

Original Article

The Relationship between Personality Characteristics and Adherence to Professional Values among Nursing Students

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ABSTRACT

Background: Professional values are the core of developing professional identity and among the determining factors behind nurses' professional practice. Adherence to professional values seems to be affected by personality characteristics. **Objectives:** This study aimed to assess the relationship between personality characteristics and adherence to professional values among nursing students. **Methods:** This descriptive correlational study was conducted on 200 nursing students recruited from Urmia Faculty of Nursing and Midwifery, Urmia, Iran. Study data were collected using the Holland's Personality Questionnaire and the Nurses Professional Values Scale-Revised and were analyzed using the Kolmogorov–Smirnov test and the Pearson's correlation analysis. **Results:** Participants' closest adherence to professional values was related to the dimensions of trust (particularly the item "Maintain competency in area of practice") and caring (particularly the item "Maintain confidentiality of patient"). Their poorest adherence was to the dimensions of professionalism (particularly the item "Participate in peer review") and activism (particularly the item "Participate in nursing research and/or implement research findings appropriate to practice"). The social personality type had significant relationships with all dimensions of adherence to professional values, while the investigative personality type had significant relationships only with the caring ($P = 0.021$) and the justice ($P = 0.013$) dimensions. Moreover, the artistic personality type had significant relationships with the trust ($P < 0.001$), professionalism ($P = 0.004$), and caring ($P = 0.001$) dimensions. **Conclusion:** Personality characteristics have significant relationships with adherence to professional values among nursing students. Therefore, personality characteristics is suggested to be considered as a main criterion for the recruitment of new students to nursing.

KEYWORDS: Nursing, Personality, Professional values, Student

INTRODUCTION

Professional values are defined as whatever is good or desirable for the member of a given profession. These values are related to personal beliefs and root in personal values.^[1] Professional values are standards for action which have been accepted by a professional group and provide a framework for the evaluation of the values and beliefs that affect behaviors.^[2]

Professional values are a significant part of nursing.^[3] They have close relationship with nurses' professional ethics,^[4] guide their professional decision-making,

professional practice, and professional behaviors,^[1,4] and thereby, can significantly affect patient care quality. Moreover, professional values help nurses better manage care-related ethical conflicts.^[5]

Adherence to professional values is affected by different factors, including culture, personal values, professional

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education, professional experiences, and organizational position.^[6] The integrated and purposeful education of professional values is essential to guarantee a bright future for the nursing profession.^[5] Therefore, professional values need to be incorporated into the nursing academic curriculum.^[7] Yet, education is not the only determining factor behind adherence to professional values. Evidence shows that despite education, most students have poor adherence to professional values and face challenges in providing value-based care.^[2,7]

Another factor behind adherence to professional values is personality characteristics. Studies show that personality characteristics and personal values can consistently affect nurses' professional behaviors and values.^[8-10] Personality characteristics which fit nursing care delivery can significantly determine nursing students' and nurses' success in academic and workplace environments through improving their intimacy, empathy, and relationships.^[2] However, a study in Iran reported that 41.3% of students did not have nursing-fitted personality characteristics and hence did not have great motivation for providing standardized value-based nursing care.^[11] Personality characteristics which do not fit nursing care can result in job dissatisfaction, job burnout, low professional commitment, intention to quit nursing, low care quality, and damages to nursing clients. Professional values are experience-, time-, and context-dependent and hence people in different areas and countries may have different professional values.^[12] Moreover, nursing students, who have no clinical experience, may have different professional values from practicing nurses.^[8] Yet, there are limited information about their professional values and the relationship of their professional values with their personality characteristics in Iran.^[13]

Objectives

This study aimed to assess the relationship between personality characteristics and adherence to professional values among nursing students.

