The impact of an emotional intelligence training program on transformational leadership

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Nurse manager retention is a major concern in healthcare today.[1] Common reasons for nurse manager turnover and intent to leave include lack of work-life balance, job stress, negative organizational culture, competing priorities, and staffing challenges. Multiple organizational outcomes are impacted by high nurse manager turnover, including departmental culture, RN turnover, use of evidence-based practices, delivery of safe care, and staff members' feelings of fulfillment in their positions.[2] High manager turnover rates and inadequate managerial leadership skills have negative impacts on an organization's culture and monetary resources. As nursing leadership challenges continue to increase, efforts to improve nurse manager retention will be essential to attain the high-quality outcomes and nursing culture desired by internal and external stakeholders.

Having leaders with transformational leadership styles brings value to the organization in relation to both manager satisfaction and organizational outcomes. Transformational leaders create highly effective work environments in which quality care is delivered, resilient teams are developed, employee retention is promoted, and staff intent to leave is

decreased.[3-5] In addition, leaders who utilize the transformational leadership style are more likely to achieve organizational outcomes and foster relationships that promote collaboration.[4] Transformational leaders also enhance employee performance by promoting work engagement.[6]

A healthcare system with five hospitals and an outpatient facility located in the Southeastern US evaluated the effect of an emotional intelligence (EI) training program on EI scores and leadership styles among nurse managers.

Literature review

Evidence shows that EI is a strong predictor of leader success, particularly within healthcare.[7] EI is an individual's capacity to recognize and effectively address emotions within themselves and others, facilitate rela-

which directly impact leader effectiveness.[10] Studies show that transformational leadership is associated with healthy work environments, high retention rates, a culture of accountability, and improved quality outcomes.[11] Transformational leadership was originally defined by Bass as "a leadership process that is systematic, consisting of [a] purposeful and organized search for changes, systematic analysis, and the capacity to move resources from areas of lesser to greater productivity to bring about a strategic transformation."[12] There are four components of transformational leadership: effective communication, inspirational traits, trustworthiness, and teamwork.[11] Transformational leadership style traits include solution-driven, empathetic, approachable, motivational, confident, mindful, and "show the way."[8,10,13]

EI training has been deemed the most effective method for improving nurse manager EI and transformational leadership by providing participants with the tools they need to be successful, then encouraging them to use these tools in their work environments.[7,17,18] EI training is a realistic intervention that requires minimal time away from one's primary role and encourages the nurse manager team to work cohesively to develop one another to their fullest potential. Long-term outcomes of EI training programs include increased job satisfaction, improved staff satisfaction, high-quality patient outcomes, enhanced workload management abilities, and reduced turnover among nurse managers and frontline staff members.[8,17,18]

Participation in an EI training program should assist nurse

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tionships, and resolve issues.[8] EI can be broken down into four distinct components: perceiving emotion (emotionality), reasoning with emotion (self-control), understanding emotion (sociability), and managing emotion (well-being).[9] Leaders with high EI are associated with the ability to effectively influence others, actively listen, build relationships, empathize, and communicate clearly.[9]

EI is also associated with transformational leadership styles,

Studies have revealed a significant positive relationship between EI levels and transformational leadership.[11,14] Researchers have also found that EI levels and transformational leadership styles are directly influenced by a leader's education or certification level and ongoing leadership training.[9,11,14,15] High levels of EI and transformational leadership styles are associated with employee empowerment, well-being at work, and job satisfaction.[16]

managers in being successful and competent in their positions by giving them tools to navigate the complexities and challenges of the healthcare environment. EI training may offer a return on investment for organizations by increasing nurse manager performance and improving the overall performance of leaders.

Methods
Design. This study employed a quasi-experimental pre-/postsurvey design. A waiver of documentation

of informed consent was requested and approved from an affiliated university Institutional Review Board. Participants completed an anonymous survey that included demographic data and the study measures on the Vanderbilt University Research Electronic Data Capture system.

