INTERNATIONAL JOURNAL OF

Short communication

The Relationship between Personality Traits of Temperament and Character and Professional Ethics: The Mediating Role of Psychological Defense Mechanisms

Mohammad Alharabi*, Ahmed Alghamdi, Leyla Alghatani

Department of Nursing, College of Nursing, Riyadh Elm University, Riyadh, Saudi Arabia.

Corresponding Author: Mohammad Alharabi, Department of Nursing, College of Nursing, Riyadh Elm University, Riyadh, Saudi Arabia. E-mail: alharabi.am@gmail.com

Received 30 Aug 2024

Accepted 15 Oct 2024

Online Published 24 Ian 2025

Abstract

Introduction: Compliance with ethical standards by hospital staff plays a significant role in the treatment process of patients. Therefore, the present study was conducted with the aim of investigating the effect of personality traits of temperament and character on professional ethics with the mediating role of psychological defense mechanisms in hospital staff.

Material and Methods: The method of this study was descriptive and correlational. The statistical population of the present study was employees of Al-Jazeera Hospital in Riyadh in 2024. Considering the number of the target population, 60 people were selected by simple random method. In this study, the professional ethics questionnaire of Armito et al. (2011), defense mechanisms of Anders et al. (1993) and the personality trait questionnaire of temperament and character of Cloninger (1994) were used. The data were analyzed using the Pearson correlation method and path analysis with SPSS18 and Amos23 software.

Results: The findings showed that there is a significant negative correlation between immature mechanisms (-0.24) and neurotic mechanisms (-0.22) with professional ethics at a significance level of 0.01. There is a significant positive correlation between mature mechanisms (0.29), temperament (0.26), and character (0.28) with professional ethics at a significance level of 0.01. Also, psychological defense mechanisms play a mediating role in the relationship between personality traits of temperament and character on professional ethics. Also, the total coefficient of explanation in the direct and indirect paths by personality traits of temperament and character and psychological defense mechanisms on professional ethics was equal to 0.51.

Conclusion: This study showed that cognitive and behavioral factors including psychological defense mechanisms and personality traits of temperament and character play a fundamental role in the level of professional ethics of hospital staff. **Keywords:** *Professional ethics, Defense mechanisms, Personality traits of temperament and character*

How to Cite: Alharabi M, Alghamdi A, Alghatani L. The relationship between personality traits of temperament and character and professional ethics: the mediating role of psychological defense mechanisms, Int J Ethics Soc. 2025;6(4): 64-69. doi: 10.22034/ijethics.6.4.64

INTRODUCTION

One of the most important and controversial topics in medical ethics is professional ethics [1]. The medical profession has ethical rules that describe the principles of their personnel's performance [2]. In the present era and in the world of modern science, medical ethics is

considered a branch of professional ethics that tries to apply ethics in the field of ethical decision-making in medicine [3]. Professional ethics is a set of principles and standards of human conduct that determine the behavior of individuals and groups and is a rational thought process that aims to realize what values should be maintained and

disseminated in the organization and when [4]. It is a set of accepted ethical actions and reactions to provide the most desirable possible social relations for its members in the performance of professional duties, as well as a kind of moral commitment and conscientiousness towards any type of work, duty and responsibility. Being ethical in a profession is the result of knowing, wanting, being able and having an attitude [5]. Professional ethics is a rational thinking process aimed at achieving the preservation and dissemination of professional values in order to provide the most optimal state of realization of the rights of stakeholders in the shadow of desirable social relations [6]. And ethics is an inseparable and inseparable part of life that seeks right and wrong and explains good and bad in a set of behaviors in different situations [7].

In the creation of moral beliefs, the role of cognitive factors is very important, and the concept of defense mechanisms, as a fundamental cognitive structure, seems to play a role in the processes of formation of moral beliefs [8]. In the psychoanalytic system, every mental disorder is accompanied by specific maladaptive defense mechanisms [9] and defense plays an important role in the mental health of individuals. Numerous studies have supported hypothesis, and research has shown that the physical and mental health of individuals is significantly related to their defense mechanisms [10]. Defense mechanisms are defined as opposing forces against instinctual impulses and drives [11]. In fact, defense mechanisms are automatic regulatory processes that act to reduce cognitive dissonance and minimize sudden changes in internal and external reality by influencing how threatening events are perceived [12]. Therefore, defense mechanisms are defined as automatic psychological maneuvers that protect individuals against anxiety and external and internal stressful events and provide them with psychological well-being [13].

Defense mechanisms are influenced by relatively stable factors such as personality traits, and personality nature consists of temperament and character components, which include functional organization consisting of different systems and rational perceptions about oneself, others, and the world [14]. These dimensions in Cloninger's model [15] include two dimensions of temperament and character. The personality traits, despite the nature of which is dedicated to differences in automatic emotional reactions and habits, deal with individual differences in self-concepts related to goals and values [16]. Such self-concepts can define the value and meaning of everything that is experienced. Therefore, in this way, they can change emotional reactions [17].

