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The impact of COVID-19 on nurse leadership characteristics

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Abstract

Background: Nurse leaders are vital for improving nursing efficiencies and the quality of care that they provide during a crisis and its aftermath. The value of positive leadership characteristics has never been more critical than during the COVID-19 pandemic. Functioning in a crisis mode required nurse leaders to demonstrate the necessary skills for clear communication and solid leadership. Therefore, nursing leadership, especially in emergencies such as the COVID-19 pandemic, needs to be transformative in the sense that leaders are informational, motivating, and able to advance the organization, notwithstanding a global pandemic. Timely leadership research during and after COVID-19 is crucial for filling the literature gap resulting from the unique changes in the nursing profession in the post-pandemic period.

Objective: This study aimed to investigate leadership characteristics shown by nurse leaders during the COVID-19 pandemic, and investigate nurses' perceptions of nurse leader effectiveness based on leaders' work roles.

Methods: An exploratory, quantitative study was conducted 18 months after the declaration of the COVID-19 pandemic (June–August 2021). The Multifactor Leadership Questionnaire (MLQ 5X) was sent to registered nurses (RNs) in Texas using the State Board's listing of active RNs. In total, 70 practicing RNs participated in the study. Data were analyzed using descriptive statistics and multivariate correlational analysis.

Results: Perceived leadership characteristics remained primarily transformational. Nurse directors and executives reported positive leadership characteristics more frequently than did staff and charge nurses.

Linking Evidence to Action: Specific tactics and strategies must be adopted to support nurses and nursing leadership during ongoing healthcare challenges. Close monitoring of leadership characteristics will enable organizations to support and provide educational opportunities for ongoing organizational success.

KEYWORDS
leadership, leadership styles, multifactor leadership questionnaire, nurse leader, passive-avoidant leadership, transactional leadership, transformational leadership

INTRODUCTION

The COVID-19 pandemic has changed the landscape of nursing leadership. During the pandemic, nurse leaders were expected to provide organizational stability; however, in some cases, they lacked the training and competency to do so (Chen & Sriphon, 2021). During this disruptive event, nurse leaders needed to use an enhanced skill-set to prioritize activities and promote positive cognitive, behavioral, and emotional responses a mong staff.

The pandemic's sustained impact on nursing has yet to be fully realized. Recent research has indicated that leadership style strongly influences nurse behaviors (Huang et al., 2021). When leaders are considered supportive and ethical, nurses showed increased trust and higher levels of psychological health. The same study found that nurses' voluntary behaviors to help patients were boosted when they perceived leaders to be ethical and creating a trusting environment. Thus, strong leadership teams have a positive impact on the nursing workforce. The changing priorities during the pandemic required nurse leaders to adapt their skills, abilities, and competencies to oversee quality patient care.

BACKGROUND

Leadership characteristics

Different characteristics define leadership styles. This study investigated leadership behaviors utilizing characteristics of transformational, transactional, and passive-avoidant styles. For this study, nurse leaders were considered the next-in-line supervisors who managed the participants' nursing activities. Leadership characteristics represent specific activities employed to garner positive staff outcomes.

Transformational leadership characteristics are multidimensional and embody the goal achievement process. Leaders' transformational characteristics can be categorized through the *4-Is*: idealized influence, inspirational motivation, individualized consideration, and intellectual stimulation (Spies et al., 2018). Nurse leaders can influence staff behaviors through role modeling that is congruent with followers' values, beliefs, ideology, and interests, which creates strong identification with the supervisor and leads to the first characteristic, idealized influence (IA) (Abun et al., 2020; Kovenshnikov & Ehrnrooth, 2018). This connection helps form a collective identity between nurse leaders and staff. Motivating language facilitates the second characteristic, inspirational motivation (IM). Poghosyan and Bernhardt (2018) state that IM occurs when the leader's message is clear, and collective group contributions are seen as more valuable than individual contributions. IM is essential in goal achievement for nurse supervisors and organizations. The third characteristic, individualized consideration (IC), is enhanced when leaders take a personal interest in their staff's interests and feelings (Kovenshnikov & Ehrnrooth, 2018). The perception that employees' individual views and comfort affect leaders' decisions increases the perception of individualized consideration. The fourth characteristic, intellectual stimulation (IS), is beneficial for individuals, nurse leaders, and organizations. An intellectually engaged employee will assist in organizational problem solving, be innovative, and think outside the box (Abun et al., 2020).