METHODS

Study design and participants

This descriptive correlational study was conducted from November 2016 to April 2017 on sixth-, seventh-, and eighth-semester bachelor's nursing students of Urmia Faculty of Nursing and Midwifery, Urmia, Iran. Inclusion criteria were agreement to participate in the study, no clinical work experience, and not being a guest student. The exclusion criterion was reluctance to answer the study instruments. Sample size was calculated using the results of an earlier study in which 32.5% of nursing students had completely compatible personalities with the nursing profession.^[11] Accordingly, with a Z of 1.96

and a d of 0.05, the needed sample size was calculated as 335. However, in total, 236 students were eligible for the study and only 209 of them agreed to participate in the study. Then, all of these 209 students were recruited to the study.

Data collection instrument

Data were collected using the Holland's Personality Questionnaire and the Nurses Professional Values Scale-Revised. The Holland's Personality Questionnaire is among the most famous tools for career choice counseling and student recruitment. More than 400 studies in different countries around the world used this questionnaire and reported its acceptable validity and reliability.^[11,14] This questionnaire was translated into Farsi and culturally adapted by Hosseinian and Yazdi, 1997^[15] and was applied in nursing students by Adib-Hajbaghery and Dianati.^[16] This questionnaire includes two main parts. The first part is a list of 500 occupations in the six main personality type categories of social, artistic, conventional, realistic, enterprising, and investigative. The social, artistic, and investigative personality characteristics are supposed to fit nursing. The second main part of this questionnaire includes the following six dimensions:

1. Occupational daydreams: This dimension includes open-ended questions which ask respondents to write all their occupational daydreams, from the oldest to the newest
2. Activities: This dimension includes a list of social, artistic, conventional, realistic, enterprising, and investigative activities which are responded as "Interested" or "Not interested". Finally, a total score is calculated for this dimension
3. Competencies: This dimension includes a list of activities which the respondent is able to successfully perform. Items are responded as "Yes" or "No," and the score of this dimension is the sum of the "Yes" answers
4. Occupations: This dimension includes a list of different occupations. Respondents are asked to rate their interest in each of the listed occupations through choosing either the "Yes" or the "No" answer. The score of this dimension is the sum of the "Yes" answers
5. Self-rating of abilities and skills: In this dimension, respondents compare their mechanical, scientific, artistic, teaching, selling and clerical, bureaucratic, manual, musical, mathematical, friendliness, cooperative, and managerial abilities and skills with their peers and rate themselves for these abilities and skills from 1 to 7
6. Response organization: In this dimension, the sum score of the previous dimensions is calculated and a three-letter code is produced for each respondent.

The first letter of the code shows the most striking personality characteristics of the respondent and can be used to determine the best fitted occupations for him/her. In the present study, dimension 1–5 were completed by participants.

Professional values were assessed using a ten-item demographic questionnaire and the Nurses Professional Values Scale-Revised. Developed based on the American Nurses Association Code of Ethics for Nurses, this scale includes 26 items in the five dimensions of caring (nine items), activism (five items), trust (five items), professionalism (four items), and justice (three items). Items are scored on a Likert-type scale from 1 (“Not important”) to 5 (“Most important”). Thus, the possible total score of the scale is 26–130, with higher scores showing closer adherence to professional values. In the present study, we reported the total mean scores of the items and the dimensions in the range of 1–5. Weis and Schank developed and validated this scale for the assessment of professional values. They assessed its content validity through seeking the comments of five experts in nursing professional values and confirmed its reliability through a Cronbach’s alpha of 0.92.^[2] The Farsi version of this questionnaire showed suitable validity and reliability.^[17]

For data collection, the corresponding author referred to participants’ class with previous arrangement with their teacher, provided them with explanations about the study aims and methods, gave them the data collection instruments, and asked them to complete the instruments within 24 h.

Ethical considerations

The Ethics Committee of Urmia University of Medical Sciences, Urmia, Iran, approved this study (approval code: IR.UMSU.REC.1394.156). Participants were informed about the aims of the study and were ensured of data confidentiality and their freedom to voluntarily withdraw from the study. Written informed consent was obtained from all of them. All study instruments were anonymous.

