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Demographics, Personality Traits, Work Conditions and Dehumanization Levels: A Large-Scale Study Among Healthcare Professionals

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Abstract

The phenomenon of dehumanization constitutes a critical and multifaceted issue in the healthcare sector, particularly within hospital and clinical settings. This study aims to investigate the significant correlations between demographic characteristics and dehumanization, work conditions, personality traits, professional quality of life. The primary research instrument of the study was a validated questionnaire, which included items related to the participants' sociodemographic, educational, and professional characteristics, as well as the following scales: the Dehumanization Scale (DS), the Self-Dehumanization Scale (SDS), the Ten Item Personality Inventory (TIPI), and the Professional Quality of Life Scale (ProQOL). With regard to sociodemographic characteristics, age (mean 4.48±0.59 for older vs 4.32± 0.53 for younger health professionals, $p<0.001$) and professional experience (mean 4.46±0.58 for more experienced vs 4.3±0.49 for less experienced health providers, $p = 0.033$) could significantly account for the overall extent of dehumanization. Secondary traumatic stress mainly concerned female health professionals (20.6±8.24 for females vs 19.2±7.8 for males; $p=0.019$), as well as married healthcare providers (20.85±8.15 for married vs 19.1±8.05 for unmarried health professionals; $p=0.005$). The analysis also revealed that certain personality traits, professional burnout and secondary traumatic stress seem to be positively correlated with working experience. The findings of this study highlight the severity of dehumanization in healthcare settings and the urgent need for systematic intervention, along with the development of targeted programs by relevant authorities, aiming at promoting holistic patient care and improving the quality of life of healthcare professionals.

Keywords: Dehumanization; demographic characteristics; healthcare professionals; personality traits; professional quality of life

1. Introduction

Dehumanization is the phenomenon whereby individuals or groups attribute to others characteristics that diminish their human status (Haque & Waytz, 2012; Haslam, 2006; Haslam & Bain, 2007; Sakalaki et al., 2016, 2017). Within healthcare services, dehumanization has emerged as a particularly concerning manifestation, affecting both patient care and provider well-being (Capozza et al., 2024; Lekka et al., 2021; Roupa et al., 2024, 2025; Surchat et al., 2022).

Evidence suggests that personality traits, professional quality of life, and socio-demographic factors are key determinants of dehumanizing attitudes (Cole-King & Gilbert, 2014; Roupa et al., 2025; Trifiletti et al., 2014).

The present study aims to examine the relationships between healthcare professionals' demographic and professional characteristics, personality traits, and professional quality of life using a large sample of healthcare professionals. Particular emphasis is given on identifying the factors associated with dehumanization, with the goal of informing targeted psychological interventions that foster more human-centered care.

1.1 Dehumanization in Medical Practice: Challenges and Sustaining Factors

According to Haslam's theoretical model, dehumanization is particularly relevant in the context of healthcare provision (Haslam, 2006; Haslam & Loughnan, 2014). In Haslam's framework dehumanization arises from the denial of two fundamental dimensions of human nature: human uniqueness (higher cognitive and cultural characteristics) and human nature (emotionality, vitality, and the capacity for social connection).

In medical practice, dehumanization is reflected in patients being treated not as unique individuals but rather as creatures without will**,** as impersonal bodies or mechanical entities. Such an approach undermines fundamental ethical principles of medicine and diminishes the quality of care provided. Despite the acknowledged importance of empathy and person-centered care in improving clinical outcomes, healthcare professionals often, consciously or unconsciously, depersonalize patients, primarily focusing on biological or functional aspects of treatment (Andersen et al., 2020; Roupa et al., 2024, 2025). This "mechanization" of patients leads to the loss of interpersonal connection and limits the professional's capacity to recognize and respond to patient emotional needs (Haslam, 2006; Haslam et al., 2007). Furthermore, emotional distancing may be further exacerbated by burnout and reduced personal accomplishment, both prevalent in high-stress clinical settings (Roupa et al., 2025).

This model has been examined cross-culturally, consistently revealing patterns of dehumanization across different healthcare systems and social environments. The systematic occurrence of these patterns highlights that dehumanization constitutes a broader socio-psychological phenomenon rather than an isolated or incidental event. (Bain et al., 2009; Vaes & Muratore, 2013).

