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Research Article

Professional Values in a Sample of Nursing Students from Different Countries

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Abstract

AIM: This study aimed to determine the professional values of nursing students from different countries.

METHODS: This descriptive study was conducted with a convenience sample of nursing students from different countries. The data were collected using an identification form and the Nurses' Professional Values Scale–Revised. A total of 305 nursing students from Turkey, Tanzania, and Spain were included in the analysis.

RESULTS: In this study, the mean nursing professional values scores were 113.5±12.8, 105.8±16.0, 107.9±8.4 for Turkey, Tanzania, and Spain, respectively (minimum–maximum: 44–130). There were no statistically significant differences between the Turkish and the Spanish students' professional value scores, but the Turkish students' scores were higher than the Tanzanian students.

CONCLUSION: The factors affecting the level of professional values of students for each country were different. For educators, it is important to develop teaching strategies to empower professional values. Understanding cultural differences can guide professional values and universal ethics in nursing practice, education, and research.

Keywords: Codes of ethics for nursing, nursing ethics, nursing student, professional values

Introduction

Professional values have been defined as "standards for action that are accepted by the practitioners and professional group and provide a framework for evaluating beliefs and attitudes that influence behavior" (Weis & Schank, 2009). Nursing values are important professional nursing principles, such as human dignity, integrity, altruism, and justice, which serve as a framework for standards in professional practice (Schmidt & McArthur, 2018). Therefore, it is also very important to develop professional values in nursing education as a foundation of nursing practice (Rose et al., 2018). For nurses, well-established and adopted professional values are guiding principles, while making decisions, acting ethically, developing professional identity, and these principles help them develop better relationships with patients and other health care members and provide standardized quality nursing care (Elliott, 2017; Geckil et al., 2012; Parandeh et al., 2014). There are universal values guided by bioethical principles that nurses must follow, such as autonomy, nonmaleficence, beneficence, and justice (The International Council of Nurses- ICN Code of Ethics for Nurses, 2012). Although the American Nurses Association (2015) provided a framework through the nursing Code of Ethics for Nurses with Interpretive Statements from which nurses can derive a set of professional values, the American Association of Colleges of Nursing compiled a set of core values, including human dignity, autonomy, integrity, justice, altruism, and truth for nurses, which every nurse must adapt and apply (American Association of Colleges of Nursing, 2008; American Nurses Association, 2015; Bijani et al., 2019). Professional values start to develop from the very beginning of undergraduate nursing education, and there is a continual development throughout the formal education and clinical experience (Kantek et al., 2017; Riklikiene et al., 2018). Beyond education, professional values can be attained by students from their nurse educators/instructors, and a professional identity can be established through interactions with nurse educators, instructors, and other students and nurses (Ten Hoeve et al., 2017). Therefore, the val-

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Date of receipt: December 10, 2019 Date of acceptance: June 30, 2020 ues that students develop are a combination of the values that their educators and other students and nurses showed and the values they already had (Riklikiene et al., 2018; Rose et al., 2018; Ten Hoeve et al., 2017). Moreover, Schmidt (2016) has stated that core professional nursing values are developed before the nursing education is started (Schmidt, 2016). Students' professional values establish themselves based on their culture and the personal values they already have. Personal values begin to develop under the influence of family, culture, society, environment, religious belief, and ethnicity (Elliott, 2017; Parandeh et al., 2014; Ten Hoeve et al., 2017; Weis & Schank, 2009).

