ORIGINAL ARTICLE

Prediction of ethical decision making with professional values in senior nursing students

İlknur Bektas PhD, RN[1] 🟢 | Murat Bektas PhD, RN[1] 🟢 |
Aslı Akdeniz Kudubeş PhD, RN[2] 🟢 | Dijle Ayar PhD, RN[3] 🟢

[1]Department of Pediatric Nursing, Faculty of Nursing, Dokuz Eylul University, Izmir, Turkey

[2]Department of Nursing, Faculty of Health Science, Bilecik Şeyh Edebali University, Bilecik, Turkey

[3]Departmant of Nursing, Faculty of Health Science, Alanya Alaaddin Keykubat University, Alanya, Turkey

Correspondence
Ilknur Bektas, PhD, RN, Lecturer, Address: Dokuz Eylul University Faculty of Nursing, Inciraltı, Izmir, Turkey.
Email: ilknurbektas23@gmail.com

Abstract

Purpose: This study investigated whether the professional values of nursing students can predict their ethical decision-making levels.

Design and Methods: The study used a descriptive and cross-sectional research design. The study sample consisted of 130 senior nursing students. The data were collected from the *Student Information Form*, *Nursing Professional Values Scale*, and *Nursing Dilemma Test (NDT)*. The data were evaluated using Pearson correlation analysis and multiple linear regression analysis.

Findings: A significant correlation was found between students' professional values and their mean PLT total scores ($p < 0.01$). Also, a negative correlation was found between students' professional values and the total mean practical thinking scores ($p < 0.01$). Professional values of the students explained 21.2% of the total PLT score and 0.08% of the total practical thinking score.

Conclusion: The professional values of the students affect their principal and practical thinking skills in ethical dilemmas.

Implications for Nursing Practice: It is recommended to discuss the ethical dilemmas observed or experienced by the students in their clinical practice in the field, increase the awareness of the students, and teach them how to deal with ethical dilemmas.

KEYWORDS
decision making, ethical decision, ethical dilemma, ethics, nursing students, professional

1 | INTRODUCTION

Professional values are the basis of nursing practices and guide the interactions of nurses with patients, colleagues, and society (Kaya & Kantek, 2016; Tarhan et al., 2016). Nurses are expected to undergo professional development and specialization in a field while also developing their critical thinking and autonomy in changing and developing health services. These expectations have increased the importance of professional values in nursing. Professional values are the standards accepted by practitioners and professional groups that guide education and practice and influence beliefs and attitudes (Moon et al., 2014; Weis & Schank, 1997). The professional values of

nurses are based on those ethical principles that form the basis of the profession (Kaya & Boz, 2019). Nurses are expected to make ethical decisions in line with these principles while giving care (Poorchangizi et al., 2017; Sabancıoğulları et al., 2018; Yönt et al., 2014). While trying to provide care in accordance with ethical codes, nurses and nursing students experience various ethical dilemmas and conflicts because of complex nurse–patient–family relationships (Hoskins et al., 2018; Rainer et al., 2018).

Although ethical decision making in nursing is not yet a clear issue, it has been emphasized that professional values form a scientific basis when confronting dilemmas (Deliktaş et al., 2016; Poorchangizi et al., 2017). When nurses face an ethical dilemma, they

have two means for decision making: practical thinking (PRT) and principled thinking (PLT). Principle thinking relates to how much importance is given to ethical principles when making an ethical decision in nursing. PRT determines the importance that nurses give to environmental factors, such as the available resources and the number of patients, institutional policies, and doctor control, in the decision made regarding ethical dilemmas (Deliktaş et al., 2016; Poorchangizi et al., 2017). The professional values of nurses lead them to be constructive in their relations with the patient and advocate for initiatives that benefit the patient. In addition, nurses are role models for students looking to become professionals. Ethical decision making is a more complex issue for nursing students because they are still in the educational process, their knowledge and skills are not fully developed, and there are difficulties experienced in communicating with the patient (Asfour et al., 2016; Eckardt & Lindfelt, 2018; Küçük et al., 2017). Not being able to take enough responsibility in patient care and being together with a nurse or lecturer in the clinic forces nursing students when faced with ethical dilemmas (Dimitriadou et al., 2015; Serçekuş & Başkale, 2016).

