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Transformational leadership to promote nurse practitioner practice in primary care

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Abstract

Aim: This study investigated transformational leadership from the perspectives of primary care nurse practitioners.

Background: The growing workforce of nurse practitioners in the United States could play a critical role in meeting the increasing demand for primary care. Little is known about how leadership within primary care practices could promote nurse-practitioner care. Transformational leadership is a widely recognized leadership style that affects clinician practice and outcomes.

Method: A cross-sectional survey design was used to collect data from nurse practitioners in New York state in 2012. The online survey containing measures of nurse practitioners and leadership relationships was completed by 278 nurse practitioners.

Results: The four factors of transformational leadership—idealized influence, inspirational motivation, intellectual stimulation, and individual consideration—were recognized by nurse practitioners. Almost half of nurse practitioners reported that leadership did not share information equally between nurse practitioners and physicians (idealized influence), and 45.9% reported that nurse practitioners were not represented on important organisational committees (intellectual stimulation).

Conclusion: Transformational leadership can be applied to promote nurse practitioner practice in primary care. Future research should explore how transformational leadership affects nurse practitioner care and outcomes.

Implications for Nursing Management: Leaders in primary care practices should consider applying transformational leadership principles to promote nurse practitioner practice.

KEYWORDS

nurse practitioner, primary care, transformational leadership

1 | INTRODUCTION

The United States is facing a shortage of primary care providers given the increased demand for health care services (Sargen, Hooker, & Cooper, 2011). Expansion of the nurse practitioner (NP) workforce and development of team-based care-delivery models have been recommended as two related approaches to increase the primary care capacity (Institute of Medicine, 2011; National Committee for Quality Assurance, 2014). The NP workforce in the United States is expected to increase by 93% between 2013 and 2025, and many health care organisations will see an increase in the numbers of NPs in their staffing mix (Health Resources and Services Administration, 2016). However, the expansion of the NP workforce and development of team-based care models will not address quality

and access-to-care challenges facing primary care as studies demonstrate that NPs face major barriers within their employment settings, such as lack of support from and poor relationships with leadership, which limit their contributions to optimal team-based care (Pasarón, 2013; Poghosyan, Nannini, Stone, & Smaldone, 2013). Nurse practitioners' advanced skills and training are often not optimally utilized within their organisations. Organisational leadership either lacks awareness about NP competencies or does not provide NPs with access to resources. For example, leaders within health care organisations such as practice managers or medical directors do not share information with NPs to support their care delivery or take NPs' concerns seriously (Poghosyan, Nannini, Stone, et al., 2013). Such poor organisational attributes and relationships between NPs and administrators not only negatively impact the practice of NPs but also undermine teamwork between NPs and physicians (Poghosyan & Liu, 2016).