Culture is one of the very important factors in developing individuals' professional values. Culture comprises a range of values, beliefs, and habits learned during socialization, which shapes ideas, perception, decisions, and how individuals act (Rassin, 2010). Throughout the world, every nurse is responsible for the core professional values and should act and make judgments appropriate to these values. The presence of common core professional values, with cultural differences based on value priorities, has been reported in the literature (Parandeh et al., 2014; Riklikiene et al., 2018; Schmidt & McArthur, 2018). Various studies have analyzed professional values of the nursing students, nurse educators, and nurses (Alkaya et al., 2018; Bijani et al., 2019; Elliott, 2017; Erkus & Dinc, 2018). Several studies evaluated the differences between nurses' professional values by generation or throughout formal education (Bolan & Grainger, 2009; Kantek et al., 2017; Rose et al., 2018). Although the existing literature states that nurses from different cultural backgrounds have different levels of personal values, there are limited studies that determine the differences in professional values among nursing students. Determining the common and different aspects of the professional values of nursing students in terms of geographical and intercultural contexts is worth considering improving our understanding of professional values on a global scale, uniting the profession, and providing culturally competent care. The aim of the study was to examine the professional values of nursing students from different countries.

Research Questions

To achieve this aim, the following research questions were put forward and answered:

1. What are the professional values of nursing students from different countries? 2. What are the factors that affect the professional values of nursing students from different countries?

Method

Study Design

This is a desticriptive-comparative design.

Sample

The sample of this study included university nursing students, many of whom participated in the Online Cultural Exchange Program (OCEP) in different countries. The OCEP is a web-based, interclassroom collaborative exchange project for international university students. Students of various majors participate in the program to practice English by exchanging information and discussing issues relevant to their majors and their future. This program is currently being run by the Language Education Center and the Center for Animal Disease Control, University of Miyazaki, Japan. In addition to OCEP, an online survey was also shared on the webpages and social media sites of the Turkish Nursing Student Association and the European Nursing Student Association to invite more nursing students from other countries to take the survey.

The data were collected from 346 students from 18 countries, including Turkey (n=194), Tanzania (n=81), Spain (n=30), Indonesia (n=8), Finland (n=5), Turkish Republic of Northern Cyprus (n=7), the United States of America (n=5), Greece (n=3), Japan (n=3), India (n=2), Holland (n=1), Israel (n=1), Germany (n=1), Lebanon (n=1), Serbia (n=1), Nigeria (n=1), Italy (n=1) and England (n=1); however, the students from 15 countries were excluded from the analysis because of the small number of the participants from each country. Therefore, a total of 305 students from 3 countries, Turkey, Tanzania, and Spain, were included in the study.

Data Collection

The research data were collected using a student identification form that was developed by the researchers and the Nurses Professional Values Scale-Revised (NPVS-R). These 2 surveys were put in the Qualtrics software program (Qualtrics, Provo, UT) and distributed as an online link to collect data.

The student identification form included 12 questions about the sociodemographic characteristics, such as age, gender, class, perceived income status, parents' educational levels, and questions related to nursing career. The NPVS-R was developed by Weis & Schank (2009) to measure nurses' professional values based on the American Nurses Association Code of Ethics (Weis & Schank, 2009). The NPVS-R is a 26-item and 5-subscaled (caring, professionalism, activism, justice, and trust), 5-point Likert-scale instrument, ranging from 1 (not important) to 5 (most important). By summing numeric responses to each item, total scores are obtained, and the possible range of scores is 26-130. Higher scores indicated stronger orientations to professional values. The reliability and validity study in the Turkish population were conducted by Geckil et al., (2012), and the Cronbach alpha coefficient was 0.96 (Geckil et al., 2012). In this study, Cronbach alpha coefficients of the scale for the countries were found to be 0.93 for Turkey, 0.93 for Tanzania, and 0.87 for Spain. The scale scores and its subscale scores were evaluated with arithmetic means, and higher scores signify that nursing students place a greater importance on their professional values.

Statistical Analysis

The Statistical Package for the Social Science 24.0 (IBM SPSS Corp., Armonk, NY, USA) package program was used to analyze the data. Descriptive statistics, n and percentage for discrete data, and mean±standard deviation for continuous data were used. The relationship between the level of professional values and age, the country of residence, and the class of the students was analyzed by *t*-test, variance analysis, and Pearson correlation analysis. Multivariate linear regression analyses were used to employ a model describing the relationships between the professional value and some sociodemographic characteristics, which were found statistically significant by bivariate analyses for all students.