With their still-developing professional values, students can find solutions to the problems experienced in the clinic by approaching these problems from different perspectives. Nursing students have emphasized that they are more courageous in recognizing and revealing ethical problems because they spend more time observing patients and nurses in the limited time they are in the clinic (Bickhoff et al., 2017). In addition, nursing students should be sensitive, respectful to human dignity, responsible, and able to use their autonomy to make ethical decisions regarding the dilemmas encountered (Poorchangizi et al., 2017). How professional values affect ethical decision making in nursing students is also an important issue that needs to be evaluated (Karadağlı, 2016; Orak & Alpar, 2012). The factors affecting ethical decision making in nursing students have been examined in the literature (Albert et al., 2020; Özgönül et al., 2020; Sari et al., 2018).

Professional values affect each other in ethical decision making for the dilemmas encountered in nursing. According to one study, nurses' perceptions of professional values determine how nurses deal with ethical problems (Kim et al., 2015). For this reason, the professional values of nurses guide ethical decision making in solving the dilemmas encountered in the clinic. However, the professional values and behaviors of senior nursing students, whose professional knowledge and skills are more developed than in previous years, have not been adequately investigated. In the current study, the professional values of senior nursing students and their relationship with ethical decision making were examined.

2 | METHOD

2.1 | Setting and participants

The study sample involved fourth-year nursing students at a state university located in Western Turkey. The population consisted of 247 fourth-year nursing students who were attending an internship program (final year of faculty program) in the fall terms of the 2019–2020 academic year. Students were reached using a convenience sample method. The sample size was calculated using the G-power 3.0 software package, here based on 0.05 significance, 99% power, and a medium effect size. Because regression analysis was employed, the sample size was determined to be 188 subjects based on two variables. All the students in the sample population were reached, but only 130 out of the 247 students who agreed to participate in the study and fully completed the measurement tools were included. Fourth-year nursing students who agreed to participate in the study voluntarily and completed the data collection tools were included.

Only senior nursing students were included. The reason for this is that the professional skills of senior nursing students have greatly improved compared with when they first started school, and their sensitivity has increased. At this point in their education, students take more responsibility for patient care together with nurses by doing more clinical practice. They work more independently in clinical practice than students in the other classes. Moreover, they interact more with patients, which leads them to encounter more examples of ethical decision making.

In the education program, students take theoretical and practical courses on the fundamentals of nursing, internal diseases, surgical diseases, women's health and obstetrics, pediatric health and diseases, and public health and psychiatry nursing, and they also carry out clinical practice for the first 3 years. In the last year, students receive training in an intensive practice program in two different clinics in the first and second semesters of the internship program.

2.2 | Instruments and data collection

2.2.1 | Instruments

Data were gathered using a student information form, the Nursing Professional Values scale, and the Nursing Dilemma Test (NDT).

2.2.2 | The student information form

This is a data form that asks about the age and sex of the students. In this section, there are two questions about the age and sex of the students.

2.2.3 | The Nursing Professional Values Scale (NPVS)

This scale was developed by Weis and Schank (2000), and the validity and reliability study of the Turkish version was conducted by Şahin Orak and Alpar (2012). In the scale of professional values of nurses, each item is scored in a 5-point Likert type, from 1 = not important to

5 = extremely important. The scores that can be obtained from the 31-item form of this scale range from 31 to 155. The scale consists of five subdimensions: "human dignity (11 items)," "responsibility (7 items), "taking action (5 items), "security (4 items), and "autonomy (4 items)." The reliability of the scale was determined by its test–retest reliability, item-total score correlation, and internal consistency analysis. The item-total score correlation coefficient was found to be between 0.36 and 0.66 and Cronbach's α coefficient 0.95 (Şahin Orak & Alpar, 2012). In the current study, Cronbach's α coefficient is 0.85.

2.2.4 | The NDT

This scale was developed by Dr. Patricia Crisham in 1981. The scale was translated into Turkish by Cerit in 2010. In the original study of the scale (N: 225), Cronbach's α was 0.57 for the PLT subdimension and 0.39 for PRT. In the Turkish validity study, Cronbach's α was 0.59 for PLT (n: 50) and 0.50 for PRT (n: 50). In the test–retest reliability study, Cronbach's α was 0.77 for PLT (n: 25) and 0.73 for PRT (n: 25) (Cerit, 2010). In the present study, Cronbach's α was 0.57 for PLT and 0.51 for PRT.

