



2019

The Effect of an Emotional Intelligence Training Program on Use of a Transformational Leadership Style Among Nurse Managers

Audrey Frias
afr256@uky.edu

[Right click to open a feedback form in a new tab to let us know how this document benefits you.](#)

Recommended Citation

Frias, Audrey, "The Effect of an Emotional Intelligence Training Program on Use of a Transformational Leadership Style Among Nurse Managers" (2019). *DNP Projects*. 285.
https://uknowledge.uky.edu/dnp_etds/285

This Practice Inquiry Project is brought to you for free and open access by the College of Nursing at UKnowledge. It has been accepted for inclusion in DNP Projects by an authorized administrator of UKnowledge. For more information, please contact UKnowledge@lsv.uky.edu.

The Effect of an Emotional Intelligence Training Program on Use of a Transformational
Leadership Style Among Nurse Managers

Submitted in Partial Fulfillment of the Requirements for the Degree of Doctor of Nursing
Practice at the University of Kentucky

By

Audrey Frias

Louisville, KY

2019

Abstract

Background: Leaders with high levels of emotional intelligence have been associated with transformational leadership styles, which have been found to directly impact leader effectiveness. Emotional intelligence training has been deemed the most effective method for improving nurse manager emotional intelligence and transformational leadership by providing participants with the tools they need to be successful.

Conceptual Framework: Transformational leadership was used as the conceptual framework for this study and is defined as “a leadership process that is systematic, consisting of 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.”

Methodology: Seventy-four nurse managers from the system organization were invited to participate in the study. The Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF) and Multifactor Leadership Questionnaire (MLQ-5X) were used to assess participant emotional intelligence levels and leadership styles.

Results: A total of 45 participants completed the pre-survey, 19 participants completed the post-survey, and nine participants completed all study requirements. Pre and post scores for the TEIQue-SF and MLQ-5X were not significantly different for the nine participants.

Discussion: Overall, the educational training intervention implemented in this study did not prove to be an effective method for improving emotional intelligence or utilization of a transformational leadership style.

Conclusion: Despite high scores overall, study results did not show any statistically significant change from pre to post intervention, with many post-intervention scores being lower than those collected in the pre-survey. Further research is recommended.

Acknowledgements

Norton Healthcare Scholarship Recipient: This Doctor of Nursing Practice project and program of study was fully funded through the University of Kentucky College of Nursing and Norton Healthcare academic-practice partnership.

I would like to specifically recognize my DNP advisor, Dr. Debra Hampton, for being a role model and mentor I could always go to for advice, motivation, and leadership throughout my doctoral journey. She has always believed in me and has challenged me to do my best every step of the way. Dr. Tharp-Barrie, DNP committee member, has been an inspiration for me over the last three years, always demonstrating what it means to be a doctoral prepared nurse and how to empower others to spark change within clinical and educational environments. Carrie Burton, one of my clinical mentors, has provided a unique perspective on leadership and has supported my growth as a leader over the last couple of years. I value her approach and for the time she taken to mentor me as an up and coming DNP. Dr. Jennifer Thomas, my other clinical mentor, recently graduated with her DNP and was a constant motivator for me, especially as I finish up the last year of my doctoral program. She is a dynamic nurse and leader and I am grateful to have had the opportunity to learn from her over the last couple of years.

I also want to acknowledge all of the clinical instructors that have taken time to teach me during my doctoral program. I would like to specifically recognize Dr. Cheryl Martin, Dr. Pam Missi, Dr. Shirl Johnson, Dr. Michelle Pendleton, and Dr. Eva Stone for their kindness, generosity, and enthusiasm during my time with them as a student. These instructors were instrumental to my growth and development as a nurse, leader, and DNP.

Dedication

I would like to dedicate this project and my DNP to my mom, who unfortunately passed away shortly before I was accepted into the program. She has been a constant motivator for me throughout my journey and I know she would be proud of this personal and professional achievement. This is also dedicated to my father, husband, and son who have all gone out of their way to support me. My father has been a constant source of support, being a shoulder to lean on, during my three years in the program and has always encouraged me to challenge myself and accomplish my dreams. My husband has gone to great lengths to help me be successful and has pushed me to keep going even when things seemed almost impossible. My son was born during the program and has been a constant ray of light. I want to set a good example for him and encourage him to achieve his dreams just as my parents did for me. This is also for my sister who has kept me laughing and having fun throughout the program. Lastly, this is for my nieces and nephews who have kept me entertained and feeling young despite the work that needed to be completed. I hope this accomplishment will inspire them, showing them that anything is possible through hard work and dedication.

