






ORIGINAL ARTICLE

Influence of leadership style on nurses' structural empowerment: a cross-sectional study

HIGHLIGHTS

1. Leadership styles are determinants of structural empowerment.
2. Nurses report a moderate level of structural empowerment.
3. Relationship-oriented leadership prevails.

Olga Alexandra Moura Ramos¹ 
José Alberto Fernandes Traila Monteiro de Sá² 
Jacinta Maria Pisco Alves Gomes³ 
Ana Maria Nunes Português Galvão⁴ 
Maria José Almendra Rodrigues Gomes⁴ 

ABSTRACT

Objective: To evaluate nursing leadership styles, the structural empowerment of nurses in clinical practice, and the association between leadership styles and nurses' structural empowerment. **Method:** observational and correlational study carried out between December 2023 and February 2024. Three hundred and eight nurses from health organizations in Portugal answered the Management Style Assessment Scale and the Conditions of Workplace Effectiveness Questionnaire II. Data were analyzed using descriptive and inferential statistics. **Results:** a moderate level of structural empowerment was reported (16.66 ± 3.88). The highest-scoring leadership style was relationship-oriented (32.31 ± 9.24). There are positive correlations between the different leadership styles and the level of structural empowerment. Relationship-oriented leadership has the strongest correlation ($r=0.446$; $p=0.000$). **Conclusion:** Nursing leadership styles are decisive in building practice environments facilitating access to training structures.

DESCRIPTORS: Leadership; Nursing; Health Institution Environment; Models Organizational; Health Management.

HOW TO REFERENCE THIS ARTICLE:

Ramos OAM, de Sá JAFTM, Gomes JMPA, Galvão AMNP, Gomes MJAR. Influence of leadership style on nurses' structural empowerment: a cross-sectional study. Cogitare Enferm [Internet]. 2025 [cited "insert year, month and day"];30:e99094. Available from: <https://doi.org/10.1590/ce.v30i0.99094>

¹Hospital Pedro Hispano, Porto, Portugal.

²Fundação Fernando Pessoa, Hospital Escola Fernando Pessoa, Gondomar, Portugal.

³Universidade Fernando Pessoa, Escola Superior de Saúde, Porto, Portugal.

⁴Instituto Politécnico de Bragança, Escola Superior de Saúde, Bragança, Portugal.

INTRODUCTION

Current healthcare is characterized by the implementation of organizational changes that emerge as an attempt to respond to the challenges arising from health needs, the shortage of nurses, and the difficulty in retaining these professionals¹. Nurses are a critical resource for achieving the Sustainable Development Goals, as their contributions are fundamental to making the targets related to health priorities achievable². It is also essential to recognize that nurses are leaders capable of positively influencing the achievement of patient and organizational goals based on a culture of quality and safe care³.

The scientific literature refers to leadership in nursing as a determinant with the potential to influence work-life quality of life, motivation, and commitment to teamwork⁴. Formal leadership behaviors impact nurse performance, patient outcomes, and the assurance of quality and safety of care⁵.

Leadership focuses on the power of leaders to influence followers to achieve personal and organizational goals through competencies such as guidance, support, motivation, and direction⁶. Leadership styles refer to how the leader interacts with others and can be categorized as task-focused or human relations-focused leadership⁷⁻⁸. Relationship-oriented leadership includes the socioemotional, inspirational, authentic, resonant, and transformational styles⁹. Task-oriented leadership values the execution of activities and refers to the transactional, dissonant, and instrumental leadership styles⁸.

Leaders who adopt a relational leadership style, such as authentic or transformational leadership, achieve more positive results than task-oriented leadership styles⁷. Leadership focused on people and relationships has been associated with greater job satisfaction and positively impacts patient outcomes⁹. On the other hand, the difficulty of retaining nurses in organizations and the intention to leave tend to increase when nurse leaders adopt authority-based leadership behaviours⁷. The incivility of supervisors in the workplace has a negative relationship with professional performance¹⁰, and leadership behaviors can shape nursing performance¹¹.

Authors argue that leadership in nursing is a determinant of job satisfaction, motivation, and well-being in the workplace¹². Leadership behaviors can promote practice environments that facilitate decision-making and the effective sharing of information¹³. As described in Kanter's Theory¹⁴, access to empowering structures has been relevant to nurses' well-being and effectiveness, and nurse leaders play an epicentral role in accessing these structures¹⁵.

