ORIGINAL PAPER

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Type of Personality and Characteristics of Nurses in Pediatric Intensive Care Unit

ABSTRACT

Background: In recent years, correlation between personality and professional success has become increasingly evident. In modern times, it is well accepted that a persons' personality combined with their abilities are a prerequisite for the successful practice of any profession. **Objective:** The aim of this study was to explore factors associated with ICU nurses' personality types. **Methods:** The sample of the study included 102 nurses working pediatric ICUs. Data collection was performed by the method of the interview using the questionnaire "Greek Version of the TIPI (Ten-Item Personality Inventory)"which includes the following traits: a) Openness to Experience, b) Conscientiousness, c) Extraversion, d) Agreeableness and e) Emotional Stability. **Results:** A fairly high "agreement" (above average) was observed with all five personality types of the "TIPI" scale (median value ≥5 in all subscales). After multiple linear regression, it was found that nurses who wished to move from the ICU have 0.42 units lower "Extraversion" compared to those who do not wish to (β=-0.42, 95%CI: -0.88 - -0.04). An increase in the age of the nurses by one year increases the score of "Agreeableness" by 0.02 units (β=0.02, 95%CI: 0.01 - 0.04) and the score of "Conscientiousness" by 0.03 points (β=0.03, 95%CI: 0.01 - 0.06). Male pediatric ICU nurses have a 3.95-point higher score of "Openness to experience" than women (β=3.95, 95%CI: 2.96-5.64). No factor was found to be significantly associated with "emotional stability". **Conclusion:** Nurses characteristics are associated personality traits. For the health sciences, this is important to recognizes the vital characteristics that make a health professional a competent, safe and ethical worker.

Keywords: Personality, intensive care units, nurses.

1. BACKGROUND

Personality refers to the characteristics of each individual (general and specific) and the ways it directs life. More in detail, personality traits predict the way an individual is expected to respond within a particular context or situation in interaction with environment (1). In addition, personality traits are associated with individual's choices regarding profession and furthermore indicate whether an individual is suitable for work in intensive care unit (ICU). In particular, in pediatric ICU, the type of nurses' personality illustrates the level of love for children (2-4).

Notably, individuals' behaviors are not solely influenced by personality traits but are also facilitated or constrained by their environment. Individuals' personality traits are reflected on their actions, when they work in an environment that allows their expression (5).

Individuals with positive characteristics and emotions report less conflict, maintain good job performance and remain calm, thus ensuring productive teamwork within clinical settings. It is also suggested that positive personality traits lead to effective problem solving and decision making (6).

The personality model explored in the present research concerns the following traits: a) Openness to Experience which indicates willingness to experience new situations and challenges. b) Conscientiousness which refers to the individual's consistency, ambition and corporation, c) Extraversion which is characterized by energy, dominance, warmth, sociability, ambition, positive emotions and a constant tendency to seek stimulation and excitement, d) Agreeableness that describes ability to be pleasant, kind and cooperative in environment and e) Emotional Stability which is the opposite of neuroticism and is characterized by calmness and resilience to stress (7, 8).

All aforementioned traits affect the provided care by nurses. For example, nurses with low levels of the personality trait "Emotional Stability" demonstrate diminished quality of care, as reported by the patient, and low patient safety, as reported by nurses. Additionally, more, negative personality traits not only affect patients' safety but are also associated with greater work stress or maladaptive coping (6). Compared with adult nurses and the broader health care population, pediatric nurses are a less studied population, perhaps due to their relatively small numbers.

2. OBJECTIVE

Therefore, the aim of the present research was to explore the association between type of personality and characteristics of nurses in pediatric ICU.

3. MATERIAL AND METHODS

Design, Setting and Period of the Study

In this cross sectional study, were enrolled 102 nurses of pediatric ICUs in public hospitals in Athens during 2024. Convenience sampling was the applied method for the sample under evaluation.

Inclusion and Exclusion Criteria of the Sample

Criteria for sample inclusion were the following: a) age over 25 years and b) ability to comprehend spoken and written Greek language. Exclusion criteria were nurses newly admitted in pediatrics ICU.