Table of Contents

<u>Abstract</u>	ii
<u>Acknowledgements</u>	1
<u>Dedication</u>	2
<u>List of Tables</u>	4
<u>Introduction</u>	5
<u>Conceptual Framework</u>	6
<u>Literature Review</u>	7
<u>Purpose</u>	9
<u>Agency Description</u>	9
Design.....	9
Setting.....	9
<u>Methods</u>	9
Sample.....	9
Procedures.....	10
Measures.....	11
Data Analysis.....	12
<u>Results</u>	13
Sample Characteristics.....	13
Emotional Intelligence.....	13
Leadership Style.....	14
<u>Discussion</u>	15
<u>Implications</u>	17
<u>Limitations</u>	18
<u>Conclusion</u>	18
<u>References</u>	26

List of Tables

Table 1: *Pre-Survey Demographic Variable Data*.....20

Table 2: *Pre-Survey TEIQue-SF Results*.....21

Table 3: *Pre-Survey MLQ-5X Results*.....22

Table 4: *Pre/Post Survey Demographic Variable Data*.....23

Table 5: *Pre/Post Survey TEIQue-SF Results*.....24

Table 6: *Pre/Post Survey MLQ-5X Results*.....25

The Effect of an Emotional Intelligence Training Program on Use of a Transformational Leadership Style Among Nurse Managers

Introduction

The healthcare arena is currently in a state of transformation, as the industry shifts away from a quantity-based payment system to one focused on quality. Healthcare reform has a profound impact on the delivery systems utilized by organizations, including the structural and fiscal components. As this change occurs, healthcare organizations need to evaluate whether their leaders are equipped with the skills required to successfully navigate through this transformative phase.

Approximately 8.3% of nurse manager positions were unoccupied in 2010, putting managers at the top of the list for leaders most likely to leave their work environments (American Organization of Nurse Executives [AONE], 2002; Loveridge, 2017). In addition, 72% of nurse managers say they intend to leave their manager role within the next five years (Loveridge, 2017). Common reasons for nurse manager turnover and intent to leave include: work-life balance, job stress, organizational culture, competing priorities, and staffing challenges (Loveridge, 2017; Zastocki, 2010). Many nurse managers describe being “thrown to the wolves” and report being burned out and overwhelmed as the reason why they have chosen to leave or search for other career opportunities (Loveridge, 2017).

Nurse manager retention is a concern in the United States and many other nations. In a study about healthcare managers in Sweden, Hewko, Brown, Fraser, Wong, and Cummings (2015) found that approximately 40% of managers leave their role within four years. Researchers have also shown that only 24% of Canadian staff nurses are interested in pursuing a role in nursing administration (Hewko et al., 2015). The United States is expected by 2020 to have

67,200 open manager positions (Hewko w3et al., 2015). It has been estimated that hiring and training a nurse manager costs as much as 25% more than a nurse managers annual salary (Loveridge, 2017). In addition to cost, the following factors are also impacted by high nurse manager turnover: nursing culture, staff registered nurse (RN) turnover, utilization of evidence-based practices, delivery of safe care, and the ability for staff to feel fulfilled in their positions (Warshawsky, Wiggins, & Rayens, 2016). High turnover rates and inadequate managerial leadership skills have negative impacts on an organization's culture and monetary resources. As profit margins shrink and the number of nurse graduates' declines, efforts to improve nurse manager retention will be essential to attain the high-quality outcomes and nursing culture desired by internal and external stakeholders.

Conceptual Framework

Transformational leadership is defined as “a leadership process that is systematic, consisting of 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” (Luzinski, 2011, p. 501). There are four components of transformational leadership: effective communication, inspirational traits, trustworthiness, and teamwork (Spano-Szekely et al., 2016). Transformational leadership style traits include: solution driven, empathetic, approachable, motivational, confident, mindful, and “show the way” (LaVoie-Tremblay et al., 2015; Sayeed & Shanker, 2018; Taylor, 2017).

Having leaders with transformational leadership styles brings value to the organization. Transformational leaders have been shown to create highly effective work environments, where quality care is delivered and resilient teams are developed (Doody & Doody, 2012; Schwartz, Spencer, Wilson, & Wood, 2011). In addition, leaders that utilize this leadership style are more

likely to achieve organizational outcomes and foster relationships that promote collaboration (Doody & Doody, 2012). Innovation is a key trait of transformational leadership and drives others to think about challenges in a new way while improving healthcare outcomes, which is an imperative skill in the current healthcare environment (Nielsen, Randall, Yarker & Brenner, 2008).