Sample. Seventy-four nurse managers from the healthcare system were invited to participate in the study. Inclusion criteria included full-time status, nurse manager role, bachelor's degree or higher, and current employment within a hospital or cancer-focused outpatient treatment facility setting. Exclusion criteria included part-time status, non-nurse manager role, and nurse managers employed outside of a hospital or cancer-based outpatient facility setting.

Procedures. Participants were invited to complete three study components: a presurvey, a 2-hour EI training session, and a postsurvey. The educational session was taught by an EI expert and focused on defining and growing EI. The session also guided participants through the process of creating an individualized action plan, with the aim of developing a strategy for how they would incorporate the techniques they learned into their daily workflow. Participants who attended the education session received a journal and tip sheet with a list of the techniques covered in the session on how to grow EI.

To allow participants time to build their EI, there was a 4-month window between the educational session and the postsurvey. Each month during the 4-month window, the researcher sent an email to the participants as a reminder to continue incorporating the skills they learned into their everyday practice.

Measures. The presurvey included demographic information related to age, gender, race, ethnicity, highest level of education, work location, years working as a nurse, and years working as a nurse manager, as well as instruments to measure the dependent variables of EI and leadership style. The postsurvey included instruments to measure EI and leadership style; demographic data weren't collected on the postsurvey because the same group of participants was invited to complete both surveys.

EI was measured using the Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) instrument. The TEIQue-SF is composed of 30 items focused on evaluating an adult's EI.[19] It applies a holistic approach by incorporating all four domains of EI: emotionality, self-control, sociability, and well-being.[20,21]

Leadership style was measured using the Multifactor Leadership Questionnaire (MLQ-5X) instrument. The MLQ5X uses a nine-domain model to evaluate transformational, transactional, and laissez-faire leadership styles and outcome variables.[22] It's scored according to characteristics that represent certain leadership styles, including transformational, transactional, and passive-avoidant.

Statistical software was used to perform statistical analyses. Statistical significance was considered to be a *P*-value of less than or equal to .05.

Table 1: Preintervention demographic variable data (N = 45)

Demographic variable	Mean (SD), n (%), or median (IQR)
Age	44.53 (9.96)
Gender	
Female	42 (93.3%)
Male	3 (6.7%)
Race	
White	44 (97.8%)
More than one race	1 (2.2%)
Ethnicity	
Non-Hispanic or Latino	44 (97.8%)
Hispanic or Latino	1 (2.2%)
Work location	
Hospital	39 (88.6%)
Cancer-focused outpatient treatment facility	5 (11.4%)
Years of nursing experience	18 (12–30)
Years of nurse manager experience	4.25 (2.13–9.75)
Education level	
Bachelor's degree	23 (51.1%)
Master's degree	13 (28.9%)
Doctoral degree	9 (20.0%)

Table 2: Pre-/postintervention: TEIQue-SF results

Domain	Preintervention mean (SD) [n]	Postintervention mean (SD) [n]	t	P
Emotionality	5.84 (0.57) [45]	5.96 (0.63) [19]	-0.72	0.47
Self-control	5.33 (0.71) [43]	5.57 (0.86) [18]	-1.07	0.29
Sociability	5.45 (0.62) [44]	5.61 (0.70) [19]	-0.88	0.38
Well-being	6.19 (0.62) [44]	6.31 (0.59) [19]	-0.69	0.49
Overall	5.77 (0.50) [43]	5.97 (0.54) [18]	-1.37	0.18

Note: Potential scores range from 1 to 7, with 1 being completely disagree and 7 being completely agree.

Results

Sample characteristics. A total of 45 participants completed the presurvey. Of these participants, 97.8% were White of non-Hispanic descent and 93.3% were female. The median for nurse manager experience was 4.25 years and nurse experience, 18 years. The majority (88.6%) of participants worked in a hospital setting and held a bachelor's degree (51.1%). See *Table 1* for additional details regarding the presurvey study sample.