As societies become more diverse, hospitals increasingly treat patients from different language, religious, ethnic, and social backgrounds. Cross-cultural studies further highlight that the prevalence and expression of dehumanization are shaped by both societal norms and healthcare system structures, suggesting that interventions aimed at fostering human-centered care must consider cultural and organizational contexts (De-María et al., 2024; Kelley et al., 2014). At the same time, systematic reviews indicate that cultural differences in the expression of pain, in decision-making regarding health, and in the role of the family are often misinterpreted by healthcare professionals, leading to unequal or even discriminatory treatment (Kleinman & Benson, 2006; So et al., 2024). Strengthening cultural humility and

cross-cultural competence through continuous education and reflective practice has been shown to improve communication and reduce inequalities in care. In other words, the recognition of cultural diversity should not be viewed as an obstacle, but rather as a prerequisite for humane, equitable, and dignified healthcare (Schiavo, 2023; Walkowska et al., 2023).

1.2 Impact of Sociodemographic Characteristics on Healthcare Professionals' Behavior Toward Patients

A growing body of research suggests that socio-demographic characteristics significantly shape professional attitudes and the risk of dehumanization. Gender, age, education level, years of experience, and cultural background influence empathy and interpersonal communication in care (Vaes & Muratore, 2013). Female healthcare professionals, for instance, often display higher levels of empathy and emotional accessibility compared to male colleagues (Hojat et al., 2002; Mendez, 2023). Age and professional experience are typically associated with better self-regulation and stress management, although prolonged exposure to workplace stressors can lead to emotional desensitization (Johnson et al., 2017; Mendes & Miguel, 2024; Scheibe & Zacher, 2013). Education, while enhancing technical competence, may be associated with more objectifying attitudes, as professionals with advanced training risk perceiving patients as "clinical cases" rather than whole persons (Lekka et al., 2021; Vaes & Muratore, 2013). In addition, implicit biases based on gender, ethnicity, or socioeconomic status can foster differential treatment (Amdani et al., 2023; Schulman et al., 1999; Zebib et al., 2019). Furthermore, work environment further shapes behavior, as professionals in high-intensity settings such as intensive care units (ICUs), especially with rotating or night shifts are more vulnerable to burnout, stress, and depersonalizing practices (Embriaco et al., 2007; Teixeira et al., 2013).

1.3 The Role of the Big Five Personality Traits among Healthcare Professionals

Personality plays a critical role in professional functioning. The five-factor model (FFM), or "Big Five," describes personality through five broad dimensions: Extraversion, Agreeableness, Conscientiousness, Neuroticism (or Emotional Stability), and Openness to Experience (Angelini, 2023; Fukuzaki & Iwata, 2022; Törnroos et al., 2013). These dimensions, stable over time, are linked to a wide range of behavioral and emotional outcomes (Roberts & DelVecchio, 2000; Terracciano et al., 2008). In healthcare contexts, personality traits influence resilience, communication, and stress management. Conscientiousness has been associated with professional responsibility, dedication, and reduced burnout (Swider & Zimmerman, 2010). Agreeableness and Extraversion facilitate positive interpersonal relationships and collaboration, while Neuroticism is linked to emotional instability, higher strain, and vulnerability to stress (Treglown et al., 2016). Conversely, Openness may enhance adaptability and problem-solving, though findings in healthcare are mixed (Angelini, 2023; Divinakumar et al., 2019; Pérez-Fuentes et al., 2020).

1.4 Professional Quality of Life

A further determinant of dehumanization risk is professional quality of life (ProQOL), which reflects job satisfaction, burnout, and secondary traumatic stress. Workplace stress and burnout are strongly associated with reduced empathy and increased emotional distancing (Roupa et al., 2024, 2025). Low ProQOL has consistently been linked to higher levels of dehumanization (Vaes & Muratore, 2013; Zhou, 2025). Nurses with high burnout and secondary traumatic stress report diminished empathy and reduced positive patient interaction (Kitano et al., 2023; Zhou, 2025), while professionals with low compassion satisfaction are more prone to depersonalizing practices (Smart et al., 2014). Moral distress, arising when

clinicians are unable to provide the quality of care they consider appropriate, further amplifies the risk of dehumanization. In contrast, empathy and compassion satisfaction serve as protective factors against professional fatigue, reinforcing human-centered care (Figley, 2002; Zhou, 2025).

Taken together, these findings highlight the multifactorial nature of dehumanization in healthcare. It emerges at the intersection of demographic characteristics, personality traits, work conditions, and professional quality of life. Understanding how these variables interact is essential for designing interventions that strengthen empathy, reduce burnout, and protect human dignity in care.

