Research Paper:
Relationship Between Personality Traits and Nursing Professionalism

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ABSTRACT

Background: Professionalism is among the major concepts of nursing. Besides, nursing professionalism is often associated with attitudes, knowledge, and behaviors that underlie the successful clinical practice. Personality traits can affect various aspects of an individual's life. Accordingly, the present study aimed to determine the relationship between personality traits and nursing professionalism.

Methods: A cross-sectional correlational study was conducted on 205 nurses in teaching hospitals of Khoramabad City, Iran, in 2017. The study subjects were recruited by the stratified sampling method. NEO Personality Inventory and Goze Professional Behavior questionnaire were used to collect the required information. Then, the obtained data were analyzed by SPSS using descriptive and inferential statistics.

Results: Nursing professionalism had a direct relationship with extraversion (r=0.330, P<0.05), conscientiousness (r=0.333, P<0.05), and agreeableness (r=0.172, P=0.014); it also had an inversed relationship with neuroticism (r=- 0.161, P=0.021).

Conclusion: The Big Five personality traits are strongly related to nursing professionalism; with conscientiousness and extraversion as the most pronounced traits. Nurses' attitudes are partly rooted in their personality traits and these attitudes affect the nurse-patient relationship. Therefore, it is suggested that these characteristics be considered in appointing nurses in different departments.

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Highlights

- Every profession requires particular personality traits.

- Professionalism is partly related to the type of personality.

- Professionalism in nursing is directly associated with conscientiousness, extraversion, and agreeableness. It has a negative association with neuroticism.

Plain Language Summary

Human personality traits can affect all aspects of life, including interpersonal relationships and job performance. The nature of the nursing profession requires establishing a good relationship with the patients. Thus, determining the relationship between personality traits and nursing performance should be considered. This study suggested that professionalism in nursing was directly related to extroversion, conscientiousness, and agreeableness personality traits. This finding can be used in appointing nurses in different wards.

1. Introduction

Nursing as a career was started with the work of the British nurse Florence Nightingale. In the past decades, the trend of professionalism has been accelerating in nursing (Cant et al., 2011). The term professionalism refers to the behavior, quality, and goals that characterize the concept of nursing (Christman 1986; Khachian et al., 2016). In another definition, it is stated that professionalism is often associated with attitudes, knowledge, and behaviors that underlie successful clinical practice (Cornett 2006). The American Association of Colleges of Nursing also addresses civility as a component of the professionalism and expected behaviors of nursing professionals (Lasiter et al., 2012).

Nursing education has always aimed at inculcating students with free and intellectual thinking, teaching ethics, and professional values. This is because professionalism in nurses leads to better care and patients' greater satisfaction (Vanlaere & Gastmans 2007). Nursing professionalism is hidden in the nursing curriculum (Karimi et al., 2014). Besides, nursing education always emphasizes professionalism and respects values and commitment to community service delivery (Kim-Godwin et al., 2010). The formation of nursing professionalism begins at the onset of nursing education and continues after graduation; accordingly, the highest level of professionalism is achieved 3-5 years after graduation (Paik & Cho 2004).

It is very difficult to define a person's professionalism. This is because it is affected by personal and professional behavior; however, in the 1980s, Miller offered a model for determining and evaluating professional behavior (Miller et al., 1993). Eight attributes that demonstrate the degree of professionalism in nursing include the following: competence and continuing education; research development; assessment and evaluation; self-regulation and autonomy; participation in professional organizations; publication and communication, as well as adherence to the American Nursing Association (ANA) codes of ethics, and community service (Miller et al., 1993; Adams et al., 1996; Adams & Miller 2001).

A study on pharmaceutical students indicated that personality traits can affect behavior and professionalism (Jensen et al., 2014). Personality is referred to as a set of traits, characteristics, and qualities of sustainability that distinguish an individual from the others (Mangal 2013). As a result, personality traits might be shared by different individuals concerning their thoughts, feelings, and actions; it may not always be easy to understand, due to biosocial pressures and circumstances (Francis et al., 2004). Personality traits are divided into 5 groups, including neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness (Goldberg 1993).

A neurotic individual is frequently upset, experiences a negative temper, and is prone to depression. An extrovert individual is characterized by group desire, decisiveness, activity, excitement, and presenting openness towards new experiences. An agreeable person is ready to make sacrifices and remains warm, sympathetic, and benevolent. Conscientious individuals are efficient, regular, and responsible, and their actions are orderly, accu-

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rate, and sensible (Digman 1990). Furthermore, nurses frequently share common personality traits (Cupit & Sukal 2015). A study found that nurses with neuroticism and introverted traits are more exposed to burnout in the intensive care unit (Ntantana et al., 2017).