Data analysis

Data were analyzed using the SPSS software v. 13.0 (SPSS Inc., Chicago, IL, USA). The Kolmogorov–Smirnov test showed the normal distribution of the study data ($P = 0.09$). The means and the standard deviations of the dimensions of the professional values and personality types were calculated. Moreover, the relationships of personality types with professional values and their dimensions were examined through the Pearson’s correlation analysis.

RESULTS

In total, 209 nursing students were recruited to the study. Nine of them incompletely filled out their questionnaires and hence were excluded. Final data analysis was conducted on the data retrieved from 200 students. Most participants were female (65.5%) and single (84.7%) and had no clinical work experience (74.8%). The means of their age and their grade point average were 22.50 ± 1.15 and 16.35 ± 1.34 , respectively.

The total mean score of adherence to professional values was 90.98 ± 16.30 (in the possible range of 26–130). Among the five dimensions of adherence to professional values, the lowest and the highest mean scores were related to the activism and the trust dimensions [Table 1]. Around 55% of participants had social, artistic, or investigative personality, and hence, their personality fitted nursing. The remaining 45% of participants had personality characteristics which did not fit nursing [Table 2].

The results of the Pearson’s correlation analysis illustrated that the social personality type had significant relationships with all dimensions of adherence to professional values ($P < 0.05$), while the investigative personality type had significant relationships only with the caring ($P = 0.021$) and the justice ($P = 0.013$) dimensions of adherence to professional values. Moreover, the artistic personality type had significant relationships with the trust ($P < 0.001$), professionalism ($P = 0.004$), and caring ($P = 0.001$) dimensions of adherence to professional values [Table 3].

DISCUSSION

The findings of the present study showed that more than half of the participants had personality characteristics which fit nursing care, and there was significant relationship between personality characteristics and adherence to professional values. Moreover, study findings revealed that among the dimensions of adherence to professional values, nursing students placed greater importance on the trust dimension. Moreover, the highest-scored item in the trust dimension was the item “Maintain competency in area of practice.” This is exactly the same as the findings of a former study.^[18] This similarity is attributable to the fact that trust is a global value. Because of steady advances in healthcare sciences, health-care providers need to consistently perform self-evaluation, develop and upgrade their knowledge and skills, and promote their interprofessional relationships to provide quality care and effectively fulfill their clients’ needs. Moreover, our findings revealed that the other items of the trust dimension also obtained high scores. The items of this

Table 1: The mean scores of the different dimensions and items of adherence to professional values

Professional value dimensions	Mean \pm SD
The caring dimension	
Protect moral and legal rights of patients	3.96 \pm 0.95
Refuse to participate in care if in ethical opposition to own professional values	3.19 \pm 1.23
Act as a patient advocate	3.38 \pm 0.91
Provide care without prejudice to patients of varying lifestyle	3.35 \pm 1.04
Safeguard patient's right to privacy	3.79 \pm 1.02
Confront practitioners with questionable or inappropriate practice	3.13 \pm 1.21
Protect rights of participants in research	3.32 \pm 0.92
Practice guided by principles of fidelity and respect for person	3.63 \pm 0.98
Maintain confidentiality of patient	4.23 \pm 0.25
Total	3.55 \pm 0.61
The professionalism dimension	
Participate in peer review	2.77 \pm 0.85
Establish standards as a guide for practice	3.87 \pm 1.0
Promote and maintain standards where planned learning activities for students take place	4.13 \pm 1.08
Initiate actions to improve environments of practice	3.76 \pm 1.09
Total	3.63 \pm 0.68
The activism dimension	
Participate in public policy decisions affecting distribution of resources	3.15 \pm 1.03
Advance the profession through active involvement in health-related activities	3.70 \pm 0.95
Recognize role of professional nursing associations in shaping health care policy	3.38 \pm 1.15
Participate in nursing research and/or implement research findings appropriate to practice	3.14 \pm 0.1
Participate in activities of professional nursing associations	3.30 \pm 1.09
Total	3.34 \pm 0.69
The trust dimension	
Engage in ongoing self-evaluation	3.23 \pm 0.85
Request consultation/collaboration when unable to meet patient needs	3.75 \pm 0.84
Seek additional education to update knowledge and skills	3.96 \pm 0.93
Accept responsibility and accountability for own practice	3.98 \pm 0.78
Maintain competency in area of practice	4.21 \pm 0.85
Total	3.82 \pm 0.58
The justice dimension	
Protect health and safety of the public	3.84 \pm 0.87
Promote equitable access to nursing and health care	3.73 \pm 0.96
Assume responsibility for meeting health needs of the culturally diverse population	3.59 \pm 1.04
Total	3.72 \pm 0.70