Considering the above-mentioned materials, the aim of the present study was to investigate the effect of personality traits of temperament and character on professional ethics with the mediating role of psychological defense mechanisms in hospital staff.

MATERIAL AND METHODS

The method of this study was descriptive correlational. The statistical population of the present study was the employees of Al Jazeera Hospital in Riyadh in 2024. Considering the number of the target population, 60 people were selected by simple random method. In this study, the following standard questionnaires were used. Professional Ethics Questionnaire by Armito et al. (2011)

The professional ethics questionnaire was designed by Armito et al. in 2011 with 19 questions [18]. Its scoring is on a Likert scale (from strongly agree 5 to strongly disagree 1). A higher score indicates greater professional ethics. Construct and content validity was confirmed by the constructor, and reliability was obtained by Cronbach's alpha method of 0.92.

Defense Mechanisms by Anders et al. (1993)

This questionnaire was prepared by Anders et al. in 1993 with 40 questions [19]. It has three factors: developed with 8 questions, underdeveloped with 24 questions, and psychotic with 8 questions. The scoring is in the form of a 9-option Likert scale (from strongly agree 9 to strongly disagree 1). The construct and content validity were confirmed by the constructor, and the reliability was obtained by Cronbach's alpha method for the three factors: developed 0.82, underdeveloped 0.80, and neurotic 0.87.

Cloninger Personality Trait Questionnaire (1994) The temperament and character questionnaire were prepared by Cloninger et al. in 1994 with 125 questions [20]. It has two factors: temperament and character. The scoring is in the form of two factors: yes (zero) and no and (one). The construct and content validity were confirmed by the constructor, and the reliability was obtained by the Cuder-Richardson method for temperament 0.77 and character 0.81.

The data were analyzed using the Pearson correlation method and path analysis with SPSS18 and Amos23 software.

RESULTS

In examining the fit indices resulting from the analysis of data and variables, it was determined that the RMSEA value is 0.027, therefore it is less than 0.1, which indicates the suitability of the mean square errors of the model and the acceptability of the model. Also, the value of the chi-square in the degree of freedom (2.435) is between 1 and 3 and the values of the GFI, CFI and NFI indices are almost equal to and greater than 0.9, which indicates that the measurement model of the research variables is an appropriate model.

In the path analysis between the research variables, the direct paths were first examined and then the indirect paths.

Table 1: Direct paths

		A DESCRIPTION OF THE PERSON NAMED IN COLUMN 1				
Direct path	Va.	b	β	\mathbb{R}^2	t	Sig.
Temperament on professional ethics		0.257	0.203	0.122	3.166	0.01
Character on professional ethics	17	0.268	0.221	0.080	3.546	0.01
Matured mechanisms on professional ethics		0.250	0.210	0.080	2.956	0.01
Unmatured mechanisms on professional ethics		0.226	0.187	0.080	2.864	0.01
Neurotic mechanisms on professional ethics		0.197	0.161	0.080	2.674	0.01

According to Table (1), the paths of personality traits, temperament and psychological defense mechanisms, and professional ethics in hospital

staff have a direct and significant relationship with professional ethics at the (0.01) level.

Table 2: Indirect paths

Indirect paths		Lower limits	Upper limits	Sig.
Temperament on professional ethics with a mediating role on matured mechanisms	0.351	0.297	0.410	0.01
Temperament on professional ethics with a mediating role on unmatured mechanisms		-0.394	-0.291	0.01
Temperament on professional ethics with a mediating role on neurotic mechanisms		-0.386	-0.262	0.01
Character on professional ethics with a mediating role on matured mechanisms		0.302	0.443	0.01
Character on professional ethics with a mediating role on unmatured mechanisms		-0.408	-0.283	0.01
Character on professional ethics with a mediating role on neurotic mechanisms		-0.406	-0.257	0.01

As can be seen in Table (2), the indirect path of the effect of personality traits of temperament and character on professional ethics with the mediating role of psychological defense mechanisms in hospital staff was significant and confirmed by the bootstrap method at the (0.01) level according to the obtained values. Also, the total coefficient of explanation in the direct and indirect paths by personality traits of

temperament and character and psychological defense mechanisms on professional ethics was equal to 0.51.