Each dilemma consists of three evaluation steps. In the first step, the subjects were asked about what the nurse should do in each dilemma (Section A). In the second step, there were six statements about how nurses can approach ethical dilemmas (Section B). The students were asked to choose the most important of these expressions and then number them in the order of priority. Items corresponding to PLT and PRT in the answer key were determined in ranking the participants, and they were scored. The total score was obtained by summing the scores of PLT and PRT. The PLT scores on the scale range between 18 and 66, and the PRT scores range between 6 and 36. In the third step, the subjects were questioned whether they had encountered similar dilemmas in the past. The status of encountering before was identified using a Likert-type scale, and the "Familiarity (Section C)" score was calculated (Cerit, 2010). The participant's ranking of six items in part B of each dilemma from the most important (6 points) to the least important (1 point) was evaluated. This ranking was then compared with the answer key of the test. The items corresponding to PLT and PRT in the answer key were determined in the order of the participant and the order of the items was compared and scored. For example; Among the thoughts/questions in part B of the dilemma, the number of the item marked as the most important by the participant is 6 points if the number corresponding to the order of one of the PLT items in the answer key is the same, and 5 points if the order of the second most important item is the same as the number corresponding to the order of the other PLT item in the answer key. If the item that is considered important in the third place is the same as the number corresponding to the order of the PRT item in the answer key, 4 points are given. Thus, the PLT and PRT scores were calculated by taking into account the participant's responses to the thoughts/questions in part B of each dilemma. The PLT and PRT scores obtained from each dilemma

were added separately to determine the participant's total PLT and PRT scores. The lowest PLT score that can be achieved in the test is 18, and the highest PLT score is 66. The lowest PRT score that can be obtained is 6, and the highest PRT score is 36. The Section A score of the nurses was calculated with the data obtained in Section C of the test. In this calculation; Likert-type scale was used and the option "I made a decision in a similar dilemma" was coded as 1 point, and the option "it is difficult to encounter in real life" was coded as 5 points. Section A score was obtained by adding these scores for each dilemma. Section A score between 6 and 17 indicates that the participants are familiar with a similar dilemma, while a score in the 18–30 range indicates that they are not familiar with a similar dilemma.

These dilemmas are as follows:

1. "Resuscitation attempt in a newborn with anomaly": This is a dilemma in which the quality of life problem is evaluated in neonatal nursing.
2. "Forced medication administration": This is a dilemma in which the patient's right to use their autonomy is evaluated in the field of psychiatry.
3. "An adult's will to die": This is a dilemma about whether life support should continue, despite an adult's will to end their life.
4. "Adaptation of a new nurse": This is a dilemma that discusses the responsibility of an experienced nurse in the process of adapting a new nurse to the clinic.
5. "Medication error reporting": This is a dilemma regarding reporting erroneous medication administration.
6. "Not informing an adult with a fatal disease": This is a dilemma involving not informing the patient about the progression of disease at the request of the family of a patient with cancer.

2.2.5 | Data collection process

The data were collected from senior nursing students at a university located in the west of Turkey through face-to-face interviews in the classroom environment. At the outset, permission from the authors of the measurement tools used for data collection was obtained through email correspondence. Institutional permission was obtained from the administration of the nursing faculty where the data were collected and from the noninterventional ethics committee. The study sample consisted of 130 students who agreed to participate and completed the data forms. The students who agreed to participate were informed about the research, and they were given the scales in a classroom environment between October and November 2019. It took about 15–20 min to fill out the data forms.

2.2.6 | Data analysis

The data were analyzed using the SPSS 24.0 package program. Descriptive data were presented as numbers, percentages, and mean

values. The relationship between professional values and ethical decision making was analyzed using Pearson correlation analysis. The prediction of ethical decision-making levels by the scores of professional values and subdimensions was evaluated using multiple linear regression analysis. Multiple correlation analysis was used to decide which subdimensions to involve in the regression model. The significance level was accepted as 0.05.

2.2.7 | Ethical considerations

Before starting the data collection process, permission from the faculty administration and approval from the noninterventional ethics committee of the university (Ethics Committee Decision No: 2019/ 25-36) was obtained. The researchers informed the students participating in the study about the purpose of the study and the confidentiality of the data, telling them that the data would only be utilized within the scope of the study. Then, the students' consent was obtained. Forms were given to the students. It was requested not to write introductory information on the forms. The students were left alone in the classroom and asked to put the completed forms in a designated box. They were reminded that if they wanted to, they could opt out of the research while filling out the forms.

3 | RESULTS

All the participants were senior students, and the mean participant age was 21.81 (+1.27) years. All the students attended an internship program in internal medicine, surgery, intensive care, pediatrics, psychiatry clinics, and the public health field.

