Original Article

Transformational leadership and nurses' satisfaction with their team: A cross-sectional study

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ARTICLE INFO

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ABSTRACT

Background & Aim: Leadership style influences nursing team satisfaction, impacting organizational behavior, performance, outcomes, and quality of nursing care. This study aimed to describe the relationship between transformational leadership and nurses' satisfaction with their teams.

Methods & Materials: A cross-sectional study with 95 participants enrolled by a snowball sample technique, using the Global Transformational Leadership Scale and the Group Satisfaction Scale for data collection, was developed. Quantitative data were analyzed with SPSS 26, and qualitative data were analyzed through conventional content analysis assisted by QDA Miner Lite 4.

Results: A statistically significant difference between the participants' length of service and Group Satisfaction and an association between Transformational Leadership and Group Satisfaction was found. Communication skills are highlighted by the participants as characteristics a leader should have.

Conclusion: Health organizations should value transformational leadership, especially nowadays, where health work environments are characterized by instability. Training leaders to assume this type of leadership is needed.

Introduction

In recent years, leadership has aroused interest among researchers due to the need to understand why this phenomenon is crucial for organizations, its influence on professionals' job satisfaction, and how they interrelate (1). Job satisfaction results from individuals' assessment of their work or the experiences lived by them in their work, which translates into their attitude toward work (2,3). It is a multidimensional concept that comprises cognitive, emotional, and behavioral components that are influenced by the job's characteristics, working environment, and individual characteristics and needs (4).

Regarding job satisfaction, two dimensions can be considered: events and conditions; and agent or work relations. Agent or work relations comprise aspects related to the team working environment and communication with peers and superiors (5). Therefore, professionals' satisfaction with their team is a contributing factor to overall job satisfaction. Evidence suggests that improved teams' quality of life and satisfaction

positively impact workers' job satisfaction and quality of life (6,7).

Job satisfaction is also influenced by the type of leadership, the ability to communicate a clear and positive vision of the future, and the individual treatment of employees. In turn, job satisfaction affects organizational behavior, performance, results, and quality, consequently reflecting on customer satisfaction (8).

In an era in which the sustainability of health care services is an eminent concern, the binomial health expenditure/health gains make it challenging to improve health care quality continuously. In this context, leadership, as competence and not just as a position, is essential in managing healthcare organizations. Healthcare teams' challenges require charismatic behavior that results in collaborative decision-making processes and vision formation (9), typical characteristics of a transformational leader. Leaders who follow this type of leadership that transforms organizations pursue success by inspiring others. In nursing, leaders and subordinates, mediated by Transformational Leadership (TL), can be essential in the search for better organizational practices, with positive feedback for stakeholders (10). TL refers to the influencing process that transforms the attitudes and values of each team member, developing in them the commitment to the organization's challenging mission and objectives, achieving more than initially expected (10). The leadership style strongly impacts the nursing team, namely its degree of satisfaction and quality of nursing care provided (11,12).

By promoting job satisfaction among nurses, TL improves team performance and develops leadership behaviors that foster positive and adaptive behaviors necessary in nursing teams (13). Commitment to the organization, retention of new nurses, and job satisfaction are positive aspects of TL in nursing (13–16). Among the various leadership styles, TL is the style with the highest relationship in job satisfaction perceived by the nursing team (14).

The type of leadership and workers' satisfaction with their team can ultimately impact the quality of care provided to patients. Also, acknowledging that evidence is scarce relating these two dimensions in Portuguese nurses, this study sought to describe the relationship between transformational leadership and nurses' satisfaction with their team and identify associated factors.

Methods

A quantitative, descriptive, and cross-sectional study was performed with a non-probabilistic sample, in which participants were enrolled by snowball sampling using the researcher's network. Data collection was carried out from Jun to August of 2021 using a self-administered online questionnaire. All nurses integrating healthcare teams that agreed to participate were included. The self-administered questionnaire was composed of four parts. The first part collected data on sociodemographic characteristics. Part two was composed of the Global Transformational Leadership (GTL) scale, a seven-item scale based on the model of the seven behaviors (17,18). Part three included the Group Satisfaction Scale (GSS) (10). The fourth part had two open-ended questions intended to identify the characteristics a leader must and must not have from the participants' perspective. The GTL scale assesses the TL of participants' leaders in a 5-point Likert-type scale ranging from 1 (never), 2 (rarely), 3 (sometimes), 4 (often) to 5 (always) (17). The GTL has a Cronbach's alpha of 0.96 (18).