Data Collection and Procedure

The researcher applied the method of interview to fill in a specially developed scale to serve the purposes of this study. Completing the scale lasted approximately 15 minutes for each nurse and took place when they had no task to perform.

Research Instrument

Data were collected using a research instrument which included participants' characteristics and the "Greek Version of the TIPI (Ten-Item Personality Inventory)".

Regarding participants' characteristics were recorded the following: gender, marital status, education level, job position, consideration to move from ICU, age, work experience in years, years' experience in ICU, level of job satisfaction and quality of ICU services, as reported by patients.

Assessment of Nurses' Personality Inventory

The "Greek Version of the TIPI (Ten-Item Personality Inventory)" scale was used to assess the personality of ICU nurses. This scale is a brief psychometric instrument developed by Samuel D. Gosling et al. in 2003 to assess the five basic personality dimensions according to the Five-Factor Model (FFM) (6).

The TIPI scale consisted of ten statements, two for each of five personality dimensions, which were "Extraversion, Agreeableness, Conscientiousness, Emotional Stability and Openness".

Respondents were allowed to answer each statement on a seven-point Likert-type scale. Each of the seven-point scale ratings is assigned a score from "strongly disagree" (1) to "strongly agree" (7). Each statement represents one dimension of personality and participants are asked to rate "how much they agree" with each statement. One statement in each pair is positively worded while the other is negatively worded (needing a scoring reversal first). For each dimension the average of the questions is calculated and the total scores range from 1 to 7. Higher scores indicate greater agreement with each personality dimension.

Ethical Considerations

The present study was approved by the Research Committee of the pediatric public hospital (Athens 1214/19-1-2022). Participants who met the entry criteria were informed by the researcher for the purposes of this study. All subjects participated in the study after they had given their written consent and were informed of their rights to refuse or discontinue participation in the study, according to the ethical standards of the Declaration of Helsinki (1989) of the World Medical Association.

Statistical Analysis

Nominal data are presented with absolute and relative (%) frequencies, whereas continuous data are presented with mean, standard deviation, median, and interquartile range (IQR). Normality of quantitative measures was tested with the Kolmogorov-Smirnov criterion and graphically with histograms and Q-Q plots. The Kruskal-Wallis test and Mann-Whitney test were applied to assess differences between nurses on the characteristics and scores of each scale, as well as the Spearman's rho criterion. The criterion takes values

	Nurses in Peds ICU (n=102)
	n(%)
Gender	
Male	15(14.7%)
Female	87(85.3%)
Marital Status	
Single	37(36.3%)
Married	59(57.8%)
Divorced	3(2.9%)
Living together	3(2.9%)
Education	
Training School	5(4.9%)
University	47(46.1%)
MSc/PhD	50(49.0%)
Job Position	
Supervisor	7(6.9%)
Nurse	90(88.2%)
Nurse's assistant	5(4.9%)
The job Position was	
My choice	30(29.4%)
Service Order	72(70.6%)
Considering changing department	
Yes	51(50.0%)

	Mean (SD)	Median (IQR)
Age (years)	40.8(8.2)	42.0(35.0-47.0)
Work Experience (years)	16.2(8.1)	18.0(9.0-23.0)
Years' Experience in ICU	11.1(8.3)	10.0(3.0-18.0)
Satisfied from working in ICU (Range 0-10)	7.8(1.4)	8.0(7.0-9.0)
Rate quality of ICU services (Range 0-10)	8.6(0.9)	9.0(8.0-9.0)

Table 1: Sample Description. SD: Standard Deviation, IQR: Interquartile range

	Nurses in Peds ICU (n =102)		
	Score Range	Mean (SD)	Median (IQR)
Personality Inventory (TIPI)			
Extraversion	1-7	5.1(1.2)	5.5(4.0-6.0)
Agreeableness	1-7	5.9(0.7)	6.0(5.5-6.5)
Conscientiousness	1-7	6.1(0.6)	6.0(6.0-6.5)
Emotion Stability	1-7	5.4(1.0)	5.5(5.0-6.0)
Openness to Experience	1-7	5.8(0.8)	6.0(5.5-6.5)

Table 2: Personality scores of nurses. SD: Standard Deviation, IQR: Interquartile range

from -1 to +1. Values of spearman's rho close to -1 or +1 indicate strong linear correlation, negative and positive respectively, while values close to 0 indicate absence of linear correlation.

