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ALTRUISTIC VALUES AMONG STUDENTS OF NURSING, MIDWIFERY, PHYSIOTHERAPY, AND HEALTH PSYCHOLOGY: A CROSS-SECTIONAL STUDY

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Ключові слова: *альтруїзм, студенти, медична сестра, акушерка, фізіотерапія*

Abstract. Altruistic values among students of Nursing, Midwifery, Physiotherapy, and Health Psychology: a cross-sectional study. Kraja J., Fresku E., Xhakollari L. *Aim – to study the altruistic values of o group of nursing, midwifery, and physiotherapy students, and how these values evolved throughout academic years and across study programs. The study used a descriptive correlational design. The data were collected from students in the bachelor's degree programs in nursing, midwifery, and physiotherapy, and in the master's degree program in health psychology (students in this program have completed bachelor's degrees in nursing, midwifery, or physiotherapy). The Faculty of Natural Sciences at the University of Shkodra "Luigi Gurakuqi", Albania offers bachelor's degree programs in nursing, midwifery, physiotherapy and a professional master's degree in health psychology. During the academic year 2022-2023, the number of active students was 756. A total of 457 students participated in this study: 175 from the nursing program, 130 from the midwifery program, 107 from the physiotherapy program, and 45 from master program. Data were collected from December 1, 2022, through January 31, 2023, with an online questionnaire. Two tools were used in this study: a demographic questionnaire and the Altruism Scale used by Ümmet and colleagues. The mean score on the Altruism Scale was 2.9±0.78. A one-way ANOVA revealed that there was a difference in mean altruism score between at least two groups (F (3, 452) = [3.232], p=0.02). Tukey's HSD Test for multiple comparisons found out that the mean value of altruism was different between the bachelor students in nursing and bachelor students in physiotherapy (p=0.011, 95% CI = [0.0498, 0.5448]). Compared to others, bachelor students in nursing had higher level of altruism and bachelor students in physiotherapy had lower level of altruism. Conclusions: The results showed that it is precisely the feeling of altruism that people have, which made them choose nursing as a profession. Since altruism is so important for the nursing profession, topics related to altruism should be included in nursing curricula.*

Реферат. Альтруїстичні цінності серед студентів, які навчаються за спеціальностями «Медсестринство», «Акушерство», «Фізіотерапія» та «Психологія здоров'я»: перехресне дослідження. Края Ю., Фреску Е., Джаколларі Л. *Мета – вивчити альтруїстичні цінності групи студентів-медсестер, акушерок і фізіотерапевтів, а також те, як ці цінності розвивалися протягом академічних років і в різних програмах навчання. У дослідженні використовувався описовий кореляційний дизайн. Були зібрані дані студентів програм бакалавра з медсестринства, акушерства та фізіотерапії та магістерської програми з психології здоров'я (студенти цієї програми мають ступінь бакалавра з медсестринства, акушерства або фізіотерапії). Факультет природничих наук Університету Шкодра «Луїджі Гуракукі», Албанія, пропонує програми бакалавра з медсестринства, акушерства, фізіотерапії та професійний ступінь магістра з психології здоров'я. Протягом 2022/2023 навчального року кількість студентів становила 756. Загалом у цьому дослідженні взяли участь 457 студентів: 175 з медсестринської програми, 130 з акушерської програми, 107 з фізіотерапевтичної програми та 45 з магістерської програми. Дані збиралися з 1 грудня 2022 року до 31 січня 2023 року за допомогою онлайн-анкети. У цьому дослідженні використовувалися два інструменти: демографічна анкета та шкала альтруїзму, розроблена Ümmet та його колегами. Середній бал за шкалою альтруїзму становив 2,9±0,78. Односторонній дисперсійний аналіз виявив, що існує різниця в середньому показникові альтруїзму принаймні між двома групами (F (3, 452) = [3,232], p=0,02). Тест HSD Тьюкі для множинних порівнянь виявив, що середнє значення альтруїзму було різним у студентів-бакалаврів медсестринства і студентів-бакалаврів фізіотерапії (p=0,011, 95% CI = [0,0498, 0,5448]). Порівняно з іншими студенти-бакалаври медсестринства мали вищий рівень альтруїзму, а студенти-*

бакалаври фізіотерапії мали нижчий рівень альтруїзму. Результати показали, що саме почуття альтруїзму спонукало їх обирати професію медсестри. Оскільки альтруїзм дуже важливий для професії медсестри, теми, пов'язані з альтруїзмом, повинні бути включені до навчальних програм медсестер.