Transactional leadership characteristics include actions that focus on task completion. Nurse leaders with these characteristics recognize employees' needs and clarify how they are fulfilled if a task is completed using the requisite behaviors (Avolio & Bass, 2004). Transactional leaders value duty, honesty, fairness, promise-keeping, obedience, and morality (Efianda & Iswahyuni, 2021). In a social context, transactional characteristics resolve conflicts between nurse leaders and staff by trading something that the leader needs for a commodity which a staff member needs (Efianda & Iswahyuni, 2021). Staff respond to transactional leadership characteristics to receive rewards, avoid punishment, or prevent corrective actions (Kark et al., 2018). Management by exception-active (MBEA) is often associated with transactional leadership. In MBEA, leaders closely focus on monitoring tasks and making prompt corrections (Avolio & Bass, 2004). While effective, transactional leadership may hinder innovation and intrinsic motivation (Kark et al., 2018).

Passive-avoidant leadership characteristics are the least desirable of the three types included in this study (Breevaart & Zacher, 2019). Passive-avoidant style is comprised of laissez-faire (LF) and management by exception-passive (MBEP) characteristics. LF characteristics include avoidance of interactions, avoidance of responsibility, lack of support for staff, limited information-sharing, and limited feedback for staff (Avolio & Bass, 2004; Breevaart & Zacher, 2019). A passive-avoidant style can result in a lack of staff trust and decrease in staff perceptions of supervisory effectiveness (Breevaart & Zacher, 2019). Transformational and transactional characteristics represent active supervision; however, LF is a more passive style.

Transformational leadership theory

Transformational leadership theory (Burns, 1978) informed the characteristics examined in this study. Burns (1978) coined the term *transformational* to describe a leader's ability to transform a follower's behavior to reflect higher levels of motivation. In Burns' early work, transactional leadership was considered the opposite of transformational leadership. Avolio and Bass (2004) expanded the transformational leadership theory to include the passive-avoidant style to further define components. As defined above, characteristics of transformational style include idealized behaviors (IB), IA, IM, IS, and IC. Transactional leadership style is defined by characteristics such as contingent reward (CR) and MBEA. Passive-avoidant management characteristics include MBEP and LF.

A literature gap exists regarding the effects of a crisis and its aftermath on leadership styles. The foundation of the threat-rigidity theory is that organizational leaders at all levels apply control efficiencies during a crisis through three actions: restricting information, conserving resources, and tightening controls (Stoker et al., 2019). Applying this theory to the context of the COVID-19 pandemic may explain shifts from transformational characteristics to more transactional and passive-avoidant characteristics.

Research questions

The characteristics of effective leadership require time and purposeful action, which the COVID-19 pandemic may have impacted. This research sought to provide insight on three questions:

1. Did nurse leaders exhibit less positive leadership characteristics through the pandemic?
2. Will the three outcomes of leadership (extra effort, effectiveness, satisfaction of leadership) on the Multifactor Leadership Questionnaire (MLQ 5X) differ between staff RNs and different leadership levels based on leadership characteristic ratings?
3. Are there correlations between RNs' work roles and perceptions of leadership characteristics in nurse leaders?

Purpose/aims

This study aimed to provide a snapshot of nurse leaders' leadership characteristics 18 months after the World Health Organization (2020) declared COVID-19 a global pandemic on March 11, 2020.

METHODS

Study design and participants

The study used an exploratory, quantitative design. The pandemic has offered a unique environment to investigate potential changes in leadership styles, and exploratory studies can inform larger research. The sample comprised RNs who were uniquely positioned to reflect on their immediate supervisors' leadership characteristics during the pandemic. Through a quantitative design, variables (e.g., leadership styles) can be quantified to express and reveal statistically proven patterns. Additionally, the study's design enabled investigation between leadership characteristics and groups.