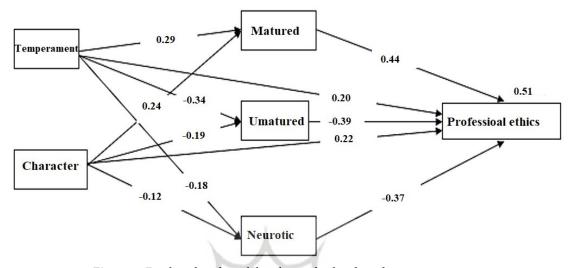


Figure 1: Final analyzed model with standardized prediction statistics

DISCUSSION

This study showed that cognitive and behavioral including psychological factors, defense mechanisms and personality traits, play a fundamental role in the level of professional ethics of hospital employees. The results obtained from the present study were consistent with the findings of some studies [21-25]. In explaining this relationship, it can be said that since professional ethics is a set of principles and standards of human conduct that determine the behavior of individuals and groups, it is a rational thought that aims to determine the values of individuals in their workplace. Therefore, employees may experience stress or anxiety if they do not comply with these rules intentionally or unintentionally. When a person encounters some undesirable feelings (such as anxiety, frustration, conflict, and threat) in their life and workplace, they automatically and unconsciously use defense mechanisms to deal with such feelings, because defense mechanisms are a common phenomenon in the daily lives of individuals (employees) and also in their

workplace. Which are used to reduce or prevent anxiety and unpleasant feelings. Also, these defense mechanisms help them to maintain their self-esteem and to defend themselves against anxiety when facing failures because defense mechanisms are self-monitoring behaviors that are designed to reduce cognitive conflict by minimizing changes in internal and external realities by influencing the perception of events and threats. Therefore, it can be said that there is a relationship between psychological defense mechanisms and the professional ethics of employees. On the other hand, a person's temperamental and secretive personality traits call for certain and different types of reactions in the individual and, consequently, affect the professional ethics of employees. People with temperamental and secretive personality traits have adaptive and altruistic beliefs in social relationships. In relationships with others, they are kind, receptive, and flexible in the face of changes and adapt themselves to problems. Professional ethics are also rules that individuals must voluntarily observe in their professional

work based on their conscience and nature. Therefore, employees who have characteristic in their work are likely to have high professional ethics [2]. These employees are very hardworking and, in response to possible signs of laziness, are very diligent and always do their best to observe ethical standards. Therefore, by increasing the characteristics that are based on the person's ability to improve behavior, his use of efficient cognitive and even emotional regulation strategies increases, and as a result, the likelihood of adaptive and even ethical behaviors increases.

CONCLUSION

This study showed that there is a relationship between psychological defense mechanisms and personality traits of temperament and character in the professional ethics of hospital staff. Also, psychological defense mechanisms play a mediating role in the relationship between personality traits of temperament and character on professional ethics.

ETHICAL CONSIDERATIONS

Ethical issues (such as plagiarism, conscious satisfaction, misleading, making and or forging data, publishing or sending to two places, redundancy and etc.) have been fully considered by the writers.

CONFLICT OF INTEREST

The authors declare that there is no conflict of interests.

REFERENCES

- Mercuri JJ, Iorio R, Zuckerman JD, Bosco JA. Ethics of total joint arthroplasty gainsharing. JBJS. 2017;99(5):e22. Doi: 10.2106/JBJS.16.00594
- Gholami AH, Soltanian AR, Khalili A. The survey of professional ethics observance from nurses' perspective and its related factors in hamadan medical education centers. Journal of Health and Care. 2020;22(1):75-83. Doi: 10.29252/jhc.22.1.75
- Azadian M, Rahimi A, Mohebbi M, Iloonkashkooli R, Maleki M, Mardani A. The barriers to observing professional ethics in the practice of nursing care from