Nursing professionalism is essential in clinical care. Besides, personality traits impact professional behavior. Thus, this study aimed to investigate the relationship between the Big Five personality traits and nursing professionalism.

2. Materials and Methods

This cross-sectional correlational study was conducted in all teaching hospitals in Khorramabad City, Iran. The research sample consisted of 205 nurses working in teaching hospitals, i.e. selected by stratified sampling method based on Kim's study (Kim & Kim 2016). The study inclusion criterion was having a bachelor's degree in nursing.

The NEO Personality Inventory is a personality test introduced by Costa and McCrae in 1985 (Costa & McCrae 1988). The questionnaire consists of a long-form which contains 240 questions and a short form of 60 items. Costa and McCrae stated that the correlation of the short form to long-form was 0.77 to 0.92 per domain (Costa & McCrae 1986). In the present study, the short form of the questionnaire was used. The validity and reliability of its short-form have been investigated in various studies, and the relevant Cronbach's alpha coefficient has been reported as 0.85 (Wachi et al., 2016; Fornés-Vives et al., 2016). The responses are scored on a five-point Likert-type scale, ranging from "1: Strongly disagree" to "5: Strongly agree".

In this inventory, 28 questions are scored reversely and each Big trait (neuroticism, extraversion, openness to experience, agreeableness, & conscientiousness) is examined by 12 questions. Scores for each attribute are divided into 3 levels; low, medium, and high. Accordingly, for each trait, a score between 12 and 24 indicates a minimum incidence of the symptoms or opposing signs of that trait; a score of 25 to 48 reflects moderate and stable, and a score of 49 to 60 indicates significant symptoms of that Big trait. To better understand the magnitude of any personality type, the score obtained in each area was classified into three groups of high, moderate, and low severity. The validity coefficients of the Persian version of this questionnaire has been determined as 0.53 to 0.64, i.e. at the significant level of $P \leq 0.01$; its reliability has been supported by the test-retest approach in the 5 domains of neuroticism, extraversion, openness to experience, agreeableness, and conscientiousness as 0.81,

0.73, 0.75, 0.79, and 0.83, respectively (Zare' & Mohammadzadeh 2012). In this study, the Cronbach's alpha coefficient of the NEO Personality Inventory (NEO-PI) was calculated as 0.519.

The Goze professional behavior questionnaire was applied to assess nursing professional behavior. This questionnaire consists of 27 questions answered on a 5-point Likert-type scale, with "never" assigned to the score of 1 and "always" to the score of 4. Additionally, in this questionnaire, one question asks nurses to express their interest in the nursing profession, i.e. rated from zero to 10. The minimum and maximum obtainable scores on this questionnaire are 27 to 135; a higher score indicates better nursing professionalism. The reliability and validity of this questionnaire have been demonstrated and its Cronbach's alpha coefficient was measured as 0.95 (Goz & Geckil 2010; Khachian et al., 2016). In the present study, the reliability of this questionnaire was calculated as 0.899 by Cronbach's alpha coefficient. A demographic form was also used to collect the research subjects' characteristics.

The achieved data were analyzed by descriptive and inferential tests using SPSS. Kolmogorov–Smirnov test findings determined that the data have a normal distribution. Therefore, the Pearson correlation coefficient was used to determine the correlations with a significance level of 0.05.

3. Results

Most of the study participants were female (77.6%) and married (66%). The Mean±SD age of the research subjects was 30.82±6.98 years and their Mean±SD work experience was 84.16±83.149 months.

The Mean±SD score of professionalism was 113.08±13.04. Furthermore, and the Mean±SD rate of the nurses' interest in the nursing profession equaled 7.13±2.74. Table 1 presents the relationship between the main variables and the demographic information of study participants. The scores of the subjects in each of the Big Five personality traits are listed in Table 2. Table 3 presents the intercorrelations (Pearson's r) among the Big Five personality traits and the professionalism score obtained by the research subjects.