For decades, business management and organisational researchers have explored the role of leadership in the success of individuals, teams, and organisations (Bass, 1985; Wang, Sui, Luthans, Wang, & Wu, 2014). Leaders are capable of motivating their followers, supporting their work performance, and helping the team and the organisations achieve the best outcomes (Bass, 1990; Herold, Fedor, & Caldwell, 2008). One of the most recognized forms of leadership, transformational leadership, has been highlighted as an effective leadership style to maximize the performance and outcomes of individuals and teams (Avolio & Yammarino, 2013; DeRue, Nahrgang, Wellman, & Humphrey, 2011; Piccolo et al., 2012; Wang, Oh, Courtright, & Colbert, 2011). Transformational leaders within various organisations are capable of encouraging their followers to strive for, and achieve, the common mission (Van Dierendonck, Stam, Boersma, deWindt, & Alkema, 2014). In addition, they take their followers' concerns seriously and address them (Kouzes & Posner, 2002). Transformational leadership is associated with job satisfaction among the followers and improved team performance (Braun, Peus, Weisweiler, & Frey, 2013; Dust, Resick, & Mawritz, 2013). In the health care sector, the significance of transformational leadership as it relates to organisational commitment, productivity, job satisfaction, and performance of clinicians and its impact on patient safety and outcomes are widely recognized (Lyder et al., 2012; McFadden, Henagan, & Gowen, 2009; Vogus, Sutcliffe, & Weick, 2010). Researchers concluded that transformational leaders have the potential to slow nurses' attrition and retain nurses by creating a positive work environment (Brewer et al., 2016; Weberg, 2010). Furthermore, a systematic review of evidence demonstrates that transformational leadership is associated with positive patient outcomes such as low rates of mortality, medication errors, falls, and infections (Wong, Cummings, & Ducharme, 2013). The Institute of Medicine (2001) identified transformational leadership, in its work on patient safety, as a solution to poor leadership outcomes, such as weakened trust, lack of feedback, minimal employee involvement in developing change initiatives, and limited voice on committees. Researchers have studied the role of transformational leadership in promoting the practice of registered nurses (Casida, Crane, Walker, & Wargo, 2012; Cummings et al., 2010; Weberg, 2010), but to date little attention has been given to the importance of transformational leadership in promoting the practice of advanced practice registered nurses (APRN) such as NPs despite the fact that the researchers indicate the critical value transformational leadership has on maximizing the potential of APRNs (Kapu & Jones, 2016). The purpose of this study is to investigate transformational leadership in primary care practices from the perspectives of NPs.

1.1 | Conceptual framework

Transformational leadership was first conceptualized by John McGregor Burns as leaders and followers moved together toward enhanced purpose and inspiration (Burns, 1978). Burns stated that, in order to enhance effective leadership, leaders should focus on meeting the followers' needs so they are motivated to align their values with those of an organisation. Burns noted that transformational leaders embodied qualities that motivated followers. Transformational leaders also elevate the followers' interests and increase their awareness and commitment to the group's mission. Bass (1985) developed concepts related to how transformational leaders have an impact on the development and performance of followers and stated that if individuals were aware of how their outcomes could make a difference they would be more motivated to achieve them. Furthermore, Northouse emphasized that leaders can motivate followers by emphasizing their value and increasing followers' awareness about their capabilities (Northouse, 2013). Leaders create an organisational culture through their impact on followers and seek to empower them in an exchange between themselves and followers, which mobilizes followers to value collaboration instead of competition. Moreover, if followers are engaged in the mission of the group or the organisation, then they are inspired to deliver their best. Such empowered followers model the behaviours of the leader and develop a sense of group identity. Followers know the leader is invested in the achievement of their goals, which results in their motivation to achieve a collective purpose (Bennis & Nanua, 1995; Kouzes & Posner, 2002).

Four transformational leadership factors have been identified by Bass as promoting followers (Bass, 1985). First, *idealized influence*—followers seek to model the behaviours of a transformational leader and perceive their leader as trustworthy and respectful. Followers believe that their leader prioritizes their needs, which promotes the follower's sense of loyalty to the leader. Followers are inspired to do what it takes and make the extra effort to achieve the desired results because the leader has convinced them that together they can achieve important goals. Second, *inspirational motivation*—the leader provides followers with a clear message that the collective purpose is greater than individual contributions. Inspirational motivation is operationalized as clear communication about high expectations and achieving the current and future goals of the organisation. Followers push themselves to reach goals when they receive such feedback. Third, *intellectual stimulation*—followers are intellectually stimulated to solve problems. Intellectual

stimulation is reflected in statements about creativity and testing of ideas. Followers seek out challenges and strive for improvement. For followers to be intellectually stimulated, they must have a sense that the structures and processes are orderly and rational. Last, *individualized considerations*—the leader focuses on the followers' needs to ensure they are fulfilled. Individualized considerations include leaders' supportive behaviours such as listening, advising, and mentoring to help followers grow.

In this study, the four transformational leadership factors are framed through the responses of NP followers about the organisational leadership in primary care practices.