- nurses' viewpoints. Clinical Ethics. 2021;16(2):114-21. Doi: https://doi.org/10.1177/1477750920959549
- Silva TN, Freire ME, Vasconcelos MF, Silva Junior SV, Silva WJ, Araújo PD, Eloy AV. Deontological aspects of the nursing profession: understanding the code of ethics. Revista Brasileira de Enfermagem. 2018;71:3-10. Doi: 10.1590/0034-7167-2016-0565
- Haddad L, Bigger S. Radiology nursing ethics and moral distress. Journal of Radiology Nursing. 2020;39(4):278-85. Doi: 10.1016/j.jradnu.2020.06.003
- Tsuruwaka M, Asahara K. Narrative writing as a strategy for nursing ethics education in Japan. International Journal of Medical Education. 2018; 9:198-205. Doi: 10.5116/ijme.5b39.d5d2
- Kim MS, Jeon MK. Influence of perception of patient rights and ethical values on biomedical ethics awareness in nursing students. Journal of East-West nursing research. 2018;24(1):1-9. Doi: https://doi.org/10.14370/JEWNR.2018.24.1.1
- 8. Prout TA, Gottdiener WH, Camargo A, Murphy S. The relationship between defense mechanisms and religious coping using a new two-factor solution for the Defense Style Questionnaire-40. Bulletin of the Menninger Clinic. 2018;82(3):224-252. Doi: 10.1521/bumc.2018.82.3.224
- Di Giuseppe M, Ciacchini R, Micheloni T, Bertolucci I, Marchi L, Conversano C. Defense mechanisms in cancer patients: a systematic review. Journal of psychosomatic research. 2018;115:76-86. Doi: 10.1016/j.jpsychores.2018.10.016
- Ahanger TA, Aljumah A. Internet of Things: A comprehensive study of security issues and defense mechanisms. IEEE Access. 2018;7:11020-8. Doi: 10.1109/ACCESS.2018.2876939
- 11. Boldrini T, Buglio GL, Giovanardi G, Lingiardi V, Salcuni S. Defense mechanisms in adolescents at high risk of developing psychosis: an empirical investigation. Research in Psychotherapy: Psychopathology, Process, and Outcome. 2020;23(1). Doi: 10.4081/ripppo.2020.456
- 12. Di Giuseppe M, Perry JC, Prout TA, Conversano C. Recent empirical research and methodologies in defense mechanisms: defenses as fundamental contributors to adaptation. Frontiers in psychology. 2021;1,1-2. Doi: 10.3389/fpsyg.2021.802602
- 13. Romeo A, Benfante A, Geminiani GC, Castelli L. Personality, defense mechanisms and psychological distress in women with fibromyalgia. Behavioral Sciences. 2022;12(1):10. Doi: 10.3390/bs12010010
- 14. Kim E, Kim G. Subjective Happiness according to Temperament and Character Type of Nursing Students. Korean Journal of Stress Research. 2020;28(2):76-83. Doi: https://doi.org/10.17547/kjsr.2020.28.2.76
- Cloninger CR, Pryzbeck TR, Svrakic DM, Wetzel RD. The temperament and character inventory (TCI): A guide to its development and use. St. Louis, MO: Center for Psychobiology of Personality. 1994; 1:1047-1057.
- 16. Mihailovic M, Garcia D, Amato C, Lindskär E, Rosenberg P, Björk E, Lester N, Cloninger KM, Cloninger CR. The personality of newly graduated and employed nurses: Temperament and character profiles of Swedish nurses. International Journal of Nursing Studies Advances. 2022; 4:1-16. Doi: 10.1016/j.ijnsa.2021.100058
- 17. Hwang HC, Kim SM, Han DH, Min KJ. Associations of temperament and character with coping strategies among office workers. Psychiatry investigation. 2020;17(1):37-46. Doi: 10.30773/pi.2019.0084
- Fathabadi S, Abaei N, Manzaritavakoli H. Structural equation model of the relationship between professional ethics and teacher emotions with the mediation of moral

- identity. Journal of Adolescent and Youth Psychological Studies. 2023; 4(6): 86-93. Doi: 10.61838/kman.jayps.4.6.9
- Giovazolias T, Karagiannopoulou E, Mitsopoulou E. Can the factor structure of Defense Style Questionnaire (DSQ-40) contribute to our understanding of parental acceptance/rejection, bullying, victimization and perceived well-being in Greek early adolescents? *Europe's journal of psychology*, 2017; 13(2): 269–285. Doi: https://doi.org/10.5964/ejop.v13i2.1090
- Schmeck K, Goth K, Poustka F, Cloninger R. Reliability and validity of the Junior Temperament and Character Inventory. International Journal of Methods in Psychiatric Research. 2001; 10: 172 - 182. Doi: 10.1002/mpr.113
- 21. Munro D, Bore M, Powis D. Personality factors in professional ethical behavior: studies of empathy and narcissism. Australian Journal of Psychology. 2005; 57: 49 60. Doi: 10.1080/00049530412331283453

- 22. Aghighi A. Effect of personality characteristics' dimensions on ethical leadership. Int. J. Ethics Soc 2019; 1 (3): 19-29. Dor: 20.1001.1.26763338.2019.1.3.3.1
- Richardson J, Lounsbury J, Bhaskar T, Gibson L, Drost A. Personality Traits and Career Satisfaction of Health Care Professionals. The Health Care Manager, 2009; 28: 218-26. Doi: 10.1097/HCM.0b013e3181b3e9c7
- Wang X, Shao J, Aozhou W, Lian J, Wen F, Qiong F, Hu Y. Nurses' Personality Traits and Perceived Work Environments During Public Health Emergencies: Implications for Nursing Workforce Planning. Risk Management and Healthcare Policy, 2024; 17: 1199-1209. Doi: 10.2147/RMHP.S458235
- Deshpande S, Joseph J, Prasad R. Factors impacting ethical behavior in hospitals. Journal of Business Ethics, 2006; 69: 207-216. Doi: 10.1007/s10551-006-9086-5