The statements of the students regarding what the nurse should do according to the scenarios in the ethical dilemma test are given in Table 1. As seen in the table, 53.1% (n = 69) of the students confirmed "resuscitation attempt in a newborn with anomaly" in the first scenario. In the second scenario, 46.9% (n = 61) did not confirm "forced medicine administration." In the third scenario, 77% (n = 101) stated that life support should be continued despite the "adult's will to die." In the fourth scenario, 43.1% (n = 56) said the experienced nurse should support the "adaptation of a new nurse to the clinic." In the fifth scenario, 83.1% (n = 108) stated that "medication error reporting" should be done. In the sixth scenario, 53.1% (n = 69) were undecided about "not informing an adult with a fatal disease" (Table 1).

The data obtained from the second part of the NDT were evaluated, and the mean PLT and PRT scores of the student nurses from this test were calculated. Accordingly, students' mean PLT score (50.23 ± 7.08) was above the average, and their mean PRT score (17.44 ± 4.09) was close to the average (Table 2). In the third part of the test, the student nurses' familiarity with situations similar to dilemmas in the NDT (17.77 + 1.55) was at a moderate level (Table 2).

A positive and statistically significant correlation was found between students' professional values and the mean PLT total score

$(p < 0.01)$. A negative correlation was found between their professional values and mean PRT total score $(p < 0.01)$ (Table 3).

Nursing students' professional values significantly predicted their PLT in ethical decision making $(p < 0.01)$. The professional values of the students explained 21.2% of the total PLT score $(R^2 = 0.212)$ and increased PLT by 0.212 times (Table 4).

TABLE 1 The distribution of the answers given by the students to the question "What should nurse do?," which is in the first part of the test about each dilemma.

Answers to the question "What should the nurse do?"			
		n	%
Resuscitation attempt in a newborn with anomaly	It should be implemented	69	53.1
	I am undecided	49	37.7
	It should not be implemented	12	9.2
Forced medication administration	It should be implemented	9	6.9
	I am undecided	60	46.2
	It should not be implemented	61	46.9
An adult's will to die	Life support should be continued	101	77.7
	I am undecided	26	20.3
	Life support should be discontinued	3	2.3
Adaptation of a new nurse	The experienced nurse should spare time for the new nurse	56	43.1
	I am undecided	50	38.5
	The experienced nurse should not spare time for the new nurse	24	18.5
Medication error reporting	It should be reported	108	83.1
	I am undecided	19	14.6
	It should not be reported	3	2.3
Not informing an adult with a fatal disease	The nurse should inform the patient	47	36.2
	I am undecided	69	53.1
	The nurse should not inform the patient	14	100

TABLE 2 Mean scores for principled thinking, practical thinking, and familiarity of ethical decision making.

	Minimum	Maximum	M ± SD
1. Principled thinking	29.00	63.00	50.23 ± 7.08
2. Practical thinking	8.00	29.00	17.44 ± 4.09
3. Familiarity	12.00	23.00	17.77 ± 1.55

Abbreviations: M, mean; SD, standard deviation.

Nursing students' professional values significantly predicted PRT in ethical decision making ($p < 0.01$). The professional values of the students explained 0.08% of the total PRT score ($R^2 = 0.083$) and increased PRT by 0.083 times (Table 5).

4 | DISCUSSION

In the current study, regarding the question "What should the nurse do?" in the dilemma test scenarios, 53.1% ($n = 69$) of the students stated that a resuscitation attempt needed to be done for a newborn with an anomaly. In the literature, nursing students and clinical nurses have reported at a high rate that newborns with anomalies should be given resuscitation interventions (Basak & Cerit, 2019; Küçük et al., 2017; Özgönül et al., 2020; Sari et al., 2018). Regarding forced medication administration to a patient constantly refusing to receive medication in a psychiatry clinic, 46.9% ($n = 61$) of the students stated that the drug should not be administered by force, and 46.2% ($n = 60$) were undecided. The results of our study are consistent with other studies (Basak & Cerit, 2019; Özgönül et al., 2020). Also, 77% ($n = 101$) of the students stated that life support should be continued in cases where an adult patient does not want to continue to live. The students in previous studies were found to have a similar view (Basak & Cerit, 2019; Baysal et al., 2019; Küçük et al., 2017; Özgönül et al., 2020; Sari et al., 2018). In the fourth scenario, 43.1% ($n = 56$) of the students stated that an experienced nurse should spare time for helping a newly recruited nurse adapt to the clinic, despite worries about disrupting the care of babies under their responsibility. In previous studies, the students were thought that experienced nurses should support new nurses in their adaptation to the clinic (Küçük et al., 2017; Özgönül et al., 2020; Sari et al., 2018). Regarding medication error reporting, 83.1% ($n = 108$) of the students stated that it should be reported. In this scenario, the students were found to confirm the reporting of erroneous medication administration cases with the highest rate. In previous studies, both students and nurses stated that medication errors should be reported (Küçük et al.,