The participants represented a convenience sample of RNs in Texas from a list obtained from the Texas Board of Nursing. To select participants, currently practicing RNs from every tenth line of the list were chosen (i.e., the 10th, 20th, 30th line, etc.). Invitations that included a link to the electronic survey were sent to 200 RNs biweekly for three months (June–August 2021), for seven mailings in total. Participants who completed the survey received a $10 Starbucks gift card.

The survey was open for three months (June–August 2021), and 78 RNs participated in total. Two surveys were duplicates and were removed. An additional six participants did not advance beyond biographical data collection and were removed because no leadership data was collected. After removing duplicates and incomplete questionnaires, 70 participants were included in the analysis. Data integrity was checked to assess for a normal distribution assumption, presence of multicollinearity, homogeneity, linearity, and outlier influence, as appropriate.

Instruments

Data were collected using a web-based survey (QuestionPro™), which included biographical questions related to age, sex, years as

an RN, primary work area, and role at work and the MLQ 5X. RNs were asked to rate their current nurse leader and reflect on actions during the past 18 months.

The MLQ 5X measures effective leadership using nine leadership components to indicate the supervisor's leadership style and three leadership outcomes (Dimitrov & Darova, 2016). It includes components designed to identify transformational leadership characteristics (IA, IB, IM, IS, IC), transactional leadership characteristics (CR, MBEA), and passive-avoidant management characteristics (MBEP, LF). Additionally, the scale measures three leadership outcomes: (1) extra effort (EE), (2) effectiveness (EFF), and (3) satisfaction (SAT). The MLQ 5X comprises 45 items rated using a five-point Likert scale (0 = *not at all*, 1 = *once in a while*, 2 = *sometimes*, 3 = *fairly often*, 4 = *frequently, if not always*). The MLQ 5X and its subscales have shown good internal reliability (Cronbach's $\alpha > 0.74$; Dimitrov & Darova, 2016). Cronbach's α was 0.94 in the present study.

Ethical issues and approval

Institutional Review Board approval was obtained before initiating the study. An online survey was used to collect participant data, and no ethical issues were identified.

Statistical analysis

Data were analyzed using IBM SPSS, version 26, including descriptive statistics and multivariate correlation analysis. Univariate analysis separately explored each variable in the dataset. Correlational analysis using Pearson product–moment correlations explored relationships between variables. The significance threshold was set at 0.05.

RESULTS

Biographical data

Biographical data can be found in Table 1. Mean participant age in years was 41 and 84.3% were female. On average, participants had been practicing RNs for approximately 13 years. As expected, age was correlated with years as an RN ($r = .766$, $p < .001$). No other significant correlations were found with biological data.

Leadership characteristics

Leadership styles and staff/leadership levels were analyzed using the mean scores of characteristics within each leadership style. Scores for IA, IB, IM, IS, and IC, CR and MBEA, and LF and MBEP were averaged to obtain means for transformational leadership, transactional leadership, and passive-avoidant management, respectively. Table 2 shows

TABLE 1 Biographical data of participants

	Mean N = 70*	Range	
		Minimum	Maximum
Age (years)	41.34 (SD = 10.01)	22	67
Years as an RN	13.61 (SD = 9.85)	1	40
	Male N = 11		Female N = 59
Sex	15.7%		84.3%
	N		%
Areas of work			
Acute care (Hospitals)	42		60.8
Clinics	7		9.5
Outpatient care	5		6.8
Home health or remote worker	5		6.8
School nurse	4		5.4
Other	7		10.8
Role at work			
Staff/charge nurse	35		50.0
Second-line (manager)	19		27.1
Third-line (director)	6		8.6
Executive	5		7.1
Advance practice	1		1.4
School nurse	2		2.9
Other	2		2.9

Note: *Total responses: 74; 2 duplicates and 2 incomplete surveys.

