

RESEARCH ARTICLE (ORIGINAL)

Magnet Hospitals and Their Implications for Nurses' Job Satisfaction

Hospitais Magnet e as Implicações na Satisfação Profissional dos Enfermeiros
Hospitales Magnet y las Implicaciones en la Satisfacción Profesional de los Enfermeros

Jorge Manuel da Silva Ribeiro ^{1,2} <https://orcid.org/0000-0003-1380-3593>Paulo Gonçalves Pinheiro ¹ <https://orcid.org/0000-0003-2397-6463>

¹ University of Beira Interior, Faculty of Social and Human Sciences, Department of Management and Economics, Covilhã, Portugal

² Coimbra Local Health Unit, Neurology A, Coimbra, Portugal

Resumo

Enquadramento: Não existe em Portugal uma avaliação extensa da perceção dos enfermeiros sobre os ambientes de trabalho, nem a sua caracterização como *Magnet* favoráveis e não-*Magnet* desfavoráveis.

Objetivo: Analisar a relação entre os ambientes de trabalho, a satisfação profissional dos enfermeiros, para além de introduzir o conceito *Magnet*.

Metodologia: Utilizando um estudo descritivo correlacional, obtivemos 1015 respostas aos questionários. Utilizamos o Practice Environment Scale of the Nursing Work Index (PES-NWI) e a Escala de Satisfação dos Enfermeiros no Trabalho (ESET).

Resultados: Verifica-se que 40,0% dos hospitais foram classificados com um ambiente de trabalho *mixed*, 39,5% com um ambiente de trabalho desfavorável (Não *Magnet*) e o restante 16,5% como tendo ambiente de trabalho favorável (*Magnet*). Verifica-se que a maioria dos profissionais manifestou moderada satisfação (83,5%). Verifica-se também que existe correlação entre o ambiente de trabalho e a satisfação.

Conclusão: Persiste a necessidade de intervenções por parte da gestão hospitalar no sentido de otimizar os ambientes laborais, de modo a promover melhores condições organizacionais e, consequentemente, elevar os níveis de satisfação profissional dos enfermeiros.

Palavras-chave: ambiente de trabalho; satisfação profissional; enfermagem; gestão de recursos humanos

Abstract

Background: In Portugal, there is no comprehensive assessment of nurses' perceptions of their work environments, nor a characterization of these environments as Magnet (favorable) or non-Magnet (unfavorable).

Objective: To analyze the relationship between work environments and nurses' job satisfaction, as well as to introduce the Magnet concept.

Methodology: A descriptive correlational study was conducted, obtaining 1,015 valid questionnaire responses. Data were collected using the Practice Environment Scale of the Nursing Work Index (PES-NWI) and the Nurses' Job Satisfaction Scale (ESET).

Results: Of the hospitals analyzed, 40.0% were classified as having a mixed (Magnet-aspiring) work environment, 39.5% as having an unfavorable (non-Magnet) work environment, and the remaining 16.5% as having a favorable (Magnet) work environment. Most nurses reported moderate levels of job satisfaction (83.5%). A statistically significant correlation was also found between the work environment and job satisfaction.

Conclusion: There remains a need for hospital management interventions aimed at optimizing work environments in order to promote better organizational conditions and, consequently, increase nurses' levels of job satisfaction.

Keywords: work environment; work engagement; nursing; personnel management

Resumen

Marco contextual: En Portugal no existe una evaluación exhaustiva de la percepción que tienen los enfermeros sobre los entornos de trabajo, ni su caracterización como *Magnet* favorables y no *Magnet* desfavorables.

Objetivo: Analizar la relación entre los entornos de trabajo y la satisfacción profesional de los enfermeros, además de introducir el concepto *Magnet*.

Metodología: Mediante un estudio descriptivo correlacional, obtuvimos 1015 respuestas a los cuestionarios. Utilizamos el Practice Environment Scale of the Nursing Work Index (PES-NWI) y la Escala de Satisfacción de los Enfermeros en el Trabajo (ESET).

Resultados: Se observa que el 40,0 % de los hospitales fueron clasificados con un ambiente de trabajo mixto, el 39,5 % con un ambiente de trabajo desfavorable (no *Magnet*) y el 16,5 % restante con un ambiente de trabajo favorable (*Magnet*). Se observa que la mayoría de los profesionales manifestaron una satisfacción moderada (83,5 %). También se observa que existe una correlación entre el ambiente de trabajo y la satisfacción.

Conclusión: Persiste la necesidad de intervenciones por parte de la dirección hospitalaria con el fin de optimizar los entornos laborales, de modo que se promuevan mejores condiciones organizativas y, en consecuencia, se aumenten los niveles de satisfacción profesional de los enfermeros.