Literature Review

Evidence has shown that emotional intelligence (EI) is a strong predictor of leader success, particularly within healthcare (Maulding, Peters, Roberts, Leonard, & Sparkman, 2012). EI is an individual's capacity to recognize and effectively address emotions within themselves and others, facilitate relationships and resolve issues (Mayer & Salovey, 1990; Mayer & Salovey, 1997; Sayeed & Shanker, 2018). EI can be broken down into four distinct components: perceiving emotion, reasoning with emotion, understanding emotion, and managing emotion (Prufeta, 2017, p. 135). Leaders with high EI have been associated with the ability to effectively influence others, actively listen, build relationships, empathize, and communicate clearly (Prufeta, 2017).

EI has also been associated with transformational leadership styles, which have been found to directly impact leader effectiveness (Taylor, 2017). Studies have shown that resonant leadership styles, particularly transformational leadership, are associated with healthy work environments, high retention rates, a culture of accountability, and improved quality outcomes (Spano-Szekely, Quinn Griffin, Clavelle, & Fitzpatrick, 2016).

Numerous studies have revealed a significant positive relationship between EI levels and transformational leadership (Cummings, Midodzi, Wong, & Estabrooks, 2010; Spano-Szekely et al., 2016; Tyczkowski, Vandenhouten, Reilly, & Kubsch, 2015). Researchers have also found

that EI levels and transformational leadership styles are directly influenced by a leader's education or certification level (Prufeta, 2017; Spano-Szekely et al., 2016) and ongoing leadership training (Prufeta, 2017; Tyczkowski et al., 2015). High levels of EI and transformational leadership styles have been associated with reduced burnout among leaders (Codier, Kamikawa, & Kooker, 2011; Tyczkowski et al., 2015) and improved 30-day mortality rates among patients (Cummings et al., 2010).

Emotional intelligence training has been deemed the most effective method for improving nurse manager emotional intelligence and transformational leadership by providing participants with the tools they need to be successful, then encouraging them to utilize these tools in their work environments (Chang, 2008; Humphrey, 2012; Liang & Chi, 2013; Maulding et al., 2012; Sayeed & Shanker, 2009; Singh, 2009; Srivastava & Shreekumar, 2010). EI training is a realistic intervention, as it 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 extent. 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 (Humphrey, 2012; Liang & Chi, 2013; Sayeed & Shanker, 2018; Singh, 2009).

Participation in an EI training program could assist nurse managers in being successful and competent in their positions by giving them the tools they need 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 quality of leaders.

Purpose

The goal of this project was to evaluate the effect of an EI training program on EI scores and leadership styles among nurse managers. Key objectives encompassed by the nurse manager EI training program included:

- Assess EI scores and leadership styles prior to attendance to an EI training program
- Deliver an EI training program
- Evaluate the effect of EI training on EI scores and leadership style

Agency Description

Design

This study employed a quasi-experimental pretest/posttest design. The study was approved by the University Medical Institutional Board and healthcare organization. A waiver of documentation of informed consent was approved from the University of Kentucky Institutional Review Board for this study. Subjects completed an anonymous survey on the Research Electronic Data Capture (REDCap) system.

Setting

The setting for this study was a healthcare system located in the southeastern part of the United States and included five hospitals and an outpatient facility.

Methods

Sample

Seventy-four nurse managers from the system organization 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. Names and email addresses of nurse managers were provided by provided by human resources.

Procedures

Once qualified candidates were identified, the researcher emailed hospital leaders about the study to coordinate dates and times to attend each facility's monthly leadership meeting. The purpose of attendance at leadership meetings was to share information about the study and to inform participants that they would receive an invitation to participate, but that participation would be voluntary. Nurse managers who worked at a cancer-focused outpatient treatment facility were contacted directly to schedule an individual meeting to review the study and their opportunity to participate.

After attending each hospital's monthly leadership meeting and discussing the study with cancer-focused outpatient treatment facility nurse managers, a follow up email was sent to qualified candidates to invite them to participate and complete the pre-survey. Respondents had access to the survey any time after receiving the email with the survey link until the time the education session began. When clicking on the invitation to participate in the research study, participants were given access to a Microsoft Word document that outlined the purpose, methodology, risks/benefits, survey process, and investigator contact information if they had any questions about the study. Clicking on the survey link and completing the survey was considered consent to participate in the study.

To fulfill the study requirements, participants were required to complete three components, including a pre-test, two-hour emotional intelligence training session, and post-test. 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 developing 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 emotional intelligence. To allow participants time to build their emotional intelligence, there was a four-month window between the educational session and post-survey. Each month during the four-month window, the researcher sent an email to the qualified participants as a reminder to continue incorporating the skills they learned into their everyday practice.

