empathic Tendency Score Means (N= 408)

SOCIO-DEMOGRAPHIC CHARACTERISTICS		EMPATHIC TENDENCY SCALE MEAN SCORE	t/F
Age	20 years and under	66.7±5.86	t: 0.72
	Over 20 years old	66.2±8.33	p: 0.46
Gender	Female	67.1±7.10	t: -3.06
	Male	64.7±6.33	p< 0.001
Department	First and Emergency Aid	66.3±5.46	F: 2.24
	Anesthesia	64.7±7.34	p: 0.08
	Operating Room Services	65.9±7.83	
	Physiotherapy	67.7±6.71	
Income	Income Less Than Expenses	66.0±8.26	F: 2.58
	Income Equal to Expense	66.4±5.96	p: 0.08
	Income More Than Expenses	68.3±5.88	
Mother education level	Primary School	66.3±7.39	F: 0.85
	Middle School	66.9±6.66	p: 0.46
	High School	66.0±6.81	
	University	69.1±5.87	
Father education level	Primary School	66.1±8.36	F: 0.20
	Middle School	66.7±5.78	p: 0.89
	High School	66.6±6.17	
	University	66.5±7.43	
Selecting the department	Yes	66.7±7.11	t: 1.50
	No	65.0±6.20	p: 0.13
Is there a health professional in the family?	Yes	67.2±8.23	t: 1.14
	No	66.3±6.52	p: 0.25

*Independent Groups t Test, **One Way Analysis of Variance

The social dimension of the altruism scale was found to be at a significant level in the students who received First and Emergency Aid, the students with Operating Room services, and the students with First and Emergency Aid and Physiotherapy. In addition, when the social dimension of the Altruism scale was compared according to whether the students had health professionals in their families or not, it was found that those who had health professionals in their families ($\bar{x}$= 14.7) were significantly higher than those who did not ($\bar{x}$ = 13). When the benevolence dimension of the altruism scale is compared according to the gender variable, it is seen that the benevolence score of female students ($\bar{x}$= 16.2) is significantly higher than that of male students ($\bar{x}$= 15.2). It was found that the responsibility dimension of the altruism scale differed according to the department of study, and there was no significant difference in the results of the Tukey-b test conducted to determine the groups that caused this difference. In addition, when the responsibility dimension of the Altruism scale was compared according to the variable of choosing the department willingly, it was found that the responsibility scores of the students who chose the department willingly ($\bar{x}$= 16.7) were significantly higher (Table 2).

The mean Empathic Tendency Scale score of the students was 65.2±8.73. In the study, it was determined that the mean Empathic Tendency scores differed according to gender and female students ($\bar{x}$= 67.1) had significantly higher empathic tendencies than male students ($\bar{x}$= 64.7) (Table 3).

4. DISCUSSION

This study was carried out to determine the relationship between altruism behaviour and empathic tendency of students studying in vocational school of health services. In this study, the empathic tendency level of the students was slightly above the average. Similar findings were obtained in the study conducted by Bekmezci et al. (22), Oran and Kurul (23) on midwifery students and Tekir et al. (24) on nursing students. The empathic tendency levels of the students in our study were found to be compatible with the literature. It is usual to expect similar results in departments receiving vocational education in the field of health. The fact that the level of empathic tendency of students is above the average is closely related to their ability to better understand the feelings and thoughts of others (25). Empathic tendency, which positively affects interpersonal and social communication, is the main motivation source of altruism behaviour (26).

When the altruism behaviour of the students in our study was examined, it was found that was above the average. In the study conducted by Arpacı and Özmen (7) and Banbal (27) with nursing students, it was found that the level of altruism was above the average. In the study conducted by Keskin and Özcan (28) on nursing students, it was found to be at a medium level. It is similar with the results of our study. In the study of Johson et al. (11), unlike our study findings, altruism behaviour of nursing students was found to be at a low level. The reason for this difference was interpreted as "the destiny of idealism" in which students lost their ideals during the education process (11). The fact that altruism behaviour was not found to be at a low level in our study can be said to be due to the fact that the students did not lose their ideals in the two-year period, considering that they received education at the associate degree level.

In our study, a moderate positive relationship was found between students' empathic tendencies and altruism behaviour. The findings of our study are compatible with the findings of Eisenberg et al. (29). When the literature is analysed; in the studies of Arpacı and Özmen (7) and Avcı et al. (17), a low level positive relationship was found between empathic tendency and altruistic behaviour, and in the study of Acar and Apak (30), a medium level positive relationship was found.