4. Discussion

Most of the research subjects were female with an average age of 30 years, i.e. in line with the study of Tanaka and Naami (Tanaka et al., 2014; Naami et al., 2014). Wynd reported a significant relationship between the level of work experience and professionalism (Wynd 2003). In

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Table 1. Relationship between the main variables and study participants' demographic data

Variables	Neuroticism		Extraversion		Openness to Experience		Agreeableness		Conscientiousness		Professionalism	
	P	R	P	R	P	R	P	R	P	R	P	R
Age (y)*	0.053	-0.140	0.897	0.009	0.943	-0.005	0.294	0.077	0.580	-0.041	0.659	0.032
Work experience (y)*	0.018	-0.166	0.000	0.258	0.879	-0.011	0.563	0.041	0.002	0.218	0.142	0.106

Variables	P	P	P	P	P	P
Gender**	0.134	0.020	0.000	0.038	0.053	0.062
Marital status**	0.074	0.029	0.150	0.019	0.030	0.066
Workplace ward**	0.363	0.365	0.246	0.360	0.236	0.482

*Pearson correlation coefficient; **Eta Coefficient test

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Table 2. The frequency of the score of the subjects in the Big Five personality traits

Variables	Scores 12-24		Scores 25-48		Scores 49-60		Total
	No. (%)	Mean±SD	No. (%)	Mean±SD	No. (%)	Mean±SD	
Neuroticism	25 (12.4)	20.64±2.612	175 (86)	35.20±5.881	3 (1.6)	50.33±1.528	203
Extraversion	0 (0)	0	179 (87.3)	41.10±4.369	24 (11.7)	50.96±2.010	203
Openness to Experience	2 (1)	24±0	199 (98)	35.50±4.264	2 (1)	50.50±2.121	203
Agreeableness	0 (0)	0	181 (89.2)	40.14±5.115	22 (10.8)	51.68±2.317	203
Conscientiousness	0 (0)	0	127 (62.7)	42.69±3.779	76 (37.3)	53.05±3.132	203

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Table 3. Pearson correlation test data between the big five personality traits and professionalism

Variable	Neuroticism		Extraversion		Openness to Experience		Agreeableness		Conscientiousness	
	P	R	P	R	P	R	P	R	P	R
Professionalism score	0.021	-0.161	0.000	0.330	0.299	-0.074	0.014	0.172	0.000	0.333

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the present study, however, there was no significant relationship between professionalism and staffing experience, i.e. in accordance with Tanaka's study; they documented no significant relationship between professionalism and work experience of up to 10 years (Tanaka et al., 2014). A study examined ethics and professional values in nursing students; accordingly, it was observed that students in the last year of academic education had more respect for ethics and professional values (Bulut et al., 2015). However, this result was not supported in the present study.

The current study data revealed that the highest mean score of the maximum number of subjects was in agreeableness and extraversion, which tallies well with the re-

sults of Pitt's study; they reported that nurses obtained a higher score in empathy and narcissism, and were more communitarian in attitude (Pitt et al., 2014). We found no relationship between the main variables and workplace ward; however, Ong's study revealed that extraversion and intellect/imagination were associated with the odds of choosing psychiatric nursing (Ong et al., 2017).

The present study findings indicated that three Big personality traits –extroversion, agreeableness, and conscientiousness– were directly related to nursing professionalism; however, neuroticism presented an inversed relationship with nursing professionalism. A study demonstrated that professional ethics among medical

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staff was directly related to the four big traits of conscientiousness, agreeableness, openness to experience, and extraversion; however, it had a reverse relationship with neuroticism (Qasemi & Behroozi 2015). Except for openness to experience, the rest of their results were consistent with the present study. Jasemi et al. argued that personality characteristics have substantial relationships with obedience to professional standards in nursing students. They recommended that personality characteristics be considered as a key standard for the employment of new students in nursing (Jasemi et al., 2020).

Moreover, the current present data supported the findings of other studies according to which personality traits impact professional performance and the provision of advanced services at the pharmacy (Rosenthal et al., 2016; Niculită 2013). Shafii et al. stated that hospital executives can advance their nurses' performance by strengthening staff accountability and hiring accountable personnel (Shafii et al., 2018).

5. Conclusion

The personality traits and nursing professionalism are closely linked; nursing professionalism is directly related to extraversion, conscientiousness, and agreeableness. However, it presented an inversed relationship with neuroticism. Finally, the personality traits of nurses are important factors in predicting their professional behavior.

Ethical Considerations

Compliance with ethical guidelines

The names of the nurses and the information of the research participants remained confidential. Also, participation in this study was voluntary and informed consent forms were obtained from all individual participants in the study.

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Authors' contributions

Conceptualization and supervision: Behnam Masmouei; Methodology: Mehdi Harorani; Data collection: Hossein Bazvand and Zahra karimi; Writing-original draft: Mohammad-Rafi Bazrafshan; Writing-review & editing: Mozhgan Jokar.

Conflict of interest

The authors declared no conflicts of interest.