Measures

The pre-survey included demographic information related to age, gender, race, ethnicity, highest level of education attainment, work location, years working as a nurse, and years working as a nurse manager. Respondents were asked to provide a unique four digit identifying number. This unique identifier was used for all pre and post survey responses to provide anonymous correlations between responses in the study. A list of unique identifiers from pre-survey respondents was provided at the education session. Attendees were asked to place a check mark next to their unique identifier from the pre-survey to verify their attendance and maintain confidentiality.

Emotional intelligence was measured using the Trait Emotional Intelligence Questionnaire-Short Form (TEIQue-SF) instrument. The TEIQue-SF instrument is composed of 30 items focused on evaluating an adult's emotional intelligence (Siegling, Vesely, Petrides, & Saklofske, 2015). The instrument applies a holistic approach by incorporating all four domains of EI: emotionality, self-control, sociability, and wellbeing (Petrides, 2009). Due to the limited number of questions, significant correlations have not been found in previous studies between

scores on this instrument and the 15 facets of EI, known as: emotion perception, trait empathy, emotion expression, relationships, emotion regulation, stress management, impulsiveness (low), adaptability, self-motivation, assertiveness, emotion management, social awareness, self-esteem, trait happiness, and trait optimism (Petrides, 2009). The TEIQue-SF has been found to be comparable to the full TEIQue assessment and is recommended for use in research studies with limited implementation timeframes (Petrides, 2009; Siegling et al., 2015). The TEIQue-SF is scored according to four domains (well-being, self-control, emotionality, and sociability) and also provides an overall score. Scores obtained through this instrument are useful when evaluating an individual's overall EI score, as well as their score in each domain (Petrides, 2009).

Leadership style was measured using the Multifactor Leadership Questionnaire (MLQ-5X) instrument. The MLQ5X is a leader in its field, being the gold standard for evaluating transformational and transactional leadership tendencies (Muenjohn & Armstrong, 2008; Rowold, 2005). The instrument uses a nine-domain model to evaluate transformational, transactional, laissez-faire, and outcome variables (Muenjohn & Armstrong, 2008; Rowold, 2005). Muenjohn and Armstrong (2008) tested the validity of the instrument against two similar leadership tools and found the MLQ-5X to be statistically superior. The MLQ-5X is scored according to characteristics that represent certain leadership styles including transformational, transactional, and passive avoidant. This tool assesses three outcomes of leadership, including extra effort, effectiveness, and satisfaction.

Data Analysis

Participants included in the data analysis completed one or more of the three required study components including: pre-test, two-hour emotional intelligence training session, and post-

test. Demographic survey data was analyzed using descriptive statistics, including means, standard deviations, medians, interquartile ranges, and percentages. Outcome variables for both tools, the Trait Emotional Intelligence Questionnaire – Short Form (TEIQue-SF) and Multifactor Leadership Questionnaire (MLQ-5X) were analyzed using a dependent t-test and a t-test for independent groups. SPSS version 26 was used to perform statistical analyses and statistical significance was considered a p-value less than or equal to .05.

Results

Sample Characteristics

A total of 45 participants completed the pre-survey. Of these participants, 97.8% were Caucasian of non-Hispanic descent and 93.3% were female. The median for nurse manager experience was 4.25 years and nurse experience was 18 years. The majority (88.6%) of participants worked in a hospital setting and held a bachelor's level degree (51.1%). The overall TEIQue-SF mean was 5.77, and component scores ranged from 5.33 to 6.19 (maximum 7). The mean of the MLQ-5X transformational leadership characteristics ranged from 2.72 to 3.46 (maximum 4). See Table 1 for additional details regarding the pre-survey study sample.

A total of nine participants completed all three components of the study. Of these participants 100% were Caucasian females of non-Hispanic descent. The median for nurse manager experience was three years and nurse experience was 17 years. All participants, apart from one, worked in the hospital setting and almost 45% held a bachelor's level degree. See Table 4 for additional details regarding the study sample.

Emotional Intelligence

The overall TEIQue-SF (n = 9) was 5.84 (0.50) pre-intervention compared to 5.79 (0.48) post-intervention (possible range 1-7). The highest subscale mean score post-intervention was

well-being (6.28) followed by emotionality (5.75), sociability (5.44) and self-control (5.27), respectively. Refer to Table 5 for subscale mean scores prior to the educational intervention and following the intervention. The mean score for sociability increased from 5.41 in the pre-survey to 5.44 in the post-survey, but the increase was not significant. The overall score and the other subscale scores decreased after the intervention period. No statistically significant changes in the four domains or in the total score of the TEIQue-SF were noted.