Power is related to the ability to carry out tasks by mobilizing resources, allowing the person to acquire the necessary skills to achieve their goals¹⁴. Improving individual self-efficacy results from removing disempowering factors, and structural empowerment considers that changing the structures of organizations can affect nurses' behaviors and decisions¹⁶. In this sense, empowerment should be viewed as a process and an outcome resulting from the formal systems that enable decision-making according to organizational objectives and the interpersonal relationships that allow access to organizational structures¹⁷.

Kanter's Theory¹⁴ suggests that workers' behaviors and attitudes stem from individual access to organizational structures. In healthcare organizations, governing bodies must provide the necessary support and empowerment structures for nurses to develop the capacity to do meaningful work¹⁵. These structures include access to resources, information, opportunities, and support¹⁴. The ability to mobilize resources is related to the support

organizations provide regarding material and physical resources. Access to information involves the knowledge and understanding needed to understand legislation and institutional norms. Support and opportunities refer to working conditions that allow skills, knowledge, and competencies to be developed, as well as feedback and guidance from peers, superiors, and subordinates¹⁴.

Scientific evidence shows that structural empowerment reduces nurses' *burnout*, promotes a culture of safety, and makes it possible to achieve better patient outcomes¹⁸. It impacts nurses' attitudes and behaviors, contributing to their engagement with the organization and making them more creative and flexible, improving organizational results¹⁹. Structurally empowered nurses experience less stress at work and more significant job satisfaction²⁰.

Studies indicate that nursing leadership is central to creating empowering conditions in healthcare organizations²¹. The scientific literature documents the relationship between transformational leadership and the structural empowerment of nurses²². It is known that nurses who work in structurally empowered environments and with relationship-oriented leadership styles report higher levels of work-related well-being⁷. However, despite the scientific evidence available internationally, no study demonstrated the relationship between leadership styles and structural empowerment in healthcare organizations in Portugal. The research focused on the gap identified, considering that the evidence obtained offers contributions to the development of nursing as a profession and discipline, to the person who uses healthcare, and to healthcare organizations. In nursing, the study could contribute to the profession's development and build on the scientific knowledge available, supporting the definition of strategies to promote the creation of structurally empowered nursing teams.

The literature shows that structurally empowered nurses are more committed to their work¹⁹, promote a safety culture, and achieve better results¹⁸, impacting organizations and patients. Establishing the relationship between structural empowerment and leadership styles in nursing could enable the implementation of helpful management measures, namely the definition of strategies to promote satisfaction and performance in the workplace. The objectives were to evaluate nursing leadership styles, the structural empowerment of nurses in clinical practice, and the association between leadership styles and nurses' structural empowerment.

METHOD

An observational, cross-sectional, and correlational study with a quantitative approach was carried out to meet the objectives. The recommendations of *Strengthening the Reporting of Observational Studies in Epidemiology* (STROBE)²³ were followed.

Participants and recruitment

The study population refers to nurses in clinical practice in health organizations in Portugal, with around 83,000 nurses registered in 2023²⁴. To calculate the sample size, a 90% confidence level was set with a 5% margin of error, and the minimum sample size was 272 participants to guarantee the defined criteria. A convenience sample of 308 nurses in clinical practice in public or private health organizations was set up. The inclusion criteria were consent to participate in the study, active registration with the Order of Nurses, and full-time clinical practice for at least six months. Nurses who were managers or in management positions were excluded from the study.

Data collection and instruments

A partnership was established with the Order of Nurses to collect data, publicize the study, and encourage participation. The data collection instrument was built on the EUSurvey platform, which allowed the creation of a link and anonymous self-response between December 2023 and February 2024. It includes a sociodemographic and professional characterization questionnaire, the Management Style Evaluation Scale (EAEG)²⁵, and the version translated and validated for the Portuguese population of the Conditions of Workplace Effectiveness Questionnaire II (CWEQ II)¹⁷.

The sociodemographic and professional characterization questionnaire included age, gender, marital status, education, number of hours worked per week, working hours, employment relationship, type of organization, professional category, and length of clinical practice in the profession and the organization.

The EAEG²⁵ includes 19 items that assess the nurse manager's leadership behaviors by answering a five-point *Likert* scale (1 — never acts like this, 2 — rarely acts like this, 3 — occasionally acts like this, 4 — often acts like this, and 5 — always acts like this). The items are grouped into task (six items), relationship (nine items), and situational (four items) factors. The average score varies between six and 30 for the task factor, nine to 45 for the relationship factor, and four to 20 for the situational factor. Higher scores for a given factor indicate the predominant leadership style. The EAEG has good psychometric properties, with a Cronbach's alpha of 0.94 for the relationship factor, 0.82 for the situational factor, and 0.72 for the task factor. In the sample studied, reliability revealed Cronbach's alpha values of 0.75 for the task factor, 0.85 for the situational factor, and 0.96 for the relationship factor.