References

Adams, D., & Miller, B. K., 2001. Professionalism in nursing behaviors of nurse practitioners. *Journal of Professional Nursing,* 17(4), pp. 203-10. [DOI:10.1053/jpnu.2001.25913] [PMID]

Adams, D., Miller, B. K. & Beck, L., 1996. Professionalism behaviors of hospital nurse executives and middle managers in 10 western states. *Western Journal of Nursing Research,* 18(1), pp. 77-88. [DOI:10.1177/019394599601800106] [PMID]

Bulut, H. K., 2015. Evaluation of occupational professionalism of final year nursing students of a university. *Procedia-Social and Behavioral Sciences,* 186, pp. 445-50. [DOI:10.1016/j.sbspro.2015.04.074]

Cant, S., Watts, P. & Ruston, A., 2011. Negotiating competency, professionalism and risk: the integration of complementary and alternative medicine by nurses and midwives in NHS hospitals. *Social Science & Medicine,* 72(4), pp. 529-36. [DOI:10.1016/j.socscimed.2010.11.034] [PMID]

Christman, L., 1986. Professionalization of nursing. *Nursing Administration Quarterly,* 10, p. 86. [DOI:10.1097/00006216-198601040-00011]

Cornett, B. S., 2006. A principal calling: Professionalism and health care services. *Journal of Communication Disorders,* 39(4), pp. 301-9. [DOI:10.1016/j.jcomdis.2006.02.005] [PMID]

Costa, P. T., & Mccrae, R. R., 1986. Cross-sectional studies of personality in a national sample: I. Development and validation of survey measures. *Psychology and Aging,* 1(2), pp. 140-3. [DOI:10.1037/0882-7974.1.2.140]

Costa, P. T., & Mccrae, R. R., 1988. Personality in adulthood: A six-year longitudinal study of self-reports and spouse ratings on the NEO Personality Inventory. *Journal of Personality and Social Psychology,* 54(5), pp. 853-63. [DOI:10.1037/0022-3514.54.5.853] [PMID]

Cupit, T., & Sukal, M. F., 2015. Does personality matter in nursing? Assessing suitability as well as eligibility when hiring. *Nurse Leader,* 13(4), pp. 44-7. [DOI:10.1016/j.mnl.2015.05.009]

Digman, J. M., 1990. Personality structure: Emergence of the five-factor model. *Annual Review of Psychology,* 41, pp. 417-40. [DOI:10.1146/annurev.ps.41.020190.002221]

Fornés-Vives, J., et al., 2016. Coping, stress, and personality in Spanish nursing students: A longitudinal study. *Nurse Education Today,* 36, pp. 318-23. [DOI:10.1016/j.nedt.2015.08.011] [PMID]

Francis, L. J., Louden, S. H. & Rutledge, C. J., 2004. Burnout among Roman Catholic parochial clergy in England and Wales: Myth or reality? *Review of Religious Research,* 46(1), pp. 5-19. [DOI:10.2307/3512249]

Goldberg, L. R., 1993. The structure of phenotypic personality traits. *American Psychologist,* 48(1), pp. 26-34. [DOI:10.1037/0003-066X.48.1.26] [PMID]

Goz, F., & Geckil, E., 2010. Nursing students professional behaviors scale (NSPBS) validity and reliability. *Pakistan Journal of Medical Sciences* 26, pp. 938-41. https://www.researchgate.net/publication/228485051_

Jasemi M., et al., 2020. The relationship between personality characteristics and adherence to professional values among nursing students. *Nursing and Midwifery Studies,* 9(1), pp. 29-35. http://www.nmsjournal.com/text.asp?2020/9/1/29/275

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Jensen, M., et al., 2014. Pharmacy students: Personality types, professionalism and decision making. *Life Long Learning in Pharmacy*. https://researchspace.auckland.ac.nz/docs/uoa-docs/rights.htm

Karimi, Z., et al., 2014. Using the hidden curriculum to teach professionalism in nursing students. *Iranian Red Crescent Medical Journal*, 16(3), p. e15532. [DOI:10.5812/ircmj.15532]

Khachian, A., et al., 2016. Evaluation nurses' professional behavior and its relationship with organizational culture and commitment in 2015. *International Journal of Medical Research & Health Sciences*, 5(12), pp. 247-52. Evaluation nurses' professional behavior and its relationship with organizational culture and commitment in 2015 | Abstract (ijmrhs.com)

Kim-Godwin, Y. S., Baek, H. C. & Wynd, C. A., 2010. Factors influencing professionalism in nursing among Korean American registered nurses. *Journal of Professional Nursing*, 26(4), pp. 242-9. [DOI:10.1016/j.profnurs.2009.12.007] [PMID]

