Perceived Leadership Styles, Outcomes of Leadership, and Self-Efficacy Among Nurse Leaders:

A Hospital-Based Survey to Inform Leadership Development at a US Regional Medical Center

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In response to improving upon a leadership development program at a US regional medical center, coupled with the understanding that transformational leadership is linked with better outcomes, as a first step, we examined the perceived leadership styles, outcomes of leadership, and level of self-efficacy among nurse leaders, namely nurse managers, clinical supervisors, and nurse directors. Twenty-three hospital-based nurse leaders completed the surveys with a response rate of 57.5%. The majority of the leadership styles aligned with that of transformational. However, the items with the 3 lowest average frequency ratings within the transformational leadership style were in the areas of communication and showing confidence. Additionally, the perceived median self-efficacy score was low. Organizational support by way of providing continuous, sustainable professional leadership development, especially in the area of communication, and building self-efficacy is needed to ensure leader effectiveness, and improvement in staff and patient outcomes.

Nurse leadership in the unpredictable and often chaotic health care setting is critical to ensuring the delivery of safe, evidence-based care necessary to positively impact the overall patient experience.[1] Nurses make up the most significant number of health care professionals in the medical workforce, where daily, they are either directly or indirectly involved in patient care.[2] Nurse leaders in the clinical setting, therefore, have the critical and challenging task of influencing effective workplace performance and retention of hospital staff nurses by directing clinical practice and outcomes inclusive of compliance with regulations, human resource issues, fiscal accountability, patient satisfaction, and overall excellence in service.[3] The COVID-19 pandemic has undoubtedly reinforced the need for quality nurse leadership within health care. In troubling times, nurse leadership is paramount to safety and organizational outcomes.

KEY POINTS

- **This study identified the most prevalent leadership style among nurse leaders at a regional medical center in the United States.**

- **Although nurse leaders perceive to have a transformational leadership style, this study identified the need for professional development and interventions in the areas of self-efficacy and communication for nurse leaders in the hospital setting.**

Historically, nurse leaders have had a remarkable capacity to manage. However, becoming an exemplary leader requires transformational leadership, the personal capacity to inspire others through innovation to achieve optimal outcomes.[4] Inspired by James McGregor Burns' theory of transformational leadership,[5] the American Nurses Association, the premier organization for nursing professionals, describes transformational leaders with having the ability to communicate effectively, inspire others, have enthusiasm, support positive change, and lead others in pursuit of shared goals.[6,7] In a systematic review conducted by Wong et al.,[8] transformational nurse leadership was found to have resulted in staff work engagement,[9] nurses' reluctance to quit,[10] medication safety,[11-13] workplace safety climate,[14] quality of care,[10] and decreases in inpatient falls, hospital infections, and patient mortality.[12,13] Additionally, self-efficacy, defined as the belief in one's ability to accomplish specific tasks, has been found to mediate the relationship between transformational nurse leadership and staff engagement.[15] These studies, albeit limited, inform us that transformational leadership, which is the most optimal leadership style, with transactional and passive avoidant being suboptimal, can lead to overall staff well-being and improved patient outcomes.

In 2010, the Institute of Medicine (IOM), now known as the National Academy of Medicine, published *The Future of Nursing: Leading Change, Advancing Health*,[1] which provided a blueprint for nurse leadership development and mentorship within 3 core domains: transformational leadership, mentorship, and involvement in policy making. In response, efforts have been mobilized to equip clinical nurses with leadership competencies in their nursing programs and workplace that would enable to answer IOM's call for effective nurse leadership in the hospital setting.

SURVEY ON LEADERSHIP STYLES, OUTCOMES OF LEADERSHIP, AND SELF-EFFICACY

In an effort to improve professional development for nurse leaders at a regional medical center located in the mid-Atlantic area of the United States, we conducted this hospital-based survey to examine the perceived leadership style, outcomes of leadership, and self-efficacy among nurse leaders at one of the third busiest hospitals in its state. The survey is the first stepping stone to inform the adaptation of an existing 9.5-day leadership development training program for nurse leaders focusing on fundamentals of performance coaching, leadership challenges, analyzing performance issues, and finance management facilitated by the human resources (HR) department. This survey for nurse leaders who held the position of clinical supervisor, nurse manager, or nurse director is a result of the medical center's HR department's desire to strengthen the training focusing on transformational leadership and building self-efficacy for nurse leadership.