The CWEQ II¹⁷ made it possible to assess the structural empowerment of the participants. The version translated and validated for the Portuguese population¹⁷ kept the 19 items of the original scale, which are grouped into six dimensions: opportunity (three items), information (three items), support (three items), resources (three items), formal power (three items) and informal power (four items). The items are scored using a five-point *Likert* scale, where 1 means "none" and five means "a lot." The scale's total score is the sum of the average of the six dimensions, ranging from six to 30 points. For the dimensions, the score varies between one and five points, and the higher the score, the higher the level of structural empowerment. The Portuguese version of the CWEQ II has good psychometric properties, with a Cronbach's alpha of 0.91 for the scale and 0.68 to 0.89 for the dimensions¹⁷. For the sample studied, the scale showed similar values, with Cronbach's Alpha for the scale being 0.92, with a variation between 0.70 and 0.92 for the dimensions.

Statistical treatment of data

Data was processed and analyzed using descriptive and inferential statistics. Parametric and non-parametric tests were used to test hypotheses, adopting a 95% confidence interval. Normal distribution, homogeneity of variances, and independence of observations were considered. The data was processed using the *Statistical Package for Social Sciences software*, version 28 (IBM Corporation, Armonk, New York).

Ethical considerations

The study was approved by the Ethics Committee of the Polytechnic Institute of Bragança (Opinion no. P507703-R612764-D1770019). The use of the scales was preceded by authorization from the authors of the original scales and the version translated and adapted for the Portuguese population. Participants were provided information about

the study, were able to ask the research team any additional questions, and were allowed to participate freely and in an informed manner.

RESULTS

A total of 308 nurses working in clinical practice took part in the study (Table 1), with females (n=243, 78.9%) being the most represented. Most work in public health organizations (n=281; 91.2%) and have rotating hours (n=244; 79.2%). The average age was 40.15 years (± 9.38), ranging between 21 and 63 years. On average, the participants worked as nurses for 16.19 years (± 9.30) and worked 35.41 hours a week (± 3.10).

Table 1. Sociodemographic and professional characterization of the sample. Portugal, 2024

	n	%
Gender		
Male	65	21.1
Female	243	78.9
Marital status		
Single	91	29.5
Married	200	64.9
Divorced/Separated	15	4.0
Widowed	2	0.6
Academic qualifications		
Bachelor	3	1.0
Degree	148	48.1
Post-specialization course in nursing	66	21.4
Master's degree	90	29.2
Post-doctorate	1	0.3
Health organization		
Public	281	91.2
Private	27	8.8
Employment relationship		
Fixed-term employment contract	47	15.3
Open-ended employment contract	182	59.1
Public employment contract	72	23.4
Provision of services	5	1.6
Other	2	0.6
Professional category		
Nurse	197	64.0
Nurse specialist	111	36.0
Type of timetable		
Fixed	64	20.8
Rotary	244	79.2
	Average\pmDP	Min - Max
Age	40.15 \pm 9.38	21.00-63.00

Table 1. Sociodemographic and professional characterization of the sample. Portugal, 2024

	Average±DP	Min - Max
Clinical practice time		
In the profession	16.19±9.30	0.00-40.00
In the health organization	12.45±9.44	0.00-40.00
Weekly workload	35.41±3.10	6.00-48.00

Note: SD — standard deviation; Min — minimum; Max — maximum.

Source: The authors (2024).

The participants reported a moderate level of structural empowerment (Average±SD=16.66±3.88) (Table 2). The dimension with the highest score was opportunity (Average±SD=3.35±0.96), and the dimension with the lowest score was formal power (Average±SD=2.26±0.81).

The nurse manager's leadership style was characterized by behaviors geared toward relationships, which obtained the highest scores (Average±SD=32.31±9.24). The situational factor, which refers to adapting leadership behaviors according to contexts, scored the lowest (Average±SD=14.63±3.48).

Table 2. Structural empowerment of the sample and leadership style of the nurse manager. Portugal, 2024

	Mean (±sd)	Min – Max	α
CWEQ II (Total score)	16.66±3.88	6.00 – 28.67	0.92
Opportunity	3.35±0.96	3.00 – 15.00	0.86
Information	2.70±0.92	3.00 – 15.00	0.91
Support	2.61±0.98	3.00 – 15.00	0.92
Resources	2.59±0.82	3.00 – 15.00	0.88
Formal power	2.26±0.81	3.00 – 15.00	0.81
Informal power	3.15±0.72	4.00 – 20.00	0.70
EAEG			
Relationship	32.21±9.24	9.00 – 45.00	0.96
Task	22.32±4.17	6.00 – 30.00	0.75
Situational	14.63±3.48	4.00 – 20.00	0.85

Note: SD - standard deviation; Min - minimum; Max - maximum; α- Cronbach's alpha.