Multiple linear regression was performed to assess the effect of potential factors on the score of each personality scale. Results are presented with β regression coefficients and 95% Confidence Intervals (CIs). The observed 5% level of significance was considered statistically significant. All statistical analyses were performed with SPSS version 28 (SPSS Inc, Chicago, IL, USA).

4. RESULTS

Descriptive results - Sample characteristics

Table 1 presents the demographic characteristics of the sample. It is observed that, the mean age of the participants was 40.8 years±8.2 years, and females constituted 85.3% of the sample. Furthermore, 57.8% of the sample participants were married, 46.1% had a university education and 49.0% held a master's or doctoral degree. For the majority of the sample, working in the ICU was a duty assignment (70.6%), while 50.0% expressed thoughts of moving out of ICU. Regarding the status of the sample, 6.9% were supervisors, 88.2% were nurses and 4.9% were nursing assistants. The overall average time in the nursing profession and the overall average time working in ICUs were 16.2 and 11.1 years, respectively. The mean score on the sample statement regarding "job satisfaction" and "quality of service provided in ICU" was 7.8 and 8.6 respec-

tively in a range of 0 to 10.

Assessment of personality

Table 2 describes the scores of the "TIPI" personality scale. Comparing the median of scores with the possible range of score values, a fairly high "agreement" (above average) was observed with all five personality types of the "TIPI" scale (median value ≥5 in all subscales).

Statistical results

Association between personality and characteristics of pediatric ICU nurses

Tables 3-8 present the associations between the "TIPI" personality scale and demographic characteristics of pediatric

	Nurses in Pediatric ICU				
	Males (n=15)		Females (n=87)		
	Mean (SD)	Median (IQR)	Mean (SD)	Median (IQR)	p-value
Personality Inventory (TIPI)					
Extraversion	5.2(1.6)	6.0(3.0-6.5)	5.0(1.1)	5.0(4.0-6.0)	0.283
Agreeableness	6.1(0.5)	6.0(6.0-6.5)	5.9(0.8)	6.0(5.5-6.5)	0.353
Conscientiousness	6.3(0.6)	6.0(6.0-7.0)	6.1(0.6)	6.0(5.5-6.5)	0.251
Emotional Stability	5.7(0.5)	6.0(5.0-6.0)	5.3(1.1)	5.5(4.5-6.0)	0.333
Openness to Experience	6.2(0.5)	6.0(6.0-6.5)	5.7(0.9)	6.0(5.5-6.5)	0.029

Table 3: Association between personality and gender

	Nurses in Pediatric ICU				
	Single/Divorced (n=40)		Married/Living together (n=62)		
	Mean (SD)	Median (IQR)	Mean (SD)	Median (IQR)	p-value
Personality Inventory (TIPI)					
Extraversion	5.0(1.1)	5.5(4.0-6.0)	5.1(1.2)	5.3(4.0-6.0)	0.531
Agreeableness	5.8(0.8)	6.0(5.5-6.5)	5.9(0.7)	6.0(5.5-6.5)	0.628
Conscientiousness	5.9(0.7)	6.0(5.5-6.5)	6.2(0.6)	6.0(6.0-6.5)	0.017
Emotional Stability	5.3(0.9)	5.5(4.5-6.0)	5.5(1.1)	5.5(5.0-6.0)	0.138
Openness to Experience	5.9(0.7)	6.0(5.5-6.5)	5.7(0.9)	6.0(5.5-6.5)	0.712

Table 4: Association between personality and family status

ICU nurses.

Gender (Table 3) was found to be statistically significantly associated with "Openness to Experiences" (p=0.020) of the "TIPI" personality scale. Specifically, female pediatric ICU nurses compared to males had lower scores on "Openness to Experience" (median [IQR]: 6[5.5-6.5] vs 6[6-6.5]).