The GSS allows characterizing the professional's degree of satisfaction with his team. It consists of a Likert-type rating scale with seven response options, ranging from 1 (completely dissatisfied), 2 (very dissatisfied), 3 (moderately dissatisfied), 4 (neither satisfied nor dissatisfied), 5 (moderately satisfied), 6

(very satisfied), to 7 (completely satisfied), assessing satisfaction. These seven questions integrate various aspects related to the socio-affective and task subsystem of the group/work team. Three of these items measure satisfaction with aspects of the affective domain: satisfaction with the existing relationships between group/work team members. The remaining four items measure satisfaction with elements of the task domain, that is, the way of working in a group/work team and the role played by each member. The internal consistency of this assessment instrument has a Cronbach's alpha of 0.91.

For the statistical treatment of quantitative data, *Statistical Package for Social Sciences®*, version 26 was used. Summarized in statistical descriptions including percentage, frequencies, mean, standard deviation, median, and variance, Spearman's Rank correlation coefficient to determine relationships between variables, and Student's t-test to determine differences between groups. Statistical tests were performed with a confidence level of 95%, considering a significant significance level of *p* <0.05. Qualitative data were analyzed through conventional content analysis of the responses provided by the participants and coding assisted by QDA Miner Lite 4 to access the participants' vision of a leader.

All foreseen ethical principles were fulfilled, and the ethics committee of the school where the study was developed approved the study (Parecer-021/2021).

Results

A total of 95 nurses were enrolled in this study. Study participants' mean age was 40.54± 8.8 years, ranging from 23 to 64 years. Most were female 83.2% (n=79) and married (n=62; 65,3%). Concerning academic degrees, 74.7% (n=71) were nursing graduates, 21.1% (n=20) had a Master's degree, and 4.2% (n=4) had a PhD. Regarding the professional title, 51.6% (n=49) were specialist nurses, and the remaining were registered nurses (48.4%, n=46). The primary working place was the public sector for 76.8% (n=73) of the participants, and most of them worked in hospitals, 61.1% (n=58) (Table 1). Participants had a mean length of service of 16.35 ± 8.96 years, ranging from less than one year to 38 years.

Table1. Participants' working areas

Areas	N	%
Hospital	58	61.1
Primary health care centers	13	13.7
Outpatient services	11	11.6
Nursing homes/continuous care	9	9.4
University	4	4.2
Total	95	100,0

Participants' mean for GTL was 2.72±0.92 for all items. The item with the highest mean, 2.88±1.06, was "*Is clear about his values and practices what he stands for*." The item with the lowest mean value, 2.58±1.037, was "*Encourages and recognizes its employees*" (Table 2). As for the participant's satisfaction with their work team, mean values ranged between 1.86 and 6.86, and a mean of 4.49 ± 1. 09.

By analyzing the descriptive statistics of group satisfaction (Table 3), the item with the highest mean, 5.00 ± 1.13, was "*Relationships between work team members*." The items with the lowest satisfaction among participants were: "*How the leader organizes and*

coordinates the team's activities," with a mean of 3.94 ± 1.59. "*Relationships between team members and the leader*" with a mean of 3.95±1.48.

The differences between the participants' age and the GSS were insignificant (r=-0.151; p=0.144). In the correlation between the length of service and the GSS (r=-0.218; p=0.034), a negative correlation was obtained, which translates to the inverse relationship between the variables: the longer the service time, the lower the nurses' satisfaction. No statistically significant difference in the mean level of satisfaction with the team regarding the nurses' professional title (t(93)=1.043; p=0.30) and in the mean satisfaction with the team concerning the sector where participants work (public/private) (t(93)=-1.209; p=0.23) was found.