Source: The authors (2024).

There was a statistically significant association between the sample's structural empowerment and the variables marital status ($p=0.001$), type of healthcare organization ($p=0.001$), and type of employment relationship ($p=0.042$) (Table 3).

As for the scores for the different factors of the EAEG, a statistically significant association was found between the type of healthcare organization and the factors: relationship ($p=0.021$) and task ($p=0.032$). In these factors, nurses working in private healthcare organizations obtained higher average scores (Table 3).

Table 3. Association between sociodemographic and professional characteristics, structural empowerment and leadership style. Portugal, 2024

Variable	CWEQ II		EAEG					
			Relationship		Task		Situational	
	Average (±SD)	p	Average(±SD)	p	Average (±SD)	p	Average (±SD)	p
Gender								
Male	17.17±4.46	0.450	32.05±10.22	0.921	21.92±4.29	0.276	14.43±3.85	0.667
Female	16.52±3.71		32.39±8.98		22.43±4.14		14.69±3.37	
Marital status								
Single	17.53±4.09	0.001*	32.49±10.22	0.207	22.41±4.33	0.753	14.51±3.67	0.239
Married	16.20±3.75		32.34±8.90		22.36±4.11		14.72±3.34	
Divorced	18.19±2.91		33.00±6.13		21.33±4.40		15.07±3.47	
Widowed	11.50±2.83		16.15±6.36		22.50±3.54		8.50±4.95	
Academic Qualifications								
Bachelor's degree	17.69±2.78	0.410	36.33±3.21	0.438	22.00±4.58	0.700	17.33±1.53	0.124
Bachelor's licenciante	16.83±3.95		32.57±9.29		22.56±4.23		14.43±3.43	
Post-specialization course in nursing	16.48±3.76		31.70±8.61		21.92±4.21		14.88±3.16	
Master's degree	16.56±3.87		32.43±9.59		22.67±4.11		14.81±3.67	
Post-doctorate	9.50±0.00		12.00±0.00		20.00±0.00		5.00±0.00	
Health organization								
Public	16.46±3.87	0.001*	31.97±9.31	0.021*	22.17±4.20	0.032*	14.60±3.51	0.665
Private	18.76±3.38		35.89±7.78		23.96±3.58		14.96±3.13	
Employment relationship								
Fixed-term employment contract	17.79±4.33	0.042*	32.36±10.48	0.767	22.00±4.94	0.971	14.98±3.72	0.512
Open-ended employment contract	16.54±3.70		32.20±8.73		22.32±4.09		14.47±3.40	
Public employment contract	17.22±3.98		32.18±10.03		22.50±3.92		14.74±3.64	
Provision of services	20.25±2.20		35.20±2.49		22.00±2.35		14.80±1.09	
Other	18.42±3.77		39.50±7.78		24.50±7.78		17.50±3.54	
Professional category								
Nurse	16.72±4.01	0.861	32.87±9.09	0.175	22.34±4.11	0.981	14.61±3.32	0.500
Specialist nurse	16.54±3.88		31.33±9.46		22.31±4.17		14.68±3.75	
Type of schedule								
Fixed	16.97±3.48	0.312	32.84±9.02	0.591	22.70±3.89	0.474	14.94±3.28	0.398
Rotating	16.58±3.98		32.18±9.31		22.23±4.17		14.55±3.53	

Note: SD - standard deviation; p - p-value; *p < 0.05

Source: The authors (2024).

Statistically significant negative correlations were identified between the Opportunity dimension of the CWEQ II and the variables age ($p=0.007$), years of clinical practice ($p=0.002$), and length of clinical practice in the organization ($p=0.002$). This evidence (Table 4) shows that the greater the age and professional experience, the fewer opportunities to acquire and develop knowledge and skills that can favor the development of nurses.

Positive correlations were found between the Support dimension of the CWEQ II and the variables' length of clinical practice in the organization ($p=0.018$) and workload ($p=0.000$).