Implications for Knowledge Translation
Altruistic values are increasingly being lost in the health care professions.
Society is becoming more and more individualistic and education curricular is not giving the best in the formation of these values.
More concepts and topics related to altruism should be introduced into the curricula of medical science study programs, in order to provide safe and compassionate care for patients.

Nursing literature in the last decade has highlighted missed care, related to limited nursing resources, accompanied by a decrease in all aspects of nursing care, especially nurse-patient communication, and relationships [1]. The lack of these fundamental aspects of care is difficult to measure, and the widespread erosion from the lack of diffusion of these values leads to health care failures with a decrease in the quality of patient care [2]. More precisely the lack of health personnel has caused a serious problem in both the quality of health care services and the improvement of global well-being [3]. In recent years, these nursing, midwifery and physiotherapy programs are preferred by students due to the increasing demand for health care workforce [4, 5]. The increase in the number of students studying physiotherapy and the high competition of the global market inevitably compromise the essential values of professionalism [6]. Therefore, there could be a risk that the diploma of these programs is seen as a catapult to guarantee a job in high income countries, rather than as an opportunity to develop the required altruistic values and qualities to provide qualitative care.

During the growth and development, we learn how to have values based on culture, education, and surroundings [7]. Altruism as part of these values is considered a characteristic that distinguishes us from other living things [8]. The Latin etymological origin of altruism suggests the idea of "for others", such as "a self-destructive behavior developed for the benefit of others" [8], and altruism can be defined as attention and care without any expectations [9]. Precisely these personal and professional values motivate and reward nurses, in which they believe and are the basis of nursing practice when they interact with patients and colleagues [10]. Although values take different names and orders based on cultures [11], they are the principles that guide human behaviour and these values directly affect altruistic behaviours, as well as moral norms [12]. Referring to today importance of nurses in the health system public nursing care, educators and policy makers are becoming more and more interested in these values [2]. During the curricular formation, students gradually acquire the values and behaviours of the medical professions, where they base humanity, which is characterized by altruism [13]. A study conducted in Iceland showed that the desire to help others should be seriously considered and used during the designation of the education for future leaders and managers [14]. This early identification for the profession, among nursing student, would increase the quality and patients' safety when providing nursing care [15], and this professional identity for nurses begins with the nursing studies and will continue throughout their career [2]. This professional identity based mainly on compassionate care, as a virtue and moral orientation, ensures qualitative health care [16]. Internal factors, such as altruism and patient care, are important for attending medical study programs [17]. From two studies conducted in Albania, bachelor students in nursing [4] as well as midwifery [5] attended these programs specifically to provide care to people in need. Although altruism is not valued in the same way as other professional knowledge and skills [18], while choosing a profession, research shows that altruism is the most common motivation of the people when they become nurses [9]. Indeed, the altruism makes nurses sacrifice their time, provide safe care, preserve the patient's dignity, avoid prejudice, and receive an internal reward [19]. Today's society seems to be more individualistic, where self-interest is considered as more interesting than the honest and altruistic aspect [2], but the nursing profession as one of the most altruistic professions, altruism has its own role to help others and not to fulfill their own interests [9]. Altruism originates from spontaneous kindness to help people, without expecting anything in return [20]. Moreover, the literature brings to attention the altruistic perspective for health care professionals [21]. According to Sanjai & Gopichandran, a favorable environment must be created to nurture altruistic behavior and channel it through activities organized in medical schools [22].

Purpose – study the altruistic values of o group of nursing, midwifery, and physiotherapy students, and how these values evolved throughout academic years and across study programs.

MATERIALS AND METHODS OF RESEARCH

The study used a descriptive correlational design. The data were collected from students in the bachelor's degree programs in nursing, midwifery, and

physiotherapy, and in the master's degree program in health psychology (students in this program have completed bachelor's degrees in nursing, midwifery, or physiotherapy).