Ethical Considerations

Ethical approval was obtained from the Koç University Committee on Human Research (No: 2018.009IRB3.009). The participants were given information about the aim and method of the study and asked to click the online link for participation in the study. The aim of the study was explained in detail, and it was assumed that completing the questionnaire was giving consent for participation in the study.

Results

The sociodemographic characteristics of the nursing students from Turkey (n=194), Tanzania (n=81), and Spain (n=30) are given in Table 1. The mean age of the Turkish students was 21.5 ± 1.6 years. Of the Turkish students, 82% were female and 45% were studying in their final year. The education levels of the students' mothers (63.9%) and their fathers (45.5%) were mostly at the level of primary education. Of 194 students, 27.3% reported having a family member who worked in health care, and 14.9% reported having a family member who was a nurse. Moreover, 66.4% reported that they would work as nurses after graduation.

The mean age of the Tanzanian students was 22.9 ± 6.6 years. Of the Tanzanian students, 38% were female and 98% were studying in their final year. The education levels of the students' mothers (69.1%) and their fathers (64.2%) were mostly at the level of primary education. Of 81 students, 30.9% reported having a family member who worked in health care, and 14.9% reported having a family member who was a nurse. Moreover, 71.6% reported that they would work as nurses after graduation.

The mean age of the Spanish students was 25.7±3.2 years. Of the Spanish students, 80% were female and 53% were studying in their final year. The students' mothers (50%) and their fathers (64.2%) had mostly completed a high school education. Of 30 students, 50% reported having a family member who worked in health care, and 20% reported having a family member who was a nurse. Moreover, 86.7% reported that they would work as nurses after graduation.

In this study, the mean nursing professional values scores were 113.5±12.8, 105.8±16.0, and 107.9±8.4 for Turkey, Tanzania, and Spain, respectively (minimum-maximum: 44-130; Table 2). There were statistically significant differences between the 3 countries in terms of overall professional values; however, the differences arose between the professional value scores of the Turkish and Tanzanian students. The professional values scores of the Turkish students were higher than those of the Tanzanian students (p<0.000). For the caring factor, there were statistically significant differences between the students from all 3 countries; the Turkish students' mean score in caring values was higher than the Spanish students' score, and the Spanish students' mean score in caring values was higher than the Tanzanian students' score (p<0.000). For the professionalism factor, there was no statistically significant difference between the mean scores of the Turkish and

Table 1

Sociodemographic Characteristics of Nursing Students

Sociodemographic Characteristics		(n=194)		ia (n=81)	-	(n=30)
Mean age (min–max)	21.5±1.6	6 (18–30)	22.9±6.	6 (19–48)	25.7±3.2	2 (23–43)
	n	%	n	%	n	%
Gender						
Female	159	82.0	38	46.9	24	80.0
Male	35	18.0	43	53.1	6	20.0
Marital status			1.5			. –
Married	3	1.5	13	16.0	2	6.7
Single	191	98.5	68	84.0	28	93.3
Year of nursing education (class)						
1	39	20.1	1	1.2	11	36.7
2	35	18.0	NA	NA	2	6.7
3	45	23.2	NA	NA	16	53.3
4	75	38.6	80	98.8	1	3.3
Educational level of mother						
Illiterate	11	5.7	3	3.7	NA	NA
Literate	11	5.7	1	1.2	1	3.3
Primary school	124	63.9	56	69.1	2	6.7
High school	32	16.5	18	22.2	15	50.0
University and above	16	8.2	3	3.7	12	40.0
Educational level of father						
Illiterate	3	1.5	1	1.2	NA	NA
Literate	5	2.6	1	1.2	1	3.3
Primary school	88	45.4	52	64.2	8	26.7
High school	64	33.0	13	16.0	11	36.7
University and above	34	17.5	14	17.3	10	33.3
Family income						
High	53	27.3	7	8.6	8	26.7
Average	128	66.0	62	76.5	20	66.7
Low	13	6.7	12	14.8	2	6.7
Residential area						
Village	16	8.2	40	49.4	3	10.0
Town	20	10.3	30	37.0	13	43.3
City	158	81.4	11	13.6	14	46.7
Having a nurse relative/family member						
Yes	29	14.9	18	22.2	6	20.0
No	165	85.1	63	77.8	24	80.0
Having a health care professional relative/family member						
Yes	53	27.3	25	30.9	15	50.0
No	141	72.7	56	69.1	15	50.0
Consider working as a nurse after graduation						
Yes	125	64.4	58	71.6	26	86.7
No	18	9.3	6	7.4	1	3.3
Indecisive	51	26.3	17	21.0	3	10.0
Note. NA: Not applicable.						