Palabras clave: ambiente de trabajo; compromiso laboral; enfermería; administración de personal

Corresponding author

Jorge Manuel da Silva Ribeiro

E-mail: jorgemsribeiro@live.com.pt

Received: 24.06.25

Accepted: 13.11.25



Escola Superior de
Enfermagem de Coimbra

fct

Fundação
para a Ciência
e a Tecnologia

How to cite this article: Ribeiro, J. M., & Pinheiro, P. G. (2025). Hospitais Magnet e as Implicações na Satisfação Profissional dos Enfermeiros. *Revista de Enfermagem Referência*, 6(4), e42104. <https://doi.org/10.12707/RVI25.54.42104>



Introduction

Magnet institutions are healthcare organizations identified in the United States as being successful in recruiting, retaining, and motivating the nursing workforce. Research conducted on these institutions has demonstrated a positive correlation between Magnet status and good human resource management practices, workforce characteristics, and care delivery outcomes, with corresponding gains in patient health outcomes (Aiken et al., 2008).

The principles of the Magnet model may be useful in addressing workforce challenges in European hospitals, and there has been growing interest in this model among European healthcare institutions, with the aim of increasing nurse recruitment, job satisfaction, and retention. The primary reason for this interest lies in the fact that the quality of services provided in Magnet hospitals is superior to that of hospitals without Magnet status or characteristics (Svensson et al., 2024; Wei et al., 2023; Xue et al., 2024). This assumption constitutes the starting point for the need to verify whether work environments in which professionals feel fulfilled are effectively associated with increased levels of nurses' job satisfaction.

The nursing practice environment is defined as a set of organizational characteristics that facilitate or support professional nursing practice (Lake & Friese, 2006).

Currently, job satisfaction is widely recognized as beneficial not only for employees themselves but also for the individuals or organizations that employ them. Job satisfaction is particularly important for nurses due to the nature of their work, as it can influence performance, efficiency, and the quality of care delivered to patients, thereby becoming a key component in the process of building patient satisfaction (Huang et al., 2023; Kunecka & Skowron, 2019).

This study aims to analyze the effect of the work environment on Portuguese nurses' job satisfaction, as well as to classify hospitals according to Magnet characteristics, namely as favorable (Magnet), mixed (aspiring Magnet), or unfavorable (non-Magnet).

Background

In the United States of America, there is a recognition program known as Magnet, which distinguishes healthcare organizations worldwide in which nursing leaders successfully align their strategic goals to improve patient health outcomes. This program provides a roadmap for excellence in nursing practice, benefiting the entire organization. For nurses, Magnet recognition status represents opportunities for education and professional development at all stages of their careers, thereby granting greater autonomy in the delivery of care (Beal & Riley, 2019). For patients, it signifies higher-quality care delivered by nurses who are supported in providing excellence in nursing practice. Although 629 hospitals worldwide currently hold Magnet designation, 98% of them are located in the United States. Only three hospitals in Europe—one in Spain and two in Finland—currently hold Magnet designation (American

Nurses Credentialing Center, 2023).

According to a comprehensive update of the *Magnet Application Manual*, Magnet criteria are grounded in the 14 Forces of Magnetism: quality of nursing leadership; organizational structure; management style; personnel policies and programs; professional models of care; quality of care; quality improvement; consultation and resources; autonomy; community and the hospital; nurses as teachers; image of nursing; interdisciplinary relationships; and professional development ElKhateeb et al., 2022).

These forces have since been consolidated into five core components: Transformational Leadership; Structural Empowerment; Exemplary Professional Practice; New Knowledge, Innovation, and Improvements; and Empirical Quality Results (Skela Savic et al., 2023).

Job satisfaction has emerged as a global and critical concern in the field of nursing (Norelho et al., 2019). The shortage of nurses and high turnover rates are worsening at an alarming pace, which is likely to jeopardize the quality of healthcare provided to patients (Al Sabei et al., 2020; González-Gancedo et al., 2019;). Nurses' job satisfaction is essential, as it may help enhance their competencies, increase productivity, and maintain an adequate workforce within the healthcare sector. Conversely, job dissatisfaction may lead nurses to experience negative feelings toward their profession, resulting in diminished patient health outcomes. This, in turn, may increase length of hospital stay and treatment costs, further exacerbating turnover rates and intensifying the nursing shortage (Al-Haroon & Al-Qahtani, 2020).

Nurses' job satisfaction is an indicator of the quality of hospital healthcare services. It refers to the emotional response and behavioral expression that reflect nurses' individual evaluations of their own performance, professional life, and work environment. Thus, job satisfaction focuses on individuals' feelings toward their work. A nurse who is satisfied with their job contributes positively to the hospital, as performance improves when nurses are satisfied with their work environment. In contrast, nurse dissatisfaction adversely affects the hospital, ultimately leading to organizational losses due to poorer performance (Rizany et al., 2019).

Research question

How do nurses perceive their work environment and job satisfaction, and how do they relate to each other?; How are hospitals in Portugal positioned in terms of the Magnet classification?

Methodology

A cross-sectional, descriptive, correlational study was conducted using a quantitative approach. Questionnaires were distributed electronically via Google Forms to Portuguese nurses working in hospitals in Portugal and abroad between October 20, 2023, and February 7, 2024.