SD: Standard deviation

dimension pertain to those nursing values and tasks that ensure quality patient care and affect the social status of nursing. Most nurses and nursing students greatly value

Table 2: The frequency distributions and the mean scores of different personality types

Personality type	n (%)	Mean \pm SD
Social	50 (25)	9.11 \pm 0.45
Investigative	42 (21.2)	7.64 \pm 0.29
Artistic	19 (9.6)	6.43 \pm 0.57
Realistic	50 (25)	8.71 \pm 0.33
Enterprising	27 (13.5)	6.98 \pm 0.63
Conventional	12 (5.7)	5.67 \pm 0.21

SD: Standard deviation

the social status of their profession.^[2] Therefore, the high scores of the items of the trust dimension in the present study denote that our participants were aware of and greatly valued the social status of their profession.

The lowest dimensional mean score respecting adherence to professional values was related to the activism dimension. A former study reported that nurses mostly value those professional values that are directly related to their profession.^[18] The items of the activism dimension are not directly related to nurses' clinical tasks, and hence, they obtained the lowest scores in the present study. Yet, the items of this dimension pertain to important aspects of nursing, including participation in nursing associations and research activities. Our participants' little attention to these important aspects of their profession highlights the necessity of employing strategies to promote their activism-related awareness and practice.

We also found that in the professionalism dimension, study participants did not greatly value "Participation in peer review." A former study also reported the same finding.^[8] This finding may be attributed to nursing students' misconceptions about the supervision and evaluation of colleagues' performance and their fear over creating an inappropriate workplace environment due to peer supervision and evaluation. Given the significant role of peer supervision, evaluation, and feedback provision in promoting the performance of nurses and healthcare teams and improving care quality, awareness-raising strategies are needed to make nursing students and nurses aware of the importance and the benefits of peer supervision and evaluation.

In the justice dimension of professional values, the item "Protect health and safety of the public" obtained the highest score. Similarly, a former study found that the highest-scored item in the justice dimension was to protect all people against unethical or incompetent practice.^[2,4,18,19] The high score of this item may be due to the fact that students might have supposed that they were more competent in protecting public health and safety compared with the other areas of the justice dimension.

Table 3: The relationships of personality types with adherence to professional values

Values	Personality type (<i>r, P</i>)					
	Social	Investigative	Artistic	Realistic	Enterprising	Conventional
Caring	0.208, 0.003	0.240, 0.021	0.354, 0.001	0.111, 0.119	0.001, 0.988	0.079, 0.268
Activism	0.381, 0.001	0.144, 0.079	0.117, 0.071	0.129, 0.068	0.105, 0.139	0.017, 0.812
Professionalism	0.358, <0.001	0.163, 0.292	0.219, 0.004	0.195, 0.006	0.085, 0.230	0.133, 0.060
Trust	0.253, <0.001	0.109, 0.108	0.498, <0.001	0.075, 0.292	0.104, 0.022	0.107, 0.131
Justice	0.179, 0.011	0.174, 0.013	0.198, 0.068	0.127, 0.074	0.001, 0.988	0.080, 0.261
Total	0.314, 0.001	0.197, 0.04	0.231, 0.002	0.067, 0.312	0.092, 0.194	0.048, 0.498

Our finding also revealed the caring dimension as the second lowest-scored dimension of adherence to professional values. Similarly, two earlier studies reported that patient care is of low importance among professional values.^[2,7] Providing patients with professional care is among the codes of ethics for nurses so that nurses are expected to provide their clients with respectful and efficient care without any prejudice.^[20] Accordingly, the low score of the caring dimension in the present study highlights the necessity of developing more effective systems for student recruitment to nursing^[16] and revising nursing education programs. Contrarily to our findings, a study reported that the caring dimension was the highest-scored dimension of professional values.^[8] This contradiction is attributable to the differences in the settings of the studies. It is noteworthy that hospitals may use different nursing care delivery approaches and hence may produce different nursing-related outcomes.