TABLE 3 The relationship between professionalism, principled thinking, and practical thinking.

Variables	1	2	3
1. Professionalism	1.00		
2. Principled thinking	0.460*	1.00	
3. Practical thinking	−0.288*	−0.626*	1.00

*Significant at $p < 0.01$.

TABLE 4 The relationship between the professional values of the nursing students and their principled thinking.

Variables	Principled thinking					
	B	SE	β	t	p	95% CI
Constant	19.814	5.218		3.797	<0.01	9.489–30.139
Professionalism	0.235	0.040	0.460	5.862	<0.01	0.156–0.315
R		0.460				
R^2		0.212				
F		34.368				
p		<0.01				
DW (1.–2.5)		1.704				

Abbreviations: B, β; CI, confidence interval; DW, Durbin Watson; R, correlation coefficiency; R^2, correlation coefficiency square; SE, standard error; β, standardized β.

TABLE 5 The relationship between the professional values of the nursing students and their practical thinking.

Variables	Practical thinking					
	B	SH	β	t	p	95% CI
Constant	28.460	3.258		8.736	<0.01	22.013–34.906
Professionalism	−0.085	0.025	−0.288	3.400	0.001	−0.135 to −0.036
R		0.288				
R^2		0.083				
F		11.559				
p		0.001				
DW (1.5–2.5)		1.604				

Abbreviations: B, β; CI, confidence interval; DW, Durbin Watson; R, correlation coefficiency; R^2, correlation coefficiency square; SE, standard error; β, standardized β.

2017; Özgönül et al., 2020; Sari et al., 2018). Regarding not informing an adult with a terminal illness, 53.1% (*n* = 69) of the students stated that they were undecided. In similar studies, the rate of students and nurses who were undecided regarding this scenario was found to be high (Küçük et al., 2017; Özgönül et al., 2020; Sari et al., 2018). Nurses often have to follow physicians and institutional policies in solving the ethical problems they encounter in the workplace. Law is mostly binding to the ethical problems they face. The difficulties nurses experience in ethical dilemmas similarly apply to students. In the second part of the nursing dilemmas test, students' mean PLT score was high (50.23 + 7.08), and their mean PRT score (17.44 + 4.09) was close to the average (Table 2). Familiarity with the events in the scenarios (17.77 + 1.55) was also close to the average (Table 2). In our study, the mean PLT, PRT, and familiarity scores of the nursing students were similar to the results of other studies conducted with students. Nursing students are in a clinical environment focused on psychomotor skills and under the guidance of instructors or clinical nurses. This condition primarily limits taking responsibility for the patient. Because of their limited clinical practice and responsibilities, students are not as familiar with ethical dilemmas as nurses (Küçük et al., 2017; Özgönül et al., 2020; Sari et al., 2018).

In our study, there was a statistically significant relationship between students' professional values and mean PLT total score and mean PRT total score (*p* < 0.01). In the current study, students' total scores regarding professional values explained 21.2% of the total score for PLT in ethical decision making. In the scenarios in the ethical dilemma test, it was determined that students attached importance to approaches based on their professional values.

Looking at the literature, it is emphasized that thinking based on principles in ethical decision making leads to a determination of ethical behavior instead of revealing what is right or wrong in accepted or disliked situations (Butts & Rich, 2016). In addition, with the professional values of nursing students, showing respect for every life, privacy, safety, and provision of benefit can explain PLT. There is a relationship between thinking based on principles and professional values. Professional values may be a motivating factor in finding solutions to the ethical problems encountered by nurses in the clinic, which is in line with principles (Bijani et al., 2019). Ethical rules provide an opportunity for PLT in those decisions in which the benefit of the patient is considered. Professional values are of great importance in the formation of this way of thinking (Fernández-Feito et al., 2019; Shafakhah et al., 2018). Values are also the basis for the formation of behaviors (Alkaya et al., 2018). Fourth-year nursing students interact more with patients in their internship program and play a greater role in patient care. Professional values improve as students' professional knowledge, skills, and sensitivities increase throughout the course of their education. It is thought that this situation enables them to make decisions based on their principles when facing ethical dilemmas.