The Faculty of Natural Sciences at the University of Shkodra "Luigi Gurakuqi", Albania offers bachelor's degree programs in nursing, midwifery, physiotherapy and a professional master's degree in health psychology. During the academic year 2022-2023, the number of active students was 756. Of these, 342 students attend the nursing study program (113 first-year students, 121 second-year students and 108 third-year students), 172 students attended the midwifery study program (71 first-year students, 62 second-year students and 39 third-year students), 170 students attended the physiotherapy study program (72 first-year students, 66 second-year students and 32 third-year students) and 72 students attended the master's degree in health psychology. A total of 457 students participated in this study (60.45% of the total number of students): 175 from the nursing program (51.16% of the total number of nursing students), 130 from the midwifery program (75.58% of the total number of midwifery students), 107 from the physiotherapy program (62.94 % of the total number of physiotherapy students), and 45 from master program (62.5% of the total number of master students).

Any student in the bachelor's degree programs in nursing, midwifery, or physiotherapy, or the master's degree in health psychology at the University of Shkodra "Luigi Gurakuqi" during the academic year 2022-2023, could participate in this study.

Data were collected from December 1, 2022, through January 31, 2023, with an online questionnaire. Two tools were used in this study: a demographic questionnaire and the Altruism Scale used by Űmmet and colleagues.

The demographic questionnaire collected data about personal characteristics of participants: gender, age, study program, place of birth, family structure, residence, year of study, and number of siblings.

The Altruism Scale used in this study was developed by Űmmet and colleagues [23]. The scale consists of 38 items in seven dimensions: 1) Participating in Volunteer Activities; 2) Helping Financially; 3) Traumatic Situations; 4) Caring for the Elderly/Sick; 5) Helping Based on Physical Strength; 6) Helping in the Education Process; and 7) Helping from a Sense of Closeness. Each item is scored between 1 and 5 points (1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree). Cronbach's alpha value was found to be 0.911 in this study.

Data analysis was conducted using Statistical Package for the Social Sciences (SPSS) version 24. Descriptive statistics, including frequencies, percentages, and standard deviations, were calculated to summarize the demographic characteristics of the participants (Table 1). Additionally, inferential statistics were employed to assess relationships between variables and compare groups. The following statistical methods were utilized:

- t-test: To compare mean scores of altruisms between different groups (e.g., gender, study program), a t-test was conducted. This method was chosen based on its appropriateness for comparing means between two independent groups [24]. We reasoned that students in different programs represent independent groups, as their characteristics and experiences may vary based on their chosen field of study. Furthermore, we assessed the assumptions underlying the t-test, including normality and homogeneity of variances. Normality assumptions were checked using visual inspection of histograms and statistical tests, ensuring that our data approximated a normal distribution within each group. Additionally, Levene's test for equality of variances was conducted to confirm homogeneity of variances between groups, ensuring the validity of our comparisons.
- Analysis of Variance (ANOVA): ANOVA was used to test for differences in mean altruism scores among multiple groups (e.g., study programs, family structures). This method allows for comparisons across more than two groups and was selected to assess variation in altruism levels across different categories [25].
- Pearson Correlation Analysis: Pearson correlation analysis was employed to assess the relationships between altruism scores and other continuous variables (e.g., years of study). This method measures the strength and direction of linear relationships between two variables [26]. To ensure the validity of our correlation analysis, we examined scatterplots for linearity and outliers, confirming the suitability of Pearson correlation for our data.

The level of statistical significance chosen for this study is α=0.05. This level was selected based on standard practices in the field and to ensure robustness in the interpretation of results.

Ethics approval was obtained from the council at the Department of Nursing at the University of Shkodra "Luigj Gurakuqi", protocol No. 132. Data were de-identified so confidentiality of participants was preserved. The authors explained the study to participants, completion of the questionnaire implied consent.

RESULTS AND DISCUSSION

Demographic Characteristics

Table 1 displays the demographic characteristics of the participants. Most participants were female (88%); 85.3% lived in the same house with their parents; 52.3% had a nuclear family compared to 46.2% that had an extended family; and 58.6% lived in village.