the zero-order correlations between leadership styles and staff/leadership levels. The nurse leadership role at work was positively correlated with perceived transformational leadership ($r = .259$, $p = .031$), indicating that as the nurse leadership role increases, so does the supervisor's perceived transformational leadership characteristics. Passive-avoidant characteristics and leadership roles were negatively correlated ($r = −.308$, $p = .009$). Regarding outcomes, EE was significantly correlated positively with transformational style ($r = .872$, $p = .000$) and transactional style ($r = .577$, $p = .000$), and negatively with passive-avoidant style ($r = −.374$, $p = .001$). Leadership EFF was significantly correlated positively with transformational style ($r = .917$, $p = .000$) and transactional style ($r = .657$, $p = .000$), and negatively with passive-avoidant style ($r = −.487$, $p = .000$). SAT was significantly correlated positively with transformational style ($r = .9103$ $p = .000$) and transactional style ($r = .646$, $p = 000$), and negatively with passive-avoidant style ($r = −.442$, $p = .000$).

Leadership outcomes

Descriptive statistics were completed on the leadership outcomes of EE, EF, and SAT. The lowest scoring outcome was EE ($M = 2.33$, $SD = 1.34$) with 45.72% scoring the positive trait of extra effort as fairly often or frequently, if not always occurring. EF and SAT scored very similarly with EF $M = 2.53$ ($SD = 1.16$) and SAT $M = 2.56$ ($SD = 1.26$). Additionally, 48.45% of participants scored EF as fairly often or frequently, if not always; similarly, 50% scored SAT positive characteristics as fairly often, or frequently, if not always.

A post-hoc analysis was conducted and the Tukey's HSD test for multiple comparisons demonstrated significant differences between groups for leadership outcomes of EFF, and SAT between staff nurses and 1st line mangers in IC ($p = .019$, 95% CI [−1.92, −.10]); between nurse managers(2nd inline) and nurse directors (3rd inline) in EFF ($p = .042$, 95% CI [−.03, 3.02]); between nurse managers and nurse directors in SAT ($p = .024$, 95% CI [−3.34, −.15]); between nurse directors and nurse executives in SAT ($p = .049$, 95% CI [.002, 4.13]). The effect size, using eta squared, for the factor of IC was 0.22, EFF 0.16, and SAT 0.22, all indicating a large effect. No between-groups difference on the leadership outcome of extra effort was evident.

Nurse roles

The RNs' role was identified in the survey by asking participants to describe their nursing role at work. The choices consisted of 1st line

TABLE 2 Zero-order correlations of variables

		1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Attributes	(r)	–														
	(p)	–														
2. Behaviors	(r)	.259*	–													
	(p)	.031	–													
3. Motivation	(r)	.224	.919**	–												
	(p)	.062	.000	–												
4. IB	(r)	.136	.822**	.679**	–											
	(p)	.262	.000	.000	–											
5. IM	(r)	.255*	.931**	.828**	.726**	–										
	(p)	.033	.000	.000	.000	–										
6. IS	(r)	.250*	.944**	.817**	.735**	.853**	–									
	(p)	.037	.000	.000	.000	.000	–									
7. IC	(r)	.293*	.939**	.836**	.686**	.836**	.889**	–								
	(p)	.014	.000	.000	.000	.000	.000	–								
8. Transactional	(r)	.087	.734**	.635**	.813**	.644**	.654**	.649**	–							
	(p)	.473	.000	.000	.000	.000	.000	.000	–							
9. Contingent Reward	(r)	.195	.877**	.808**	.809**	.786**	.804**	.809**	.834**	–						
	(p)	.105	.000	.000	.000	.000	.000	.000	.000	–						
10. MBE Active	(r)	-.093	.189	.101	.415**	.146	.141	.125	.715**	.211	–					
	(p)	.443	.116	.403	.000	.227	.243	.303	.000	.080	–					
11. Passive-Avoidant	(r)	-.308**	-.461**	-.466**	-.303*	-.410**	-.441**	-.455**	-.270*	-.492**	.146	–				
	(p)	.009	.000	.000	.011	.000	.000	.000	.024	.000	.229	–				
12. MBE Passive	(r)	-.287*	-.533**	-.515**	-.356**	-.528**	-.518**	-.491**	-.301*	-.550**	.163	.813**	–			
	(p)	.016	.000	.000	.002	.000	.000	.000	.011	.000	.177	.000	–			
13. Laissez-Faire	(r)	-.258*	-.315**	-.335**	-.203	-.244*	-.297*	-.336**	-.192	-.350**	.103	.918**	.517**	–		
	(p)	.031	.008	.005	.091	.042	.013	.005	.111	.003	.395	.000	.000	–		
14. Extra Effort	(r)	.178	.872**	.862**	.675**	.785**	.825**	.812**	.577**	.757**	.063	-.374**	-.416**	-.268*	–	
	(p)	.140	.000	.000	.000	.000	.000	.000	.000	.000	.603	.001	.000	.025	–	
15. Effectiveness	(r)	.192	.917**	.901**	.707**	.871**	.847**	.837**	.657**	.847**	.090	-.487**	-.562**	-.334**	.881**	–
	(p)	.111	.000	.000	.000	.000	.000	.000	.000	.000	.460	.000	.000	.005	.000	–
16. Satisfaction	(r)	.231	.903**	.875**	.716**	.846**	.829**	.838**	.646**	.855**	.062	-.442**	-.536**	-.286*	.887**	.940**
	(p)	.055	.000	.000	.000	.000	.000	.000	.000	.000	.611	.000	.000	.016	.000	.000