2 | METHOD

2.1 | Design

This study is a part of a large investigation of NP practise within primary care practices. A cross-sectional survey design was used to collect data from NPs practising in one state in the United States (New York State) in 2012. We specifically limited the data collection to one state because state-level policy regulations governing NP practice vary across states within the United States (Robert Wood Johnson Foundation, 2017). The study was approved by the Institutional Review Board of [Columbia University Medical Center].

2.2 | Sample

Primary care NPs were recruited from the membership list of the New York Nurse Practitioner Association (NYNPA), the NP advocacy organisation in New York State. Only NPs who had one of the following specializations—adult, family, paediatric, women's health or gerontology—were invited to participate in the study because NPs from these specialties are more likely to deliver primary care (Health Resources and Services Administration, 2002). The NYNPA membership list included 1,950 NPs within these specialties. The NYNPA sent an email invitation to NPs with a link to the online survey asking for their participation. In addition, the survey asked NPs to self-identify whether they practise in a primary care setting and deliver primary care services. Overall, 278 eligible NPs completed the survey. It was not possible to compute the response rate as we were unable to determine how many emails were active or reached NPs.

2.3 | Survey tool

Nurse practitioners were asked to complete a survey tool that contained NP demographic measures such as age, sex, education, and years of experience, and work characteristics such as the location and type of organisation (e.g., physician practice). The survey also contained a series of questions generated from the existing evidence and qualitative interviews with NPs (Poghosyan, Nannini, Stone, et al., 2013) on their employment settings, organisational structures, and leadership, some of which were designed for developing the Nurse Practitioner Primary Care Organisational Climate Questionnaire (NP-PCOCQ)—a measure of NP organisational climate (Poghosyan, Nannini, Finkelstein, Mason, & Shaffer, 2013). The NP-PCOCQ has been validated as a measure of organisational climate and its internal consistency, reliability, construct, discriminant, and predictive validity has been established (Poghosyan, Chaplin, & Shaffer, 2017). One of the subscales of the tool called NP-Administration Relations measures various aspects of the relationship between NPs and organisational leaders such as whether leaders share ideas with NPs or create a comfortable environment for NPs to practise (Poghosyan, Nannini, Finkelstein, et al., 2013). All survey items had a four-point Likert scale ranging from "strongly agree" to "strongly disagree."

The authors took two approaches, conceptual and empirical, to ensure that the survey items could be grouped and used to provide evidence about transformational leadership from the perspectives of NPs. First, they each independently reviewed the survey items completed by NPs and mapped the items on each transformational leadership factor. They had regular conference calls to review the alignment of the items on each transformational leadership factor and resolve discrepancies. The authors achieved consensus regarding which items conceptually map to which transformational leadership factors. After the mapping, the authors took an empirical approach and computed the internal consistency reliability coefficients, Cronbach's alphas, of the item groupings to demonstrate how well the items measure the same construct (Cronbach, Gleser, Nanda, & Rajaratnam, 1972).

2.4 | Data collection

We used electronic survey methods to collect data from NPs. A survey was developed in SurveyMonkey—a web-based platform for administrating surveys and collecting participants' responses. The NYNPA sent an email invitation with the online survey link to NPs within the five primary care specialties. The invitation described the study, its purpose, as well as participants' rights, and asked that only eligible NPs participate in the study. The first screen in the online survey contained the eligibility questions for NPs practising in primary care settings. The NPs' responses to these questions determined whether they could proceed to the full survey. The survey took 15–20 min to complete. We followed a modified Dillman process for online surveys and sent reminders to achieve a maximum response rate (Dillman, Smyth, & Christian, 2009).

3 | DATA ANALYSIS

We analysed the survey data using SPSS 24 statistical software (https://www.ibm.com/analytics/us/en/technology/spss/). After mapping the survey items on each transformational leadership factor, we computed Cronbach's alphas. Then we dichotomized each survey item by combining "strongly disagree" and "disagree" responses into a "disagree" category, and "strongly agree" and "agree" responses into an "agree" category. We computed the proportions

of NPs agreeing and disagreeing with each statement. Descriptive statistics were computed on all demographic variables. Categorical variables such as sex and education were studied via frequency tables. The distributions of the continuous variables such as age were examined by means and standard deviations.