Table 1

Characteristics of Participants (No.=457)

Item	No.	%	Item	No.	%
Gender			**Age**		
Female	**402**	**88**	**18-19 years old**	**129**	**28.2**
Male	**55**	**12**	**19-20 years old**	**135**	**30.3**
Study program			**20-21 years old**	**119**	**26.7**
Bachelor in nursing	**175**	**38.4**	**Over 21 years old**	**63**	**14.1**
Bachelor in midwifery	**130**	**28.5**	**Year of study in university**		
Bachelor in physiotherapy	**107**	**23.5**	**First year**	**166**	**36.3**
Master in Health psychology	**45**	**9.6**	**Second year**	**127**	**27.8**
Place of residence			**Third year**	**98**	**21.4**
Live with parents	**390**	**85.3**	**Fourth year**	**66**	**14.4**
Rented house	**53**	**11.6**	**Number of siblings**		
Dormitory	**14**	**3.1**	**0**	**5**	**1.1**
Family structure			**1**	**110**	**24.1**
Nuclear family	**239**	**52.3**	**2**	**172**	**37.2**
Extended family	**211**	**46.2**	**3 or more**	**170**	**37.2**
Separated parents	**7**	**1.5**			
Residence					
Village	**268**	**58.6**			
City	**189**	**41.4**			

Notes: No. – number of valid observations in each group: % – percentages of observations in each group.

Altruistic Values

The mean score of Altruism Scale was 2.9±0.78. Considering the five-point Likert response format of the scale ranging from 1 to 5 (a high score indicates a high level of altruism), it resulted that in general students had a moderate level of altruism. The mean score of the sub dimensions of the scale were: Participating in Volunteer Activities 2.94±1.00; Helping Financially 2.72±1.03; Traumatic Situations 3.56±1.1; Caring for the Elderly/Sick 3.66±1.04; Helping Based on Physical Strength 2.93±1.11; Helping in the Education Process 3.45±1.05; Helping from a Sense of Closeness 3.87±1.07. These results show that compared to others sub dimensions Helping from a Sense of Closeness had the highest mean value and Helping Financially had the lowest mean value.

T-test was applied to test the statistical difference of altruism among the respondents with different gender and different residence. The mean score of female students in Altruism Scale was similar to the mean score of males. There was no difference on altruism across the gender of participants ($p=0.285$). The mean score of students living in village in Altruism Scale was similar with the mean score of students living in city. There was no difference on altruism across the residence of participants ($p=0.187$), Table 2.

Table 2

Relation between altruism with gender and residence of the students

Independent sample test						
	gender	N	mean	SD	T	sig.(2-tailed)
Altruism	Male	55	2.8	0.78	-1.069	0.285
	Female	402	2.9	0.78		
	Residence					
Altruism	Village	286	2.86	0.82	-1.323	0.187
	City	189	2.96	0.72		

Notes: N – number of valid observations in each group; SD – standard deviation; t – test for independent samples t Test; Sig. (2-tailed) – p – value corresponding to the given test statistic and degrees of freedom.

The One-way ANOVA was applied to test the difference among the respondents studying different programs and different family structures. The hypothesis was formulated as no difference in the means score of students across different programs regarding their general altruism level, One Way ANOVA was used.

Table 3 shows the relation between altruism with study program of participants and different family structures. There was a difference on altruism throughout different study programs of participants (p=0.022).

A one-way ANOVA revealed that there was a difference in mean altruism score between at least two groups (F (3, 452)= [3.232], p=0.02). Tukey's HSD Test for multiple comparisons found out that the mean value of altruism was different between the bachelor students in nursing and bachelor students in physiotherapy (p=0.011, 95% C.I. = [0.0498, 0.5448]). There was no difference in mean altruism scores between bachelor students in nursing, bachelor students in midwifery (p=0.602) and master students in health psychology (p=0.946) or between bachelor ones in midwifery, bachelor ones in physiotherapy (p=0.269) and professional master students in health psychology (p=0.992). Compared to others, bachelor students in nursing had higher level of altruism and bachelor students in physiotherapy had lower level of altruism.