Note: *Correlation is significant at $p < .05$; ** at $p < .001$.

leader (staff or charge nurse), 2nd line leader (nurse manager), 3rd line leader (director), executive, school nurse, advanced practice nurse, and others. In the research sample, 50.0% indicated their role as staff nurse, 27.1% nurse manager, 8.6% director, 7.1% executive, 2.9% school nurse, 1.4% advanced practice, and 2.9% listed their role as other.

Transformational leadership style had the highest mean score of the participants ($M = 2.38$, $SD = 0.97$), with this highest average characteristic of IM ($M = 2.70$, $SD = 1.03$). Both transactional styles ($M = 2.22$, $SD = 0.76$) and passive-avoidant styles ($M = 2.01$, $SD = 1.08$) had a mean score less than transformation with the lowest scoring characteristic of MBEP ($M = 1.51$, $SD = 1.00$). In comparing leadership styles between staff/leadership levels, 1st line leadership scored their supervisors highest in passive-avoidant style ($M = 2.34$, $SD = 0.98$), 2nd line leadership scored supervisors highest in transformational style ($M = 2.68$, $SD = 0.89$), 3rd line leadership scored supervisors highest in passive-avoidant style ($M = 2.25$, $SD = 0.97$), and nurse executives scored supervisors highest on transformational characteristics ($M = 2.98$, $SD = 0.47$).

Leadership styles associated with staff/leadership levels were interpreted using MANOVA with Levine's test to assure equality of variances. A one-way multivariate analysis was conducted to determine the effects of staff/leadership levels on the means of the 12 factors of the MLQ 5X (9 characteristics and 3 outcomes). A one-way ANOVA revealed significant differences between leadership groups and idealized attributes ($F [5, 64] = 2.57$, $p < .05$), idealized behaviors ($F [5, 64] = 2.67$, $p < .05$), intellectual stimulation ($F [5, 64] = 2.72$, $p < .05$), individual consideration ($F [5, 64] = 3.71$, $p < .05$), and contingent reward ($F [5,64]) = p < .05$). IM, MBEA, MBEP, and LF were not significant. Tukey's HSD test for multiple comparisons found that the mean values for leadership groups were significantly different between staff nurses and first-line managers in IC ($p = .019$, 95% CI [−1.92, −.10]).

