

Leadership and nursing work satisfaction: an integrative review

Liderança e satisfação no trabalho da enfermagem: revisão integrativa

André Almeida de Moura¹

Andrea Bernardes¹

Alexandre Pazetto Balsanelli²

Ariane Cristina Barboza Zanetti¹

Carmen Silvia Gabriel¹

Keywords

Leadership; Job satisfaction; Nursing team

Descritores

Liderança; Satisfação no trabalho; Equipe de enfermagem

Submitted

May 2, 2017

Accepted

August 21, 2017

Corresponding author

André Almeida de Moura
Rua Prof. Hélio Lourenço, 3900,
14040-902, Ribeirão Preto, SP, Brazil.
andalmo@usp.br

DOI

<http://dx.doi.org/10.1590/1982-0194201700055>



Abstract

Objective: To identify and analyze knowledge about the relationship between leadership and nursing job satisfaction.

Methods: An integrative review of the MEDLINE, CINAHL, EMBASE, PubMed, Web of Science, and LILACS databases to answer the guiding question: What knowledge was produced about the relationship between leadership and nursing job satisfaction in the period from 2011 to 2016? Searches were made to obtain articles, theses, dissertations, and reviews (systematic, narrative and integrative); opinion articles and editorials were excluded. The searches were carried out between October 2016 and January 2017, using the inclusion criteria: primary articles; full text available; written in English, Portuguese or Spanish; and published in the last six years (2011-2016). The extraction of study results was carried out by two reviewers, who defined four thematic categories, with the purpose of analyzing the data obtained in the articles and comparing them with the literature.

Results: Out of a total of 582 articles, 15 were selected; four categories were established: the use of the theoretical reference of leadership in the construction of the articles; the use of instruments to measure leadership and job satisfaction, and the correlation between these variables; the predominance of nursing leadership in the hospital setting; and the direct and indirect relationship between leadership and job satisfaction.

Conclusion: The results showed that nursing leadership has a positive and significant impact on job satisfaction, and the need to develop this competency in nursing professionals was demonstrated.

Resumo

Objetivo: Identificar e analisar o conhecimento da relação entre liderança e satisfação no trabalho da enfermagem.

Métodos: Revisão integrativa nas bases de dados MEDLINE, CINAHL, EMBASE e LILACS para responder à pergunta norteadora: Qual é o conhecimento produzido acerca da relação entre liderança e satisfação no trabalho da enfermagem no período de 2011 a 2016? Para obtenção dos artigos, excluíram-se as teses, dissertações, revisões (sistemática, narrativa e integrativa), assim como artigos de opinião e editoriais. As buscas ocorreram entre outubro de 2016 a janeiro de 2017, utilizando os critérios de inclusão: artigos primários; disponíveis na íntegra; nos idiomas inglês, português e espanhol e; publicados nos últimos seis anos (2011-2016). A etapa de extração dos resultados dos estudos foram realizadas por dois revisores, que estabeleceram quatro categorias temáticas, com a finalidade de analisar os dados obtidos nos artigos, comparativamente com a literatura.

Resultados: Disposto de 582 artigos selecionou-se 15 sendo estabelecidas quatro categorias: o uso do referencial teórico de liderança na construção dos artigos; a utilização de instrumentos para mensurar a liderança e satisfação no trabalho e correlação entre essas variáveis; o predomínio da liderança da enfermagem no contexto hospitalar; e a relação direta e indireta entre liderança e satisfação no trabalho.

Conclusão: Evidenciou-se que a liderança na enfermagem exerce uma relação positiva e significativa sobre a satisfação no trabalho demonstrando a necessidade do desenvolvimento dessa competência nos profissionais de enfermagem.

¹Escola de Enfermagem de Ribeirão Preto, Universidade de São Paulo, Ribeirão Preto, SP, Brazil.

²Escola Paulista de Enfermagem, Universidade Federal de São Paulo, São Paulo, SP, Brazil.

Conflicts of interest: there are no conflicts of interest to declare.

Introduction

In the current globalized scenario, where technological innovations and market demands are continuous, there is no room for keeping archaic (vertically and task-centered) management standards. These innovations and demands are transforming the workplaces and organizational cultures of health institutions. At the same time, all these changes have led health professionals to learn new roles and develop skills such as teamwork, group coordination and leadership.