Kim, I. & Kim, J., 2016. The relationship between nurse image and nursing professionalism according to nursing students' gender. *Advanced Science and Technology Letters,* 32, pp. 30-6. [DOI:10.14257/astl.2016.132.06]

Lasiter, S., Marchiondo, L. & Marchiondo, K., 2012. Student narratives of faculty incivility. *Nursing Outlook*, 60(3), pp. 121-6. [DOI:10.1016/j.outlook.2011.06.001] [PMID]

Mangal, S. K., 2013. *General psychology*, New Delhi, Sterling Publishers Private Ltd.

Miller, B. K., Adams, D., & Beck, L., 1993. A behavioral inventory for professionalism in nursing. *Journal of Professional Nursing*, 9(5), pp. 290-5. [DOI:10.1016/8755-7223(93)90055-H]

Naami, A., et al., 2014. A study on the personality aspects of adaptive performance among governmental hospitals nurses: A conceptual model. *Procedia-Social and Behavioral Sciences*, 159, pp. 359-64. [DOI:10.1016/j.sbspro.2014.12.388]

Niculiță, Z., 2013. Personality traits that foster ambulance workers' professional performance. *Procedia-Social and Behavioral Sciences*, 78, pp.385-9. [DOI:10.1016/j.sbspro.2013.04.316]

Ntantana, A., et al., 2017. Burnout and job satisfaction of intensive care personnel and the relationship with personality and religious traits: An observational, multicenter, cross-sectional study. *Intensive and Critical Care Nursing*, 41, pp. 11-7. [DOI:10.1016/j.iccn.2017.02.009] [PMID]

Ong, H. L., et al., 2017. Why is psychiatric nursing not the preferred option for nursing students: A cross-sectional study examining pre-nursing and nursing school factors. *Nurse Education Today*, 52, pp. 95-102. [DOI:10.1016/j.nedt.2017.02.014] [PMID]

Paik, S. N., & Cho, K. J., 2004. Comparing nursing perspective between BSN and RN-BSN program student. *Journal of Korean Academy of Nursing Administration*, 10, pp. 417-25.

Pitt, V., et al., 2014. Nursing students' personal qualities: A descriptive study. *Nurse Education Today*, 34(9), pp. 1196-200. [DOI:10.1016/j.nedt.2014.05.004] [PMID]

Qasemi, L. & Behroozi, M., 2015. Survey of personality traits (based on big five) in professional ethics's growth in medical sciences university of Bushehr. *Iran's Aspect. Procedia-Social and Behavioral Sciences*, 190, pp. 334-8. [DOI:10.1016/j.sbspro.2015.05.007]

Rosenthal, M., et al., 2016. Identifying relationships between the professional culture of pharmacy, pharmacists' personality traits, and the provision of advanced pharmacy services. *Research in Social and Administrative Pharmacy*, 12(1), pp. 56-67. [DOI:10.1016/j.sapharm.2015.05.003] [PMID]

Shafii, M., et al., 2018. The relationship between nurses' five personality traits and organizational knowledge with their job performance in 2016 case study: A trauma hospital. *Evidence Based Health Policy Management and Economics*, 2(1), pp. 51-60. http://eprints.kums.ac.ir/id/eprint/5526

Tanaka, M., Yonemitsu, Y., & Kawamoto, R., 2014. Nursing professionalism: A national survey of professionalism among Japanese nurses. *International Journal of Nursing Practice*, 20(6), pp. 579-87. [DOI:10.1111/ijn.12201] [PMID]

Vanlaere, L., & Gastmans, C., 2007. Ethics in nursing education: Learning to reflect on care practices. *Nursing Ethics*, 14(6), pp. 758-66. [DOI:10.1177/0969733007082116] [PMID]

Wachi, T., et al., 2016. The relationship between police officers' personalities and interviewing styles. *Personality and Individual Differences*, 97, pp. 151-6. [DOI:10.1016/j.paid.2016.03.031]

Wynd, C. A., 2003. Current factors contributing to professionalism in nursing. *Journal of Professional Nursing*, 19(5), pp. 251-61. [DOI:10.1016/S8755-7223(03)00104-2]

Zare, H., & Mohammadzadeh R., 2012. [The role of personality traits in predicting college students' achievement motivation (Persian)]. *Psychological Achievements (Educational Sciences and Psychology)*, 19(1), pp. 117-38. https://www.sid.ir/fa/Journal/ViewPaper.aspx?ID=190212

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