A total of 1,015 completed responses were received, with none invalidated due to errors.

The sample was obtained using a non-probability, self-selection sampling method. This approach was chosen to facilitate access to nurses and to save time. Moreover, individuals who voluntarily participate are likely to be more committed to the study and to provide more accurate responses (Berndt, 2020). To minimize bias, the inclusion criteria were: working in hospitals and being Portuguese. Exclusion criteria were: not working in hospitals and not being Portuguese. These criteria enabled the recruitment of a large and relevant sample.

The first section of the data collection instrument included sociodemographic characteristics, such as sex, age group, marital status, and educational background. It also collected professional characteristics, including years of service, professional category, hospital of employment (or country for those working abroad), and department. Finally, participants were asked about their intention to leave their current institution.

The second part of the questionnaire comprised two Likert-type scales, the first of which was the *Practice Environment Scale of the Nursing Work Index* (PES-NWI). The PES-NWI consists of 31 items organized into five dimensions that characterize the nature of professional nursing practice in the original Magnet hospitals. These dimensions are: Nurse participation in hospital affairs; Nursing foundations for quality of care; Nurse manager ability, leadership, and support of nurses; Staffing and resource adequacy; and Collegial nurse–physician relations. Each item is rated by nurses on a 4-point Likert scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The score for each dimension is calculated as the mean of its corresponding items. An overall composite score is then computed as the mean of the dimension scores. Possible scores range from 1 to 4, with higher scores indicating greater agreement with the presence of the dimension's characteristics in the current work environment. Values above 2.5 indicate general agreement, whereas values below 2.5 indicate disagreement regarding the presence of the characteristics measured by the scale.

Hospitals that scored favorably on none or only one dimension were classified as unfavorable (non-Magnet); those scoring favorably on two or three dimensions were classified as mixed (aspiring Magnet); and those scoring favorably on four or five dimensions were classified as favorable (Magnet; Lake & Friese, 2006).

The validation of this scale for the Portuguese context was carried out by Amaral et al. (2012), maintaining the original 31 items and the five associated dimensions. According to the authors, the Portuguese version of the PES-NWI is a valid and reliable instrument for measuring care delivery environments. It can be used not only to assess nursing practice environments exclusively, but also as an independent variable in studies evaluating the quality of care and related outcomes (Amaral et al., 2012). The other scale used to assess nurses' job satisfaction was the *Nurses' Job Satisfaction Scale* (*Escala de Satisfação dos Enfermeiros no Trabalho* – ESET), developed by João et al. (2017). This scale consists of 37 items distributed across six

dimensions: Satisfaction with leadership; Satisfaction with organization and resources; Satisfaction with professional recognition; Satisfaction with co-workers; Satisfaction with remuneration; and Satisfaction with staffing.

Scores are obtained by summing the 37 item responses according to their respective values, with the following interpretation: 1–61 indicating low satisfaction; 62–123 indicating moderate satisfaction; and scores above 124 indicating high satisfaction.

The ESET is easy to administer and demonstrated good reliability and validity indices, making it a valuable tool for studies aimed at assessing nurses' perceptions of job satisfaction (João et al., 2017).

This study received approval from the Ethics Committee of the University of Beira Interior, under reference number CE-UBI-Pj-2021-076. Following ethical review, no elements were identified that violated ethical or moral principles, and a favorable opinion was therefore issued for the approval of the study.

In addition, the study was approved, supported, and disseminated by the Research and Development Office of the Portuguese Nursing Profession Regulatory Body (*Ordem dos Enfermeiros*–OE; SAI-OE/2024/141).

The questionnaires were hosted on the Google Forms platform and distributed to all nurses registered with the OE. Participation was voluntary, and all standards of confidentiality and privacy were strictly respected.

To systematize and highlight the information provided by the data, both descriptive and inferential statistical techniques were used. Data were processed using the IBM SPSS Statistics software, version 29.0.

Based on the results, the PES-NWI demonstrated high overall internal consistency (Cronbach's $\alpha = 0.91$). With the exception of the dimension *Collegial nurse–physician relations*, which presented a relatively lower but acceptable alpha coefficient ($\alpha = 0.63$) due to the small number of items (three), all other dimensions showed alpha values above 0.70 and close to those obtained in the original validation study.

For the ESET, a Cronbach's alpha of 0.95 was obtained for the overall scale, with values ranging from 0.64 to 0.93 across the different dimensions. The lowest value ($\alpha = 0.64$) was observed in the dimension *Satisfaction with staffing*, which comprises two items. In the remaining dimensions, alpha values were above the reference threshold of 0.70. In these dimensions and in the overall score, the values obtained were close to those reported in the original validation study.

For this purpose, the following hypothesis tests were applied: the Kolmogorov–Smirnov test (normality test); the Mann–Whitney U test (comparison of two independent groups); the Kruskal–Wallis test (comparison of more than two independent groups); the Tukey test (multiple comparisons); and the significance test of Spearman's correlation coefficient.

In all analyses, a significance level of 0.05 was set as the maximum threshold.