Leadership is an essential competency for nurse professional practice in society and in the contemporary labor market; therefore, through and from it, nurses guide their work process and lead their teams towards the achievement of shared objectives.⁽¹⁾

Currently, nursing studies focus on how this competency influences individuals in organizational culture, their work environments, patient-related outcomes (patient satisfaction, adverse events), and interactive relationships between leaders and those they lead, for example, the relationship between leadership and job satisfaction. Research aimed at understanding this relationship is based on theories of leadership.⁽²⁾

Based on this aspect, a systematic review analyzed the relationship between leadership theories and the nursing workforce, as well as work environment variables. We hypothesized a positive relationship between certain leadership styles and job satisfaction; that is, as leadership is performed and experienced, there is an increase in job satisfaction. In addition, we also expected to find a positive relationship between leadership and the variables: organizational commitment, empowerment and productivity; and a negative correlation between leadership and turnover and stress at work.⁽³⁾

The research supported these hypotheses, indicating that nursing leadership has a significant impact on the work environment, and job satisfaction and, consequently, on the performance and motivation of professionals. The most satisfied and motivated nursing professionals in their work environment are, in turn, able to reward their organiza-

tion through increased retention and the ability to provide better quality care.⁽⁴⁾

Considering the importance of this theme for nursing management, and that the most recent reviews date from 2010,⁽³⁻⁴⁾ a new update is needed in order to identify the knowledge produced and the existing gaps. Therefore, the present research aimed to identify and analyze the knowledge produced about the relationship between leadership and nursing job satisfaction.

Methods

The present work consists of an integrative review of the literature⁽⁵⁾ that judiciously used the six steps recommended for carrying out an integrative review: 1) selection of the guiding question (What is the knowledge produced about the relationship between leadership and job satisfaction in nursing in the period from 2011 to 2016?); 2) determination of the inclusion and exclusion criteria, and a search in the literature; 3) definition of the information to be extracted, and categorization of studies; 4) evaluation of studies included in the integrative review; 5) interpretation of the results; and 6) presentation of the review with a synthesis of the knowledge produced.⁽⁶⁾

Searches were made to obtain articles, theses, dissertations, and reviews (systematic, narrative and integrative); opinion articles and editorials were excluded. The following electronic databases were consulted: Latin American and Caribbean Health Sciences Literature (LILACS); National Library of Medicine of the U.S. National Institutes of Health (PubMed), Web of Science; the Elsevier EMBASE; and the Cumulative Index to Nursing and Allied Health Literature (CINAHL). We used the controlled descriptors present in: Health Sciences Descriptors (DeCS) - leadership, nursing, and job satisfaction; and MeSH and Emtree - leadership, nursing, and job satisfaction. To cross-reference the terms, the Boolean logical operator "AND" was used to obtain as many articles as possible to answer the guiding question. The searches took place between October 2016 and January 2017, using the

inclusion criteria: primary articles; available in full; written in English, Portuguese or Spanish; published in the last six years (2011-2016) - this period was chosen because there is a review of the previous period.⁽³⁾ The extraction of the study results was carried out by two reviewers, who established four thematic categories, with the purpose of analyzing the data obtained in the articles and comparing them compared to the literature.

Results

Initially, 582 papers were found. After reading of titles and abstracts, analysis of the inclusion and exclusion criteria, and eliminating duplicate articles, 40 articles remained. Of these, after reading the manuscripts in full, 15 articles were obtained that responded to the guiding question of the study; the other 25 articles were excluded, since they did not approach the relationship between leadership and job satisfaction.

The 15 papers presented correlation as their method of study. They were reviewed and classified

using the quality tool for correlational studies developed by Cummings and Estabrooks⁽⁷⁾, which evaluates four areas of each study: research design, sampling, measurement and statistical analysis. It consists of 13 items, and a total of 14 possible points: a point is assigned for each positive item, and one of the items has a two-point score. Based on the evaluated points, the studies were considered: strong (10-14), moderate (5-9), and weak (0-4).

The characterization of the articles is summarized in chart 1, which shows that the production on the subject was as follows. Regarding the quality of the articles, they were distributed in moderate (73.3%; n = 11), and strong articles (26, 6%, n = 4). The largest number of papers was developed in North and South America (Canada, n = 3, 20%; the United States, n = 3, 20%; and Chile, n = 1, 6.6%). Regarding the distribution of the articles over the six years of publication analyzed, the higher ratios were: 2016 (20%, n = 3); 2014 (20%, n = 3); 2012 (20%, n = 3); and 2013 (20% %, n = 3). Regarding the journals where the articles were published, 9 (60%) of the 15 articles were published in nursing journals.