The survey and future development of a nurse leadership training program are inspired by the theory of structural empowerment, which posits that the work environment is accountable for providing access to resources to enable effective and influential leadership.[16] Structural empowerment is one of the core components of the American Nurses Credentialing Center's Magnet Recognition Program® where it recognizes an institution that promotes shared decision-making, continual professional development, and organizational commitment and support that will ultimately lead to staff well-being, better patient outcomes, and institutional financial success.[16,17]

We conducted the survey between June and July of 2019, utilizing a cross-sectional approach to examine the perceived leadership styles, outcomes of leadership, and level of self-efficacy among nurse leaders, inclusive of nurse managers, clinical supervisors, and nurse directors at a single-site regional medical center located in the mid-Atlantic area of the United States. Anonymous paper surveys without identifying information were stored via interdepartmental mail in a secure, locked file cabinet. Unique random numbers were assigned to each survey for participants to keep so that they may have access to their results. The results of the survey were disseminated to participants by placing them in a secure area, and participants used their identification number to identify their survey results. The sole collector of data was a clinical manager who did not observe who picked up the survey and who returned completed surveys. We collected information on participant's gender, age, years of experience as a nurse and nurse manager/director/clinical supervisor, number of years in the workplace in current position, education, race/ethnicity, place of licensure, and type of unit (i.e., general surgical).

For the *Perceived Leadership Style & Outcomes of Leadership*, we used the 45-item Multifactor Leadership Questionnaire (MLQ) 5x Short Version.[18] The MLQ is an established and validated leadership instrument that evaluates self-perception of 3 different leadership styles: Transformational, Transactional, and Passive-Avoidant, and Perceived Outcomes of Leadership using a 5-point frequency behavioral scale (0 = not at all, 1 = once in a while, 2 = sometimes, 3 = fairly often, 4 = frequently, if not always). The specific components within each leadership style are as follows: **Transformational** (5 I's): Idealized Attributes—ability to build trust; Idealized Behaviors—acting with integrity; Inspirational Motivation—ability to motivate; Intellectual Stimulation—ability to inspire innovation; Individual Consideration—focus on the individual development plan for personal achievement; **Transactional**: Contingent Reward—set goals; Management by Exception–Active—focus on compliance;

Passive-Avoidant: Management by Exception–Passive—punitive; Laissez-Faire—uninvolved; **Perceived Outcomes of Leadership**–Extra Effort: can get followers to go above and beyond; Effectiveness—productive; Generates Satisfaction—staff satisfaction achieved. We measured level of self-efficacy using the general self-efficacy scale. It is a 17-item scale developed by Mark Sherer, which consists of 5-point Likert responses ranging from "strongly disagree" to "strongly agree." Scores range from 17 to 85, where higher scores indicate greater self-efficacy.[19] Group frequency mean scores and standard deviations for each leadership style and outcomes of leadership scale and subscales were computed. Group standard deviations of the frequency ratings for the leadership scales and outcomes measured the variation in response to the MLQ. The smaller the standard deviation, the higher the agreement among group self-ratings. A value of 0.0 would mean complete agreement among ratings. Mean, and mode were calculated to measure the level of self-efficacy perceptions. We performed normality testing, using the Kolmogorov-Smirnov test and measures of central tendencies. The survey was reviewed and approved as exempt research by the institution's clinical research committee.

RESULTS
Table 1 summarizes the demographic characteristics of the participants. There are a total of 40 nurse leaders at the regional medical center. Twenty-three deidentified surveys were completed and returned with index cards for a response rate of 57.5%. The majority of nurse leaders were above 41 years of age, self-identified as White, had at least a bachelor's degree in nursing, and had a mean of 21 years of nursing experience and 5.2 years of nurse leadership experience in a clinical setting.