A t-test for independent groups was performed on TEIQue-SF variables to assess for differences between the pre-intervention group (n = 45) and comparison group (n = 9). A statistically significant relationship was found for self-control and emotionality, indicating that there was a difference in responses between the two groups that impacted the overall score for these domains.

Leadership Style

The highest transformational leadership subscale score both pre and post-intervention was individual consideration (3.59 to 3.53) followed by inspirational motivation (3.53 to 3.5), contingent reward (3.53 to 3.5) and idealized behaviors (3.36 to 3.25). The outcome of leadership highest scores at both the pre and post-intervention stages was effectiveness (3.47 both pre and post). See Table 6. An increase was noted post-intervention in scores for the following characteristics: idealized attributes (associated with transformational leadership) and intellectual stimulation (associated with transformational leadership). A decrease was noted in transactional and passive-avoidant leadership characteristics following the educational intervention (see Table 6), but the decrease was not significant. Overall, the MLQ-5X assessment scores obtained during this study did not show any statistically significant changes. An independent t-test performed to assess for differences in MLQ-5X variables between the pre-

intervention group (n = 45) and comparison group (n = 9) did not result in any significant differences. Overall, the MLQ-5X assessment scores obtained during this study did not show any statistically significant changes.

Discussion

There were some differences in demographics, TEIQue-SF and MLQ-5X mean scores between the total pre-intervention group (n =45) and pre-intervention group for the nine participants that completed all steps of the study. The main demographic difference between the two groups pertained to gender, as the group that included the nine participants was composed of all female participants.

In relation to emotional intelligence, study participants in both the pre-intervention (n = 45) and comparison groups (n = 9) scored higher than a normative sample (n =1,666) on the TEIQue assessment (Petrides, 2009). The normative sample findings were based on the full TEIQue instrument, as opposed to the short form version; however, this full assessment contains all components of the short form and was able to be correlated to this study's findings (Petrides, 2009). The normative sample total TEIQue score mean was 4.82 (0.57) compared to this study's pre-intervention group's score of 5.84 (0.57) and the comparison group score of 5.86 (0.63). Overall, participants in this study had a higher level of emotional intelligence pre and post intervention than the average individual.

Scores for participants in this study were compared to normative MLQ-5X results (n = 27,285; Avolio & Bass, 2004). In relation to the MLQ-5X, study participants in both groups, pre-intervention (n = 45) and comparison (n =9), scored higher in every category of the MLQ-5X tool than the normative sample, with the exception of the following leadership characteristics: management by exception (active), management by exception (passive), and laissez-faire

(Avolio & Bass, 2004). These three characteristics are associated with transactional and passive avoidant leadership styles, which are not considered highly effective. Lower scores on any characteristic scored by the MLQ-5X instrument indicate that an individual is less likely to utilize this trait and therefore the associated leadership style. Considering that participants scored lower on management by exception (active), management by exception (passive), and laissez-faire, this indicates that study participants are less likely to use these characteristics than the average leader and therefore are less likely to adopt a transactional or passive avoidant leadership style (Avolio & Bass, 2004). Participants in the comparison group showed a decrease in their score for each of these characteristics from pre-intervention to post-intervention; however, this change was not determined to be statistically significant.

As mentioned, transformational leadership style characteristics are considered more effective than transactional and passive avoidant characteristics; however, it is imperative to mention that researchers have discovered a unique correlation between transformational leadership style characteristics and the transactional characteristic known as contingent reward (Avolio & Bass, 2004). Contingent reward helps build strong relationships that allow leaders to embrace and utilize a transformational leadership style (Avolio & Bass, 2004). This correlation was exemplified in the MLQ-5X “normative sample” based on an intercorrelation analysis comparing the relationship between transformational leadership characteristics and other leadership style characteristics (Avolio & Bass, 2004). The only transactional or passive avoidant characteristic positively correlated with transformational leadership for the normative sample was contingent reward (Avolio & Bass, 2004). Similar findings emerged in this study; high scores on contingent reward were noted, along with lower scores on all other characteristics associated with transactional and passive avoidant leadership styles.

Study findings from the correlated group (n = 9) showed that several measures, including idealized behaviors, inspirational motivation, individual consideration, contingent reward, extra effort, effectiveness, and satisfaction on the MLQ-5X assessment and emotionality, self-control, well-being, and overall score for the TEIQue-SF assessment decreased from the pre-survey to post-survey. As mentioned, management by exception (active), management by exception (passive), and laissez-faire scores also decreased from the pre-survey to the post-survey; however, this is considered a positive change as these are associated with less desirable leadership styles.

Overall, the educational training intervention utilized in this study did not appear to be an effective method of improving emotional intelligence or utilization of a transformational leadership style. Several changes occurred within the organization during the time between the Emotional Intelligence training program and the post-intervention survey, which could have impacted scores.