4 | RESULTS

Overall, 342 NPs accessed the survey; out of which 64 reported they did not deliver primary care and 278 NPs completed the survey. Table 1 demonstrates the demographic and work characteristics of the study participants. Ninety per cent of the participants were white and female, with an average age of 52 years. Fifteen per cent of the NPs had less than one year of experience in their current position. Most NPs (53%) practised in physician offices—clinics owned by physicians. Thirty-four per cent of NPs practised in primary care practices affiliated with hospitals. The rest practised in community health centres, which are practices receiving government funding.

Table 2 presents NP responses to the items mapped on each transformational leadership factor and their respective Cronbach's alphas, which were above 0.70 (Cronbach et al., 1972). The Cronbach's alphas ranged from 0.785 to 0.902 and provided empirical evidence that the items measure the same construct.

TABLE 1 Demographic and work characteristics of the NPs from New York

Characteristics	*N* = 278
Demographics	
Age (years)	
Mean (*SD*)	52.03 (9.56)
Range	24–75
Sex % (*n*)	
Female	90.2 (220)
Race % (*n*)	
White	92.8 (219)
Highest nursing degree % (*n*)	
Master's degree/post-master's certificate	84 (205)
Doctor of nursing practice (DNP)	7 (18)
Other	9 (21)
Work characteristics	
Years in the current position % (*n*)	
Less than 1 year	15 (37)
1–6 years	41 (99)
More than 6 years	44 (107)
Average hours worked per week % (*n*)	
Less than 20 hr	17 (43)
20–40 hr	43 (104)
More than 40 hr	40 (97)
Main practice site % (*n*)	
Physician's office	53 (98)
Community health centre	13 (25)
Hospital-affiliated practice	34 (63)
Practice location % (*n*)	
Urban	34 (84)
Suburban	46 (111)
Rural	20 (48)

TABLE 2 Nursing practitioners' responses to the survey items assessing each dimension of transformational leadership

Transformational leadership factors	NP responses (Percent disagreeing) % (n)
Idealized influence (Cronbach's alpha = 0.895)	
Leadership informs NPs about changes taking place in the organisation	29.9 (83)
Leadership takes NP concerns seriously	33.1 (88)
Leadership shares information equally with NPs and physicians	50.6 (133)
Leadership treats NPs and physicians equally	57.4 (147)
Inspirational motivation (Cronbach's alpha = 0.785)	
My contributions to the organisation are visible	9.0 (25)
I am able to review outcome measures of my care	30.3 (77)
In my organisation, there is a system in place to evaluate my care	32.7 (86)
I regularly get feedback about my performance in my organisation	33.8 (94)
Intellectual stimulation (Cronbach's alpha = 0.830)	
My organisation creates an environment where I can practice independently	15.8 (42)
Leadership promotes an environment that is comfortable to work in	25.8 (66)
Leadership encourages NPs to share their ideas	39.8 (102)
NPs are represented in important committees in my organisation	45.9 (122)
Individual consideration (Cronbach's alpha = 0.902)	
I feel valued by my organisation	24.4 (62)
In my organisation, leadership supports NP ideas	35.2 (84)
Leadership pays attention to NP requests	35.2 (88)
In my practice setting, leadership listens to NPs	38.0 (95)

On the four items on the idealized influence dimension, the responses of NPs varied widely, from about 30% to 57% of NPs disagreeing with the statements. The majority of NPs reported that their leadership informs NPs about changes taking place in their organisations, with about 30% of NPs disagreeing with this statement. Similarly, almost one-third of the participants reported that leadership did not take their concerns seriously. More than half of the NPs reported that their leadership did not share information equally with NPs and physicians. Nurse practitioners' responses to the items mapped to the inspirational motivation domain also ranged very widely with more positive response from NPs. Between 9% and about 34% of NPs disagreed that aspects of inspirational motivation do not exist in their practices. For example, only about 9% of NPs reported that their contributions to the organisation were not visible; however, 33.8% of NPs reported not receiving performance feedback.