1.5 Purpose of the Study

The purpose of this research is to investigate the significant correlations between demographic characteristics, work conditions, personality traits, and professional quality of life**,** in relation to dehumanization**,** drawing on contemporary scientific literature**.**

2. Materials and Methods

2.1 Sampling-Participants

This study was conducted in 14 public hospitals in urban centers of Greece between March and September 2022. The total sample comprised 1,150 healthcare professionals, including physicians and nurses (Table 1)**.** Hospital departments were classified into two categories: "units," referring to closed, high-intensity areas such as Intensive Care Units (ICUs), and "wards," representing more open clinical structures such as Pediatrics and Internal Medicine**.** Staff were further categorized by work schedule into "rotating shifts," including alternating morning, afternoon, and night shifts, and "fixed shifts," defined by a consistent, non-rotating schedule**.**

Table 1. Demographic and Other Characteristics of the Sample (N = 1,150)

		n	%
Age		45.13 ± 10.25 (22-74)	
Gender			
	Male	275	23.9
	Female	875	76.1
Place of living			
	Village	162	14.1
	Town (<150.000 citizens)	370	32.2
	City (>150.000 citizens)	618	53.7
Family status			
	Unmarried	395	34.3
	Married	652	56.7
	Divorced	88	7.7
	Widow/er	15	1.3
Occupation			
	Nurse	816	71.0
	Doctor	334	29.0

Annual family income			
	<20.000 €	972	84.5
	20-50.000 €	160	13.9
	50-80.000 €	13	1.1
	80-100.000 €	5	0.4
Postgraduate studies (n = 251)			
	Master of Science	193	76.9
	PhD (Doctor of Philosophy)	58	23.1
Work department			
	Open department	560	48.7
	Closed department	589	51.2
	Laboratory	1	0.1
Working experience			
	6 months - 1 year	146	12.7
	2 years - 10 years	306	26.6
	11 years - 20 years	297	25.8
	21 years - 40 years	401	34.9

Notes. Values are referred to absolute and relative frequencies (%) or means ± standard deviations (SD), minimum and maximum.

A convenience sampling method was employed, and all participants were fully informed about the study's objectives and procedures. Of the 1,315 questionnaires distributed, 1,150 were completed and included in the analysis (response rate 87.5%). Exclusion criteria included incomplete responses, professional experience of less than six months, and refusal to participate in the study.

2.2 Data Collection Procedure

Data collection was conducted using printed questionnaires, distributed by a single researcher across all participating hospitals to ensure procedural consistency. Healthcare professionals received detailed information about the study's purpose and objectives, both verbally and through a written information letter. The letter emphasized the voluntary nature of participation, assured the anonymity of responses, and outlined the rights of participants. The average time required to complete the questionnaire was approximately 20 minutes.

2.3 Questionnaires

2.3.1 Questionnaire on Demographic, Personal, and Professional Data

The demographic questionnaire, designed to collect information on the personal, professional, and general characteristics of the study population, was developed based on a review of international and Greek literature. It consisted of 14 closed-ended questions addressing key demographic variables, including age, gender, place of residence, marital status, annual income, education level, years of professional experience, department of employment, and work schedule**.** In addition, several general questions explored the nature of interpersonal relationships among healthcare professionals and their participation in psychotherapy sessions.

2.3.2 Dehumanization Scale (DS)

The Dehumanization Scale measures hetero-dehumanization and consists of 12 items. It assesses the extent to which individuals attribute non-human qualities to other people, thereby denying their full humanness. Items were rated on a 7-point Likert scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). The scale demonstrates high internal consistency (Cronbach's $\alpha = 0.86$) (Fousiani et al., 2019; Roupa et al., 2024).

2.3.3 Mechanistic Self-Dehumanization Scale (MSDS)

The Mechanistic Self-Dehumanization Scale (MSDS) measures self-dehumanization, referring to the self-perception lacking human qualities. It includes 10 items and evaluates the extent to which individuals perceive themselves as mechanistic objects or devoid of human attributes. Items were rated on a 9-point Likert scale ranging from 1 (*strongly disagree*) to 9 (*strongly agree*). The scale is unidimensional and exhibits excellent reliability (Cronbach's $\alpha \approx 0.97$) (Roupa et al., 2024; Sakalaki et al., 2016).

2.3.4 Ten-Item Personality Inventory (TIPI)

The Ten-Item Personality Inventory (TIPI) (Gosling, Rentfrow, & Swann, 2003) was used to assess participants' personality traits according to the Big Five dimensions**:** Extraversion, Agreeableness, Conscientiousness, Emotional Stability, and Openness to Experience**.** The TIPI consists of 10 items**,** each rated on a 7-point Likert scale from 1 (*strongly disagree*) to 7 (*strongly agree*) (Gosling et al., 2003). The TIPI does not include a Cronbach's alpha calculation because it was designed as a brief and practical tool for studies with limited time and in which personality assessment is not the primary focus. Given its structure, with only two items per dimension, low internal consistency indices are expected; nevertheless, the literature shows that brief measures can demonstrate satisfactory convergence and reliability compared to longer personality scales (Gosling et al., 2003; Woods & Hampson, 2005).