In this context, professional values in nursing help provide care by observing human dignity and aiming for benefit and safety of the patient, hence allowing the nurse to use their autonomy (Alkaya et al., 2018; Fernández-Feito et al., 2019; Shafakhah et al., 2018).

Professional values also reflect the personality traits of the nurse (Butts & Rich, 2016; Dündar et al., 2019; Kaya et al., 2017). These features largely determine the response to events. Nursing students can recognize many unethical cases in the clinic, despite their limited responsibilities. In solving the problems, they encounter, their vocational professionalism is decisive in thinking and making decisions that are in line with ethical principles (Bijani et al., 2019). In the results obtained in the current study, as mentioned in the literature, it was determined that the professional values of the students significantly affected their PLT style. It was observed that the students made decisions by considering both the professional knowledge they learned and experiences they brought from the past and their human and cultural values. This result also shows that nursing education is effective in teaching students' professional values and in gaining ethical behaviors. Senior-year students' decision making based on professional values in ethical dilemmas is related to their being more equipped and ready for real working life.

In our study, there was a significant negative relationship between PRT and professional values. The results show that the students mostly adhered to principles in ethical dilemmas. In the current study, a negative relationship was found between PRT and professional values. The results show that students were more committed to thinking about principles in ethical dilemmas. As the professional values of the students increased, their PRT decreased (Chen et al., 2021). As the professional values of the students increased, they began to make decisions in line with professional knowledge and ethical principles, here without being affected by environmental or instantaneous situations. The literature has emphasized that professional values especially increase PLT and decrease PRT at the same time. The current study's results are compatible with the literature (Basak & Cerit, 2019). Students evaluate the behavior of nurses in the face of ethical dilemmas in clinical practice. This situation allows students to think like nurses and question themselves. Here, the students may model nurses who have professional values in the clinic and make decisions in line with these values when facing ethical dilemmas.

In the current study, professional values explained a very minor part of PRT. It was thought that professional values may have predicted a low level of PRT because of the limited professional competence and autonomy of nursing students. For this reason, they are more affected by other people and environmental factors when making decisions (Basak & Cerit, 2019; Palazoğlu & Koç, 2019). In addition, because the students encountered the situations given in the scenarios less often, do not have legal responsibilities, work directly in the team, and do not have an institutional tie all may cause the professional values to explain why PRT was found to be at a low level (Basak & Cerit, 2019; Palazoğlu & Koç, 2019).

5 | LIMITATIONS

The current research has a few limitations. The first limitation is the use of a convenience sample. In our study, 247 fourth-year students were reached, and the purpose of the study was explained. However,

only 130 students filled out the forms. This may affect the results of the study. However, multidimensional analyzes were used to reduce this effect. In addition, the presence of six scenarios and related problems in the ethical dilemma test reduced the completion rate of the measurement tool and participation. To increase participation, an environment was provided where the students would feel comfortable, and they were not given time limits. However, participation was still limited. The relationship between ethical decision making and professionalism should be evaluated intermittently in nursing education. In addition, specific evaluations regarding ethical dilemmas can be made for different nursing fields. The last limitation is that the results are based on the self-reported responses of senior students at a single institution.

6 | CONCLUSION AND RECOMMENDATIONS

In our study, the occupational professionalism of senior nursing students and their responses to scenarios from an ethical dilemma test were evaluated. A significant relationship was found between nursing students' ethical decision making and their professional values. Also, the students were able to present different perspectives on the ethical dilemmas experienced in the clinic. Qualitative studies with students are required to determine the predictive effect of professional values on ethical decision making. To reveal ethical decision making more clearly, measurement tools that allow for the monitoring and objective evaluation of students throughout the entire education process, along with new interventional studies, are needed.

7 | IMPLICATIONS FOR NURSING PRACTICE

In the current study, nursing students' professional values and their decisions regarding ethical dilemmas were discussed. Our study has revealed that the professional values nursing students have in making ethical decisions are an important determinant. The relationship between professional values and ethical decision making, which is one of the most important results of nursing education, should be monitored for a longer time frame. Long-term studies should be conducted to reveal the relationship between principals and PRT and professional values in ethical decision making. In addition, how students should behave in the face of ethical dilemmas should be discussed using a reflective learning method. Students' interaction with appropriate role model nurses should be increased to develop professional nursing behaviors in the ethical dilemmas they encounter in the clinical setting. It is recommended to discuss the ethical dilemmas observed or experienced by the students in their clinical practice in the field to increase the awareness of the students and teach them how to deal with ethical dilemmas.