The hypothesis is formulated is that there is no difference in the means score of the students that belong to different family structures regarding their general altruism level and the One Way ANOVA was used. There was a difference on altruism across the different family structure of participants (p=0.028). LSD post hoc test results revealed that the extended family group had significant higher altruism (M=3.01, SD=0.76) compared to nuclear family group (M=2.82, SD=0.79). There was no difference in altruism among the groups of separated parents, the nuclear family, and the extended family.

Table 3

Relation between altruism with study program of students and family structure of students

Relation between altruism and study program of students						
	study program	N	mean	SD	ANOVA	
					T	sig
	Bachelor in nursing	175	3.01	0.75		
Altruism	Bachelor in midwifery	130	2.90	0.77	3.232	0.022
	Bachelor in physiotherapy	107	2.72	0.86		
	PM in Health psychology	44	2.94	0.64		
Relation between altruism and family structure of students						
	Family structure					
	Nuclear family	239	2.80	0.79		
Altruism	Extended family	211	3.01	0.76	3.612	0.028
	Separated parents	7	2.68	0.96		

Notes: N – number of valid observations in each group; SD – Standard Deviation; F – ANOVA coefficient; Sig – significance level.

Table 4 shows the relation between altruism with place of residence of participants, or economic status, using one-way ANOVA. There was no difference in altruism among the places of residence at the p=0.333 level for the three groups (F (2,454)=1.101, p=0.333). A one-way ANOVA was conducted to determine the effect of the economic status (low, medium, high) on altruism. The results indicated non-significant effect, (F (2,454) =0.344, p=0.709).

Table 4

Relation between altruism with residence place of students and economic status of students

Relation between altruism and residence place of students

	place of residence	N	mean	SD	F	sig
	Homestay with parents	390	2.88	0.76		
	Rented house	53	2.95	0.92		
Altruism	Dormitory	14	3.1	0.76	1.101	0.333

Relation between altruism and economic status of students

	Economic status					
	Low	29	3.02	1.05		
Altruism	Medium	416	2.89	0.76	0.344	0.709
	High	12	2.85	0.81		

Notes: N – number of valid observations in each group; SD – Standard Deviation; F – ANOVA coefficient; Sig – significance level.

Table 5 shows the relation between altruism with group age of participants and number of siblings of the students, using one-way ANOVA. There was no difference in altruism among the group age at the p=0.193 level for the four groups (F (3,442)=1.581, p=0.193).

The One-way ANOVA was applied to test the difference among the respondents having different numbers of siblings. The hypothesis is formulated as no difference in the means score of students that have different numbers of siblings regarding their general altruism level and the One Way ANOVA was used. There was a difference on altruism among the different number of participants' siblings (p=0.007).

A one-way ANOVA revealed that there was a difference in mean altruism score between at least two groups (F (3, 453)=[4.108], p=0.007).

Tukey's HSD Test for multiple comparisons found out that the mean value of altruism was different between students with 1 sibling, students with 2 siblings (p=0.021, 95% C.I. = [-0.5216, -0.0303]) and students with 3 or more siblings (p=0.014, 95% C.I. = [-0.5358, -0.0434)

There was no difference in mean altruism scores between students with 2 siblings, students with no siblings (p=0.540) and 3 or more siblings (p=0.998); or between students with no siblings, students with one (p=0.946) and 3 or more siblings (p=0.5116). Compared to others, students with 3 or more siblings had higher level of altruism and students with no siblings had lower level of altruism.

In this study, students were asked if they really wanted to be health personnel. Most of them (94.3%) responded "yes". T-test was applied to test the difference of altruism among the respondents with different approaches to the wish to become health personnel. The mean score of students having the wish to become health personnel in Altruism Scale was higher than the mean score of students who did not have the wish to become health personnel (Table 6). There was a difference on altruism across the wish of students to become health personnel (p=0.021) and the effect size was small (Eta squared =0.016).

In conclusion: "There was a difference in the score of altruism for students having the wish to become health personnel (M=2.92, SD=0.77) and students who did not have the wish to become health personnel (M=2.56, SD=2.56); t (455)=3.31, p=0.021)". Students who really wanted to be health personnel had higher level of altruism compared to those who did not have this wish.