Table 4. Correlation between structural empowerment and leadership style and sociodemographic and professional variables. Portugal, 2024

	Age	Clinical practice		Workload
		Profession	Organization	
CWEQ II (Total score)	$r=-0.001$ $p=0.986$	$r=-0.044$ $p=0.438$	$r=-0.075$ $p=0.187$	$r=0.064$ $p=0.261$
Opportunity	$r=-0.154^{**}$ $p=0.007$	$r=-0.178^{**}$ $p=0.002$	$r=-0.172^{**}$ $p=0.002$	$r=0.032$ $p=0.570$
Information	$r=0.004$ $p=0.947$	$r=-0.044$ $p=0.444$	$r=-0.021$ $p=0.714$	$r=-0.045$ $p=0.427$
Support	$r=-0.029$ $p=0.614$	$r=-0.062$ $p=0.276$	$r=-0.135^{*}$ $p=0.018$	$r=0.411^{**}$ $p=0.000$
Resources	$r=0.100$ $p=0.080$	$r=0.051$ $p=0.374$	$r=-0.013$ $p=0.815$	$r=0.019$ $p=0.741$
Formal power	$r=0.100$ $p=0.080$	$r=0.070$ $p=0.218$	$r=0.014$ $p=0.812$	$r=0.050$ $p=0.380$
Informal power	$r=0.055$ $p=0.333$	$r=0.037$ $p=0.513$	$r=0.065$ $p=0.255$	$r=0.088$ $p=0.122$
EAEG				
Relationship	$r=0.027$ $p=0.631$	$r=-0.021$ $p=0.713$	$r=-0.056$ $p=0.325$	$r=0.060$ $p=0.297$
Task	$r=-0.004$ $p=0.944$	$r=-0.027$ $p=0.635$	$r=-0.060$ $p=0.290$	$r=0.023$ $p=0.683$
Situational	$r=0.088$ $p=0.124$	$r=0.044$ $p=0.442$	$r=0.005$ $p=0.935$	$r=-0.040$ $p=0.485$

Note: Spearman's r - Rho; p - p -value; $*p<0.05$ (bilateral); $**p<0.01$ (bilateral).

Source: The authors (2024).

The structural empowerment of nurses in clinical practice is statistically related to the nurse manager's leadership style. There were positive correlations between the different leadership styles and the level of structural empowerment, with the relationship-oriented leadership style showing the strongest correlation ($r=0.446$; $p=0.000$) (Table 5).

Table 5. Spearman's Rho correlation between structural empowerment and leadership style. Portugal, 2024

	EAEG		
	Relationship	Task	Situational
CWEQ II (Total score)	r=0.446** p=0.000	r=0.286** p=0.000	r=0.357** p=0.000
Opportunity	r=0.241** p=0.000	r=0.171** p=0.003	r=0.213** p=0.000
Information	r=0.267** p=0.000	r=0.250** p=0.000	r=0.187** p=0.001
Support	r=0.445** p=0.000	r=0.287** p=0.000	r=0.351** p=0.000
Resources	r=0.315** p=0.000	r=0.138* p=0.015	r=0.247** p=0.000
Formal power	r=0.405** p=0.000	r=0.198** p=0.000	r=0.350** p=0.000
Informal power	r=0.291** p=0.000	r=0.192** p=0.001	r=0.236** p=0.000

Note: Spearman's r - Rho; p - p-value; *p<0.05 (bilateral); **p<0.01 (bilateral).

Source: The authors (2024).

DISCUSSION

A cross-sectional study was carried out with a representative sample of the population, expressing the relationship between leadership styles and the structural empowerment of nurses in clinical practice. The statistical relationships found between leadership styles and the different dimensions of the CWEQ II corroborate Kanter's Theory¹⁴ as a sound theoretical framework for investigating structural empowerment in nursing. The possible influence of nurse managers' behaviors on employees' access to training structures was demonstrated, and it was found that relational, situational, and task-oriented leadership styles have statistical significance with structural empowerment. This is a positive result, as the structural empowerment of nursing teams is a factor that healthcare organizations should value, as it impacts patients, professionals, and the organization itself.

Previous studies have associated structural empowerment with lower *burnout* among nurses and better results for patients¹⁸ and the organization¹⁹. Studies claim that professional empowerment reduces stress at work and increases job satisfaction²⁰, and show its influence on job satisfaction and organizational commitment¹⁹.

In this study, relationship-oriented leadership styles positively correlated with nurses' structural empowerment in clinical practice. These results are corroborated by previous studies, which revealed the contribution of formal leaders in nursing to the structural empowerment of nurses^{15,21}. These authors showed that nurses in clinical practice have a more excellent perception of access to training structures when the leader shows presence and availability. This may be associated with relational leaders' power conferred on subordinates since they base their behavior on inspiring communication, intellectual stimulation, support, organizational vision, and personal recognition²⁶.