2.3.5 Professional Quality of Life Scale (ProQOL, Version IV)

The Professional Quality of Life Scale (ProQOL, Version IV) consists of 30 items divided into three independent subscales: Compassion Satisfaction, Burnout, and Secondary Traumatic Stress. Each subscale is psychometrically distinct and cannot be combined. Items are rated on a 6-point Likert scale, ranging from 0 (*Never*) to 5 (*Very Often*). Regarding reliability, the Cronbach's alpha coefficients for the ProQOL subscales are as follows: compassion satisfaction ($\alpha = 0.89$), burnout ($\alpha = 0.94$), and compassion fatigue ($\alpha = 0.92$) (Mangoulia et al., 2015; Misouridou et al., 2021).

2.4 Statistical Analysis

Statistical analyses were conducted using SPSS (version 28; IBM Corp., Armonk, NY, USA)**.** Quantitative variables are expressed as means and standard deviations **(**for normally distributed data). Correlation analyses were used to examine associations among variables. Analysis of Variance (ANOVA) with Tukey post hoc tests was applied to compare parametric groups, as appropriate. A multiple linear regression model was used to examine predictors of dehumanization. The following covariates were entered simultaneously into the model: age (continuous), gender (binary variable; males vs females), years of working experience (continuous), TIPI score (mean of all items), and ProQOL score (mean of all items). All predictors were included in their original continuous form with no transformations or standardization applied. Variance inflation factors (VIFs) were inspected to assess multicollinearity. Participants were recruited from 14 public hospitals. Although the sample was drawn from multiple sites, preliminary checks indicated minimal between-hospital

variance in dehumanization scores, and model residuals showed no systematic hospital-level clustering. Therefore, the regression model was estimated without multilevel adjustment.

2.5 Ethics and Ethical Considerations

The study was conducted in accordance with the General Data Protection Regulation (GDPR; EU 2016/679), effective since 25 May 2018, regarding the protection of sensitive personal data. Approval was obtained from the relevant institutional authorities prior to the commencement of the study. All data were collected anonymously and used solely for research purposes, with access restricted to the principal investigator. Participants were fully informed about the study aims and procedures and provided written informed consent. They were explicitly informed that participation was voluntary and anonymous, that data would be used exclusively for research purposes, and that they retained the right to withdraw from the study at any time without consequences.

3. Results

Statistical analysis revealed that age was significantly associated with higher levels of dehumanization among healthcare professionals (mean = 4.48 ± 0.59 for older vs. 4.32 ± 0.53 for younger professionals; $p < 0.001$), as shown in Figure 1. With regard to gender, men demonstrated a higher tendency toward dehumanization compared to women (mean = 4.44 ± 0.56 for men vs. 4.36 ± 0.58 for women; $p = 0.048$) (Figure 2). Annual income was also connected with dehumanization (Figure 3). Professional experience was significantly related to dehumanization (mean = 4.46 ± 0.58 for more experienced vs. 4.30 ± 0.49 for less experienced professionals; $p = 0.033$). By contrast, no statistically significant differences were observed between physicians and nurses with respect to dehumanization.

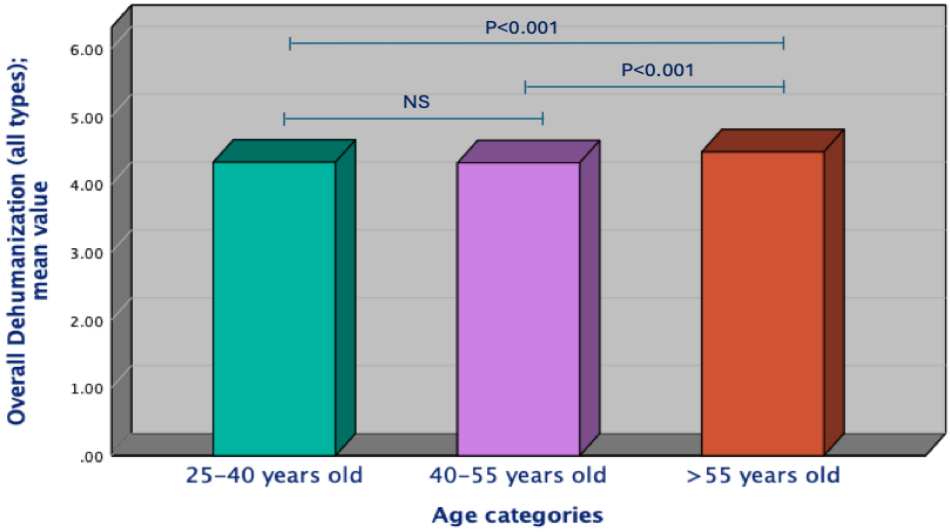

Figure 1. Age-related differences in overall dehumanization (all types of dehumanization). Bars represent mean values of dehumanization. The connectors indicate significantly higher levels of dehumanization in older healthcare professionals. NS= non-significant.