Chart 1. Articles according to authorship, country and year of publication, research design, number of participants, article evaluation, theoretical reference framework, tools used and research outcome

Author(s)/Country/Year	Design/Number of participants/Article evaluation	Leadership theoretical reference	Data Collection instruments for leadership and job satisfaction	Outcomes
MEDLINE				
Choi et al. ⁽⁸⁾ /Malaysia/2016	Correlational Study/n=200 nursing professionals/(strong-10/14)	Transformational leadership	<i>Multifactor Leadership Questionnaire (MLQ)/Scale</i> described by Warr, Cook and Wall	Study analyses showed that empowerment mediated the effect of transformational leadership on job satisfaction in the nursing team. (p=0.001; t-value= 3.28).
Lin et al. ⁽⁹⁾ /Taiwan/2015	Correlational Study / n=651 nurses/(moderate-9/14)	Leadership transformational	MLQ <i>Occupational Stress Indicator</i>	An indirect relationship was demonstrated between the transformational leadership style and job satisfaction, mediated by supervision support; (p<0.01; β=0.37).
Negussie and Demissie ⁽¹⁰⁾ /Ethiopia/2013	Correlational study/n=175 nurses (moderate- 9/14)	Transformational leadership	MLQ <i>Minnesota Satisfaction Questionnaire</i>	Based on the transactional leadership style, it was found that only contingent reward was statically significant and correlated with extrinsic satisfaction (β = 0.45; p <0.01) (β = 0.32; p <0.05), while all five dimensions of transformational leadership style were statistically significant and correlated with intrinsic and extrinsic satisfaction at work. Dimensions of transformational leadership and intrinsic satisfaction: idealized influence (behavior) (β=0.32; p<0.01), idealized influence (attribute) (β=0.29; p<0.01), inspiring motivation (β=0.49; p<0.01), and individual considerations (β=0.35; p<0.01); and extrinsic: idealized influence (behavior) (β=0.19; p<0.05), idealized influence (attribute) (β=0.21; p<0.05), inspiring motivation (β=0.19; p<0.05), intellectual stimulation (β=0.42; p<0.05) and individual considerations (β=0.17; p<0.05).
Lorber and Skela-Savič ⁽¹¹⁾ /Slovenia/2012	Correlational study/ n=509 (with 96 leader nurses & 413 nursing professionals)/(moderate-8/14)	Does not describe theoretical reference	Questionnaires structured by the authors	Showed statistically significant association between job satisfaction and personal characteristics of leaders (p < 0.001; β = 0.158), and leaders' management skills (p < 0.000; β = 0.634).

continue...

...continuation.