EI. The overall TEIQue-SF mean was 5.77 preintervention (n = 43) and 5.97 postintervention (n = 18), but this difference wasn't statistically significant. The highest subscale domain score pre- and postintervention was well-being (6.19 pre to 6.31 post), followed by emotionality, sociability, and self-control, respectively. Refer to *Table 2* for subscale mean scores. The mean score for all subcomponents increased postintervention, but the increase wasn't statistically significant.

Leadership style. The mean of the MLQ-5X transformational leadership characteristics ranged from 2.72 to 3.46 (maximum 4) preintervention to 2.86 to 3.57 postintervention. The highest transformational leadership sub-scale score both pre- and postintervention was individual consideration (3.46 to 3.57), followed by inspirational motivation (3.40 to 3.44). Scores for all transformational leadership characteristics increased following the intervention. Additionally, transactional leadership characteristic scores for contingent reward increased from the pre- to postintervention period (3.16 to 3.31). All outcome of leadership characteristic scores increased postintervention. The highest outcome of leadership score at the preintervention stage was satisfaction (3.34); at the postintervention stage, the highest was effectiveness (3.51). Refer to *Table 3* for subscale mean scores. None of the differences between the pre- and postintervention scores were statistically significant.

Scores for management by exception, active (1.59 to 1.46); management by exception, passive (0.71 to 0.53); and laissez-faire (0.46 to 0.33) decreased postintervention, but the scores weren't significantly different. (See *Table 3.*)

Discussion

The focus of this study was to determine if an EI training program would result in increased EI and impact leadership styles used by nurse managers. Study participants had a higher level of EI pre- and postintervention than the average individual based on a comparison of data from previous studies.[20,21] Management by exception (active), management by exception (passive), and laissez-faire scores decreased from the presurvey to the postsurvey; however, this is considered a positive change because these are associated with less desirable leadership styles. In active management by exception, the manager looks for deviations from expected behavior and may take corrective action if performance doesn't meet the standard, whereas passive management by exception involves action taken after standards haven't been followed or after errors have occurred.[23]

Scores for participants in this study were also compared with MLQ-5X results from other studies.[23] Participants scored higher in every category of the MLQ-5X instrument than those from the external comparison group, with the exception of the following leadership characteristics: management by exception (active), management by exception (passive), and laissez-

Table 3: Pre-/postintervention: MLQ-5X results

Scale name	Characteristic	Preintervention mean (SD) [n]	Postintervention mean (SD) [n]	t	P
Idealized attributes	Transformational	3.10 (0.48) [43]	3.16 (0.57) [19]	-0.36	0.72
Idealized behaviors	Transformational	2.72 (0.49) [43]	2.86 (0.52) [19]	-1.10	0.28
Inspirational motivation	Transformational	3.40 (0.45) [43]	3.44 (0.48) [19]	-0.32	0.75
Intellectual stimulation	Transformational	3.13 (0.51) [43]	3.34 (0.57) [19]	-1.42	0.17
Individual consideration	Transformational	3.46 (0.49) [43]	3.57 (0.45) [19]	-0.84	0.41
Contingent reward	Transactional	3.16 (0.58) [43]	3.31 (0.50) [19]	-1.00	0.32
Management by exception (active)	Transactional	1.59 (0.79) [44]	1.46 (0.74) [19]	0.61	0.55
Management by exception (passive)	Passive-avoidant	0.71 (0.50) [43]	0.53 (0.49) [19]	1.36	0.18
Laissez-faire	Passive-avoidant	0.46 (0.50) [45]	0.33 (0.49) [19]	0.99	0.33
Extra effort	Outcome of leadership	3.10 (0.57) [45]	3.24 (0.45) [18]	-1.00	0.32
Effectiveness	Outcome of leadership	3.31 (0.49) [45]	3.51 (0.48) [18]	-1.54	0.13
Satisfaction	Outcome of leadership	3.34 (0.56) [43]	3.39 (0.53) [18]	-0.34	0.73

Note: Potential scores range from 0 to 4, with 0 being not at all and 4 being frequently if not always.