Table 2

Comparative Analysis	of NPVS-R Scores	of Nursing Students
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Total and Subscale Scores of	Turkey	(n=194)	Tanzania	a (n=81)	Spain (n=30)		
NVPRS-R	Mean	SD	Mean	SD	Mean	SD	F	р
Total NPSV-R	113.5	12.8	105.8	16.0	107.9	8.4	9.8	<0.000*
Caring	36.0	4.3	32.7	4.6	33.9	3.3	18.3	<0.000
Professionalism	29.6	3.8	28.5	4.1	28.5	2.8	4.1	0.01*
Activism	21.7	2.9	21.1	2.9	20.8	2.2	2.1	0.1
Justice	13.4	1.7	12.3	1.9	13.8	0.9	13.2	<0.000**
Trust	12.6	2.1	12.5	1.8	10.9	1.5	9.5	<0.000***

Note. NPVS-R: The Nurses Professional Values Scale-Revised, SD: Standard deviation.

*The difference between Turkish and Tanzanian students.

**The difference between Turkish and Tanzanian students and the difference between Spanish and Tanzanian students.

***The difference between Turkish and Spanish students and the difference between Tanzanian and Spanish students.

Spanish students nor between those of the Spanish and Tanzanian students. However, the Turkish students' mean score of professionalism-related values was higher than the Tanzanian students' score (p<0.000). For the activism factor, there were no statistically significant differences between the scores of the students from the 3 countries. For the justice factor, there was no difference between the scores of the Turkish and Spanish students, but a statistically significant difference did emerge between the scores of the Turkish and Tanzanian students as well as those between the Spanish and Tanzanian students. The justice value scores for both the Turkish and Spanish students were higher than those of the Tanzanian students (p<0.000). For the trust factor, the scores of the Turkish and the Tanzanian students were similar, but there were significant differences between the scores of the Turkish and Spanish students as well as the Tanzanian and Spanish students. The trust values scores of both the Turkish and Tanzanian students were higher than those of the Spanish students (p<0.000).

A comparison of some sociodemographic characteristics of the students and nursing professional value scores are provided in Table 3. In the Turkish students, there was a statistically significant difference between gender, marital status, education level of mother, and the total professional values scores. Female students, single students, and the students whose father had high educational levels had higher professional values scores.

In the Tanzanian students, there was a statistically significant difference between total professional values scores, having a nurse as a relative in the family, and father's educational level. The students who had a nurse in the family and whose father had a high educational level had higher professional values scores.

In the Spanish students, there was a statistically significant difference between age, class, marital status, having a nurse as a relative, education level of parents, and the total professional values scores. Students who were older, in their final year of school, and single and those who had a nurse as a relative or whose parents had high educational levels had higher professional values scores.

Multiple regression analysis was used to employ a model describing the relationships between the professional value and some variables, such as country, age, gender, marital status, class, mother and fathers' educational levels, and having a nurse relative family member, which were found associated with the level of professional values in any given country (Table 4). Overall, 12% of the variances of professional values of students have been explained by the independent variables in the model. In this model, gender, marital status, and country of residence were found to be effective factors for the level of professional values of students.