Author(s)/Country/Year	Design/Number of participants/ Article evaluation	Leadership theoretical reference	Data Collection instruments for leadership and job satisfaction	Outcomes
CINAHL				
Brewer et al. ⁽¹²⁾ /United States/2016	Correlational study/n=1,037 registered nurses starting in the career/(moderate-8/14)	Transformational leadership	Leadership scale adapted from two other scales <i>Job satisfaction</i> described by Quinn and Staines	Transformational leadership did not have a significant impact on the intention to stay at the service (p=0.947) and on job satisfaction (p=0.125), but it was significantly associated with organizational commitment (p=0.001).
Fallatah and Laschinger ⁽¹³⁾ /Canada/2016	Correlational study/n=93 newly graduated nurses (moderate-9/14)	Authentic leadership	<i>Authentic Leadership Questionnaire</i> (ALQ) <i>North Carolina Center for Nursing - Survey of Newly Licensed Nurses</i>	The supportive environment of professional practice mediated the relationship between authentic leadership and professional satisfaction of new graduate nurses ($\beta = 0.16$; $p < 0.001$). The results suggest that managers using authentic leadership create supportive environments for professional practice and are more likely to improve the professional satisfaction of new graduate nurses.
Laschinger et al. ⁽¹⁴⁾ /Canada/2014	Correlational study/n=1.241 nurses/(moderate-8/14)	Resonant leadership	<i>Resonant Leadership Scale Global Job Satisfaction Survey</i>	Resonant leadership had both a direct influence on job satisfaction ($r = 0.43$; $\beta = 0.16$; $p < 0.05$) and an indirect effect by creating a greater sense of empowerment and subsequently less incivility and Burnout.
Roberts-Turner et al. ⁽¹⁵⁾ /United States/2014	Correlational study/n =935 registered nurses/(moderate-8/14)	Transformational and transactional	<i>Healthcare Environment Survey</i> (HES)	The results showed that both autonomy (transformational leadership, $\beta = 0.069$; $p = 0.002$) and distributive justice (transactional leadership, $\beta = 0.047$; $p < 0.001$) had significant positive effects on registered nurses' job satisfaction, but the greater source of influence was autonomy.
Abualrub and Alghamdi ⁽¹⁶⁾ /Saudi Arabia/2012	Correlational study/n=308 registered nurses/(strong-11/14)	Transformational and transactional	<i>MLQ Job Satisfaction Survey</i>	It was observed that the transformational leadership style increased nurses' job satisfaction level ($r = 0.45$; $p < 0.001$); the results also revealed that the perceived transactional leadership style negatively influences nursing job satisfaction ($r = 0.14$; $p < 0.01$).
Wong and Laschinger ⁽¹⁷⁾ /Canada/2013	Correlational study/ n= 280 nurses/(strong-11/14)	Authentic leadership	<i>ALQ Global Job Satisfaction Survey</i>	This study showed a positive association between authentic leadership and job satisfaction, mediated by structural empowerment ($\beta = 0.19$; $p < 0.01$) of experienced nurses in acute care.
Havig et al. ⁽¹⁸⁾ /Norway/2011	Correlational study/444 nursing employees, interviews and questionnaire for 13 nursing directors and 40 nursing managers/ (strong-12/14)	Leadership styles guided to tasks and relationship	Leadership styles were determined by the selection of items present in three questionnaires: Instrument developed by Brayfield and Rothe	There was a significant correlation between job satisfaction and task-oriented leadership styles ($\beta = 0.55$; ($p = 0.11$) and relationships ($\beta = 0.16$; $p = 0.07$), with a stronger effect on task orientation.
Wang, Chontawan and Nantsupawt ⁽¹⁹⁾ /China/2012	Correlational study/ n=238 nurses/(moderate-9/14)	Transformational leadership	<i>Leadership Practice Inventory</i> (LPI) <i>Nurse Job Satisfaction Scale</i> (NJSS)	There was a positive and statistically significant correlation between the transformational leadership of nursing managers and job satisfaction ($r = 0.556$; $p < 0.001$).
Furtado, Batista and Silva ⁽²⁰⁾ /Portugal/2011	Correlational study/n=266 nurses (22 nursing managers and 244 professionals of the nursing team)/(moderate-8/14)	Situational leadership	<i>Leadership Effectiveness and Adaptability Description Questionnaire</i> Instrument for job satisfaction was developed by the authors	The relationship between leadership components and job satisfaction was statistically significant for leadership profile ($p = 0.008$), in particular.
EMBASE				
Moneke and Umeh ⁽²¹⁾ /United States/2014	Correlational study/n=137 intensive care nurses/ (moderate-5/14)	Does not describe	LPI <i>Job satisfaction</i> was one of the 65 items on a sociodemographic questionnaire	Job satisfaction was found to be positively and significantly correlated with various perceived leadership practices: leaders who shape the path; leaders who inspire a shared view; and leaders who empower others to act. Data analysis also revealed a weak significant correlation between job satisfaction and challenging leaders. Encouraging the heart was not significantly correlated with job satisfaction (no p value).
LILACS				
Álvarez et al. ⁽²²⁾ /Chile/2013	Correlational study/n=214 nurses/ (moderate-7/14)	Situational leadership	<i>SBDQ (Supervisory Behavior Description Questionnaire) Satisfacción Laboral</i> , extracted from the instrument of <i>Instituto Nacional de Seguridad e Higiene del Trabajo de España</i>	It showed a positive relationship between job satisfaction and leadership styles described by the theory used in the study ($\chi^2 = 20.787$; $p < 0.001$).

Discussion

To analyze and discuss the identified articles, four categories were created: the use of the theoretical frame-

work of leadership; instruments used to measure leadership and job satisfaction; nursing leadership in the hospital setting; and the direct and indirect relationship between leadership and nurse job satisfaction.