Table 2. Global transformational leadership scale descriptive statistics

Items (Global transformational leadership)	Mean	SD	Median	Variance
Communicates a clear and positive vision of the future	2.69	0.957	3	0.916
Treats its employees individualized, supporting and encouraging their development	2.73	1.026	3	1.052
Encourages and recognizes its employees	2.58	1.037	2	1.075
Promotes trust, involvement, and cooperation among team members	2.64	1.071	3	1.147
Encourages members to think in new ways about problems and question preconceived ideas	2.78	1.044	3	1,089
He is clear about his values and practices what he stands for	2.88	1.061	3	1.125
Instills pride and respect in others and inspires me by being highly competent	2.73	1.171	3	1.371

Table 3. Descriptive statistics of group satisfaction

Items (GSS)	Mean	SD	Median	Variance
The existing climate in the work team	4.58	1.388	5	1.927
Teams' way of working	4.57	1.269	5	1.610
How the leader organizes and coordinates the team's activities	3.94	1.590	4	2.528
Results achieved by the work team	4.82	1.062	5	1.127
Relationships between team members and the leader	3.95	1.483	4	2.199
Relationships between work team members	5.00	1.130	5	1.277
The role each member plays in the team	4.61	1.205	5	1.453

Results showed an association between GTL and GSS (r=0.740; p=0.000), revealing a robust positive relationship between the two variables. The more behaviors transformational leaders present in the leadership style, the greater the level of satisfaction of nurses with the team.

Content analysis of participants' responses and code counting achieved a summary of the characteristics that a leader should or should not have in the participant's opinion. Results are presented in a word cloud, where words are randomly positioned so that the most frequent ones appear more prominent than the others, making their identification easily possible. Regarding the best characteristic of a leader, the terms "*assertive*" and "*motivational"* had the highest frequency (n=10), followed by the term "*empathic*" (n=8), "*communication*" (n=7), and the terms "*honesty*" and "*listener,*" (n=6), in a total of 30 codes (Figure 1).

Figure 1. Word cloud "*The best characteristic in a leader*"

Regarding the characteristic that a leader should not have, the term "*partiality*" was the one that most frequently evoked (n=23), followed by the term "*authoritarian*" (n=17) and "*arrogance*" (n=11), in a total of 21 codes (Figure 2).

Figure 2. Word cloud "*The characteristic a leader should not have*"

Discussion

Most participating nurses were female, consistent with the profession's representation in Portugal (19). One of the transformational leader's behaviors is to be clear about their values and practice what they stand for (8,16), which was valued by the participants. From the nurses' perspective, the behavior least evidenced by their leaders was encouraging and giving recognition to their employees, which contradicts the type of transformative leadership advocated by Dias-Silveira and colleagues (20).

Concerning nurses' satisfaction with their team, the items in which nurses' satisfaction is lower are related to leadership, namely the way the leader organizes and coordinates the team's activities and the relationships between team members and the leader. These results are in line with the results of previous studies (11,12) that argue that the leadership style has a substantial impact on the level of satisfaction of the nursing team. Mondini and colleagues (21) highlighted the importance given by nurses to the leader's planning ability; in fact, priority management transforms performance.

As for the relationship between sociodemographic variables and nurses' satisfaction, only the length of service showed a significant and negative correlation. This inverse relationship between the length of service and the nurses' satisfaction with their team may result from nurses' experience, resulting from different competencies, priorities, and needs, leading to less motivation (22). The leader has a dominant role in the motivation of his team members. The TL style promotes positive behaviors, recognizes individual expectations, motivates, and facilitates nurses' development through coherent communication and conduct, corroborating evidence (13–15, 20). Unlike traditional leadership typologies that value rational processes, TL values emotional processes (10), with emotion leading to action; nurses become self-motivated, contributing to their satisfaction.

The results show that TL significantly influences nurses' satisfaction with their team, reinforcing existing evidence (8,15,23) that suggests a direct positive impact of the TL style on the satisfaction of the nursing

team. Other studies even point out the LT as the style with the highest relationship in job satisfaction perceived by the nursing team (14).