AUTHOR CONTRIBUTIONS

CONFLICTS OF INTEREST

DATA AVAILABILITY STATEMENT

ORCID

İlknur Bektas http://orcid.org/0000-0001-8048-9501
Murat Bektaş http://orcid.org/0000-0003-3327-8204
Aslı Akdeniz Kudubeş http://orcid.org/0000-0002-0911-8182
Dijle Ayar http://orcid.org/0000-0001-5196-2355

REFERENCES

Albert, J. S., Younas, A., & Sana, S. (2020). Nursing students' ethical dilemmas regarding patient care: An integrative review. *Nurse Education Today*, 88, 104389.

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

Asfour, H. I., Ahmed, F. R., & Abd El Halim, G. E. (2016). Measuring changes in attitude, practice and knowledge of undergraduate nursing students after receiving an educational intervention in ethical comportment in critical care nursing. *Journal of Nursing Education and Practice*, 6(5), 49.

Basak, T., & Cerit, B. (2019). Comparing two teaching methods on nursing students' ethical decision-making level. *Clinical Simulation in Nursing*, 29, 15–23.

Baysal, E., Sari, D., & Erdem, H. (2019). Ethical decision-making levels of oncologynurses. *Nursing Ethics*, 26(7–8), 2204–2212.

Bickhoff, L., Sinclair, P. M., & Levett-Jones, T. (2017). Moral courage in undergraduate nursing students: A literatüre review. *Collegian*, 24(1), 71–83. https://doi.org/10.1016/j.colegn.2015.08.002

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.

Butts, J. B., & Rich, K. L. (2016). Nursing ethics across the curriculum and in to practice (Vol. 22, 5th ed., p. 7). Jones & Bartlett Publishers.

Cerit, B. (2010). Hemşirelik etik İkilem testi'nin geçerlik-güvenirlik çalışması ve hemşirelerin etik karar verebilme düzeyi. *Hacettepe Üniversitesi Hemşirelik Fakültesi Dergisi*, 17(2), 47–67.

Chen, Q., Su, X., Liu, S., Miao, K., & Fang, H. (2021). The relationship between moral sensitivity and professional values and ethical decision-making in nursing students. *Nurse Education Today*, 105, 105056.

Crisham, P. (1981). Measuring moral judgement in nursing dilemmas. *Nursing Research*, 30(2), 104–110.

Deliktaş, A. G. A., Körükcü, Ö., & Kabukcuoğlu, K. (2016). Hemşirelik eğitiminde uygulanabilir bir yöntem: Değer açıklaştırma. *Journal of Research in Education and Teaching*, 2016, 5(4), 25–31.

Dimitriadou, M., Papastavrou, E., Efstathiou, G., & Theodorou, M. (2015). Baccalaureate nursing students' perceptions of learning and supervision in the clinical environment. *Nursing & Health Sciences*, *17*(2), 236–242.

Dündar, T., Özsoy, S., Toptaş, B., & Aksu, H. (2019). Hemşirelikte mesleki değerler ve etkileyen faktörler. *Ege Üniversitesi Hemşirelik Fakültesi Dergisi*, *35*(1), 11–19.

Eckardt, M., & Lindfelt, M. (2019). An analysis of nursing students' ethical conflicts in a hospital. *Nursing Ethics*, *26*(7-8), 2413–2426.

Fernández-Feito, A., Basurto-Hoyuelos, S., Palmeiro-Longo, M. R., & García-Díaz, V. (2019). Differences in professional values between nurses and nursing students: A gender perspective. *International Nursing Review*, *66*(4), 577–589.

Hoskins, K., Grady, C., & Ulrich, C. M. (2018). Ethics education in nursing: Instruction for future generations of nurses. *Online Journal of Issues in Nursing*, *23*(1), 3. https://doi.org/10.3912/OJIN.Vol23No01Man03

Karadağlı, F. (2016). Hemşirelik öğrencilerinin profesyonel değer algıları ve etkileyen faktörler. *Mersin Üniversitesi Sağlık Bilimleri Dergisi*, *9*(2), 81–91.