Discussion

The aim of the study was to determine the professional values of nursing students from different countries regarding the nursing profession. Overall, in this study, the Turkish students had higher professional values than Tanzanian students. The concepts, including caring, professionalism, and justice, were ranked especially higher in the Turkish students

Sociodemographic Characteristics of		Turkey (n=194)	(n=194)			Tanzani	∏anzania (n=81)			Spain	Spain (n=30)	
Students	Mean	SD	Analyses*	d	Mean	SD	Analyses*	d	Mean	SD	Analyses*	d
Mean age			-0.36	0.61			0.14	0.19			-0.39	0.02
Gender												
Female	115.5	16.9	-5.0	<0.000	108.6	15.5	-0.79	0.42	108.2	8.4	-0.40	0.69
Male	104.1	10.7			106.1	12.3			106.6	9.4		
Marital status												
Married	84.6	36.7	4.0	<0.000	107.5	9.7	-0.06	0.94	93.5	14.8	2.7	0.01
Single	113.9	11.8			107.2	14.8			108.9	7.2		
Year of nursing education (class)												
	112.4	10.9	0.95	0.41	**		**	**	105.3	8.3	2.9	0.053
2	111.5	13.1						96.0	18.3			
n	116.0	11.3						110.8	5.9			
4	113.6	14.4						114.0	ΝA			
Educational level of mother												
Illiterate	106.5	16.0	2.2	0.071	114.6	7.5	0.48	0.74	ΑN	ΑN	4.2	0.015
Literate	106.6	22.4			96.0	ΝA			83.0	ΝA		
Primary school	114.8	11.5			106.5	14.6			104.5	9.1		
High school	114.4	11.8			108.2	10.7			109.3	6.5		
University and above	110.8	11.8			111.6	28.3		108.8	8.1			
Educational level of father												
Illiterate	98.0	14.1	3.3	0.011	106.0	NA	6.6	<0.000	ΝA	ΝA	4.3	0.01
Literate	97.4	27.7			44.0	ΝA			83.0	ΝA		
Primary school	114.1	12.2			107.9	11.1			109.7	8.2		
High school	114.2	11.6			108.5	13.2			107.0	6.6		
University and above	114.1	11.7			108.6	15.5			110.0	7.2		
Having a nurse relative /family member	er											
Yes	113.5	14.9	1.2	0.99	115.3	11.4	2.8	0.005	102.1	12.0	-1.9	0.06
No	113.5	12.4			104.9	13.9			109.3	6.9		
Having a health care professional relative /family member	tive /family	r member										
Yes	113.7	15.6	0.13	0.88	109.4	13.7	0.89	0.37	107.7	9.7	-0.12	06.0
No	113.4	11.6			106.3	14.2			108.1	7.3		
Consider working as a nurse after graduation	duation											
Yes	114.3	1.1	0.33	109.1	11.4	1.8	0.15	107.1	8.5	0.75	0.47	
	12.4											
No	113.4	15.2			100.6	30.0			111.1	ΝA		
Indecisive	110.9	12.8			103.0	14.1			113.3		8.5	

Table 4

	95% confidence interval		Model s	ummary				
Model	В	SD	Beta	р	Lower	Upper	R ²	р
Constant	85.283	12.433		0.000	60.814	109.752	0.129	0.000
Gender	6.839	1.827	0.216	0.000	3.244	10.435		
Country	-3.634	1.340	-0.173	0.007	-6.271	-0.998		
Mother's education	0.196	1.068	0.012	0.855	-1.907	2.298		
Father's education	1.653	1.043	0.101	0.114	-0.399	3.705		
Having a nurse family member	-1.810	2.071	-0.049	0.383	-5.887	2.266		
Marital status	-7.339	3.689	-0.124	0.048	-14.600	-0.078		
Class	0.076	0.745	0.006	0.919	-1.390	1.542		
Age	0.127	0.296	0.032	0.667	-0.454	0.709		

Multiple Linear Regression Model for Some Variables as Predictor of NPVS Scores of Nursing Students