Implications

This study may be used to support future research that aims to evaluate the effect of educational training on emotional intelligence and utilization of a transformational leadership style. Study participants evaluated in this study were found to have high emotional intelligence and were more likely to use a transformational leadership style than the average individual when assessed prior to the intervention. This study also showed a post-intervention decrease in characteristics that are associated with transactional and passive avoidant leadership styles; however, these scores were not determined to be statistically different. Further research is recommended to evaluate whether a similar intervention method would have a greater impact on individual's with lower baseline scores.

Limitations

This study had several limitations. The study sample was limited by gender and ethnicity, as it was solely comprised of Caucasian women. This limited the ability to evaluate whether gender and ethnicity has an effect on emotional intelligence level, leadership style, and growth of these traits. The second limitation of this study was the small sample of participants that completed all three study components including the pre-survey, education session, and post-survey (n = 9). A significant study limitation was the limited interaction between the researcher and participants during the four-month period between the intervention and post-survey; this allowed for study disengagement on the part of some participants. The fourth limitation was the use of a four-digit unique identifier to correlate responses and attendance. Although this was a strategic way to track responses and maintain a blinded study, many participants found it difficult to remember their unique identifier. Therefore, the researcher could not pair scores obtained prior to the intervention with scores following the intervention. More than 9 participants could have attended the training and completed the pre and post-intervention survey, but this was not possible to validate since the unique identifiers did not indicate this.

Conclusion

The purpose of this study was to evaluate the effect of a nurse manager emotional intelligence training program on emotional intelligence and utilization of a transformational leadership style. Overall, study participants were found to have a higher level of emotional intelligence and utilized a transformational leadership style more often than the average individual, both pre and post intervention. Despite high scores overall, study results did not show any statistical change from pre to post intervention and many post-intervention scores were lower than those collected in the pre-survey. Further studies are recommended to evaluate

whether a diverse study sample would impact the results differently than what was discovered in this study. In addition, a larger post-intervention sample size would improve the ability to validate the results collected and determine whether the intervention made an impact on the variables being evaluated.

Table 1

Table 1	
<i>Pre-Survey: Demographic Variable Data (n =45)</i>	
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	
NOT 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%)
Doctorate Degree	9 (20.0%)

Table 2

Table 2.	
<i>Pre-Survey: TEIQue-SF Results</i>	
Domain	Mean (SD) n = 45
Emotionality	5.84 (0.57)
Self-Control	5.33 (0.71)
Sociability	5.45 (0.62)
Well-Being	6.19 (0.62)
Overall	5.77 (0.50)

Note. Potential scores range from 1-7 with 1 being completely disagree and 7 being completely agree

Table 3

Table 3.		
<i>Pre-Survey: MLQ-5X Results</i>		
Scale Name	Characteristic	Mean (SD) n = 45
Idealized Attributes	Transformational	3.10 (0.48)
Idealized Behaviors	Transformational	2.72 (0.49)
Inspirational Motivation	Transformational	3.40 (0.45)
Intellectual Stimulation	Transformational	3.13 (0.51)
Individual Consideration	Transformational	3.46 (0.49)
Contingent Reward	Transactional	3.16 (0.58)
Management by Exception (Active)	Transactional	1.59 (0.79)
Management by Exception (Passive)	Passive Avoidant	0.71 (0.50)
Laissez-Faire	Passive Avoidant	0.45 (0.50)
Extra Effort	Outcome of Leadership	3.10 (0.57)
Effectiveness	Outcome of Leadership	3.31 (0.49)
Satisfaction	Outcome of Leadership	3.34 (0.56)
<i>Note.</i> Potential scores range from 0-4 with 0 being not at all and 4 being frequently, if not always		

Table 4

Table 4.	
<i>Pre/Post Comparison: Demographic Variable Data</i>	
Demographic Variable	Mean (SD), n (%), or Median (IQR)
Age	44.22 (10.69)
Gender	
Female	9 (100%)
Race	
White	9 (100%)
Ethnicity	
NOT Hispanic or Latino	9 (100%)
Work Location	
Hospital	8 (88.9%)
Cancer-Focused Outpatient Treatment Facility	1 (11.1%)
Years of Nursing Experience	17 (11.5 – 31)
Years of Nurse Manager Experience	3 (1 – 6.5)
Education Level	
Bachelor’s Degree	4 (44.4%)
Master’s Degree	3 (33.3%)
Doctorate Degree	2 (22.2%)