Perceived Leadership Styles and Outcomes of Leadership
The MLQ 5x mean frequency scores by Leadership Style, Outcomes of Leadership, and related subscales are summarized in Figure 1. The majority of the leadership styles aligned with that of Transformational (Idealized Attributes mean ± SD: 3.1 ± 0.3; Idealized Behaviors mean ± SD: 3.1 ± 0.4); Inspirational Motivation mean ± SD: 3 ± 0.5; Intellectual Stimulation mean ± SD: 3.1 ± 0.5; Individual Consideration mean ± SD: 3.5 ± 0.4), followed by Transactional (Contingent Reward mean ± SD: 2.9 ± 0.6; Monitors Deviations and Mistakes mean ± SD: 1.5 ± 0.9) and Passive Avoidant mean ± SD: Management by Exception–Passive mean ± SD: 1 ± 0.5; Laissez-Faire mean ± SD: 0.7 ± 0.5). The items with the 3 highest average ratings within the Transformational leadership style scale were in the areas of coaching and developing people (mean: 3.6 treating others as individuals), acting

Table 1. Demographic Characteristics of Participants (N = 23)	
	Characteristics
Age range group, n (%)	
20-30	2 (8.7)
31-40	3 (13.0)
41-50	8 (34.8)
51-60	6 (26.1)
60+	4 (17.4)
Race/ethnicity, n (%)	
White[a]	19 (82.6)
Black	2 (8.7)
Asian	1 (4.4)
Hispanic	1 (4.4)
Other[b]	1 (4.4)
Education, n (%)	
Associates	1 (4.4)
BSN	11 (47.8)
MSN	11 (47.8)
Years of nursing experience, mean ± SD	21 ± 8.6
Years of experience as an RN manager/director/clinical supervisor in current role, mean ± SD[c]	5.2 ± 4.1

[a]White indicates non-Hispanic White.
[b]One participant identifies as White Hispanic and Pacific Islander.
[c]One missing response.

with integrity (mean 3.5 considering consequences), and building trust (mean 3.5 building respect from others). The items with the 3 lowest average ratings for Transformational leadership style were in the areas of acting with integrity (mean 2.5 talking about personal values and beliefs), encouraging others (mean 2.5 vision casting), and building trust (mean 2.7 showing confidence).

Regarding the perceived outcomes of leadership, the satisfaction of leadership had the highest mean frequency score (mean ± SD: 3.2 ± 0.4) followed by perceived leadership effectiveness (mean ± SD: 3.1 ± 0.5) and generating extra effort among staff (mean ± SD: 2.9 ± 0.5).