Marital status (Table 4) was found to be statistically sig-

	Nurses in Pediatric ICU					
	Training School (n=5)		University (n=47)		MSc/PhD (n=50)	
	Mean (SD)	Median (IQR)	Mean (SD)	Median (IQR)	Mean (SD)	Median (IQR)	p-value
Personality Inventory (TIPI)						
Extraversion	4.1(0.9)	4.0(3.5-5.0)	5.1(1.1)	5.5(4.0-6.0)	5.1(1.3)	5.5(4.0-6.0)	0.141
Agreeableness	6.0(0.5)	6.0(5.5-6.5)	5.9(0.7)	6.0(5.5-6.5)	5.9(0.8)	6.0(5.5-6.5)	0.842
Conscientiousness	6.3(1.0)	6.5(6.5-7.0)	6.1(0.5)	6.0(6.0-6.5)	6.1(0.7)	6.0(5.5-6.5)	0.468
Emotional Stability	5.0(0.9)	5.5(5.0-5.5)	5.4(1.1)	5.5(4.5-6.0)	5.5(0.9)	5.5(5.0-6.0)	0.543
Openness to Experience	5.8(0.6)	6.0(5.5-6.0)	5.8(0.9)	6.0(5.5-6.5)	5.8(0.8)	6.0(5.5-6.5)	0.965

Table 5: Association between personality and education status

nificantly associated with "Conscientiousness" (p=0.017) of the "TIPI" personality scale. Specifically, married nurses working in a pediatric ICU compared to single nurses had higher scores on "Conscientiousness" (median [IQR]: 6[6-6.5] vs 6[5.5-6.5]).

The educational level of the pediatric ICU nurses was not found to be statistically significantly associated with the score of any scale (Table 5).

The choice of working in ICU (Table 6) was found to be statistically significantly associated with "Conscientiousness" of the "TIPI" personality scale, (p=0.042). Specifically, pediatric ICU nurses, whose ICU job was their own choice, had higher scores on "Conscientiousness" (median 6.5 vs 6).

Desire to move from ICU (Table 7) was found to be statistically significantly associated with "Extraversion" (p=0.041), "Emotional Stability" (p=0.011) and "Openness to Experience" (p=0.001) of the "TIPI" personality scale. Specifically, pediatric ICU nurses who desired to move from ICU had lower scores on "Extraversion" (median 5 vs 6), "Emotional Stability" (median 5 vs 5.5) and "Openness to Experience" (median 5.5 vs 6), compared to pediatric ICU nurses who did not desire.

The age of pediatric ICU nurses (Table 8) was found to be statistically significantly correlated with four personality types of the "TIPI" personality scale: "Agreeableness" (rho=0.243, p=0.014), "Conscientiousness" (rho=0.361, p=0.001), "Emotional Stability" (rho=0.270, p=0.006) and "Openness to Experience" (rho=0.213, p=0, 032). The correlation between personality types is slightly positive linear, meaning that as age increases, the scores for these scales also increase.

The total time spent in the nursing profession and total time spent working in ICU showed the same correlations with the personality scales scores of the pediatric ICU nurses. Specifically, total time spent working in the ICU was found to be statistically significantly correlated with "Conscientiousness" (rho=0.292, p=0.003) and "Emotional Stability" (rho=0.223, p=0.025). The correlation was slightly positive linear, which means that as the total working time in the pediatrics ICU increases, the scores in "Conscientiousness" and "Emotional Stability" also increase.

Job satisfaction (Table 8) was found to be

statistically significantly correlated with "Conscientiousness" (rho=0.223, p=0.024), "Emotional Stability" (rho=0.236, p=0.017) and "Openness to Experience" (rho=0.249, p=0.012). The correlation between the three personality types was slightly positive linear, which means that as the score on "Conscientiousness", "Emotional Stability" and "Openness to Experience" increases, so does the score on job satisfaction.

The rating of the quality of the services provided in the children's ICU (Table 9) was found to be statistically significantly correlated with two personality types: "Conscientiousness" (rho=0.244, p=0.018) and "Openness to Experience" (rho=0.290, p=0.003). The correlation with the personality types was slightly positive linear, which means that as the score on "Conscientiousness" and "Openness to Experience" increases, the score on the quality of services in the pediatric ICU also increases, and vice versa.