DISCUSSION

Leadership characteristics

The first research question explored leadership characteristics through the pandemic. Leadership characteristics were compared to findings from a normative sample and two current samples from research conducted prior to the pandemic. Table 3 highlights comparisons among the current study, a United States normative sample by Avolio and Bass (2004), and studies by García-Sierra and Fernández-Castro (2018) and Sabbah et al. (2020). The normative sample was used as a comparison due to the large sample size and because it was the only normative sample found. The other comparisons were chosen because the sample sizes were larger than the current study, participants were RNs, and research was conducted prior to the pandemic. Unpaired *t*-tests were run for the current and comparative studies. Significance was reached for transformational leadership style between the current study and both Avolio and Bass (2004), and Sabbah et al. (2020). Transactional leadership

TABLE 3   Comparison of descriptive statistics of the MLQ 5X

	Current study N = 70		US Normative Sample* N = 27,285		García-Sierra & Fernández-Castro, 2018 N = 150		Sabbah et al., 2020 N = 250	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD
Transformational leadership	2.38	.97	2.85	–	2.40	.92	2.79	.75
IA	2.47	1.17	2.94	.76	2.55	.89	2.89	.78
IB	2.24	.84	2.77	.72	2.46	.95	2.67	.75
IM	2.70	1.03	2.92	.76	2.52	.98	2.98	.71
IS	2.27	1.08	2.78	.71	2.27	.99	2.80	.79
IC	2.21	1.18	2.85	.78	2.23	.80	2.60	.92
Transactional leadership	2.22	.76	2.27	–	2.36	.88	2.85	.73
CR	2.48	1.09	2.87	.70	2.34	.96	2.80	.42
MBEA	1.96	.86	1.67	.88	2.33	.80	2.90	.43
Passive-avoidant Leadership	2.01	1.08	.84	–	1.44	.91	1.52	.32
LF	2.51	1.47	.65	.67	1.10	.99	1.45	.21
MBEP	1.51	1.00	1.03	.75	1.77	.83	1.59	.38
Leadership outcomes								
Extra effort	2.23	1.34	2.74	.86	2.00	1.1	2.73	.90
Effectiveness	2.53	1.16	3.07	.72	2.63	.97	2.87	.89
Satisfaction	2.56	1.26	3.08	.83	2.5	1.2	2.85	.94

Note: *Avolio and Bass, (2004). *Multifactor leadership questionnaire.* Mind Garden.

style reached significance for the current study and the study by Sabbah et al. (2020). Significance was reached in passive-avoidant leadership style for all three comparisons' studies: (1) Avolio and Bass (2004), (2) García-Sierra and Fernández-Castro (2018), and (3) Sabbah et al. (2020).

Table 4 shows the results of the unpaired samples. An additional study by Alloubani et al. (2019) conducted with nurses in private hospitals in Jordan also had higher mean scores for transformational leadership style compared with the current study. Negative characteristics such as laisses-faire and MBEP were scored higher by the nurses in the current study.

All three comparison samples had higher mean scores for all transformational and transactional characteristics. However, only Sabbah et al. (2020) and the US normative sample (Avolio & Bass, 2004) had moderate effect sizes. In addition, the three comparison samples had lower passive-avoidant scores and moderate to large between-group effect sizes. The results from the present study suggest that, during the pandemic, nurse leaders displayed fewer positive characteristics than those in the three comparison samples. This was particularly evident in the reported use of passive-avoidant styles. Other studies reported similar findings (Al Fadhalah & Elamir, 2019; Poghosyan & Bernhardt, 2018). Subsequently, an affirmative answer emerges for the first question, indicating that nursing leadership in the present study displayed more negative leadership characteristics, as measured by the MLQ 5X.

Leadership outcomes

The second research question investigates leadership outcomes (EE, EFF, SAT) and perceptual differences based on levels of staff and leadership. Some perceptual differences were evident in the data. An outcome of solid leadership is staff expending extra effort. The outcome of EFF consists of ratings of leadership EFF by those that report to them, and SAT represents nurses' satisfaction with their next-in-line nurse leader (Alloubani et al., 2019). Most participants answered questions related to EE and EF negatively (i.e., occurring never, once in a while, or sometimes). Furthermore, approximately half the participants were satisfied with their nurse leader.