We concluded that both scales demonstrated good internal consistency and, in the present study, maintained the homogeneity observed in their respective validation studies.

Results

A total of 1,015 nurses participated in the study, of whom 37 were working abroad and 978 were working in Portugal; the latter constituted the focus of the analysis. Data analysis revealed that 83.3% of participants were women. Regarding age, 33.1% were between 40 and 49 years old and 33.0% were between 30 and 39 years old. Most participants were married or living in a de facto partnership (63.7%). In terms of education, 37.1% held a bachelor's degree, 26.5% held a master's degree, and 22.4% were specialist nurses.

The following data describe the professional characteristics of the nurses who participated in the study. A total of 33.8% had between 10 and 19 years of professional experience, followed by 27.0% with 20 to 29 years of experience and 25.8% with less than 10 years of experience. The predominant professional category was staff nurse, accounting for 60.5% of participants. Regarding income, 33.9% reported a monthly salary between €1,200 and €1,399, followed by 22.0% earning between €1,600 and €1,799. Most nurses (96.4%) were employed in Portuguese hospitals, of which 80.9% worked in public hospitals, 33.3% worked in hospitals located in the north-

ern region, 32.2% in the southern region, and 75.1% in hospitals located in coastal areas. Additionally, 56.6% worked in hospitals with 500 or more beds (i.e., large hospitals). Concerning clinical areas, 35.2% worked in medical wards, while 28.8% worked in surgical wards. Most participants (76.3%) reported having considered leaving their current institution.

The results presented in Table 1 characterize nurses' perceptions of the work environment. Based on the criteria established by the scale's authors, nurses' perceptions were classified as favorable or unfavorable. Most participants reported favorable perceptions in the dimensions *Nursing foundations for quality of care* (66.5%) and *Collegial nurse-physician relations* (61.9%). In contrast, the majority reported unfavorable perceptions in the dimensions *Nurse participation in hospital affairs*, *Staffing and resource adequacy*, and *Nurse manager ability, leadership, and support of nurses*, with unfavorable responses of 80.9%, 76.0%, and 68.5%, respectively.

Overall, according to nurses' perceptions, 40.0% of hospitals were classified as having a mixed work environment, 39.5% as having an unfavorable work environment, and the remaining 16.5% as having a favorable work environment.

Table 1

Descriptive Statistics, Classification, and Normality Test Results for the Professional Environment Scale- Nursing Work Index Dimensions and Overall Score

Work environment	M	SD	p*
Nurse participation in hospital affairs	2,14	0,48	< 0.001
Nursing foundations for quality of care	2,70	0,43	< 0.001
Nurse manager ability, leadership, and support of nurses	2,20	0,62	< 0.001
Staffing and resource adequacy	2,22	0,58	< 0.001
Collegial nurse-physician relations	2,62	0,56	< 0.001
Overall score	2,39	0,39	< 0.001
Work environment (classification)	n	%	
Nurse participation in hospital affairs			
Unfavorable	821		80.9
Favorable	194		19.1
Nursing foundations for quality of care			
Unfavorable	340		33.5
Favorable	675		66.5
Nurse manager ability, leadership, and support of nurses			
Unfavorable	695		68.5
Favorable	320		31.5
Staffing and resource adequacy			
Unfavorable	771		76.0
Favorable	244		24.0
Collegial nurse-physician relations			
Unfavorable	387		38.1
Favorable	628		61.9
Overall work environment			
Unfavorable	401		39.5
Mixed	447		44.0
Favorable	167		16.5

Note. n = Number of participants; % = Percentage; M = Mean; SD = Standard deviation; p = p-value

A total of 92 Portuguese hospitals (public and private) and practice environments in five other countries—four in Europe and one in Asia—were analyzed. In Portugal, the sample included 66 public hospitals and 26 private hospitals. All work environments outside Portugal were classified as favorable (Magnet). Only nine of the 92 Portuguese hospitals analyzed were classified as Magnet, of which eight were private and only one was public. It was found that 30% of private hospitals achieved Magnet classification, whereas only 1.5% of public hospitals reached this classification.

A total of 36 hospitals were classified as non-Magnet (unfavorable), of which five were private, and 31 were public. Once again, a marked difference between public and private hospitals was observed: non-Magnet public hospitals accounted for 33% of the total sample and 86% of all non-Magnet hospitals. It is important to note that this analysis refers exclusively to the presence or absence of Magnet characteristics and not to formal Magnet

certification, which does not exist in Portugal.

Table 2 presents the results of the descriptive measures calculated based on the observed data for the ESET. The results were comparable across dimensions and showed that nurses reported higher levels of satisfaction in the dimensions Satisfaction with professional recognition (3.07), Satisfaction with co-workers (2.94), and Satisfaction with organization and resources (2.69). In contrast, lower levels of satisfaction were observed in the dimensions Satisfaction with remuneration (1.63) and Satisfaction with staffing (1.83).

Based on the overall scale scores and the classification methodology defined by the authors, nurses' levels of job satisfaction were categorized. Most participants reported moderate job satisfaction (83.5%).