Effect of ICU nurse characteristics on the Personality scale

Multiple linear regression was applied to assess the effect of ICU nurse characteristics on the 5 Personality subscales

	Nurses in Pediatric ICU				
	My choice (n=30)		Service Order (n=72)		
	Mean (SD)	Median (IQR)	Mean (SD)	Median (IQR)	p-value
Personality Inventory (TIPI)					
Extraversion	5.3(1.2)	6.0(4.5-6.5)	5.0(1.1)	5.0(4.0-6.0)	0.094
Agreeableness	5.9(0.7)	6.0(5.5-6.5)	5.9(0.8)	6.0(5.5-6.5)	0.668
Conscientiousness	6.3(0.5)	6.5(6.0-6.5)	6.0(0.7)	6.0(5.5-6.5)	0.042
Emotional Stability	5.5(1.1)	5.8(5.5-6.5)	5.3(1.0)	5.5(4.5-6.0)	0.137
Openness to Experience	5.9(1.0)	6.0(5.5-6.5)	5.8(0.8)	6.0(5.5-6.5)	0.171

Table 6: Association between personality and job position

	Nurses in Pediatric ICU				
	Considering leave ICU (n=51)		NOT Considering (n=51)		
	Mean (SD)	Median (IQR)	Mean (SD)	Median (IQR)	p-value
Personality Inventory (TIPI)					
Extraversion	4.9(1.1)	5.0(4.0-5.5)	5.3(1.2)	6.0(4.5-6.0)	0.041
Agreeableness	5.8(0.8)	6.0(5.5-6.5)	6.0(0.7)	6.0(5.5-6.5)	0.461
Conscientiousness	6.0(0.7)	6.0(5.5-6.5)	6.2(0.6)	6.0(6.0-6.5)	0.225
Emotional Stability	5.2(1.0)	5.0(4.5-6.0)	5.6(1.0)	5.5(5.0-6.5)	0.011
Openness to Experience	5.5(0.8)	5.5(5.0-6.0)	6.0(0.8)	6.0(5.5-6.5)	0.001

Table 7: Association between personality and desire to leave ICU

	Nurses in Pediatric ICU (n=102)				
	Age (years)	Work Experience (years)	Years Experience in ICU	Satisfied from working in ICU (Range 0-10)	Rate the quality of ICU services (Range 0-10)
	rho (p)	rho (p)	rho (p)	rho (p)	rho (p)
Personality Inventory (TIPI)					
Extraversion	0.150(0.132)	0.144(0.149)	0.102(0.309)	0.063(0.530)	0.045(0.655)
Agreeableness	0.243(0.014)	0.191(0.055)	0.104(0.298)	0.103(0.304)	0.186(0.061)
Conscientiousness	0.361(0.001)	0.288(0.003)	0.292(0.003)	0.223(0.024)	0.234(0.018)
Emotional Stability	0.270(0.006)	0.255(0.010)	0.223(0.025)	0.236(0.017)	0.171(0.085)
Openness to Experience	0.213(0.032)	0.128(0.200)	0.137(0.169)	0.249(0.012)	0.290(0.003)

Table 8: Correlation between personality and quantitative characteristics of the sample

(TIPI questionnaire). In the linear models, the 5 TIPI subscales were set as dependent variables and the characteristics that were statistically significantly associated with the subscales at a univariate level were set as possible independent factors.

For the subscale "Extraversion" the factor that has a statistically significant effect is the desire to move from ICU (p=0.042). Nurses who wish to move have 0.42 units lower "Extraversion" compared to those who do not wish to (β=-0.42, 95%CI: -0.88 - -0.04).

The subscale "Agreeableness" is affected by age (p=0.013). An increase in the age of the nurses by one year increases the score of "Agreeableness" by 0.02 units (β=0.02, 95%CI: 0.01 - 0.04).

The subscale "Conscientiousness" is also affected by age (p=0.048). An increase in the age of nurses by one year increases the score of "Conscientiousness" by 0.03 points (β=0.03, 95%CI: 0.01 - 0.06).