As for the sociodemographic and professional variables, statistically significant associations were found between structural empowerment, marital status, type of organization, and employment relationship. However, there was no association between the levels of structural empowerment, education, and professional categories. A study of nurses in clinical practice in hospital healthcare²⁷ showed that specialist nurses tend to have higher levels of structural empowerment, documenting a statistically significant relationship between professional category, access to information, resources, and informal power. Due to the rapid evolution of practice environments, nurses face challenges that require continuous professional development²⁸. The quest to update knowledge and clinical skills is a fundamental resource for responding to the challenges of clinical practice and is essential for access to empowering organizational structures²⁸.

The sample studied had a moderate level of structural empowerment, with the highest scoring dimension being access to opportunities, followed by informal power. These results are in line with previous studies carried out nationally²⁷ and internationally²⁸. The average score for the opportunity dimension suggests that nursing practice environments favor nurses' acquisition and development of competencies, enabling them to develop their professional careers. This evidence reinforces the scientific literature, which states that access to opportunities in the workplace is a determining factor for personal growth, autonomy, and decision-making capacity^{20,29}.

As for informal power, it is essential to highlight the documented relationship between this dimension of structural empowerment and relational leadership, as this leadership style is based on relationships in clinical practice contexts. The relationships established between nurses, leaders, and the multi-professional team can define a network of alliances that strengthens the ability to mobilize resources to achieve personal and organizational goals³⁰.

The results indicate that older, more experienced nurses have less access to training structures. This result, corroborated by previous studies²⁷⁻²⁸, should be considered relevant, as it may indicate lower motivation and job satisfaction resulting from less access to opportunities. Therefore, health organizations and nursing leaders must invest in these nurses' access to training structures, promoting organizational commitment, greater job satisfaction, and a culture of quality care.

Considering the current contexts of nursing practice, the results can serve as guidelines for policymakers, organizational managers, and researchers in the field. The difficulty in retaining nurses in the profession and organizations and the feeling of professional dissatisfaction resulting from a lack of motivation and recognition are worrying realities that could be alleviated by creating empowering practice environments. The results found can be used to identify the weakest areas of empowerment, and it is suggested that future research should focus on these gaps and on assessing and developing leadership styles to overcome them.

Study limitations

The participants practice in various healthcare organizations nationwide, allowing for a comprehensive assessment of nurses rather than a specific context. However, the practice environments were not classified according to the typology of care (hospital care and primary health care), which can be considered a limitation. Future research should take this into account to allow for more targeted conclusions. Only access to structural training structures was investigated. It is considered pertinent that future research includes, for example, psychological empowerment in nursing and its relationship with leadership styles.

CONCLUSION

The nurses who took part in the study reported a moderate level of structural empowerment. Access to opportunities had the highest average score, demonstrating that nurses have opportunities to develop knowledge and skills in the workplace. Structural empowerment impacts nurses' behaviors and is associated with personal and organizational outcomes.

A positive relationship was found between leadership styles and the structural empowerment of nurses in clinical practice, with this relationship being more substantial in relationship-oriented leadership styles. The evidence validates the impact of the role of the nursing leader on the empowerment of nurses. It reiterates the importance of defining management strategies that strengthen the construction of teams committed to results and the organization. Organizations should provide practice environments that encourage the structural training of nurses with more professional experience so that they do not experience feelings of demotivation and professional dissatisfaction.

REFERENCES

1. Kelly C, Barattucci M, Ahmad MS. Job satisfaction as a mediator between structural empowerment and intent-to-leave: a study of critical care nurses. *Intensive Crit Care Nurs* [Internet]. 2022 [cited 2024 May 1];70:103194. Available from: <https://doi.org/10.1016/j.iccn.2021.103194>
2. World Health Organization (WHO). State of the world's nursing 2020: investing in education, jobs and leadership [Internet]. Geneva: WHO; c2020. [cited 2024 May 1]. Available from: <https://www.who.int/publications/i/item/9789240003279>
3. Ystaas LMK, Nikitara M, Ghobrial S, Latzourakis E, Polychronis G, Constantinou CS. The impact of transformational leadership in the nursing work environment and patients' outcomes: a systematic review. *Nurs Rep* [Internet]. 2023 [cited 2024 May 1];13(3):1271-90. Available from: <https://doi.org/10.3390/nursrep13030108>
4. Gottlieb LN, Gottlieb B, Bitzas V. Creating empowering conditions for nurses with workplace autonomy and agency: how healthcare leaders could be guided by Strengths-Based Nursing and Healthcare Leadership (SBNH-L). *J Healthc Leadersh* [Internet]. 2021 [cited 2024 May 1];13:169-81. Available from: <https://doi.org/10.2147/JHL.S221141>
5. Alsadaan N, Salameh B, Reshia FAE, Alruwaili RF, Alruwaili M, Awad Ali SA, et al. Impact of nurse leaders behaviors on nursing staff performance: a systematic review of literature. *Inquiry* [Internet]. 2023 [cited 2024 May 1];60:00469580231178528. Available from: <https://doi.org/10.1177/00469580231178528>
6. Cai W, Lysova EI, Khapova SN, Bossink BAG. Does entrepreneurial leadership foster creativity among employees and teams? The mediating role of creative efficacy beliefs. *J Bus Psychol* [Internet]. 2019 [cited 2024 Jun 6];34:203-17. Available from: <https://doi.org/10.1007/s10869-018-9536-y>
7. Cummings GG, Tate K, Lee S, Wong CA, Paananen T, Micaroni SPM, et al. Leadership styles and outcome patterns for the nursing workforce and work environment: a systematic review. *Int J Nurs Stud* [Internet]. 2018 [cited 2024 May 1];85:19-60. Available from: <https://doi.org/10.1016/j.ijnurstu.2018.04.016>
8. Alilyyani B, Kerr MS, Wong C, Wazqar DY. An integrative review of nursing leadership in Saudi Arabia. *Nurs Open* [Internet]. 2022 [cited 2024 Jun 6];9(1):140-55. Available from: <https://doi.org/10.1002/nop2.1117>