Note. NPVS-R: Nurses Professional Values Scale–Revised, SD: Standard deviation p < 0.05

than their Tanzanian peers. The Turkish students were more motivated to being respectful to patients and protecting patient rights, more aware about which qualities should characterize a health care professional (professionalism), and more concerned about equality and diversity issues than the Tanzanian students. Despite this, both groups of students had similar priorities about being involved in health-related activities and policy making (activism) as well as responsibility and rationality (trust). These results show that nursing students from 2 geographically distinct countries and different cultural backgrounds share different perspectives toward professional values and interiorize those values into their professional identities with different priorities. However, in this study, the overall professional values of the Turkish students-particularly, in professionalism, values related to activism, and justice-are similar to those of the Spanish students. The students from both countries were appeared to be similar in some gualities, which characterize a health care professional (professionalism), health-related activities and policy (activism), and equality and diversity issues (justice). On the other hand, the Turkish students ranked respect, protection, and safeguard of patient's rights (caring), and responsibility and rationality (trust) higher than the Spanish students did. This is worth noting that having an understanding of social justice and diversity and addressing these issues to eliminate health disparities require us to address these issues systematically in nursing programs and to create culture in our community that values it.

There is a variation in factors affecting overall nursing students' professional values and some areas of professional values. In the study, the Spanish students who were older and in their final year of school exhibited higher professional value scores than the others. In a study conducted in Spain, it was shown that nursing professional values gained more importance as age increased (Jimenez-Lopez et al., 2016). Besides, there are some longitudinal studies presenting that nursing students' professional values are becoming higher throughout their education (Kantek et al., 2017; Kaya et al., 2017; Parandeh et al., 2014). However, for the Turkish students in this study, age, and class (and for the Tanzanian students, age) did not affect their professional values scores. According to these results, the current year of nursing education (class) has a positive impact on students' nursing professional values only in Spain. Unlike in previous studies, it seems nursing education has no impact on the development of professional values in Turkey (Kantek et al., 2017; Kaya et al., 2017) nor in Tanzania. This finding may show that students graduate with professional values that were shaped by the personal values they had already gained before entering nursing school. Nursing education is considered to be effective in developing professional values, but various causes such as lack of nurse educators/instructors, a large number of students, insufficient training, and practice opportunities influence education negatively in Turkey (Ergol, 2011; Kocaman & Yurumezoglu, 2015). It may be the case for Tanzanian students as well.

In this study, female Turkish students showed higher professional value scores, but there was no difference by gender in either the Tanzanian or Spanish groups. Gender has been reported as a factor affecting the professional values of nursing students; however, the way how it affects may differ between countries. Parandeh et al. (2014) have shown in their literature review that the average scores of professional values in female students is higher than those of males (Bang et al., 2011; Parandeh et al., 2014). In some countries, nursing is still perceived as a female profession and unpleasant work for men (Ibrahim et al., 2015). Since the era of Florence Nightingale, nursing has been stereotyped as a female-dominated profession, and men had no chance to enter nursing schools/colleges. In Turkey, a series of laws related to nursing were changed in 2007, allowing male students to enter nursing schools/colleges and become nurses. There is now about a 10-year history of male nurses in the profession in Turkey, so it still may take some time to overcome the gender stereotypes and develop a positive professional image. Interestingly, in another study conducted in China, the professional values of male students were shown as higher than those of women (Lin & Wang, 2010). In a qualitative study conducted by Schmidt (2016), it was stated that male nursing students value caring but may demonstrate it in different ways than their female counterparts (Schmidt, 2016).