The word cloud analysis on the characteristic that a leader should not have acknowledges that the characteristics evoked by the participants (partiality and authoritarianism) are the opposite of the qualities that a transformational leader must possess. On the other hand, a leader's two characteristics most valued were "*assertive*" and "*motivational*" qualities compatible with TL.

Overall, all characteristics highlighted by the participants are consistent with those of a transformational leader, namely idealized influence, intellectual stimulation, inspirational motivation, and individualized consideration (10,24). Thus, the strong connection of this characteristic with professional ethics is highlighted (10,14–16,24). Participants use other words to identify the characteristics they want to see in their leader: being a motivator, an example, respectful, valuing the team, mentoring, communication, assertiveness, recognition, and justice. These are part of the intellectual stimulus quality of LT. The leader promotes an environment of creative freedom and openness to change (10,13–15,24,25). About inspirational motivation, in which the leader manages to move and motivate the team around an idea through their involvement and motivation that inspires the entire team to follow them. It integrates concepts used by nurses, such as motivator, leadership, strategic vision, inspiration, and merit. These results align with what was identified in several studies (8,10,13–15,24). Seeing each team member as unique, meeting their needs, limitations, and aspirations, promotes an increase in the organization's overall performance, as each professional will give their best. This is only possible through the quality of leadership called individualized

consideration. In the characteristics nurses identify for a leader, some concepts integrate this quality of the transformational leader, such as respect, impartiality, empathy, and humanization, which is corroborated by several researchers (10,14,15,24).

Conclusion

Results reinforce the importance of TL as a management strategy for health organizations, suggesting a strong positive relationship between TL and satisfaction with the team; that is, the increase or decrease of one influences the other in the same direction.

It is also important to note that nurses value qualities that characterize a transformational leader as the best characteristics. Therefore, health organizations, given the proven influence that nurses' satisfaction has on the quality of care, should value and boost transformational leaders for the great potential they have to promote their teams' performance beyond expectations, to effect profound changes in nurses and organizations, as well as to be good political influencers. This leadership is probably more suitable nowadays, characterized by uncertainty, global turmoil, and organizational instability. Healthcare institutions that want to achieve excellent results need visionary, inspiring, and transformative nursing management leaders.

This study has limitations, primarily due to sample size and sampling technique, that prevent representativeness. Therefore, the results should be carefully interpreted.

The need to develop training in transformational leadership is recognized and disseminated among managers in health organizations. More research is needed, with larger samples, to provide robustness to these results and on the effectiveness of TL in promoting care quality and related factors, from organizational to individual characteristics of leaders and team members. The relationship between service length and

satisfaction needs to be addressed in research to identify the demotivational factors.

Acknowledgments

Conflict of interest

The authors declare no conflict of interest.

References

1. Wei H, King A, Jiang Y, Sewell KA, Lake DM. The impact of nurse leadership styles on nurse burnout:: A systematic literature review. Nurse Leader. 2020 Oct 1;18(5):439-50.

2. Lu H, Zhao Y, While A. Job satisfaction among hospital nurses: A literature review. International Journal of Nursing Studies. 2019 Jun 1;94:21-31.

3. Hoboubi N, Choobineh A, Ghanavati FK, Keshavarzi S, Hosseini AA. The impact of job stress and job satisfaction on workforce productivity in an Iranian petrochemical industry. Safety and Health at Work. 2017 Mar 1;8(1):67-71.

4. Dórdio Dimas I, Lourenço PR, Rebelo T. Escala de satisfação com o grupo de trabalho (esagt): construção e estudos de validação. Avances en Psicología Latinoamericana. 2018 Apr;36(1):197-210.

5. Locke EA. What is job satisfaction?. Organizational behavior and human performance. 1969 Nov 1;4(4):309-36.

6. Hanaysha J. Examining the effects of employee empowerment, teamwork, and employee training on organizational commitment. Procedia-Social and Behavioral Sciences. 2016 Aug 19;229:298-306.

7. James-Scotter M, Walker C, Jacobs S. An interprofessional perspective on job satisfaction in the operating room: a review of the literature. Journal of Interprofessional Care. 2019 Nov 2;33(6):782-94.