9. Pattison N, Corser R. Compassionate, collective or transformational nursing leadership to ensure fundamentals of care are achieved: A new challenge or *non-sequitur*? J Adv Nurs [Internet]. 2023 [cited 2024 Jun 6];79(3):942-50. Available from: <https://doi.org/10.1111/jan.15202>
10. Cha C, Sung C. Factors related to nursing performance in South Korean intensive care units. Int J Nurs Pract [Internet]. 2020 [cited 2024 Jun 6];26(6):e12874. Available from: <https://doi.org/10.1111/ijn.12874>
11. Wei H, Roberts P, Strickler J, Corbett RW. Nurse leaders' strategies to foster nurse resilience. J Nurs Manag [Internet]. 2019 [cited 2024 May 6];27(4):681-7. Available from: <https://doi.org/10.1111/jonm.12736>
12. Ylitörmänen T, Turunen H, Mikkonen S, Kvist T. Good nurse–nurse collaboration implies high job satisfaction: a structural equation modelling approach. Nurs Open [Internet]. 2019 [cited 2024 Jun 6];6(3):998-1005. Available from: <https://doi.org/10.1002/nop2.279>
13. Kiwanuka F, Nanyonga RC, SakDankosky N, Muwanguzi PA, Kvist T. Nursing leadership styles and their impact on intensive care unit quality measures: an integrative review. J Nurs Manag [Internet]. 2021 [cited 2024 Jun 28];29(2):133-42. Available from: <https://doi.org/10.1111/jonm.13151>
14. Kanter R. Men and women of the corporation. 2th ed. New York: Basic Book; 1993. 416p.
15. Lundin K, Silén M, Strömberg A, Engström M, Skytt B. Staff structural empowerment - Observations of first-line managers and interviews with managers and staff. J Nurs Manag [Internet]. 2022 [cited 2024 May 15];30(2):403-12. Available from: <https://doi.org/10.1111/jonm.13513>
16. Khrais H, Nashwan AJ. Leadership practices as perceived by emergency nurses during the COVID-19 pandemic: the role of structural and psychological empowerment. J Emerg Nurs [Internet]. 2023 [cited 2024 Jun 6];49(1):140-7. Available from: <https://doi.org/10.1016/j.jen.2022.10.003>
17. Teixeira AC, Nogueira MAA, Alves PJP. Structural empowerment in nursing: translation, adaptation and validation of the Conditions of Work Effectiveness Questionnaire II. Rev Enf Ref [Internet]. 2016 [cited 2024 Feb 18];4(10):39-46. Available from: <http://dx.doi.org/10.12707/RIV16014>
18. Connolly M, Jacobs S, Scott K. Clinical leadership, structural empowerment and psychological empowerment of registered nurses working in an emergency department. J Nurs Manag [Internet]. 2018 [cited 2024 Jun 18];26(7):881-7. Available from: <https://doi.org/10.1111/jonm.12619>
19. Fragkos KC, Makrykosta P, Frangos CC. Structural empowerment is a strong predictor of organizational commitment in nurses: a systematic review and meta-analysis. J Adv Nurs [Internet]. 2020 [cited 2024 Jun 18];76(4):939-62. Available from: <https://doi.org/10.1111/jan.14289>
20. DiNapoli JM, O'Flaherty D, Musil C, Clavelle JT, Fitzpatrick JJ. The relationship of clinical nurses' perceptions of structural and psychological empowerment and engagement on their unit. J Nurs Adm [Internet]. 2016 [cited 2024 Jun 18];46(2):95-100. Available from: <https://doi.org/10.1097/NNA.0000000000000302>
21. Niinihuhta M, TerkamoMoisio A, Kvist T, HäggmanLaitila A. Nurse leaders' work-related well-being - Relationships to a superior's transformational leadership style and structural empowerment. J Nurs Manag [Internet]. 2022 [cited 2024 Jun 18];30(7):2791-800. Available from: <https://doi.org/10.1111/jonm.13806>
22. Laschinger HK, Wong CA, Grau AL, Read EA, Pineau Stam LM. The influence of leadership practices and empowerment on Canadian nurse manager outcomes. J Nurs Manag [Internet]. 2012 [cited 2024 Feb 18];20(7):877-88. Available from: <https://doi.org/10.1111/j.1365-2834.2011.01307.x>
23. von Elm E, Altman DG, Egger M, Pocock SJ, Gøtzsche PC, Vandenbroucke JP. The Strengthening the Reporting of Observational Studies in Epidemiology (STROBE) statement: guidelines for reporting observational studies. BMJ [Internet]. 2007 [cited 2024 May 1];335:805-8. Available from: <https://doi.org/10.1136/bmj.39335.541782.AD>
24. Ordem dos Enfermeiros [Internet]. Lisboa, PT: Ordem dos Enfermeiros; c2024 [cited 2024 Jun 18].