The use of the theoretical leadership framework

Of the 15 selected studies, 13 (86.6%) presented the theoretical framework of leadership. In contrast, a literature review developed in Brazil on nursing leadership, among other results, found that only 21.05% of the articles selected presented a theoretical basis of leadership. The authors of the review pointed out that the deficit in nurses' theoretical basis regarding leadership can be directly linked to the low instrumentalization of these professionals to perform it in their work environment, and also to their low valorization in training.⁽²³⁾

Transformational leadership was present in seven articles. The Taiwanese authors contended that the characteristics of transformational leaders stimulate their managed employees to share the vision and use it as motivational inspiration to achieve goals.⁽⁹⁾ Research developed in China suggested that through transformational leadership, clinical nurses had a higher level of job satisfaction because they felt they could provide more meaningful service to clients and the entire organization.⁽¹⁹⁾

In one of the studies conducted in the United States, transformational leadership had a large and significant impact on the work environment, but for leadership to be performed in nursing units, some aspects needed to be taken into account, such as organizational structures.⁽¹²⁾ The point of convergence among the three U.S. surveys was that transformational leadership corresponded to a leadership model that provided an approach to promoting organizational and personal change.⁽²⁴⁾

The situational leadership framework was used in both the work developed by the Portuguese authors⁽²⁰⁾ and the research developed in Chile.⁽²²⁾ In the latter article, the authors pointed out that it is important to note that, as proposed by the situational leadership model, there is a style of leadership that is more appropriate for certain situations.⁽²²⁾ According to this model, the style depends directly on the level of preparation, that is, the levels of maturity of the those who are led; in this model, the leader intends to influence those who are led, in order to ensure the achievement of goals. The Portuguese article pointed out that depending on

the situational leadership styles present in a given group, strategies should be developed to minimize certain gaps, and develop ways to promote lines of communication as a way to maximize feedback between leaders and those they manage.⁽²⁰⁾

In addition to these findings, another study reinforces the idea that situational leaders have the knowledge and skills to nurture the professional development of those they lead, while helping them to develop their knowledge of themselves and the context in which they carry out their practice.⁽²⁵⁾

Two other articles utilized the authentic leadership framework,^(13,17) which presents the idea that support for professional practice and empowerment mediate the role of authentic nurse leadership in job satisfaction. This leadership theory is characterized as a guide to effective leadership, and requires building trust and healthier work environments. This model has similarities with two others, the transformational and resonant leadership models⁽³⁾, emphasizing that the main characteristics of authentic leaders are honesty, integrity, and high ethical standards in the development of relationships between those who lead and those who are led.⁽²⁶⁾

The article that used the theoretical framework of resonant leadership, among its other results, reported that the managers who integrated the resonant leadership skills of empathy, relationship, listening and response to concerns into their daily interactions with nurses created a respectful and friendly atmosphere that promoted quality in the relationships between leaders and staff.⁽¹⁴⁾

The leadership framework based on task-oriented behaviors includes planning work activities, clarifying roles and objectives, and monitoring operations and performance. Relationship-oriented behavior, in its turn, is related to support, development and recognition. The article that adopted this framework referred to a positive correlation between job satisfaction and task-oriented leadership styles and relationships, with a stronger effect on task orientation.⁽¹⁸⁾

Finally, no studies were found that established relationships between some contemporary leadership theories and job satisfaction. An example is charismatic leadership (based on personal quali-

ties such as charisma, persuasion, personal power, self-confidence, extraordinary ideas and strong convictions) and leadership coaching (a model that encourages and motivates the managed individuals to learn and maintain the level of readiness to perform a given task).

Further study is needed that utilizes the theoretical frameworks needed to subsidize evaluations of leadership; this way, the relationship between this competency and job satisfaction will have a stronger theoretical foundation. In addition, we must highlight the importance of creating theories that respond to the needs of the Brazilian scenario, and proposing methodological designs that include several world centers to support this theme.

Instruments used to measure leadership and job satisfaction

This category was established because of the importance of identifying the main instruments used to evaluate these two variables, as in the review performed in Canada.⁽³⁾ Except for two studies^(11,15), all others used a specific instrument for each variable. The instruments for measuring leadership that were more used in the research were the Multifactor Leadership Questionnaire (n = 4, 26.6%), followed by the Authentic Leadership Questionnaire (n = 2, 13.3%) and the Leadership Practice Inventory (n = 2, 13.3%). Two of these three instruments sought to highlight aspects regarding the exercise of transformational leadership (MLQ and LPI), while the Authentic Leadership Questionnaire addresses authentic leadership.