faire.[23] These three characteristics are associated with transactional and passive-avoidant leadership styles, which aren't considered highly effective. Lower scores on any characteristic scored by the MLQ-5X instrument indicate that an individual is less likely to use this trait and, therefore, the associated leadership style. Considering participants scored lower on management by exception (active), management by exception (passive), and laissez-faire, this indicates that they're less likely to use these characteristics than the average leader and less likely to adopt a transactional or passive-avoidant leadership style.[23]

As mentioned, transformational leadership style characteristics are considered more effective than transactional and passive-avoidant characteristics. However, a correlation exists between transformational leadership style characteristics and the transactional characteristic known as contingent reward, the most impactful aspect of transactional leadership on organizational outcomes.[23,24] Contingent reward is based on the concept that performance may be enhanced by positive feedback. It involves a focus on the definition of what work needs to be done, followed by the provision of rewards (material or psychological) when tasks are completed.[23]

Transformational leadership and transactional contingent reward may be augmentative and complementary. Contingent reward may help build relationships that allow leaders to embrace and use a transformational leadership style.[23,24] Transformational leadership and transactional contingent reward may also be predictors of employee bonding within organizations.

Leadership implications

EI is the ability to understand and manage your own emotions while at the same time influencing the emotions of those around you.[25] This is a critical skill for nurse managers because remaining calm through challenging times can reduce staff discontent and lead to the maintenance of a positive unit culture. Constructs of EI have a direct positive correlation with specific transformation leadership traits, which means that a leader with higher EI should be more effective in influencing direct reports and motivating them.[26] Transformational leadership is a foundational element for nurturing a culture of inno-

vation and change, leading employees to be more committed to working toward the organization's best interests.[24]

It's important for organizations to implement activities that promote the development of EI and use of a transformational leadership style. This study illustrates that an EI training program followed by regular reminders stressing the importance of EI activities may result in increased EI and transformational leadership behaviors. Pairing leaders with a peer colleague so both can hold each other accountable to practice activities that promote EI may lead to an increase in and maintenance of a higher level of EI.

Limitations
This study had several limitations. A significant limitation was the inability of the researcher to determine what components of the intervention were completed by study participants. The researcher couldn't pair scores obtained before the intervention with scores following the intervention due to study design issues. Another problem was the limited interaction between the researcher and participants during the 4-month period between the intervention and postsurvey; this allowed for study disengagement on the part of some participants. In addition, study participants had a higher level of EI and used a transformational leadership style more often than the average individual before participation in the EI training program, which may have limited the impact of the intervention. Finally, a larger postintervention sample size would've improved the ability to validate the results collected and determine whether the intervention made an impact on the variables being evaluated.

Value added
Despite high scores overall, scores for EI and transformational leadership increased following the EI training program, although not at a statistically significant level. As EI increased, so did transformational leadership style characteristics. A high level of EI and transformational leadership bring value to both individual leaders and the organization, so any initiative that fosters these characteristics should be valuable. Further studies are recommended to evaluate whether a diverse study sample would impact the results differently than what was discovered in this study. **NM**