Table 5

Relation between altruism with group age af the students and number of siblings

Relation between altruism and group age of students

	group age	N	mean	SD	ANOVA	
					T	sig
Altruism	18-19	129	2.82	0.82	1.581	0.193
	19-20	135	3.01	0.83		
	20-21	119	2.85	0.70		
	Over 21	63	2.86	0.76		

Relation between altruism and number of siblings

	Number of siblings					
Altruism	0	5	2.50	0.88	4.108	0.007
	1	110	2.69	0.72		
	2	172	2.97	0.78		
	3 and more	170	2.98	0.80		

Notes: N – number of valid observations in each group; SD – Standard Deviation; F – ANOVA coefficient; Sig – significance level.

A Pearson correlation coefficient was computed to assess the relationship between altruism and years of study (Table 7). There was no correlation between altruism and years of study, (r=-0.005, n=457, p=0.908)

From the obtained results, we could notice that the average rate of altruism evaluation among bachelor students of nursing, midwifery, and physiotherapy was 2.9±0.78, a value above the average.

Table 6

Relation between altruism and desire to become health personnel

Independent Sample Test

	desire to become health personnel	N	mean	SD	T	sig.(2-tailed)
Altruism	Yes	431	2.92	0.77	2.319	0.021
	No	26	2.56	0.90		

Notes: N – number of valid observations in each group; SD – Standard Deviation; t – Test for independent samples t Test, Sig. (2-tailed) – p – value corresponding to the given test statistic and degrees of freedom.

Like several studies conducted in different regions of Turkey, the one conducted in Istanbul with an average of 69.38 [27], the other one in the Nursing Departments of the Health Colleges of two universities in the Central Anatolia Region of Turkey with an average of 62.69±11.35 [9], and at the Faculty of Health Sciences in Central Anatolia in Turkey with an average of 68.68±9.81, showed that nursing students reported an above average value of altruism perception, while the other study conducted throughout Turkey, resulted in a high level of altruism [20]. The difference of the higher results in the study by Çiftçi et al., 2022 [20], is that our research included all students of bachelor study programs in

nursing, midwifery, and physiotherapy, and not only those of nursing, since the results of the study are clear that the students of the nursing study program had a higher average of level of altruism than the other two programs. Also, a study conducted in the Republic of Ireland, among nursing students, reported that the level of support expressed for altruism was high [2]. This high result, like those of other studies, is explained by the fact that the professions which come from the bachelor study programs in nursing, midwifery, and physiotherapy, have exactly to do precisely with the care, empathy, role, love which must be shown towards the patients, something that is individual from the moment that these students choose to be students of these study programs.

Table 7

Correlations between altruism and year of study

		Year of study
Altruism	Pearson correlation	-0.005
	Sig.(2-tailed)	0.908
	Total sample size	457

Note. Sig. (2-tailed) – p – value that tells if correlation in significant.

From the obtained results we can see that the average score of female students in the altruism scale was similar to the average score of men ($p>0.05$). The studies carried out by Çiftçi et al., 2022 [20]; Çınar et al., 2020 [27], show the results that altruistic behaviours are higher in the category of women, but on the other hand according to Çiftçi et al., 2022 [20], studies conducted by Kayma et al., 2020; Keleş et al., 2018; Özdemir et al., 2020, show that there is no relationship between altruism and gender [20]. Also, in the study of Göl. 2018, it is the same result, which shows that gender does not affect the level of altruism in nursing students [28]. Referring to other similar studies, we believe that the reason why there is no relationship between gender and altruism is that both genders have chosen to be future nurses. We believe that this altruistic feeling has made them choose this profession for their future. In general, in our culture women tend to be more sensitive and prepared to provide care, but the fact that 88% of the participants are women and only 12% are men, this altruistic feeling for both sexes is directly related to the desired profession.

From the obtained results, we see that the average score of altruism among students who lived in the countryside and the average score of altruism among students who lived in the city was similar in the degree of altruism ($p>0.05$). So, in our study, residence does not affect the level of altruism. For this finding we must consider the demographic movements that have happened in our country, mainly after the collapse of the totalitarian regime which brought great changes in the city/rural ratio.

Bachelor students of the study program of nursing had a higher average result of the degree of altruism than the students of the physiotherapy study program. We believe that this is directly related to the students' perceptions for the profession.