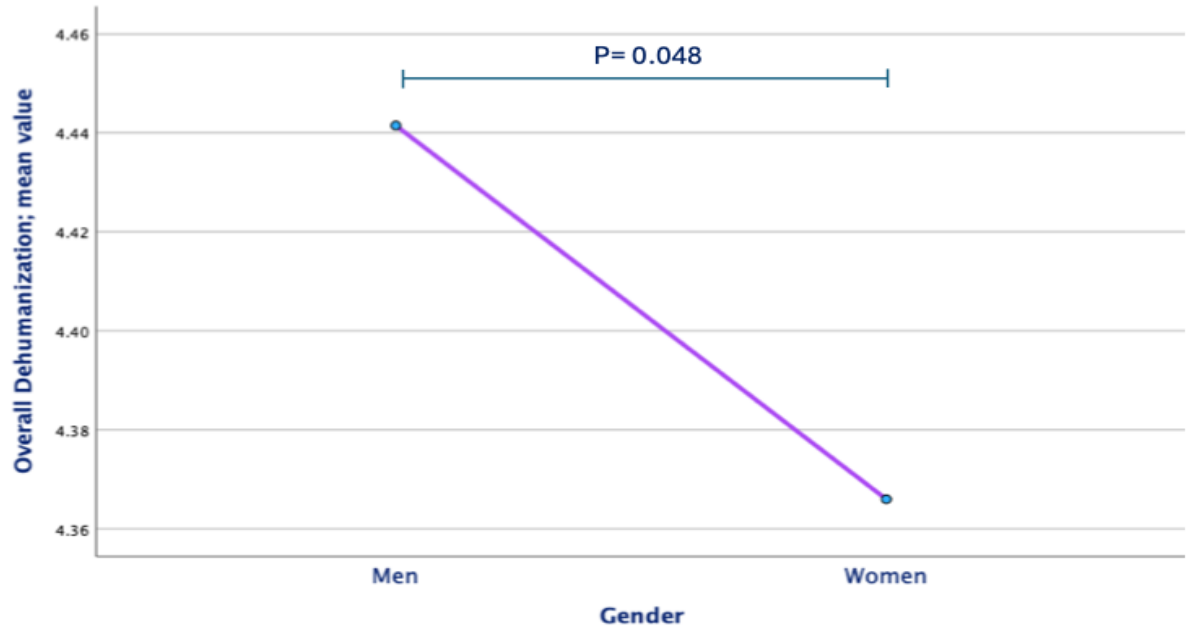

Figure 2. Gender differences in overall dehumanization (all types). The connector indicates the significantly higher tendency for dehumanization among male health professionals.