Table 5

Table 5.			
<i>Pre/Post Comparison: TEIQue-SF Results</i>			
	Pre-intervention Mean (SD) n = 9	Post-intervention Mean (SD) n = 9	<i>p</i>
Emotionality	5.86 (0.63)	5.75 (0.69)	0.66
Self-Control	5.42 (0.71)	5.27 (0.65)	0.30
Sociability	5.41 (0.49)	5.44 (0.46)	0.80
Well-Being	6.37 (0.61)	6.28 (0.50)	0.73
Overall	5.84 (0.50)	5.79 (0.48)	0.65
<i>Note.</i> Potential scores range from 1-7 with 1 being completely disagree and 7 being completely agree			

Table 6

Table 6.				
<i>Pre/Post Comparison: MLQ-5X Results</i>				
Scale Name	Characteristic	Pre-intervention Mean (SD) n = 9	Post-intervention Mean (SD) n = 9	<i>p</i>
Idealized Attributes	Transformational	3 (0.46)	3.06 (0.50)	0.67
Idealized Behaviors	Transformational	3.36 (0.55)	3.25 (0.50)	0.59
Inspirational Motivation	Transformational	3.53 (0.41)	3.5 (0.38)	0.84
Intellectual Stimulation	Transformational	3.16 (0.35)	3.22 (0.51)	0.76
Individual Consideration	Transformational	3.59 (0.44)	3.53 (0.41)	0.65
Contingent Reward	Transactional	3.53 (0.31)	3.5 (0.40)	0.86
Management by Exception (Active)	Transactional	1.5 (0.75)	1.42 (0.81)	0.74
Management by Exception (Passive)	Passive Avoidant	0.41 (0.48)	0.31 (0.29)	0.48
Laissez-Faire	Passive Avoidant	0.42 (0.43)	0.39 (0.53)	0.85
Extra Effort	Outcome of Leadership	3.22 (0.65)	3.19 (0.44)	0.83
Effectiveness	Outcome of Leadership	3.47 (0.46)	3.47 (0.44)	1.0
Satisfaction	Outcome of Leadership	3.63 (0.44)	3.31 (0.53)	0.22
<i>Note.</i> Potential scores range from 0-4 with 0 being not at all and 4 being frequently, if not always				

References

- American Organization of Nurse Executives (AONE). (2002). Acute care hospital survey of RN vacancy and turnover rates in 2000. *JONA: The Journal of Nursing Administration*, 32(9), 437-439.
- Avolio, B. J. & Bass, B. M. (2004). Multifactor leadership questionnaire: Manual and sample set (3rd ed). Retrieved from www.mindgarden.com
- Chang, K. B. T. (2018). Chapter 2: Can we improve emotional intelligence? Addressing the positive psychology goal of enhancing strengths. *Counterpoints*, 336, 25-45. Retrieved from <http://www.jstor.org/stable/42980140>
- Codier, E., Kamikawa, C., & Kooker, B. M. (2011). The impact of emotional intelligence development on nurse managers. *Nursing Administration Quarterly*, 35(3), 270-276.
- Cummings, G. G., Midodzi, W. K., Wong, C. A., & Estabrooks, C. A. (2010). The contribution of hospital nursing leadership styles to 30-day patient mortality. *Nursing Research*, 59(5), 331-339.
- Doody, O. & Doody, C. (2012). Transformational leadership in practice. *British Journal of Nursing*, 21(20). Retrieved from <http://web.a.ebscohost.com.ezproxy.uky.edu/ehost/pdfviewer/pdfviewer?vid=29&sid=95e3b9a3-f15a-4940-81c2-44eb74d87f0e%40sdc-v-sessmgr01>
- Hackett, P. T. & Hortman, J. W. (2008). The relationship of emotional competencies to transformational leadership: Using a corporate model to assess the dispositions of educational leaders. *Journal of Educational Research & Policy Studies*, 8(1), 92-111.