The subscale "Openness to experience" is affected by gender (p=0.001). Male pediatric ICU nurses have a 3.95-point higher score of "Openness to Experience" than women (β=3.95, 95%CI: 2.96-5.64).

5. DISCUSSION

According to the present results, female nurses had lower scores in the personality trait of "Openness to Experience", which indicates either low willingness to experience new situations at work or consistency in already known ways in nursing procedures. Interestingly, other factors may contribute to low "Openness to Experience". For example, women have various roles in society (caring for family, children) which may affect their physical and mental health and (depending on the extent) lead to reduced work performance, poor quality of care, loss of patient trust, and lower adherence to treatment protocols (10).

Married pediatric ICU nurses had a higher "Conscientiousness". It seems that married nurses are more self-disciplined, persistent, ambitious and achievement-oriented, which are only some of the characteristics of conscientiousness. Also, this finding may be attributed to the fact that married nurses may have children and know the importance of love which is an undisputable factor for survival of "little" people. The behavior and social relationships are shaped positively when parenting with love. For hospitalized children, health professional loving care improves the feeling of safety and satisfies the basic need of love.1

Higher "Conscientiousness" had also nurses whose work in ICU was personal choice. A possible interpretation of the finding is that nurses who love their work offer their maximum potential, demonstrating great focus on patients' needs. When individuals experience a sense of calling for their job then is increased satisfaction, motivation, and performance in work. From pediatric nurses' perspective, the sense of calling increases their commitment to profession, allows them to cope with adverse conditions, and improves the quality of care (11). It is essential for nurses to make conscious, rational, rapid, and appropriate decisions especially when caring for pediatric patients with a change in body image or with critical illness (12).

Extraversion		
	β coef. (95% CI)	p-value
Desire to be transferred from the ICU (Yes vs No)	-0.42(-0.88 - -0.04)	0.042
Agreeableness		
	β coef. (95% CI)	p-value
Age (years)	0.02(0.01 - 0.04)	0.013
Conscientiousness		
	β coef. (95% CI)	p-value
Family Status (Married vs Single)	0.09(-0.21 - 0.38)	0.565
Working in the ICU (Personal choice vs. Service order)	0.04(-0.26 - 0.34)	0.794
Age (years)	0.03(0.01 - 0.06)	0.048
Years of working in ICU	-0.01(-0.03 - 0.02)	0.593
Job Satisfaction (score 0-10)	0.08(-0.03 - 0.19)	0.134
Rate quality of services provided in ICU (score 0-10)	0.07(-0.08 - 0.21)	0.354
Emotional Stability		
	β coef. (95% CI)	p-value
Desire to be transferred from the ICU (Yes vs No)	-0.27(-0.69 - 0.15)	0.212
Age (years)	0.04(0.00 - 0.08)	0.076
Years of working in ICU	-0.01(-0.05 - 0.03)	0.540
Job Satisfaction (score 0-10)	0.13(-0.02 - 0.29)	0.094
Openness to Experience		
	β coef. (95% CI)	p-value
Gender (Males vs Females)	3.95(2.26 - 5.64)	0.001
Desire to be transferred from the ICU (Yes vs No)	0.37(-0.09 - 0.83)	0.111
Age (years)	-0.34(-0.70 - 0.01)	0.054
Years of working in ICU	0.02(0.00 - 0.04)	0.095
Job Satisfaction (score 0-10)	0.01(-0.13 - 0.15)	0.856

Table 9: Effect of pediatric ICU nurse characteristics on the personality scale. β coef.: β regression coefficient, CI: Confidence Interval

The higher nurses rated quality of care services, the higher was "Conscientiousness" and "Openness to Experience". A research in Japan conducted by Takase et al. (5) showed that personality traits of Extraversion, Conscientiousness and Openness to Experience along with environmental characteristics (autonomy and feedback) are associated with opportunities of workplace learning and assessment of nursing competence, thus leading to higher quality care. Possibly nurses with "Openness to Experience" reported better quality of provided services since they are creative, motivated to learn and prefer a work environment that offers stimuli and self-direction. An alternative explanation is that they exhibit personality traits in a work environment that offers autonomy. Individuals with "Openness to Experience" are analytical, try different methods at work and reflect their own practice and experience (5, 7). Another possible interpretation is that nurses with "Conscientiousness" like to receive feedback regarding their work performance, strengths and weaknesses, thus improving quality of care.