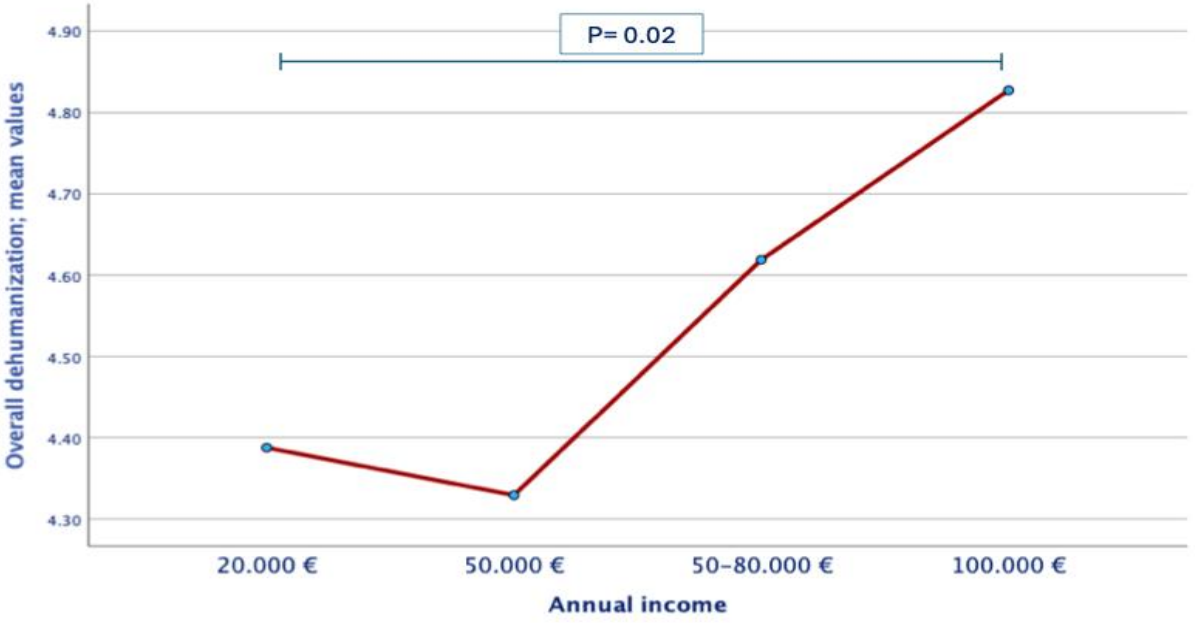

Figure 3. The influential effect of annual income on dehumanization. The connector indicates the significantly higher tendency for dehumanization among health professionals with higher income.

With regard to personality traits, the TIPI questionnaire revealed that more experienced healthcare providers tended to exhibit more positive personality characteristics (Table 2). Women scored significantly higher on agreeableness compared to men (mean = 5.79 ± 0.98 for women vs. 5.52 ± 1.14 for men; p = 0.001). Interestingly, agreeableness was also more prevalent among healthcare providers living in villages compared to those residing in towns (mean = 5.90 ± 0.90 vs. 5.62 ± 1.06; p = 0.014). A similar pattern was observed for

the nursing workforce**,** with nurses scoring higher on agreeableness than physicians **(**mean = 5.77 ± 0.99 vs. 5.62 ± 1.10; p = 0.030**).**

Table 2. Correlations of TIPI personality items and years of professional experience.

Working Experience Mean (SD)						
TIPI Personality Traits		**<1 year**	**2-10 years**	**11-20 years**	**21-40 years**	**p-value**
	Agreeableness	6.00 (1.50)	5.50 (1.50)	6.00 (1.00)	6.00 (1.50)	0.044
	Conscientiousness	6.00 (1.50)	6.00 (1.00)	6.00 (1.00)	6.50 (1.25)	<0.001
	Emotional stability	4.54 (1.28)	4.67 (1.24)	4.92 (1.25)	4.85 (1.26)	0.005
	Openness to Experiences	5.55 (1.18)	5.38 (1.10)	5.41 (1.06)	5.67 (1.04)	0.001

Differences among groups through Analysis of Variance- ANOVA test. Statistical significance was set at a p-value less than 0.05. The p-values refer to bivariate statistically significant correlations, which are highlighted in bold.

Finally, the ProQOL questionnaire revealed that secondary traumatic stress was significantly higher among female healthcare professionals compared to their male counterparts **(**mean = 20.6 ± 8.24 vs. 19.2 ± 7.80; p = 0.019**).** It is also noteworthy that married or divorced healthcare professionals exhibited higher levels of secondary traumatic stress than unmarried professionals **(**mean = 20.85 ± 8.15 vs. 19.1 ± 8.05; p = 0.005**).** In terms of compassion satisfaction**,** healthcare professionals working in open clinical departments reported higher scores than those in closed units **(**mean = 36.28 ± 8.13 vs. 35.3 ± 8.01; p = 0.039**).** In addition, Table 3 presents the positive correlations between professional burnout and secondary traumatic stress with years of professional experience among the study population.

Table 3. Professional quality of life (PROQOL questionnaire) associations with levels of professional experience.

		Professional Experience mean value (SD)				*p*-value
		<1 year	2-10 years	11-20 years	21-40 years	
Professional quality of life						
	Compassion	36.13 (7.98)	35.84 (7.88)	35.21 (8.26)	36.15 (8.61)	0.536
	Professional burn-out	**25.40 (6.87)**	25.86(7.00)	26.95 (6.34)	**26.39 (7.41)**	0.048
	Secondary traumatic stress	**19.44 (8.09)**	19.91(8.07)	21.00 (7.93)	**21.69 (8.91)**	0.021

Differences among groups through Analysis of Variance- ANOVA test. Statistical significance was set at a p-value less than 0.05. The p-values refer to bivariate statistically significant correlations, which are highlighted in bold.