8. Ferreira VB, Amestoy SC, Silva GT, Trindade LD, Santos IA, Varanda PA. Transformational leadership in nursing practice: challenges and strategies. Revista Brasileira de Enfermagem. 2020 Aug 10;73.

9. Waldman DA, Javidan M. Alternative forms of charismatic leadership in the integration of mergers and acquisitions. The Leadership Quarterly. 2009 Apr 1;20(2):130-42.

10. Dimas ID, Alves M, Lourenço PR, Rebelo T. Equipas de trabalho: Instrumentos de avaliação. Lisboa, Portugal: Edições Sílabo, Lda. 2016.

11. Saleh U, O'Connor T, Al-Subhi H, Alkattan R, Al-Harbi S, Patton D. The impact of nurse managers' leadership styles on ward staff. British Journal of Nursing. 2018 Feb 22;27(4):197-203.

12. Moura AA, Bernardes A, Balsanelli AP, Zanetti AC, Gabriel CS. Leadership and nursing work satisfaction: an integrative review. Acta Paulista de Enfermagem. 2017 Jul;30:442-50.

13. Naseem S, Afzal M, Sehar S, Gilani SA. Relationship between leadership styles of nurse managers and staff nurses Job satisfaction in public hospital of Punjab, Pakistan. International Journal of Social Sciences and Management. 2018 Jul 27;5(3):201-8.

14. Abdelhafiz IM, Alloubani AM, Almatari M. Impact of leadership styles adopted by head nurses on job satisfaction: a comparative study between governmental and private hospitals in Jordan. Journal of Nursing Management. 2016 Apr;24(3):384-92.

15. Jankelová N, Joniaková Z. Communication skills and transformational leadership style of first-line nurse managers in relation to job satisfaction of nurses and moderators of this relationship. InHealthcare 2021 Mar 18;9(3):346.

16. Maziero VG, Bernardes A, Righetti EA, Spiri WC, Gabriel CS. Positive aspects of authentic leadership in nursing work: integrative review. Revista Brasileira de Enfermagem. 2020 Aug 7;73(6):e20190118.

17. Carless SA, Wearing AJ, Mann L. A short measure of transformational leadership. Journal of Business and Psychology. 2000 Sep;14(3):389-405.

18. Van Beveren P, Dimas ID, Lourenço PR, Rebelo T. Psychometric properties of the Portuguese version of the Global Transformational Leadership (GTL) scale.

Revista de Psicología del Trabajo y de las Organizaciones. 2017 Aug 1;33(2):109-14.

19.　Ordem dos Enfermeiros. Estatística de Enfermeiros - Ordem dos Enfermeiros. 2020. Available from: https://www.ordemenfermeiros.pt/estat%C3%A Dstica-de-enfermeiros/. Accessed Dec 18, 2021

20.　Dias-Silveira C, Teixeira-de-Bessa AT, Oroski-Paes G, Conceição-Stipp MA. Gestión del equipo de enfermería: factores asociados a la satisfacción en el trabajo. Enfermería Global. 2017;16(47):193-239.

21.　Mondini CC, Cunha IC, Trettene AD, Fontes CM, Bachega MI, Cintra FM. Authentic leadership among nursing professionals: knowledge and profile. Revista Brasileira de Enfermagem. 2020 May 18;73(4):e20180888.

22.　Abu Yahya O, Ismaile S, Allari RS, Hammoudi BM. Correlates of nurses' motivation and their demographic characteristics. Nursing Forum. 2019;54(1):7–15.

23.　Moumouri S, Intas G, Sarafis P, Nikoletzos A, Triantafilloudis I, Bourantonis D, Stergiannis P. Leadership styles and job satisfaction of nursing staff in a peripheral general hospital in Greece: a survey. Health & Research Journal. 2021;7(3):109-22.

24.　Demitras O, Karaca M, editors. A handbook of leadership styles. Cambridge: Cambridge Scholars Publishing; 2020.

25.　Carvalho LA, Thofehrn MB, Barlem EL, Nunes NJ. Ressignificating theory of professional links in nursing work. Escola Anna Nery. 2019 Dec 13;24(1):20190138.