The results showed that "Conscientiousness" and "Emotional Stability" increase with age and total time of experience. Interestingly, nurses with "Emotional Stability" contribute to better outcomes (such as greater patient safety), because they achieve to apply strategies to confront with stressful situations (13). In general, nurses with higher work

experience have more effective communication skills while in the course of time, self-awareness is improved at interacting with a patient (14, 15). In contrast, younger nurses with limited life experiences have difficulties to apply the acquired communication concepts which learned during their studies (16). However, when nurses gain experience, they apply automatic and intuitive responses to specific clinical situations, resulting in an increased risk of overlooking or ignoring "signals" that threaten patients' safety (13). On the other side, prolonged exposure to illness and suffering of others may lead nurses to compassion fatigue. While nurses struggle to provide effective care for patients, this emotional burden may reduce their efforts (17). Furthermore, when working hours increase, nurses' self-esteem and empathy skills decline due to sleep disturbance and exposure to physical and mental fatigue. Nurses in the stressful ICU environment develop psychoticism and "Extroversion" as an adaptive coping mechanisms to confront with the demanding nature of their roles (18).

Lower "Extroversion" "Emotional Stability" and "Openness to Experience" was observed among nurses who considered to move from ICU. According to Chen et al. (19) the repetitive painful procedures and treatments to critically ill children along with parents' emotional burden are sources of reduced empathy among pediatric nurses. Whitehead et al. (20) showed that nurses who considered to abandon job had higher moral distress than those who did not.

Quality of life for pediatric nurses is negatively associated with the decision to leave. Burnout in pediatric nurses is unique because of the specialized nature of caring for children, the greater empathy required, and the complexity of relationships with families. Personality traits such as high neuroticism and low agreeableness are associated with burnout in pediatric nurses. Targeting personality traits as an attempt to reduce burnout is a high-cost, low-yield strategy. Notably, burnout is not a recent phenomenon, but rather has been studied over time, as it has implications for nurses, patients, and the health system in each country (21-23). Nurses face several challenges such as lack of social recognition from the general public and lower salaries compared to other health professionals, such as physicians and pharmacists. In fact, nurses are poorly paid compared to their counterparts in other countries (24).

Sympathy for children, in respect with their rights and emotional, social and developmental differences develop willingness to work in pediatric care (25).

Limitations of the study

The present study was of cross-sectional design and there was no evidence of causal relationship between dimension under evaluation. The method of convenience sampling is not representative of all nurses living in Greece, thus limiting the generalizability of the results. Moreover, there was no next measurement in time that would allow the evaluation of possible changes in all dimensions under assessment. Although many significant associations were observed, the sample size might be a small one.

6. CONCLUSION

The present study showed that the following about Pediatric ICU: Female nurses had lower scores on "Openness to Experience". Married nurses had higher scores on "Conscientiousness". Nurses, whose ICU job was their choice, had higher scores on "Conscientiousness". Nurses who desired to move from ICU had lower scores on "Extraversion", "Emotional Stability" and "Openness to Experience". As age increases, the scores for "Agreeableness", Conscientiousness" "Emotional Stability" and "Openness to Experience" scales also increase. As total time of work increases, the scores for "Conscientiousness" and "Emotional Stability" also increase. As the score on "Conscientiousness", "Emotional Stability" and "Openness to Experience" increases, so does the score on job satisfaction. As the score on "Conscientiousness" and "Openness to Experience" increases, the score on the quality of services also increases, and vice versa. Pediatric nurses provide complex care to children according to their cognitive and psychosocial development. Work in pediatric care requires nurses to be patient, empathetic, sensitive, and collaborative with families, schools, and other institutions. One area of interest in nursing includes the recognition that personality traits predict the "ideal" health professional.

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