Perceived Level of Self-Efficacy
The general self-efficacy mean and median scores were 2.4 ± 0.6 and 2.5, respectively, implying that the participants had low general self-efficacy.
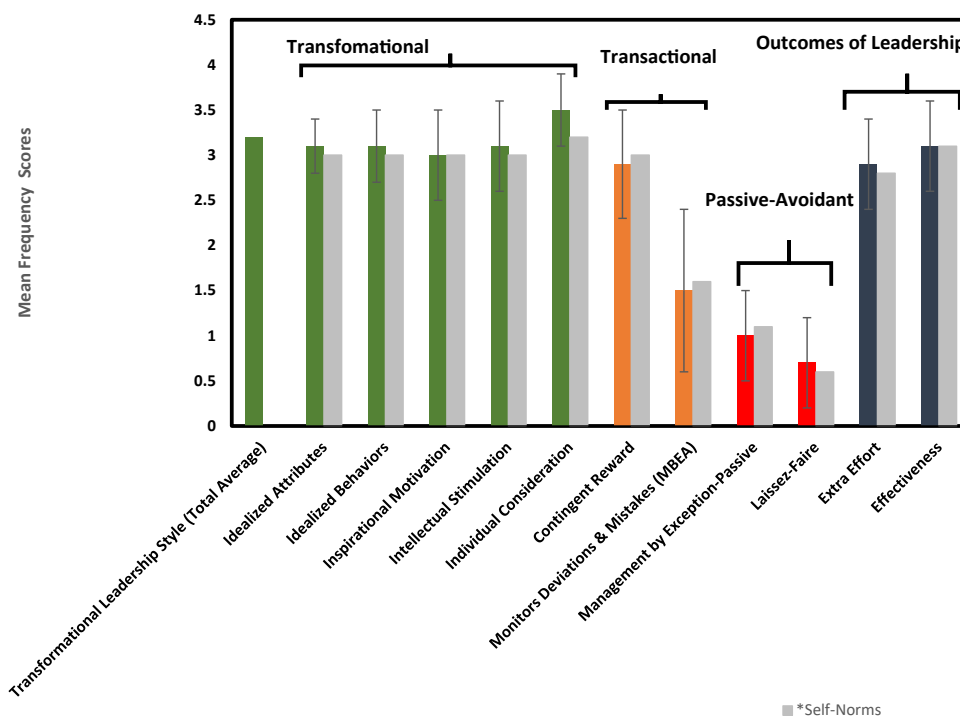
Figure 1. Multifactor Leadership Questionnaire (MLQ 5X) Mean Frequency Scores by Leadership Styles and Outcomes of Leadership Compared With Self-Norms (N = 23). *The bar chart shows how the participants perceived the frequency of their behaviors for each leadership style compared to various norms for the MLQ. Self-norms represent data from 3375 self-ratings of leaders who previously completed the MLQ.

CONCLUSION

We found that the nurse leaders perceived their leadership style to be transformational, followed by transactional and, lastly, passive avoidant. Nevertheless, we see opportunities for professional development in the areas of effective communication around personal values and beliefs, vision and mission, and showing a sense of power and confidence in the workplace. These potential areas for professional development align with the findings that the participants reported having a low-level of self-efficacy. In a recent integrative review of nurses' needs to practice effectively in the hospital environment, quality leadership was identified as the highest need nurses have in the workplace setting.[20] Fine-tuning existing professional development training for nurse leaders to improve communication and confidence is necessary for quality leadership that so many nurses desire.

Nonetheless, leadership development should begin well before one becomes a leader in the health care setting.[21] Leading nursing organizations have provided resources to help. For example, the American Organization for Nursing Leadership (AONL), the professional organization for nurse leaders in health care, provides a comprehensive list of Nurse Executive Competencies, in which effective communication and relationship building is primary.[22] The AONL also provides 2 leadership credentialing certifications to become a Certified Nurse Manager and Leader or Certified in Executive Nursing Practice.

At the regional medical center, nurses should be encouraged and financially supported to pursue graduate programs such as the Doctor of Nursing Practice (DNP) Executive Leadership program, designed for experienced nurses seeking to be competent in the knowledge of various leadership theories, managing complex health care environments, applying evidence to practice, improving patient care through policy engagement and advocacy, and leading interprofessional collaboration.[23]

This survey was intended to give us preliminary information on how to strategize professional development to support nurse leaders at a regional medical center. The first step is to examine their perceptions about their leadership style, outcomes of their leadership, and self-efficacy.

Despite the information gathered in this survey, there were limitations. We did not examine factors related to the transformational leadership style, outcomes of leadership, and self-efficacy. The survey is also prone to social desirability bias. Nurse leaders may provide responses that are desirable for their roles. To limit bias, we ensured that participation was not tracked because we did not observe who collected and returned surveys, and no identifiable information was collected. Despite the limitations, the results of this survey provide much-needed information on the areas of strength and for

future projects focusing on professional development. Although the transformational style was the leading leadership style among the nurse leaders, content around effective communication around values and vision, and showing confidence is necessary to include in the hospital's leadership development training. Finally, organizational support by way of providing continuous, sustainable professional leadership development is needed to ensure leader effectiveness and improvement in staff and patient outcomes. Hospital-based interventions and professional development focusing on leadership self-efficacy and effective communication are necessary to ensure leadership effectiveness and ultimately, clinical care outcomes.

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