- Hewko, S. J., Brown, P., Fraser, K. D., Wong, C. A., & Cummings, G. G. (2014). Factors influencing nurse managers' intent to stay or leave: A quantitative analysis. *Journal of Nursing Management, 23*, 1058-1066.
- Humphrey, R. H. (2012). How do leaders use emotional labor? *Journal of Organizational Behavior, 33*(5), 740-744. <http://doi:10.1002/job.1791>
- LaVoie-Tremblay, M., Fernet, C., Lavigne, G., & Austin, S. (2015). Transformational and abusive leadership practices: impacts on novice nurses, quality of care and intention to leave. *Journal of Advanced Nursing, 72*(3), 582-592.
- Liang, S. & Chi, S. S. (2013). Transformational leadership and follower task performance: The role of susceptibility to positive emotions and follower positive emotions. *Journal of Business and Psychology, 28*(1), 17-29.
- Loveridge, S. (2017). Nurse manager role stress. *Nursing Management, 48*(4), 20-27.
- Maulding, W. S., Peters, G. B., Roberts, J., Leonard, E., & Sparkman, L. (2012). Emotional intelligence and resilience as predictors of leadership in school administrators. *Journal of Leadership Studies, (5)4*, 20-29. <http://doi:10.1002/jls.20240>
- Mayer, J. D. & Salovey, P. (1990). Emotional intelligence. *Imagination, Cognition, and Personality, 9*, 185-211. <http://doi:0.2190/DUGG-P24E-52WK-6CDG>
- Mayer, J. D. & Salovey, P. (1997). What is emotional intelligence? In P. Salovey, D. J. Sluyter, P. Salovey, D. J. Sluyter (Eds.), *Emotional development and emotional intelligence: Educational implications* (pp. 3-34). New York, NY, US: Basic Books.
- Muenjohn, N. & Armstrong, A. (2008). Evaluating the structural validity of the Multifactor Leadership Questionnaire (MLQ), capturing the leadership factors of transformational-

transactional leadership. *Contemporary Management Research*, 4(1), 3-14. Retrieved from <http://www.cmr-journal.org/article/viewFile/704/2045>

Nielsen, K., Randall, R., Yarker J., & Brenner, S. (2008). The effects of transformational leadership on followers' perceived work characteristics and psychological well-being: A longitudinal study. *Work & Stress*, 22(1), 16–32. Retrieved from <http://search.ebscohost.com.ezproxy.uky.edu/login.aspx?direct=true&db=c8h&AN=105776036&site=ehost-live&scope=site>

Petrides, K. V. (2009). Psychometric properties of the Trait Emotional Intelligence Questionnaire. In C. Stough, D. H. Saklofske, and J. D. Parker, *Advances in the assessment of emotional intelligence*. New York: Springer. DOI: 10.1007/978-0-387-88370-0_5

Petrides, K. V. (2009). Psychometric Properties of the Trait Emotional Intelligence Questionnaire (TEIQue). Retrieved from <http://www.psychometriclab.com/adminsdata/files/TEIQue%20psychometric%20properties%20chapter.PDF>

Prufeta, P. (2017). Emotional intelligence of nurse managers: An exploratory study. *Journal of Nursing Administration*, 47, 134-139.

Rowold, J. (2005). Multifactor Leadership Questionnaire: Psychometric properties of the German translation by Jens Rowold. Menlo Park, CA: Mind Garden. International Norms for the MLQ

Sayed, O.B. & Shanker, M. (2018). Emotionally intelligent managers & transformational leadership styles. *The Indian Journal of Industrial Relations*, 44(4), 593-610.

- Schwartz, D. B., Spencer, T., Wilson, B., & Wood, K. (2011). Transformational leadership: Implications for nursing leaders in facilities seeking magnet designation. *AORN Journal*, 93(6), 737–748. Retrieved from <https://doi-org.ezproxy.uky.edu/10.1016/j.aorn.2010.09.032>
- Siegling, A. B., Vesely, A. K., Petrides, K. V., & Saklofske, D. H. (2015). Incremental validity of the Trait Emotional Intelligence Questionnaire–Short Form (TEIQue–SF). *Journal of Personality Assessment*, 97, 525-535.
- Singh, S. K. (2009). Leveraging emotional intelligence for managing executive’s job stress: A framework. *Indian Journal of Industrial Relations*, 45(2), 255-264.
- Spano-Szekely, L., Quinn Griffin, M. T., Clavelle, J., & Fitzpatrick, J. J. (2016). Emotional intelligence and transformational leadership in nurse managers. *Journal of Nursing Administration*, 46(2), 101-108.
- Srivastava, N. & Shreekumar, K. N. (2010). Emotional intelligence & managerial effectiveness: Role of rational emotive behavior. *The Indian Journal of Industrial Relations*, 46(2), 313-327.
- Taylor, G. (2017). Nurse managers: Why emotionally-intelligent leadership matters. *Australian Nursing and Midwifery Federation*, 25(2), 20.
- Tyczkowski, B., Vandenhouten, C., Reilly, J., & Kubsch, S. M. (2015). Emotional intelligence (EI) and nursing leadership styles among nurse managers. *Nursing Administration Quarterly*, 39(2), 172-180.
- Warshawsky, N. E., Wiggins, A. T., & Rayens, M. K. (2016). The influence of the practice environment on nurse managers’ job satisfaction and intent to leave. *The Journal of Nursing Administration*, 46(10), 501-507.

Zastocki, D. (2010). Retaining nurse managers. *American Nurse Today*, 5, 12.