Another finding of the present study was the significant relationships of the social personality type with all dimensions of adherence to professional values, denoting that people with this personality can be appropriate for nursing practice. Similarly, previous studies reported that social personality positively affects nurse-patient relationships, develops nurses' professional relationships, brings nurses professional happiness, helps them accurately identify patients' needs, encourages their participation in professional associations and research activities, gives them a sense of responsibility, and improves the quality of their care services.^[21] People with social personality are sociable, collaborative, patient-friendly, generous, aiding, kind, encouraging, responsible, and sincere^[22] and usually have better understanding about the professional values of nursing.^[21] Therefore, nursing authorities need to develop strategies for the recruitment of students with social personality to nursing.

Our findings also indicated that the caring dimension of adherence to professional values had significant relationship with the investigative personality type, implying that participants with this personality attempted

to promote nursing care. Investigating and determining patient problems are of critical importance to quality nursing care so that it is considered as the first step of the nursing process. Thus, investigative personality is essential for patient assessment and care delivery. Previous studies also noted that investigative personality is needed for quality and holistic care delivery.^[23,24]

We also found significant relationship between the investigative personality type and justice-based practice. In the justice dimension of professional values, the core of nurses' activities is to protect the health and safety of the public. Attainment of this goal requires adequate knowledge and independence. Apparently, nurses with investigative personality characteristics attempt to develop their knowledge about different aspects of daily life to protect public health and safety.^[11]

Study findings also indicated the significant relationships of the artistic personality type with the trust, professionalism, and caring dimensions of adherence to professional values. The justice dimension refers to the delivery of the most appropriate care to all clients.^[11] Similarly, people with artistic personality always attempt to obtain the best.^[25] Thus, the relationship of the artistic personality with the justice dimension is justified. On the other hand, the professionalism and the caring dimensions of adherence to professional values entail continuous patient assessment and updating knowledge and skills for the best professional practice. These aspects of professional values can be promoted through the artistic personality. The artistic aspect of nursing practice has received great attention in recent years^[25] so that some universities attempt to strengthen this aspect among nursing students through offering them courses on music.^[26]

We also found that nursing students mainly valued and adhered to those professional values which were directly related to their profession and placed lower importance to the other dimensions of professional values including peer review and supervision and participation in professional association and research activities. These findings are attributable to their limited professional knowledge and experience, low job motivation, poor

workplace environment, and violation of nurses' rights at their workplace. Their little attention to these aspects of professional values can negatively affect their professionalism. On the other hand, the significant relationships of the social, investigative, and artistic personality types with nursing students' adherence to professional values highlight the necessity of considering personality–job fit during the process of recruiting new students to nursing. Thus, beside academic competence assessment, personality tests are suggested to assess nursing applicants' readiness for nursing practice.

One of the study limitations was its small population which was limited to the nursing students of a single faculty of nursing and midwifery. Because this study was conducted based on volunteer participation, only students willing to participate completed the questionnaire. Therefore, it cannot be generalized. The replication of this study on larger samples and in other universities and countries is recommended.

CONCLUSION

This study suggests significant relationships between personality characteristics and adherence to professional values among nursing students. Due to the influence of personality characteristics on the development and expression of professional values in nursing students, consideration of personality characteristics as a criterion for the recruitment of new students to nursing, guidance and personality testing before university entrance examination is suggested. Moreover, professional values training in both clinical and theoretical courses are suggested to improve nursing students' professional values and thereby to improve the quality of nursing care.

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Conflict of interests

There are no conflicts of interest.

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