The application of the Kolmogorov–Smirnov test revealed that the data distribution deviated significantly from a normal (Gaussian) distribution ($p < .001$), both for the overall scale and for all dimensions.

Table 2

Descriptive Statistics, Classification, and Normality Test Results for the Dimensions and Overall Score of the Escala de Satisfação dos Enfermeiros no Trabalho

Job satisfaction	<i>M</i>	<i>SD</i>	<i>M</i> (weighted)	<i>p</i> *
Satisfaction with leadership	29.86	9.46	2.49	< 0.001
Satisfaction with organization and resources	21.41	5.58	2.68	< 0.001
Satisfaction with professional recognition	15.34	4.59	3.07	< 0.001
Satisfaction with co-workers	14.70	3.76	2.94	< 0.001
Satisfaction with remuneration	8.15	3.28	1.63	< 0.001
Satisfaction with staffing	3.66	1.58	1.83	< 0.001
Overall	93.77	22.64	2.53	< 0.001
Overall job satisfaction (classification)	<i>n</i>		%	
Low satisfaction	67		6.6	
Moderate satisfaction	848		83.5	
High satisfaction	100		9.9	

Note. *n* = Number of participants; % = Percentage; *M* = Mean; *SD* = Standard deviation; *p* = *p*-value

We also analyzed the correlation between the work environment (PES-NWI) and job satisfaction (ESET). The results are presented in Table 3, showing positive and highly significant correlations ($p < .001$) across all

dimensions and for the overall scores.

The positive correlations indicate that nurses who reported more favorable perceptions of their work environment also tended to report higher levels of job satisfaction.

Table 3*Correlation between practice environment and job satisfaction*

	Practice environment *						
Job satisfaction *		A	B	C	D	E	Overall
Satisfaction with leadership	r_s	0.62	0.50	0.72	0.38	0.40	0.73
	p	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Satisfaction with organization and resources	r_s	0.50	0.58	0.49	0.45	0.41	0.66
	p	< 0.001	< 0.001	< 0.001	< 0.001	< . 0001	< 0.001
Satisfaction with professional recognition	r_s	0.31	0.32	0.23	0.29	0.28	0.37
	p	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Satisfaction with co-workers	r_s	0.31	0.40	0.40	0.28	0.36	0.46
	p	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Satisfaction with remuneration	r_s	0.48	0.41	0.41	0.42	0.33	0.50
	p	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Satisfaction with staffing	r_s	0.45	0.38	0.38	0.64	0.31	0.54
	p	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
Overall satisfaction	r_s	0.59	0.62	0.62	0.50	0.45	0.74
	p	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001

Note. A = Nurse participation in hospital affairs; B = Nursing foundations for quality of care; C = Nurse manager ability, leadership, and support to nurses; D = Staffing and resource adequacy; E = Collegial nurse-physician relations; r_s = Spearman's correlation coefficient; p = p -value.

Discussion

This study identified a relationship between the practice environment and job satisfaction. In addition, it allowed a detailed analysis of the practice environments in a large number of hospitals, revealing that the number of hospitals in Portugal exhibiting Magnet characteristics, i.e., attractive organizations, is very low and even smaller than the number of hospitals without such characteristics. The results of the PES-NWI are supported by numerous authors who have used the same scale in various countries and contexts (Alenazy et al., 2023; González-Gancedo et al., 2019; Labrague et al., 2022).

The values obtained from this scale are important to analyze and interpret, as nurses with higher scores across the dimensions tend to report lower levels of work-related stress. Nurses with high scores across all dimensions of the PES-NWI are more likely to report lower levels of burnout. Furthermore, a higher overall score on PES-NWI is associated with reduced work-related stress and an increased perception of care quality in hospital units. The nursing practice environment is therefore a key determinant of the provision of high-quality healthcare and of nurses' personal and professional outcomes (Labrague et al., 2022).

In the studies by Patrician et al. (2022) in the United States and Alenazy et al. (2023) in Saudi Arabia, PES-NWI results were influenced by the same favorable and unfavorable dimensions observed in our study. *Staffing and resource adequacy*, *Nurse participation in hospital affairs*, and *Nurse manager ability, leadership, and support of*

nurses were considered unfavorable dimensions by these authors, affecting nurses' responses and contributing to lower PES-NWI scores (Lake & Friese, 2006).

Regarding PES-NWI results, the overall score in our study was relatively low (2.39). Other studies using the same scale reported higher values. For instance, Rezaie et al. (2023) in Iran found a score of 2.82; Labrague et al. (2022) in Oman reported 2.89; Albashayreh et al. (2019), also in Oman, obtained 2.80; Skela Savic et al. (2023) in Slovenia reported 2.64; and Yang et al. (2023) in Japan reported 2.74. As can be observed, all these studies reported scores above the midpoint (2.5), indicating favorable practice environments. In contrast, the score in Portugal was below this midpoint, suggesting that Portuguese nurses do not perceive their practice environments as favorable.