Overall, the multiple linear regression model significantly predicted dehumanization, F (5, 1139) = 23.16, p<0.001, explaining 9.5% of the variance (Adjusted R^2=0.092). Examination of the individual predictors indicated that the ProQOL questionnaire (B = 0.298, SE= 0.033, β=0.262, 95% CI [0.233, 0.364], p<0.001), and age (B = 0.086, SE=0.030, β=0.124, 95% CI [0.027, 0.144], p = 0.004) were significant positive predictors of dehumanization. Moreover, females scored significantly lower on dehumanization than males (B= -0.119, SE=0.039, β= -0.188, 95% CI [-0.194, -0.043], p=0.02), while the TIPI questionnaire (B = 0.069, SE = 0.036, β= 0.056, 95% CI [-0.001, 0.139], p = 0.055) was also a moderate predictor of dehumanization. The effects of the remaining predictors were non-significant. Multicollinearity did not appear to be a concern (VIFs <2.5 for all predictors). A Harman's single-factor test was conducted to assess common method bias. The unrotated factor solution showed that the first factor accounted for 27.8% of the total variance, well below the 50% threshold, indicating that common method bias is unlikely to have substantially influenced the results.

4. Discussion

The present study examined how demographic, personality, and professional factors are linked to dehumanization among healthcare professionals, highlighting the complex interaction between individual predispositions and work-related experiences. The findings are consistent with the view that dehumanization is not a single psychological reaction but a multifactorial phenomenon, shaped by both personality structures and contextual conditions (Haslam, 2006; Capozza et al., 2024; Roupa et al., 2025).

Gender differences further enriched these patterns. Women displayed higher levels of Agreeableness and Compassion Satisfaction but lower dehumanization compared with men, in line with evidence that female professionals generally exhibit stronger empathy and relational orientation (Almadani & Alamri, 2024; Hojat et al., 2002). However, this emotional engagement was also associated with higher Secondary Traumatic Stress, a duality frequently observed in empathy-based care (Cai et al., 2024; Crumpei & Dafinoiu, 2010). These results suggest that empathy can function both as a protective and a risk factor, depending on the availability of emotional and organizational resources. Structured supervision and resilience programs are therefore essential to sustain empathy without emotional exhaustion (Martin et al., 2021; Zhou, 2025). Age also emerged as a relevant factor for dehumanization: older professionals, often trained within hierarchical biomedical frameworks, were more likely to adopt mechanistic views of patients, whereas younger cohorts exposed to person-centered education appeared less prone to depersonalization (Haslam, 2006; Lekka et al., 2021; Tervalon & Murray-García, 1998). These results highlight the relationships of social embeddedness with cooperative attitudes and behavior (Fousiani et al., 2019; Fousiani & Demoulin, 2019; Sakalaki & Fousiani, 2012).

Sociodemographic variables also played a significant role. Higher Agreeableness and Compassion Satisfaction among rural residents and nurses may reflect greater social cohesion and a collaborative ethos typical of smaller healthcare environments (Nimbalkar & Rani, 2023; stoll et al., 2025). Married participants reported higher Conscientiousness and Emotional Stability, reinforcing the protective influence of social support against occupational stress. Although direct empirical support for marital-status differences in personality is limited, this pattern aligns with broader evidence emphasizing the protective influence of interpersonal and organizational support on professional well-being (Potter et al., 2010; Sayehmiri et al., 2020; Shanafelt et al., 2015). In contrast, single participants exhibited lower Secondary Traumatic Stress, possibly due to fewer family-related emotional burdens, partially diverging from studies associating social isolation with burnout (Kanyanta et al.,

2023; Koutsimani et al., 2019). Interestingly, income and postgraduate education were not significant predictors of professional quality of life, confirming that well-being in healthcare depends more on workplace culture than socioeconomic status (Ni et al., 2023; Wang et al., 2023).

Professional experience and work environment further influenced emotional and behavioral outcomes. Healthcare staff working in open units reported higher Compassion Satisfaction, likely due to more frequent patient interaction and visible therapeutic progress (Efkemann et al., 2019; Mohamed & Forawi, 2025). However, more experienced professionals tended to report higher burnout and secondary traumatic stress despite higher conscientiousness and stability. This pattern suggests a cumulative cost of prolonged exposure to emotionally demanding conditions, consistent with longitudinal evidence linking career duration with compassion fatigue (Potter et al., 2010; T. D. Shanafelt et al., 2015; Thapa et al., 2021). These generational and contextual differences underline that dehumanization arises not only from individual personality traits but also from professional socialization and organizational norms. The interaction between the cohort, tenure, and the work context therefore warrants further investigation.