No between-group differences were found for EFF or SAT. A difference in perceived EFF was found between nurse managers and directors. Nurse managers perceived nurse directors to be less effective, while nurse directors did not perceive nurse executives to be effective. SAT with leadership also demonstrated a between-group difference between nurse managers and directors, and nurse directors and executives. Managers were satisfied with their supervisors; however, nurse directors were not. Conversely, nurse executives were satisfied with the leadership of their leaders. Overall, nurse directors were the least satisfied, indicating that director satisfaction may be one outcome negatively impacted by the pandemic. Relationships, mutual trust, and transparent communication are necessary during a crisis and its aftermath to promote a sense of security among staff (Chen & Sriphon, 2021). During a crisis, leaders

TABLE 4 Comparison of leadership styles pre- and post-COVID with independent summary T-tests

	Current Study (n = 70)	García-Sierra & Fernández-Castro, 2018 (N = 150)	Sabbah et al., 2020 (n = 250)	US Normative*(n = 27285)	t	df	p	Cohen's d
	M (SD)	M (SD)	M (SD)	M (SD)				
Transformational	2.38 (.97)	2.40 (.92)			−.148	218	.883	−.02
Transactional	2.22 (.76)	2.36 (.88)			−1.14	218	.253	−.17
Passive-avoidant	2.01 (1.08)	1.44 (.91)			4.07	218	>.001	.57
Transformational	2.38 (.97)		2.79 (.75)		−3.77	318	>.001	.47
Transactional	2.22 (.76)		2.85 (.73)		−6.32	318	>.001	−.84
Passive-Avoidant	2.01 (1.08)		1.52 (.32)		6.27	318	>.001	.61
Transformational	2.38 (.97)			2.85(1.06)	−3.07	27,353	>.001	−.46
Transactional	2.22 (.76)			2.27 (.79)	−.592	27,353	.597	−.06
Passive-Avoidant	2.01 (1.08)			.84 (.71)	13.74	27,353	>.001	.88

Note: *Avolio and Bass, (2004). Multifactor leadership questionnaire. Mind Garden.

in high positions are tasked with approving strategic decisions and held accountable for implementing them (Ramlachan & Beharry-Ramraj, 2021). Although nurse directors are accountable for rapidly implementing changes, they are often neither present when critical issues are discussed nor at the front line directly engaged in inpatient care. A lack of trust, remote working, and professional isolation adversely affected performance during the pandemic, which nurse directors often felt (Chen & Sriphon, 2021).

Nurse roles

The final question explores whether nurses' roles at work correlate with leadership characteristics. The study found that overall transformational characteristics increased as higher-line leaders rated their supervisors. Leadership role correlated with specific leadership characteristics, including IM, IS, and IC. Only IA and IB did not demonstrate a correlation. Articulating a clear vision and a compelling sense of purpose is the foundation for inspirational motivation (Boamah & Tremblay, 2019). Leaders who supported staff and could make sense of information during the pandemic promoted a collective response and focused staff on collective interests or goals (Sobral et al., 2020). IS refers to the nurse leaders' ability to solicit and include the RN's opinions and suggestions into solutions (Boamah & Tremblay, 2019). Engagement is promoted through collective decision making, which sequentially is vital for long-term teamwork and organizational development (Chen & Sriphon, 2021). IC are activities taken by nurse leaders to look after the individual needs of staff and offer mentorship (Boamah & Tremblay, 2019). The transformational characteristic of individualized consideration may prove vital to nursing retention and satisfaction with leadership and the profession.

Implications for nursing

The aim of this study was to explore leadership characteristics displayed during the pandemic. Implications arising from the study included actions that increase positive leadership characteristics. For both short term and long term, effective strategies for resilience need to be designed and tested (Yang et al., 2021). The impact of organizational support during COVID-19 cannot be overstated. Support needs to be continuous at all levels and endure past the duration of the crisis. Outcomes of transformational leadership in staffing take time to develop. If the nurse leader has not exhibited transformational characteristics or is new to the organization, challenges during a crisis may result in less positive leadership characteristics displayed. In the immediacy of a crisis, transactional behaviors and even autocratic tactics may be used but should not be exploited. Leadership characteristics autocratic in nature, or even transactional, can be detrimental to problem solving and innovation (Kark et al., 2018). Higher levels of focus on sustaining and developing leaders in transformational leadership characteristics need to be

implemented during the immediate crisis and for a period of time after the crisis. Increased leadership training in preparation, during, and in the aftermath of a crisis may be required to sustain positive leadership characteristics.