In this study, although the educational levels of both the mother and father showed an effect on the professional values of the Spanish students, only the father's educational level was shown as a contributing factor to the professional values in both the Turkish and Tanzanian nursing students. The students whose both parents or whose father had high educational levels had higher professional values than the others. The professional values of the Turkish or Tanzanian students were not affected by their mothers' educational level. According to the Organisation for Economic Co-operation and Development-OECD, Social Institutions and Gender Index, a cross-country measure of discrimination against women in social institutions, the discrimination scores for Spain, Turkey, and Tanzania were 0, 0.1, and 0.25, respectively (OECD, 2016). This means in Spain, discrimination against women is much lower than in Tanzania and Turkey. As underlying drivers of gender inequalities, discriminatory social institutions perpetuate gender gaps in developing areas, such as education and employment. Values that are formed consciously are usually taught to children by parents and teachers. It is thought that parents' educational status affects parental behavior and attitudes, which, in turn, can have an effect on the formation of a child's personal values. When a father plays a dominant role or is a role model in a family, it may have a significant impact on a child's overall values and can also have an impact on a student's professional values. If mothers and fathers share the same levels of equality in a family, it may have an equal impact on their children's values.

Study Limitations

There are limitations to this study. First, the study was conducted online, and the data were collected from 346 students from 18 countries: however, the students from 15 countries were excluded from the analysis because of the small number of the participants from those countries. Second, the students from the 3 different countries analyzed in this study are not from one particular nursing school/college, one city, or the same ethnicity. Cultural influence on professional values may differ in the same country even among different city and school populations. Therefore, the results of each country cannot be generalized. However, these findings are very important to show how nursing education can influence the professional values of nursing students even when they come from different countries or cultures.

Conclusion and Recommendations

The professional value levels of the Turkish and Spanish students were similar but higher than those of the Tanzanian students. Of the Turkish students, those who were female, single, and whose father had a high level of education had higher professional values scores than the others. Of the Tanzanian students, those who had a nurse as a relative and whose father had a high level of education had higher professional values scores. Of the Spanish students, those who were older, in their final year of school, and single and who had a nurse as a relative or whose parents had high levels of education had higher professional values scores. Class year was a contributing factor only in Spain. In general, there is a variation in factors affecting overall nursing students' professional values and some areas of professional values.

As an East African country, Tanzanian students appear to have more distinct professional values than Turkish students, who live in a country between Eastern Europe and Western Asia. Although Turkish and Spanish students appear to have similar professional values overall, in Spain, nursing education seems to have positive impact on professional values through the nursing education. Therefore, it is recommended that in nursing education, nurse educators and faculty guide students as a role models, assist students in clarifying their own personal and professional values, and evaluate their priorities to instill those values into the students' professional identities.

Cultural sensitivity lectures and teaching strategies can help students to not only develop and improve their own professional development but also understand the priorities of patients from different backgrounds or diverse populations. Because the level of education of a mother and father or the level of education of only a father are shown to have an effect on nursing professional values in this country, it is also very important to advocate for improving the nursing profile in society. Society's perception and attitude toward nursing profession may be improved by engagement with communities at different levels.

Ethics Committee Approval: This study was approved by Ethics committee of Koç University, (Approval No: 2018.009IRB3.009).

Informed Consent: It was explained and assumed that completing the online questionnaire was giving consent for participation in the study.

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References

Alkaya, S. A., Yaman, S., & Simones, J. (2018). Professional values and career choice of nursing students. *Nursing Ethics*, 25(2), 243-252. [Crossref]

American Association of Colleges of Nursing. (2008). Essentials of baccalaureate nursing education. Washington, DC.

American Nurses Association. (2015). Code of Ethics for Nurses with Interpretive Statements. Washington, D.C.: American Nurses Publishing.