Moreover, the present study revealed that the professional quality of life emerged as the strongest correlate of dehumanization, whereas personality traits contributed moderately but meaningfully. Among the Big Five personality dimensions, Agreeableness has emerged as the most significant, being positively associated with empathy and negatively with dehumanizing attitudes (Roupa et al., 2025). Multiple studies have also confirmed this association, since agreeable individuals tend to demonstrate greater compassion and interpersonal sensitivity (Costa & McCrae, 1992; Judge et al., 2002). Similarly, Emotional Stability and Conscientiousness seem to be associated with stronger self-regulation, lower burnout, and greater resilience—traits that sustain humanized care (Swider & Zimmerman, 2010; Treglown et al., 2016). Conversely, higher Neuroticism is connected with greater depersonalization, confirming evidence that emotionally unstable professionals experience greater stress and moral distress, thereby increasing their risk of compassion fatigue (Bianchi, 2018; Çiçek Korkmaz & Gökoğlan, 2024).

Taken together, the findings confirm that personality and professional quality of life jointly shape the risk of dehumanization in healthcare contexts. Agreeableness and Emotional Stability appear to be key protective factors associated with higher empathy and interpersonal effectiveness, whereas adverse work conditions, prolonged stress, and emotional overload intensify depersonalization. These results align with international evidence recognizing empathy, reflective capacity, and resilience as essential buffers against moral distress and emotional detachment (Figley, 2002; T. Shanafelt et al., 2020; T. D. Shanafelt et al., 2015; West et al., 2020).

Limitations of the Study

Several limitations should be acknowledged. First, the explanatory power of the regression model was modest (Adjusted $R^2 \approx 0.09$), indicating that although demographic, personality, and professional quality-of-life variables were statistically associated with dehumanization, they account for only a small proportion of its variability. This suggests that additional organizational, interpersonal, and cultural factors (beyond the scope of the present study) likely play a substantial role. Second, the use of a convenience sample drawn from public hospitals in Greece limits generalizability. The findings may not fully reflect conditions in private hospitals, rural clinics, or healthcare systems operating in other cultural contexts. Third, the cross-sectional design precludes causal inference, and the reliance on self-report instruments may introduce common method bias despite our diagnostic checks. Taken

together, these limitations highlight that the implications of the study should be interpreted with regard to the magnitude of the observed effects and viewed as preliminary directions for future research rather than definitive conclusions.

Theoretical Implications of the Study

A key contribution of this study lies in its focus on the Greek healthcare system, a highly intensive and stressful context that has received limited empirical attention in dehumanization research. Given the prolonged economic pressures, staffing shortages, and cultural dynamics shaping healthcare delivery in Greece, the present findings extend existing evidence by demonstrating how dehumanization manifests in a system operating under structural constraints, resources scarcity, and emotional stress.Another novel aspect of this study is the empirical comparison between open and closed clinical units. While prior research has speculated that intensive environments may foster emotional distancing, few large-scale studies have directly examined such differences. Our findings showing higher compassion satisfaction in open departments and elevated stress indicators in closed units provide new evidence that organizational structure and workflow intensity are important contextual factors shaping humanizing and dehumanizing tendencies.

Thus, this study contributes not only confirmatory evidence but also new contextual and structural insights that broaden the current understanding of dehumanization in healthcare.

Future Directions and Practical Implications

The findings of the present study provide a solid foundation for developing targeted interventions aimed at mitigating dehumanization and enhancing healthcare professionals' quality of life. Future research should move beyond the Big Five framework to explore broader personality characteristics and contextual variables-such as workplace culture, team dynamics, and moral climate- that influence both dehumanization and professional well-being (Fousiani et al., 2019; Fousiani & Demoulin, 2019; Roupa et al., 2025; Sakalaki & Fousiani, 2012). Longitudinal designs are recommended to clarify causal mechanisms and to assess the long-term interplay between stress exposure, resilience, and emotional adaptation in healthcare settings. At the practical level, addressing dehumanization requires a multilevel and sustainable strategy that integrates both preventive and supportive actions at organizational and educational levels. Training programs focused on empathy, communication, and emotional regulation, alongside reflective supervision and staff rotation in high-intensity units, can reduce burnout and foster human-centered care (Maslach & Leiter, 2016; Shanafelt et al., 2020). In addition, the establishment of institutional guidelines, leadership engagement, and continuous evaluation of intervention effectiveness are critical to ensuring lasting positive outcomes (West et al., 2020). Cultivating organizational cultures that value empathy, collaboration, and respect can serve as a cornerstone for both compassionate care and sustainable workforce well-being (Lin et al., 2023; Lu et al., 2022)**.**

5. Conclusions

The results of the study suggest that healthcare professionals have the tendency to treat hospitalized patients in an impersonal, mechanistic manner**,** which may be related to higher dehumanization. Significant factors associated with this phenomenon include sociodemographic characteristics, personality traits, and professional quality of life parameters**.** In summary, the present study enhances understanding of the factors influencing the psychological well-being of healthcare professionals**,** underscoring the need for differentiated support based on gender, experience, and professional environment.

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