In our study, it was determined that there was a significant relationship between empathic tendency and the sub-dimensions of altruistic behaviour such as family, benevolence, responsibility at a positive medium level and at a high level in the social dimension. The findings of Arpacı and Özmen's (7) study are compatible with the findings of our study.

Similar findings were obtained in the study of Öz (31). Since the volunteers in these studies were students studying in health departments in Turkey, it is usual to obtain similar findings.

In our study, when it was examined whether the altruism levels of the students differed according to socio-demographic variables, it was determined that altruism behaviour did not differ according to gender. The findings of our study are consistent with previous studies (29, 33-34). Xi et al. (34), on the other hand, found that women's altruistic behaviors were higher than men's in their study at the national level. In the study of Linda et al. (35), it was determined that female exhibit more altruistic behavior than men. The reason for the difference in these studies is related to the acceptance of the existence of their social roles by the volunteers included in the study (36).

In our study, it was determined that female students' benevolence scores were higher than males. This finding shows that female students tend to be more helpful than males. In the study conducted by Gol (37) on nursing students, unlike our findings, it was determined that the helpfulness score did not differ according to gender. Similarly, in Smith's (38) study, it was found that benevolence did not differ according to gender. The reason for the difference in our study may be related to the acceptance of volunteers' social roles.

In our study, it was determined that the altruism level of the students studying in the department of physiotherapy was higher than the students studying in the department of first and emergency aid. In Pekçetin and Günal's (39) study conducted with students studying in health departments, different findings were obtained from our study. It is an expected situation that different findings will be obtained in students who receive different application training in different fields.

In our study, altruism behaviour of the students was found to be higher in those who had health professionals in their families compared to those who did not. Similarly, it was found that family and social dimension scores of altruism behaviour were higher in students whose families had health professionals. Considering that altruism behaviour develops within the family in early childhood, this finding can be explained by the fact that the presence of a health professional in the family is associated with high levels of altruism behaviour. Warneken and Tomasello (40) stated in their study that the high level of altruism behaviour in those who have health professionals in their families can be explained by the life culture of the family.

In our study, it was determined that the altruism level of the students who chose the department willingly was higher. Similarly, the responsibility dimension of the altruism scale was found to be higher in those who chose the department willingly. Similar to our findings, Duru (41) also found that the altruistic behaviour of students who chose the profession willingly was higher. The motivation of the students to choose the health profession stems from love, compassion and the desire to serve the society. It is an expected finding that health field students have high levels of altruism behaviour because they choose the profession with this motivation.

It was determined that female students had higher empathic tendencies than male students. The findings of our study are consistent with the relevant literature (42-45). In the study of Deng et al. (46), unlike our study findings, it was found that the empathic tendencies of female students were similar to male students. These findings can be attributed to the biological differences of women. It can be explained by the fact that women are more sensitive to their own and others' emotions than men in both socialisation and education processes (47).

5. CONCLUSION

In our study, it was found that the level of empathic tendency and altruistic behaviour of the students studying in health departments was slightly above the average and there was a moderate positive relationship between empathic tendency and altruistic behaviour. In the field of health professions, students are expected to have high levels of empathic tendency and altruistic behaviours. It should be ensured that students studying in fields related to health professions have high levels of

empathic skills and altruistic behaviours. Integration of courses and contents that will contribute to the development of empathic skills and altruistic behaviours (values education, communication skills, behavioural sciences, etc.) into the curriculum in the associate degree education programme, in addition to the acquisitions that students have acquired from family and external environment until that day, will contribute significantly.

In our study, it was determined that the altruistic behaviour of the students differed according to the department of study and whether there were health professionals in the family or not, and their empathic tendencies differed according to gender. Considering the differences of students with different socio-demographic structures, unique training programmes should be planned to increase empathic tendency and altruistic behaviour to a higher level. The planned original training programmes will contribute to solving the communication problems in the field of health and developing a humanistic approach towards patients.

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Ethical Statement: The Human Rights Declaration of Helsinki conducted the study process. Ethical approval was obtained for this study from the Akdeniz University Clinical Research Ethics Committee (Ethics Approval Number: 70904504/541, Date: 12.10.2022).

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