- Estatística de Enfermeiros;[about 1 screen]. Available from: <https://www.ordemenfermeiros.pt/estatística-de-enfermeiros/>
25. Melo EAA. Escala de avaliação do estilo gerencial (EAEG): desenvolvimento e validação. Rev Psicol (Soc Bras Psicol Organ Trab) [Internet]. 2004 [cited 2024 Feb 18];4(2):31-62. Available from: https://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1984-66572004000200003
 26. Monje-Amor A, Abeal Vázquez JP, Faíña JA. Transformational leadership and work engagement: exploring the mediating role of structural empowerment. Eur Manag J [Internet]. 2020 [cited 2024 Jul 1];38(1):169-78. Available from: <https://doi.org/10.1016/j.emj.2019.06.007>
 27. Neves N, Ribeiro O. Perception of nurses' Empowerment in healthcare organization settings. Millenium [Internet]. 2016 [cited 2024 Jul 1];2(1):179-90. Available from: <https://doi.org/10.29352/mill0201.14.00093>
 28. Moura LN, Camponogara S, dos Santos JLG, Gasparino RC, da Silva RM, Freitas EO. Structural empowerment of nurses in the hospital setting. Rev Lat-Am Enfermagem [Internet]. 2020 [cited 2024 Jul 1];28:e3373. Available from: <https://doi.org/10.1590/1518-8345.3915.3373>
 29. García-Sierra R, Fernández-Castro J. Relationships between leadership, structural empowerment, and engagement in nurses. J Adv Nurs [Internet]. 2018 [cited 2024 Jul 1];74(12):2809-19. Available from: <https://doi.org/10.1111/jan.13805>
 30. Spence Laschinger HK, Finegan J, Shamian J, Wilk P. Impact of structural and psychological empowerment on job strain in nursing work settings expanding Kanter's Model. J Nurs Adm [Internet]. 2001 [cited 2024 Feb 18];31(5):260-72. Available from: <https://doi.org/10.1097/00005110-200105000-00006>

Received: 30/09/2024

Approved: 14/02/2025

Associate editor: Dra. Luciana Puchalski Kalinke

Corresponding author:

Olga Alexandra Moura Ramos

Unidade Local de Saúde de Matosinhos

Rua Dr Eduardo Torres 4464 – 513 Senhora da Hora, Porto, Portugal

E-mail: olgamouramos@gmail.com

Role of Authors:

Substantial contributions to the conception or design of the work; or the acquisition, analysis, or interpretation of data for the work - **Ramos OAM, de Sá JAFTM, Gomes MJAR**. Drafting the work or revising it critically for important intellectual content - **Ramos OAM, de Sá JAFTM, Gomes JMPA, Galvão AMNP, Gomes MJAR**. Agreement to be accountable for all aspects of the work in ensuring that questions related to the accuracy or integrity of any part of the work are appropriately investigated and resolved - **Ramos OAM, Gomes MJAR**. All authors approved the final version of the text.

ISSN 2176-9133



This work is licensed under a [Creative Commons Attribution 4.0 International License](https://creativecommons.org/licenses/by/4.0/).