REFERENCES
1. McCright M, Pabico C, Roux N. Addressing manager retention with the Pathway to Excellence® framework. *Nurs Manage.* 2018;49(8):6-8.
2. Warshawsky NE, Wiggins AT, Rayens MK. The influence of the practice environment on nurse managers' job satisfaction and intent to leave. *J Nurs Adm.* 2016;46(10):501-507.
3. Magbity JB, Ofei AMA, Wilson D. Leadership styles of nurse managers and turnover intention. *Hosp Top.* 2020;98(2):45-50.
4. Doody O, Doody CM. Transformational leadership in nursing practice. *Br J Nurs.* 2012;21(20):1212-1214,1217-1218.
5. Tian H, Iqbal S, Akhtar S, Qalati SA, Anwar F, Khan MAS. The impact of transformational leadership on employee retention: mediation and moderation through organizational citizenship behavior and communication. *Front Psychol.* 2020;11:314.
6. Lai F-Y, Tang H-C, Lu S-C, Lee Y-C, Lin C-C. Transformational leadership and job performance: the mediating role of work engagement. *SAGE Open.* 2020;10(1):1-11.
7. Maulding WS, Peters GB, Roberts J, Leonard E, Sparkman L. Emotional intelligence and resilience as predictors of leadership in school administrators. *J Leadersh Stud.* 2012;5(4):20-29.
8. Sayeed OB, Shanker M. Emotionally intelligent managers & transformational leadership styles. *Indian J Ind Relat.* 2009;44(4):593-610.
9. Prufeta P. Emotional intelligence of nurse managers: an exploratory study. *J Nurs Adm.* 2017;47(3):134-139.
10. Taylor G. Nurse managers: why emotionally-intelligent leadership matters. *Aust Nurs Midwifery J.* 2017;25(2):20.
11. Spano-Szekely L, Quinn Griffin MT, Clavelle J, Fitzpatrick JJ. Emotional intelligence and transformational leadership in nurse managers. *J Nurs Adm.* 2016;46(2):101-108.
12. Luzinski C. Transformational leadership. *J Nurs Adm.* 2011;41(12):501-502.
13. LaVoie-Tremblay M, Fernet C, Lavigne GL, Austin S. Transformational and abusive leadership practices: impacts on novice nurses, quality of care and intention to leave. *J Adv Nurs.* 2016;72(3):582-592.
14. Tyczkowski B, Vandenhouten C, Reilly J, Bansal G, Kubsch SM, Jakkola R. Emotional intelligence (EI) and nursing leadership styles among nurse managers. *Nurs Adm Q.* 2015;39(2):172-180.
15. Codier E, Kamikawa C, Kooker BM. The impact of emotional intelligence development on nurse managers. *Nurs Adm Q.* 2011;35(3):270-276.
16. Prezerakos PE. Nurse managers' emotional intelligence and effective leadership: a review of the current evidence. *Open Nurs J.* 2018;12:86-92.
17. Humphrey RH. How do leaders use emotional labor? *J Organ Behav.* 2012;33(5):740-744.
18. Liang S-G, Chi S-CS. Transformational leadership and follower task performance: the role of susceptibility to positive emotions and follower positive emotions. *J Bus Psychol.* 2013;28(1):17-29.
19. Siegling AB, Vesely AK, Petrides KV,

Saklofske DH. Incremental validity of the Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF). *J Pers Assess.* 2015;97(5):525-535.

20. Petrides KV. Psychometric properties of the Trait Emotional Intelligence Questionnaire. In: Stough C, Saklofske DH, Parker JD, eds. *Advances in the Assessment of Emotional Intelligence.* New York, NY: Springer; 2009.

21. Petrides KV. Psychometric properties of the Trait Emotional Intelligence Questionnaire (TEIQue). 2009. www.psychometriclab.com/adminsdata/files/TEIQue psychometric properties chapter.PDF.

22. Muenjohn N, Armstrong A. Evaluating the structural validity of the Multifactor Leadership Questionnaire (MLQ), capturing the leadership factors of transformational-transactional leadership. *Contemp Manag Res.* 2008;4(1):3-14.

23. Avolio BJ, Bass BM. *Multifactor Leadership Questionnaire: Manual and Sample Set.* 3rd ed. Menlo Park, CA: Mind Garden, Inc.; 2004.

24. Xenikou A. Transformational leadership, transactional contingent reward, and organizational identification: the mediating effect of perceived innovation and goal culture orientations. *Front Psychol.* 2017;8:1754.

25. Landery L. Why emotional intelligence is important in leadership. Harvard Business School Online. 2019. https://online.hbs.edu/blog/post/emotional-intelligence-in-leadership.

26. Kumar S. Establishing linkages between emotional intelligence and transformational leadership. *Ind Psychiatry J.* 2014;23(1):1-3.

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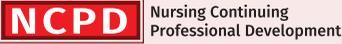
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