Communication plays a key role in transformational leadership. During periods of rapid change, there is often conflicting information, mass confusion, and fear. Staff will look to leaders for accurate information. Research has demonstrated that nursing staff performance behaviors are linked to trust in nursing leadership (Hadi-Moghaddam et al., 2021); thus, transparency is needed at all levels. The present findings demonstrate decreased perceptions of nurse directors having positive leadership characteristics, including factors related to communication and transparency from the MLQ 5X. Often considered middle management, nurse directors may be negatively impacted by a lack of transparency. Adamu and Mohamad (2019) found that staff should be aware of any organizational crises to respond effectively. Increasing "huddles" in nursing attended by all levels of leadership can ensure messaging is consistent and transparent at all levels.

Finally, heightened monitoring of leader effectiveness is needed. Increasing feedback from staff on their perceptions of leader effectiveness can provide a snapshot of organizational culture. In situations such as the COVID-19 pandemic, leaders demonstrated fluidity in decision making and managing staff. Leadership style effectiveness should be partly judged by staff. Frontline workers can provide information related to leadership and its impact on patient care, safety, and staff morale (Mianda & Voce, 2018). Formal evaluations typically conducted annually may need to be modified for quick and frequent feedback to be effective during stressful organizational periods.

Implications for future research

This study's significance is related to its timeliness. After the pandemic is resolved or the nursing profession regains a sense of normalcy, conducting a follow-up would offer insightful information. Qualitative research, such as phenomenological studies, may also identify themes and explore perceptions based on experiences of nurses. Phenomenological experience, or perception-based research, would be valuable, as nurses could verbalize lived experiences in their nursing practice during this time. As the pandemic and its sequelae are realized, nursing studies will have opportunities to present new or revised nursing management paradigms.

Study limitations

This study represented a cross-sectional view of leadership. Correlations were used in the study to demonstrate associations but do not indicate causation. The continued stress on nursing services created challenges in data collection. The sample size was a limitation. A time-series research project conducted after concepts

have been further identified and researched may yield more insightful results but would be more challenging to implement. Another limitation was sampling bias. The participation invitations were only sent to RNs in Texas. Response bias is also a risk. An incentive was offered, which may have impacted some survey participants. The survey question related to nursing roles grouped staff and charge nurses together. The rationale for this was that the charge nurse position is not always a designated formal position; however, with careful wording on the survey tool, it may have been possible to separate these two groups for more definitive responses. International articles and research were included in the support and literature review. The authors recognize that nurse staffing and leadership may differ by country. Additionally, the methodology was a limitation. A mixed-methods study would yield additional qualitative data and better insight into leadership during the pandemic.

LINKING EVIDENCE TO ACTION

- Organizational focus on maintaining transformational characteristics during times of stress or crisis, for example:
1. increased nurse leader training
2. increased leader presence
3. increased feedback to staff
4. intensive leader efforts to offer praise and recognition
5. expanded communication channels and efforts
- Increasing transparency regarding decision making during a crisis, for example:
1. increasing leadership huddles
2. increasing staff huddles
3. including staff in decision making at all levels
- Organizational awareness and monitoring of nurse leaders to promote positive leadership characteristics, for example:
1. staff input in leader evaluations
2. development of quick leader evaluations to promote frequent feedback from staff

CONCLUSION

This research examined leadership characteristics 18-months into the COVID-19 pandemic. Leaders were expected to provide organizational stability during the pandemic; however, they lacked the training and competency to do so in some cases (Chen & Sriphon, 2021). Research demonstrates that nursing staff performance behaviors are linked with their level of trust and confidence in nursing leadership (Hadi-Moghaddam et al., 2021). Transformational leadership behaviors were predominantly present in the current study; however, reduced transformational characteristics were noted. Conversely, an increase in passive-avoidance behaviors was found, indicating that changes occurred in leadership styles during this time. The findings indicated a need for organizational monitoring of leadership styles and increased training activities for leadership groups. Evidence on

leadership behavior outcomes will lead to subsequent actions to improve competencies that will intrinsically improve patient care and organizational functioning during a crisis and beyond.

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