Based on the overall scale scores and the classification methodology defined by the authors, it was possible to categorize nurses' levels of job satisfaction. The majority of participants reported moderate job satisfaction (83.5%). Numerous studies on nurses' job satisfaction, regardless of the instrument used, have similarly reported moderate levels of satisfaction (Alenazy et al., 2021; Huang et al., 2023; Rezaie et al., 2023).

Nurse manager ability, leadership, and support of nurses was found to have a strong, statistically significant relationship with job satisfaction. Leadership style at all levels of an organization is an important factor in enhancing job satisfaction. It is essential that nurses feel valued as professionals, rather than pressured, closely monitored, or ignored. In this study, staffing and resource adequacy, as

well as nursing foundations for quality of care, were also associated with job satisfaction. Nurses value the opportunity to work to their full potential within a high-quality organization and to have sufficient time to care for their patients (Wei et al., 2018). Low job satisfaction can also be explained by nurse shortages and challenges related to staffing and resource adequacy (Pursio et al., 2024). When nurses are satisfied with their work, their engagement and performance improve, which in turn facilitates better work-related outcomes (Al Sabei et al., 2020).

Finally, regarding the correlation between the practice environment and job satisfaction, our study confirmed this relationship. In all studies reviewed, this association was observed regardless of the instruments used (Rezaie et al., 2023; Skela Savic et al., 2023; Yang et al., 2023). To explain this relationship, it is necessary to understand that a favorable practice environment directs nursing science toward the overall organizational structure, encompassing organizational culture as well as health processes and outcomes (Beal & Riley, 2019). Furthermore, the provision of excellent care is fundamental for building and maintaining a healthy work environment for nurses (Wei et al., 2018).

This relationship is largely attributable to the management of a healthy workplace with a culture of openness and respect, which are prerequisites for a better organizational climate and reduced exposure to risks. The alignment between the mission of healthcare environments and their practices implies that attractive organizations provide resources to achieve high-quality care (Blackwell, 2020; Lake & Friese, 2006). When these organizational attributes are combined, the outcomes are evident: nurses in Magnet institutions report higher job satisfaction, greater affective commitment to the organization, and lower intention to leave (Al Sabei et al., 2020; Stordeur, D'Hoore & The NEXT-Study Group, 2006).

Conclusion

This study provided a more detailed understanding of hospital work environments in Portugal. It is the first study to use the PES-NWI to assess practice environments while simultaneously analyzing their relationship with job satisfaction, offering unprecedented quantitative data on Portuguese nurses' perceptions of their work settings. The study also contributed to the dissemination of a model that promotes nursing best practices and is internationally recognized for this reason. This is particularly relevant at a time when many Portuguese nurses emigrate and some hospitals face difficulties in retaining and recruiting nursing staff. It is important to identify which hospitals are recognized as attractive and favorable for their professionals (Magnet) and which are considered unfavorable and unattractive (non-Magnet).

Analysis of the results indicates that there is still a long way to go. Decades of an excessive supply of nurses have weakened their negotiating power for better working conditions, leading institutions to underestimate their importance and to fail to provide adequate conditions

for clinical practice or to maintain a healthy work environment.

Nurses are not motivated solely by remuneration, although salary is often the most frequently mentioned aspect when discussing improvements to professional conditions. On the contrary, as observed in the results of this study, remuneration is one of the least prioritized factors for these professionals. They seek better professional relationships, greater professional recognition, and adequate management of human and material resources that allow them to fully dedicate themselves to providing high-quality care.

Among the limitations of this study, the sample was obtained through self-selection, which is often associated with selection bias. Selection bias can result in a non-representative sample or in exaggerated and/or misleading results (Berndt, 2020). The significance of self-selection bias, defined as individuals deciding for themselves whether to participate in a study, lies in the possibility that the sample may not adequately represent the population from which it was drawn (Stone et al., 2024). Therefore, caution is necessary when considering the generalization of these results.

Future studies should conduct longitudinal research on the impact of workplace interventions on nurse satisfaction and retention. They should also evaluate the economic impact of nurse dissatisfaction and turnover on hospital costs and healthcare quality. The results of this study underscore the need for strategic changes in hospital management, particularly in the public sector, investing in transformational and empowering leadership that motivates and values nurses. This change should entail policies that ensure adequate human and material resources, appropriate nurse-to-patient ratios, and transparent career progression plans that recognize specialized competencies. Understanding the factors that influence nurses' performance, what motivates them, and areas for improvement in each hospital is fundamental to developing both nurses and healthcare institutions. The Magnet Recognition Program® may serve as a pathway; numerous studies, including this one, have shown that it enhances nurse satisfaction and improves patient care quality. In summary, this study promotes discussion about the importance of organizational climate as a determinant of not only nurses' well-being, but also patient safety and care quality.

Author Contributions

Conceptualization: Ribeiro, J. M.; Pinheiro, P. G.

Data curation: Ribeiro, J. M.

Formal analysis: Ribeiro, J. M.; Pinheiro, P. G.