Nurse practitioners' responses to the items in the intellectual stimulation domain also had a wide range. Only about 15% of NPs reported that their organisation lacked an environment where NPs could practise independently. However, more than 45% of the NPs reported that NPs were not represented on important organisational committees. About 40% of the NPs reported that their administration did not encourage NPs to share their ideas.

On the individualized consideration factor, the responses were more similar with between 25% and 38% of NP reporting negative findings. About one quarter of NPs reported being valued by their organisations. Almost 40% of NPs indicated that leaders in their organisations did not listen to NPs. More than 35% of NPs responded that their leadership did not support their ideas or pay attention to NPs' requests.

5 | DISCUSSION

Transformational leadership is an effective style of leadership in health care organisations. It has also been recognized as an effective strategy to maximize the contributions of APRNs to patient care (Kapu & Jones, 2016). As far as we are aware, this is the first study that investigated transformational leadership from the perspectives of primary care NPs to provide insights to help promote NP practice. As more NPs are being employed in different types of primary care practices in the United States, it is critical to understand how to enhance NP practice through effective leadership.

Our findings indicate that NPs recognize the presence or absence of the four factors of transformational leadership and appear to understand their purpose and roles as followers to advance the mission of the organisation and help achieve the organisational goals. However, we found a wide variation in NPs' responses regarding aspects of transformational leadership. While many NPs agree that their leaders exhibit qualities of a transformational leader, such as making NPs' contributions to the organisation visible or creating an environment where NPs can practise independently, others indicate opportunities for their leaders to more fully apply the factors of transformational leadership such as treating NPs and physicians equally and sharing the resources between these clinicians in a similar manner. Nurse practitioners' responses indicate that transformational leadership aspects exist in their practices—particularly inspirational motivation, which received most positive responses from NPs. Transformational leadership has the potential to motivate NPs and promote NP practice to achieve the collective purpose of primary care practices—ensuring better care for patients.

6 | IMPLICATIONS FOR NURSING MANAGEMENT

Our findings inform practice leaders about the perception of NPs regarding the leader qualities in their practices. Nurse practitioner responses indicate that many aspects of transformation leadership are present in their work settings. However, there are aspects that require attention. A hallmark of transformational leadership is the motivation to follow the leader because the leader is trustworthy and respected (idealized influence). Perceptions of unequal treatment of NPs and physicians and lack of communication between NPs and leadership observed in this study may prevent NPs from following the leader and believing that they can achieve the results needed. For example, approximately half of the NPs did not feel that their leaders share information with them or treat them equally as compared to physicians within their organisations. If NPs do not have access to resources such as information and perceive they are not being treated equally, NPs may not find their leaders trustworthy and will not have a sense of loyalty to their leaders. The perception of unequal access to resources may breed competition between NPs and physicians rather than collaboration. Barriers, such as not sharing information or resources with NPs, should be addressed as it may affect NPs' ability to make the extra effort to meet organisational and patient expectations.

Many NPs reported that their leaders indeed exhibited qualities consistent with the inspirational motivation factor of transformational leadership. Yet, a third of NPs reported that their organisations did not have a system to evaluate the care they provide nor did NPs receive feedback about their performance. Feedback is a necessary part of the inspirational motivation needed to encourage NPs to achieve higher expectations through participation in problem solving and practice-improvement initiatives. Thus, leaders should provide NPs with timely and constructive feedback.