The Multifactor Leadership Questionnaire was developed in the 1990s, and distinguishes leadership styles perceived in the transformational and transactional dimensions. This questionnaire consists of the dimensions of transformational leadership (idealized influence, inspiring motivation, intellectual stimulation and individualized consideration) and transactional leadership (contingent reward, active and passive exception management), as well as containing items regarding laissez-faire leadership.⁽²⁷⁾ Of the four manuscripts that used this instrument, two used the whole instrument^(10,16) and the other two used part of it.^(8,9)

The Leadership Practice Inventory, used in the article developed in the United States⁽²¹⁾ and China,⁽¹⁹⁾ measures the perception of the transformational leadership practices of the exemplary leader. This instrument has been used as an assessment tool to measure leadership practices associated with the transformational leadership style, as identified by nursing leaders and their staff. It consists of 30 questions, and is organized in five distinct domains: to challenge the process; to inspire a shared vision; to allow others to act; to model the path; and to encourage the heart.⁽²¹⁾ The instrument assesses behaviors in each of the five dimensions/practices described above, with six questions for each of the leadership practices; the responses are arranged on a scale of 1 to 10. In addition, the instrument has high internal consistency, test-retest reliability, and high reliability of specific subscales.⁽²⁴⁾

The Authentic Leadership Questionnaire presents a 16-item scale divided into four subscales that reflect the components of authentic leadership: relational transparency, moral perspective, balanced processing, and self-awareness. The responses are measured on a five-point Likert scale of 0 to 4 points; the highest scores reflect more authentic leadership.⁽²⁶⁾

As for the instruments applied to measure job satisfaction, a number of questionnaires were identified. A systematic review of the reliability and validity of measurement scales of job satisfaction reiterates the importance of the conceptual basis of satisfaction and the validation of content, because job satisfaction can be interpreted in different ways. The literature shows that, although some researchers have theorized about more or less specific work factors that are relevant to job satisfaction, there is no gold standard indicating which aspects of work should be taken into account when job satisfaction is measured. In addition, seven instruments are listed that meet the defined criteria for reliability and validity.⁽²⁸⁾

Nursing leadership in the hospital setting

The hospital environment was present in 9 of the 15 articles (60%). In this setting, in many situations, nurses assume the status of managers, and they need

preparation to assume their role as leaders. This is a basic condition for: seeking transformations in daily practice; aiming at ensuring quality of care provided to patients; and reconciling organizational goals with the needs of nursing teams.⁽²⁹⁾ Therefore, leadership is a vital element in the hospital setting and in the care provided to patients.

There was a diversity among the hospitals analyzed. The Brazilian study should be highlighted, which showed that, regardless of the characteristics of the hospitals, the leading nurses reported similar difficulties in positioning themselves before nursing teams and when facing conflict management.⁽³⁰⁾ In addition, a study with nurses in intensive care units found that belonging to private and public hospitals did not interfere with the exercise of their leadership.⁽³¹⁾ Moreover, due to the number of articles in the hospital environment, there is a need to explore this relationship in other health-care settings.

The direct and indirect relationship between leadership and job satisfaction

Based on the statistical analyses in the articles, it was found that empowerment mediated the effect of transformational leadership on job satisfaction in nursing teams,⁽⁸⁾ as well as on authentic leadership and job satisfaction.⁽¹⁷⁾ In another study, the indirect relationship between transformational leadership and job satisfaction took place through supervised support.⁽⁹⁾ The supportive environment of professional practice mediated the relationship between authentic leadership and professional satisfaction of new graduate nurses in Canada.⁽¹³⁾ In view of these findings, one can observe that the relationship between leadership and job satisfaction occurs through another variable, such as empowerment, supervised support, and support of professional practice.

Regarding nursing empowerment, it should be highlighted that leaders in this profession have opportunities to make a difference in health system reforms through effective development of leadership. Moreover, based on the evidence, the use of the theoretical framework of empowerment is recommended, as well as strategies to promote the au-

tonomy of nursing leaders, which has the potential to empower teams.⁽³²⁾

Regarding the other two aspects (supervised support and support of professional practice) mentioned above that mediate the relationship between leadership and job satisfaction, it is important to mention research that reinforces the importance of establishing an environment of professional support and supervised support. When analyzing the expectations of nursing teams in face of leadership, the interviewed professionals mentioned that future leaders need to be people who allow frank and open communication, have the capacity to recognize and attend to the needs of teams, know how to give support when needed, and seek harmony in the work environment, working for the union and integration of the group and ensuring the satisfaction of those led.⁽³³⁾