Investigation: Ribeiro, J. M.; Pinheiro, P. G.

Methodology: Ribeiro, J. M.; Pinheiro, P. G.

Project administration: Ribeiro, J. M.; Pinheiro, P. G.

Resources: Ribeiro, J. M.

Supervision: Pinheiro, P. G.

Validation: Pinheiro, P. G.

Visualization: Ribeiro, J. M.

Writing – original draft: Ribeiro, J. M.

Writing – review & editing: Ribeiro, J. M.; Pinheiro, P. G.

Funding

This work was supported by the FCT – Fundação para a Ciência e a Tecnologia, I.P., through the project with reference UID/04630/2023 and the DOI identifier 10.54499/UID/04630/2023.

Thesis/Dissertation

This article is derived from the Doctoral Thesis “The Reality of Magnet Hospitals as Attractive Organizations: Implications for Nurses’ Job Satisfaction”, to be submitted to the University of Beira Interior in 2026.

References

- Aiken, L., Buchan, J., Ball, J., & Rafferty, A. (2008). Transformative impact of *magnet* designation: England case study. *Journal of Clinical Nursing*, 17(24), 3330-3337. <https://doi.org/10.1111/j.1365-2702.2008.02640.x>
- Albashayreh, A., AlSabei, S. D., AlRawajfah, O. M., & AlAwaisi, H. (2019). Healthy work environments are critical for nurse job satisfaction: Implications for Oman. *International Nursing Review*, 66(3), 389-395. <https://doi.org/10.1111/inr.12529>
- Alenazy, F., Dettrick, Z., & Keogh, S. (2023). The relationship between practice environment, job satisfaction and intention to leave in critical care nurses. *Nursing in Critical Care*, 28(2), 167-176. <https://doi.org/10.1111/nicc.12737>
- Al Sabei, S., Labrague, L., Miner Ross, A., Karkada, S., Albashayreh, A., Al Masroori, F., & Al Hashmi, N. (2020). Nursing work environment, turnover Intention, job burnout, and quality of care: The moderating role of job satisfaction. *Journal of Nursing Scholarship*, 52(1), 95-104. <https://doi.org/10.1111/jnu.12528>
- Al-Haroon, H., & Al-Qahtani, M. (2020). The demographic predictors of job satisfaction among the nurses of a major public hospital in KSA. *Journal of Taibah University Medical Sciences*, 15(1), 32-38. <https://doi.org/10.1016/j.jtumed.2019.11.003>
- Amaral, A., Ferreira, P., & Lake, E. (2012). Validation of the practice environment scale of the nursing work index (PES-NWI) for the Portuguese nurse population. *International Journal of Caring Sciences*, 5(3), 280-288. <https://scispace.com/pdf/validation-of-the-practice-environment-scale-of-the-nursing-266ztzo2lc.pdf>
- American Nurses Credentialing Center. (2023). *Find a magnet organization*. <https://www.nursingworld.org/organizationalprograms/Magnet/find-a-Magnet-organization>
- Beal, J., & Riley, J. (2019). Best organizational practices that foster scholarly nursing practice in *Magnet*® hospitals. *Journal of Professional Nursing*, 35(3), 187-194. <https://doi.org/10.1016/j.profnurs.2019.01.001>
- Berndt, A. (2020). Sampling methods. *Journal of Human Lactation*, 36(2), 224-226. <https://doi.org/10.1177/0890334420906850>
- Blackwell, C. (2020). Demonstrating nursing excellence through equality: The relationship between *Magnet*® status and organizational LGBTQ client services and support. *Journal of Transcultural Nursing*, 31(2), 209-215. <https://doi.org/10.1177/1043659619865585>
- ElKhateeb, S. H., El Dahshan, M. E., & Shokry, W. A. (2022). Using Magnet components in nursing practice. *Menoufia Nursing Journal*, 7(1), 63-72. <https://doi.org/10.21608/menj.2022.226372>
- González-Gancedo, J., Fernández-Martínez, E., & Rodríguez-Borrego, M. (2019). Relationships among general health, job satisfaction, work engagement and job features in nurses working in a public hospital: A cross-sectional study. *Journal of Clinical Nursing*, 28(7-8), 1273-1288. <https://doi.org/10.1111/jocn.14740>
- Huang, S., Chen, C., Kau, K., Tsai, J., & Tsay, S. (2023). Key determinates of job satisfaction for acute care nurse practitioners in Taiwan. *BMC Nursing*, 22(1), 6. <https://doi.org/10.1186/s12912-022-01156-x>
- João, A. L., Alves, C. P., Silva, C., Diogo, F., & Ferreira, N. (2017). Validação de uma escala de satisfação dos enfermeiros com o trabalho para a população portuguesa. *Revista de Enfermagem Referência*, 4(12), 117-130. <https://doi.org/10.12707/RIV16066>
- Kunecka D., & Skowron Ł. (2019) The model of professional satisfaction of nursing staff in Poland: Brief communication. *International Journal of Occupational Safety and Ergonomics*, 25(4), 646-649. <https://doi.org/10.1080/10803548.2018.1480152>
- Labrague, L., Al Sabei, S., Al Rawajfah, O., Abualrub, R., & Burney, I. (2022). Interprofessional collaboration as a mediator in the relationship between nurse work environment, patient safety outcomes and job satisfaction among nurses. *Journal of Nursing Management*, 30, 268-278. <https://doi.org/10.1111/jonm.13491>
- Lake, E., & Friese, C. (2006). Variations in nursing practice environments: Relation to staffing and hospital characteristics. *Nursing Research*, 55(1), 1-9. <https://doi.org/10.1097/00006199-200601000-00001>
- Norelho, O., Borges, E., & Abreu, M. (2019). Job satisfaction and presenteeism of workers of a private institution of social solidarity. *International Journal on Working Conditions*, 18, 17-34. <https://doi.org/10.25762/yt3y-e364>
- Patrician, P., Olds, D., Breckenridge-Sproat, S., Taylor-Clark, T., Swiger, P., & Loan, L. (2022). Comparing the nurse work environment, job satisfaction, and intent to leave among military, *Magnet*®, *magnet*-aspiring, and non-*magnet* civilian hospitals. *Journal of Nursing Administration*, 52(6), 365-370. <https://doi.org/10.1097/NNA.0000000000001164>
- Pursio, K., Kankkunen, P., Mikkonen, S., & Kvist, T. (2024). Organizational characteristics of nursing practice environments related to registered nurses’ professional autonomy and job satisfaction in two finnish *magnet*-aspiring hospitals: Structural equation modeling study. *BMC Nursing*, 23(1), 100. <https://doi.org/10.1186/s12912-024-01772-9>
- Rezaie, F., Mohammadi-Shahboulaghi, F., Fadayevatan, R., Shati, M., & Ghaedamini-Harouni, G. (2023). Working condition and job satisfaction of nurses as predicting factors of the prevalence of health care-associated infections among elderly inpatients. *Iranian Journal of Nursing and Midwifery Research*, 28(6), 684-689. https://doi.org/10.4103/ijnmr.ijnmr_87_22
- Rizany, I., Hariyati, R., Afifah, E., & Rusdiyansyah. (2019). The impact of nurse scheduling management on nurses’ job satisfaction in army hospital: A cross-sectional research. *Sage Open*, 9(2), 2158244019856189. <https://doi.org/10.1177/2158244019856189>
- Stone, A. A., Schneider, S., Smyth, J. M., Junghaenel, D. U., Couper, M. P., Couper, Mick P., Wen, C., Mendez, M., Velasco, S., & Goldstein, S. (2024). A populationbased investigation of participation rate. *Current Psychology*, 43, 2074-2090. <https://doi.org/10.1007/s12144-023-04426-2>
- Stordeur, S., D’Hoore, W., & The Next-Study Group. (2007). Organizational configuration of hospitals succeeding in attracting and retaining nurses. *Journal of Advanced Nursing*, 57(1), 45-58. <https://doi.org/10.1111/j.1365-2648.2006.04095.x>
- Skela Savič, B., Pagon, M., & Robida, A. (2023). Magnet principles and their implementation in European hospitals: A qualitative