Similarly, most NPs reported that their organisations create an environment where NPs can practise independently (intellectual stimulation). However, a large number of NPs reported that their leaders did not encourage NPs to share their ideas or NPs were not represented in important organisational committees. Leaders have the capacity to promote intellectual stimulation by creating a

positive work environment that supports NPs. They can also create opportunities to involve NPs in important committees where practice issues related to NP care can be raised and addressed. In addition, NPs' input on patient care may be sought by encouraging NPs to share their ideas to benefit patient care. Leaders will benefit from improved engagement of and direct input from NPs in their organisations. Transformational leadership can create a positive work environment to retain nurses (Brewer et al., 2016). Promoting transformational leadership in primary care practices may thus also promote NP retention as many NPs report intending to leave their job (Poghosyan, Liu, Shang, & D'Aunno, 2017).

The responses of NPs to the individual consideration items were more comparable. Most NPs felt valued by their organisations. However, a significant proportion of NPs reported that leadership was not engaged in listening to NPs or paying attention to NP requests. In order to ensure that NPs are effective members of organisations, leaders need to be aware of and address NPs' concerns by seeking this information from NPs.

Leaders can provide NPs with timely individual feedback about their care and create mechanisms to evaluate NP care. Such feedback will provide opportunities for improvement. In addition, the leaders can ensure that NPs have similar access to organisational resources as other team members taking on similar primary care provider roles. As primary care is being transformed into care delivered by teams, assuring that NPs are supported in these teams is critical. Leaders can apply transformational leadership as a process to improve teamwork. The recommendations from the Institute of Medicine's landmark report (Institute of Medicine, 2011) also called for leaders to expand opportunities at all levels for nurses including NPs. Our results indicate that leaders can make greater efforts to empower NPs and help them to become highly productive members in health care teams focused on improving quality of patient care and outcomes.

7 | IMPLICATIONS FOR RESEARCH

Researchers can study the relationship between organisational structures, leader behaviours, and NP practice. As NPs are employed in various types of primary care practices, it is important to understand whether the transformational leadership processes are applied differently in these settings and how they affect NP practice. The small sample size in this study did not allow such analysis. The investigation of leadership qualities might inform our understanding of how to better engage and train leaders in practices employing NPs as they might not be familiar with the NP role, competencies, and needs. It is critical for practices to train leaders to meet the needs of NPs in order to retain NPs and enhance their individual and team performance. It is thus also important to assess the impact of leader behaviours on their followers. There are tools to measure transformational leadership (Bass & Avolio, 1995; Edwards, Knight, Broome, & Flynn, 2010) but these tools were not applicable to this study as one of them was specifically for substance-abuse programmes and the other one requires the followers to rate the observed behaviour of a specific leader, which was not the purpose of this study. Rather we attempted to capture the interpretation of leadership behaviours by assessing NPs' perceptions. Our tool can serve a foundation for future NP-specific tools.

8 | LIMITATIONS

The study has several limitations. We did not gather data from leaders; rather, we assessed transformational leadership from the perspectives of NP followers. The study relied on self-reports of NPs, which might affect findings because of social desirability and fear of being identified; NPs might have sought to ensure a positive image of their leaders in case their employers gained access to their responses (Donaldson & Grant-Vallone, 2002). Gathering data from NPs about their organisations is important as individuals can provide valuable information about their organisations and how organisations affect their practice and performance (Aiken & Sloane, 1997). We did not conduct subsample analysis by practice setting type due to small sample size. The survey items were also not initially designed to measure transformational leadership, although this is not a major limitation. We took both a conceptual and an empirical approach to assure the item groupings are measuring transformational leadership factors. Finally, we were not able to compute the response rate for NPs.

9 | CONCLUSION

Transformational leadership can be applied in primary care settings to promote NP practice. Nurse practitioners' perceptions of leaders' behaviours identify opportunities for greater collaboration between leaders and NPs. Future research should explore how transformational leadership affects NP practice and outcomes.

ETHICAL APPROVAL

The study was approved by the Columbia University Medical Center (AAAI9654).

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