Ten other studies^(10,11,14-16,18,20-22,34) showed positive and significant, direct correlations between the different leadership styles analyzed and job satisfaction; that is, as leadership is exercised and perceived, there is an increase in job satisfaction. The influence of leadership style in the work environment is well-known, because it can lead to synergy or disintegration of teams. Therefore, it is up to leaders to rethink the way they lead their groups, as well as whether their attitudes follow their professional trajectories and those of the organization to which they belong.⁽³⁵⁾

However, one of the articles observed that transformational leadership did not have a significant impact on the intention of employees to remain in the service, or on job satisfaction, but it was significantly associated with organizational commitment.⁽¹²⁾ However, this review observed that leadership has a positive effect on the work environment, specifically on job satisfaction, evidenced by the number of articles in which this relationship is demonstrated, and by the statistical analyses present in them.

Conclusions

This integrative review shows that nursing leadership exerts a positive influence on job satisfaction, whether or not this is mediated by another

variable, reiterating the importance of the investment of health organizations in the improvement and development of this competency in nursing professionals. In addition, a predominance of the hospital setting was observed, which demonstrates the need to develop further studies in other healthcare settings, as well as to ensure that these new investigations, when being developed, are based on theories of leadership; the use of adequate, reliable, and internally consistent instruments is required.

Collaborations

Moura AA, Bernardes A, Balsanelli AP, Zanetti ACB and Gabriel CS declare that they contributed to the design of the study, writing of the article and final approval of the version to be published.