Students with large families had a higher rate of altruism evaluation than students with nuclear families. This finding is the same with other studies such as Güven et al., 2019 [9]. We believe that in large families, the care for the needs for small children and the elderly is greater or has a greater visibility, therefore, children of these families are more familiar from a young age for more altruistic feelings for people in need of care. These data also correlate with the number of children in a family. Our study showed that students who have sisters or brothers had a higher degree of altruism compared to those who do not have any sister or brother, contrasting the results of Çiftçi et al., 2022 [20]. But many other studies have the same result as our study.

Our study shows that the economic status is not important regarding the level of appreciation of altruism. From the study conducted by Çiftçi et al., 2022 [20], it resulted that students with the lowest income turned out to have a higher average level of altruism than other students. But also, according to Çiftçi et al., 2022 [20] in two studies by Keleş et al., 2018; Yıldırım et al., 2016, showed that the level of income does not make evident any changes in the level of altruism.

Our study showed that age is not important regarding the level of altruism, this is the same with a study carried out by Messineo et al., 2021 [17]. But Çiftçi et al., 2022 [20] stated that the levels of altruism

increase with the increasing age and responsibilities. From the results of our study, we noticed that the ages of the students do not have big differences, and it does not bring big changes in the perceptions of the participants. However, this invariable value of altruism related to age is also related to the data we got from our study, so the years of study do not affect the evaluation of the average level of altruism among the participating students. But unlike Messineo et al., 2021 [17], who says that the highest levels of altruism are found in first-year students, Timmins et al., 2018 [2] reported that the study showed no differences between years of study. Çiftçi et al., 2022 [20] reported that students of the last year of study are more altruistic than student of other years of study, with the justification related to the age, as well as the greater opportunity that these students have in relation to the care offered to patients. Therefore, it is necessary to introduce altruism as a motivational criterion in higher education [14] and especially among students of medical and technical sciences, which would guarantee a higher quality, safer and more committed care towards patients. According to Paşalak et al., 2021 [29], it is important that educators should undertake teaching strategies to strengthen professional values.

The most interesting point of this study was to understand if the fact that the students who had chosen to be future health personnel would have a higher degree of altruism than those who did not want to be a future health personnel. Specifically, our study showed that students who wanted to become health personnel had higher levels of altruism. This result is the same as those of the Çiftçi studies et al., 2022 [20]; Güven et al., 2019 [9]; Messineo et al., 2021 [17]; Göl, 2018 [28]; Elliott, 2017 [21]. Çiftçi et al., 2022 [20], which related this result to the fact that nursing students are aware that the nursing profession is helping other people without expecting benefit from them. Güven et al., 2019 [9] stated that these results are satisfactory because they bring hope to the care of sick and unhealthy people, nowadays and in the future. According to Van Der Wath et al., 2020 [19], nurses experienced gratitude towards the nursing profession because it gave them the opportunity to help others and they felt appraised when they practiced altruism. According to Göl, 2018 [28], students who had decided to become a nurse expressed a high degree of altruism, related to the fact that they had understood the importance of the nursing profession towards the benefits that the others get.

CONCLUSIONS

This is a study on the level of altruism among bachelor students attending the programs of studying in nursing, midwifery, and physiotherapy in Albania. The results showed that it is precisely the feeling of altruism that people have, which made them choose nursing as a profession. Since altruism is so important for the nursing profession, topics related to altruism should be included in nursing curricula. It does not matter which year it should be offered because the study showed no change in the level of altruism between the years of study. This indicates that altruism as a main value is not taken into consideration in the bachelor curricula of the study programs of nursing, midwifery, and physiotherapy. This was also noticed when the courses syllabuses were checked. The lack of inclusion of altruism in the curricula of the respective study programs was also noticed by the study group.

Limitations

The sample was taken from a single university; therefore, the study findings are not generalizable across Albania and other European countries.

In the future studies, it would be very useful to examine the curricula of these teaching programs, considering the possibility of where and how the concepts and literature on altruism can be introduced into the curricular formation subjects.

The female/male ratio was 88% female and 12% male, but although the ratio seems to have a big difference, statistics show that this ratio is the same in all countries [30].

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