Kaya, A., & Boz, İ. (2019). The development of the professional values model in nursing. *Nursing Ethics*, *26*(3), 914–923.

Kaya, A., & Kantek, F. (2016). Nurse managers' perception of professional values and affecting factors. *Journal of Health and Nursing Management*, *3*(1), 18–25.

Kaya, H., Işik, B., Şenyuva, E., & Kaya, N. (2017). Personal and professional values held by baccalaureate nursing students. *Nursing Ethics*, *24*(6), 716–731.

Kim, K., Han, Y., & Kim, J. (2015). Korean nurses' ethical dilemmas, professional values and professional quality of life. *Nursing Ethics*, *22*(4), 467–478. https://doi.org/10.1177/0969733014538892

Küçük, S., Uysal, N., Çalbayram, N. Ç., Kahriman, İ., Altundağ, S., & Gönenç, İ. (2017). Hemşirelik öğrencilerinin etik karar verme düzeyleri ve etkileyen faktörlerin belirlenmesi. *ACU Sağlık Bilimleri Dergisi*, *3*, 157–162.

Moon, S., Kim, D. H., Kim, E. J., & Lee, S. (2014). Evaluation of the validity and reliability of Korean version of the nursing professional values scale-revised. *Nurse Education Today*, *14*, 325–350. https://doi.org/10.1016/j.nedt.2013.06.014

Orak, N. S., & Alpar, Ş. E. (2012). Hemşirelerin Profesyonel Değerleri Ölçeği'nin geçerlik ve güvenirlik çalışması. *Clinical and Experimental Health Sciences*, *2*(5), S22–S31.

Özgönül, M. L., Kırca, N., & Bademli, K. (2020). Hemşirelik Öğrencilerinin Etik Sorunlara Yaklaşım Durumlarının Belirlenmesi. *Tıp Eğitimi Dünyası*, *19*(59), 18–28.

Palazoğlu, C. A., & Koç, Z. (2019). Ethical sensitivity, burnout, and job satisfaction in emergency nurses. *Nursing Ethics*, *26*(3), 809–822.

Poorchangizi, B., Farokhzadian, J., Abbaszadeh, A., Mirzaee, M., & Borhani, F. (2017). The importance of professional values from clinical nurses' perspective in hospitals of a medical university in Iran. *BMC Medical Ethics*, *18*(1), 1–7. https://doi.org/10.1186/s12910-017-0178-9

Rainer, J., Schneider, J. K., & Lorenz, R. A. (2018). Ethical dilemmas in nursing: An integrative review. *Journal of Clinical Nursing*, *27*(19–20), 3446–3461. https://doi.org/10.1111/jocn.14542

Sabancıoğulları, S., Kol, E. U., Arslantaş, A. T., Toğantemur, F., & Ülker, F. (2018). Hemşirelerin etik karar verme düzeyi ile profesyonel benlik kavramları arasındaki ilişkinin incelenmesi. *Dokuz Eylül Üniversitesi Hemşirelik Fakültesi Elektronik Dergisi*, *11*(2), 105–112.

Sari, D., Baysal, E., Celik, G. G., & Eser, I. (2018). Ethical decision making levels of nursing students. *Pakistan Journal of Medical Sciences*, *34*(3), 724–729.

Serçekuş, P., & Başkale, H. (2016). Nursing students' perceptions about clinical learning environment in Turkey. *Nurse Education in Practice*, *17*, 134–138. https://doi.org/10.1016/jnepr.2015.12.008

Shafakhah, M., Molazem, Z., Khademi, M., & Sharif, F. (2018). Facilitators and inhibitors in developing professional values in nursing students. *Nursing Ethics*, *25*(2), 153–164.

Tarhan, G., Kılıç, D., & Yıldız, E. (2016). Investigation of the relationship between attitudes towards the nursing profession and occupational professionalism. *Gulhane Medical Journal*, *58*(4), 411–416.

Weis, D., & Schank, M. J. (1997). Toward building an international consensus in professional values. *Nurse education today*, *17*(5), 366–369.

Weis, D., & Schank, M. J. (2000). An Instrument to measure professional nursing values. *Journal of Nursing Scholarship*, *32*(2), 201–204.

Yönt, G. H., Korhan, E. A., Dizer, B., Gümüs, F., & Koyuncu, R. (2014). Examination of ethical dilemmas experienced by adult intensive care unit nurses in physical restraint practices. *Holistic Nursing Practice*, *28*(2), 85–90.