References

- Almeida E, Piexak DR, Ilha S, Caino MR, Backes DS. Leadership of the nurse technically responsible: a necessity for the professional practice. *Rev Pesq Cuid Fundam Online*. 2014; 6(3):998-1006.
- Marquis BL, Huston CJ. *Administração e liderança em enfermagem: teoria e prática*. 8th ed. Porto Alegre: Artmed; 2015. 680p.
- Cummings GG, MacGregor T, Davey M, Lee H, Wong CA, Lo E, et al. Leadership styles and outcome patterns for the nursing workforce and work environment: A systematic review. *Int J Nurs Stud*. 2010; 47(3):363-85.
- Germain PB, Cummings GG. The influence of nursing leadership on nurse performance: a systematic literature review. *J Nurs Manag*. 2010; 18(4):425-39.
- Whittemore R. Combining evidence in nursing research: methods and implications. *Nurs Res*. 2005; 54(1):56-62.
- Mendes KD, Silveira RC, Galvão CM. Revisão integrativa: método de pesquisa para a incorporação de evidências na saúde e na enfermagem. *Texto Contexto Enferm*. 2008; 17(4):758-64.
- Cummings G, Estabrooks CA. The effects of hospital restructuring that included layoffs on individual nurses who remained employed: a systematic review of impact. *Int J Sociol Soc Policy*. 2003; 23(8/9):8-53.
- Choi SL, Goh CF, Adam MB, Tan OK. Transformational leadership, empowerment, and job satisfaction: the mediating role of employee empowerment. *Hum Res Health*. 2016; 14(1):73.
- Lin P-Y, MacLennan S, Hunt N, Cox T. The influences of nursing transformational leadership style on the quality of nurses' working lives in Taiwan: a cross-sectional quantitative study. *BMC Nurs*. 2015; 14(1):33.
- Negussie N, Demissie A. Relationship between leadership styles of nurse managers and nurses' job satisfaction in Jimma University Specialized Hospital. *Ethiop J Health Sci*. 2013; 23(1):49-58.
- Lorber M, Skela Savič B. Job satisfaction of nurses and identifying factors of job satisfaction in Slovenian Hospitals. *Croat Med J*. 2012; 53(3):263-70.
- Brewer CS, Kovner CT, Djukic M, Fatehi F, Greene W, Chacko TP, et al. Impact of transformational leadership on nurse work outcomes. *J Adv Nurs*. 2016; 72(11):2879-93.
- Fallatah F, Laschinger HK. The influence of authentic leadership and supportive professional practice environments on new graduate nurses job satisfaction. *J Res Nurs*. 2016; 21(2):125-36.
- Laschinger HKS, Wong CA, Cummings GG, Grau AL. Resonant leadership and workplace empowerment: the value of positive organizational cultures in reducing workplace incivility. *Nurs Econ*. 2014; 32(1):5-15.
- Roberts-Turner R, Hinds PS, Nelson J, Pryor J, Robinson NC, Wang J. Effects of leadership characteristics on pediatric registered nurses' job satisfaction. *Pediatr Nurs*. 2014; 40(5):236-41.
- AbuAlRub RF, Alghamdi MG. The impact of leadership styles on nurses' satisfaction and intention to stay among Saudi nurses. *J Nurs Manag*. 2012; 20(5):668-78.
- Wong CA, Laschinger HK. Authentic leadership, performance, and job satisfaction: the mediating role of empowerment. *J Adv Nurs*. 2013; 69(4):947-59.
- Havig AK, Skogstad A, Veenstra M, Romøren TI. The effects of leadership and ward factors on job satisfaction in nursing homes: a multilevel approach. *J Clin Nurs*. 2011; 20(23-24):3532-42.
- Wang X, Chontawan R, Nantsupawat R. Transformational leadership: effect on the job satisfaction of registered nurses in a hospital in China. *J Adv Nurs*. 2012; 68(2):444-51.
- Furtado LC, Batista MG, Silva FJ. Leadership and job satisfaction among Azorean hospital nurses: an application of the situational leadership model. *J Nurs Manag*. 2011; 19(8):1047-57.
- Moneke N, Umeh OJ. Factors influencing critical care nurses' perception of their overall job satisfaction. *JONA J Nurs Adm*. 2014; 43(4):201-7.
- Álvarez LG, Sotomayor EG, Figueroa GM, Hernández, Paulina Segura Martínez CL. Relación de la satisfacción laboral con estilos de liderazgo en enfermeros de hospitales públicos, Santiago, Chile. *Cienc Enferm*. 2013; 19(1):11-21.
- Amestoy SC, Backes VMS, Trindade L de L, Canever BP. Produção científica sobre liderança no contexto da enfermagem. *Rev da Esc Enferm USP*. 2012; 46(1):227-33.
- Ross EJ, Fitzpatrick JJ, Click ER, Krouse HJ, Clavelle JT. Transformational leadership practices of nurse leaders in professional nursing associations. *JONA J Nurs Adm*. 2014; 44(4):201-6.
- Jackson C. Review: The influence of authentic leadership and supportive professional practice environments on new graduate nurses job satisfaction. *J Res Nurs*. 2016; 21(2):137-8.
- Wong CA, Spence LHK, Cummings GG. Authentic leadership and nurses' voice behavior and perceptions of care quality. *J Nurs Manag*. 2010; 18(8):889-900.
- Fonseca AM, Porto JB. Avaliação psicológica. *Aval Psicol*. 2013; 12(2):157-66.
- Van Saane N, Sluiter JK, Verbeek JH, Frings-Dresen MH. Reliability and validity of instruments measuring job satisfaction--a systematic review. *Occup Med (Lond)*. 2003; 53(3):191-200.
- Amestoy SC, Pacheco LF, Guanilo ME, Trindade LL, Silva CN. Exercício da liderança do enfermeiro em unidade de terapia intensiva. *J Nurs Health*. 2014; 4(2):143-54.

30. Amestoy SC, Backes VM, Trindade LL, Ávila VC, Oliveira AF, Silva CN. Compreensão dos enfermeiros sobre o exercício da liderança no ambiente hospitalar. *Cogitare Enferm.* 2014; 19(3):475-82.
31. Balsanelli AP, Cunha IC. Liderança ideal e real dos enfermeiros de unidade de terapia intensiva em hospitais privados e públicos. *Cogitare Enferm.* 2016; 21(1):1-7.
32. MacPhee M, Skelton-Green J, Bouthillette F, Suryaprakash N. An empowerment framework for nursing leadership development: supporting evidence. *J Adv Nurs.* 2012; 68(1):159-69.
33. Moura GM, Inchauspe JA, Dall'Agnol CM, Magalhães AM, Hoffmeister LV. Expectativas da equipe de enfermagem em relação à liderança. *Acta Paul Enferm.* 2013; 26(2):198-204.
34. Wang X, Chontawan R, Nantsupawat R. Transformational leadership: effect on the job satisfaction of Registered Nurses in a hospital in China. *J Adv Nurs.* 2012; 68(2):444-51.
35. Balsanelli AP, Cunha IC. Ambiente de trabalho e a liderança do enfermeiro: uma revisão integrativa. *Rev da Esc Enferm da USP.* 2014; 48(5):938-43.