- study. *International Journal of Nursing Studies*, 137, 104392. <https://doi.org/10.1016/j.ijnurstu.2023.104392>
- Svensson, I., Bridges, J., Ellis, J., Brady, N., Dello, S., Hooft, J., & Magnet4Europe Consortium. (2024). Laying the foundations for implementing magnet principles in hospitals in Europe: A qualitative analysis. *International Journal of Nursing Studies*, 154, Article 104754. <https://doi.org/10.1016/j.ijnurstu.2024.104754>
- Wei, H., Sewell, K., Woody, G., & Rose, M. (2018). The state of the science of nurse work environments in the United States: A systematic review. *International Journal of Nursing Sciences*, 5(3), 287-300. <https://doi.org/10.1016/j.ijnss.2018.04.010>
- Wei, H., Horsley, L., Cao, Y., Haddad, L., Hall, K., Robinson, R., & Anderson, D. (2023). The associations among nurse work engagement, job satisfaction, quality of care, and intent to leave: A national survey in the United States. *International Journal of Nursing Sciences*, 10, 476-484. <https://doi.org/10.1016/j.ijnss.2023.09.010>
- Xue, B., Feng, Y., Hu, Z., Chen, Y., Zhao, Y., Li, X., Yang, Y., Zhang, J., Zhang, Y., & Luo, H. (2024). Assessing the mediation pathways: How decent work affects turnover intention through job satisfaction and burnout in nursing. *International Nursing Review*, 71(4), 860-867. <https://doi.org/10.1111/inr.12939>
- Yang, Y., Hatanaka, K., Takahashi, K., & Shimizu, Y. (2023). Working conditions among Chinese nurses employed in Japan: A cross-sectional survey-based study. *Sage Open Nursing*, 9(1), 23779608231169382. <https://doi.org/10.1177/23779608231169382>