Bang, K. S., Kang, J. H., Jun, M. H., Kim, H. S., Son, H. M., Yu, S. J., Kwon, M. K., & Kim, J. S. (2011). Professional values in Korean undergraduate nursing students. *Nurse Education Today*, *31*(1), 72-75. [Crossref]

Bijani, M., Tehranineshat, B., & Torabizadeh, C. (2019). Nurses', nursing students', and nursing instructors' perceptions of professional values: A comparative study. *Nursing Ethics*, *26*(3), 870-883. [Crossref]

Bolan, C., & Grainger, P. (2009). Students in the BN program--do their perceptions change? *Nurse Education Today*, 29(7), 775-779. [Crossref]

Elliott, A. M. (2017). Identifying Professional Values in Nursing: An Integrative Review. *Teaching and Learning in Nursing*, 12(3), 201-206. [Crossref]

Ergol, S. (2011). Nursing education in higher education in turkey. *Journal of Higher Education and Science*, 1(3). [Crossref]

Erkus, G., & Dinc, L. (2018). Turkish nurses' perceptions of professional values. *JJournal of Professional Nursing*, 34(3), 226-232. [Crossref]

Geckil, E., Ege, E., Akin, B., & Goz, F. (2012). Turkish version of the revised nursing professional values scale: validity and reliability assessment. *Japan Journal of Nursing Science*, 9(2), 195-200. [Crossref]

Ibrahim, A. F., Akel, D. T., & Alzghoul, H. W. M. (2015). Image of nursing profession as perceived by Egyptian and Jordanian undergraduate male nursing students: A comparative study. *Journal of Education and Practice*, 6(4), 24-36.

The International Council of Nurses- ICN Code of Ethics for Nurses. (2012). In. Geneva, Switzerland: International Council of Nurses.

Jimenez-Lopez, F. R., Roales-Nieto, J. G., Seco, G. V., & Preciado, J. (2016). Values in nursing students and professionals: An exploratory comparative study. *Nursing Ethics*, *23*(1), 79-91. [Crossref]

Kantek, F., Kaya, A., & Gezer, N. (2017). The effects of nursing education on professional values: A longitudinal study. *Nurse Education Today*, *58*, 43-46. [Crossref]

Kaya, H., Isik, B., Senyuva, E., & Kaya, N. (2017). Personal and professional values held by baccalaureate nursing students. *Nursing Ethics*, 24(6), 716-731. [Crossref]

Kocaman, G., & Yurumezoglu, H. A. (2015). Situation analysis of nursing education in turkey: nursing education with numbers (1996-2015). *Journal of Higher Education and Science*, 5(3), 255. [Crossref]

Lin, Y. H., & Wang, L. S. (2010). A Chinese version of the revised Nurses Professional Values Scale: reliability and validity assessment. *Nurse Educ Today*, *30*(6), 492-498. [Crossref]

OECD. (2016). Social Institutions and Gender. [Crossref]

Parandeh, A., Khaghanizade, M., Mohammadi, E., & Mokhtari Nouri, J. (2014). Factors influencing development of professional values among nursing students and instructors: a systematic review. *Global Journal of Health Science*, 7(2), 284-293. [Crossref] Rassin, M. (2010). Values grading among nursing students - differences between the ethnic groups. *Nurse Educ Today*, 30(5), 458-463. [Crossref]

Riklikiene, O., Karosas, L., & Kaseliene, S. (2018). General and professional values of student nurses and nurse educators. *Journal of Advanced Nursing*, 74(3), 666-676. [Crossref]

Rose, T., Nies, M. A., & Reid, J. (2018). The internalization of professional nursing values in baccalaureate nursing students. *Journal of Professional Nursing*, 34(1), 25-30. [Crossref]

Schmidt, B. J. (2016). Core professional nursing values of baccalaureate nursing students who are men. *Nursing Ethics*, 23(6), 674-684. [Crossref]

Schmidt, B. J., & McArthur, E. C. (2018). Professional nursing values: A concept analysis. *Nursing Forum*, *53*(1), 69-75. [Crossref]

Ten Hoeve, Y., Castelein, S., Jansen, W. S., Jansen, G. J., & Roodbol, P. F. (2017). Nursing students' changing orientation and attitudes towards nursing during education: A two year longitudinal study. *Nurse Education Today*, 48, 19-24. [Crossref]

Weis, D., & Schank, M. J. (2009). Development and psychometric evaluation of the Nurses Professional Values Scale--Revised. *Journal of Nursing Measurement*, 17(3), 221-231. [Crossref]