The Nurse Empowerment Program for Nurses in Direct Care Positions

Kristin Bard, BA
Julie A. Cornell, MPA
Shayna D. Cunningham, PhD

Elizabeth A. Madigan, PhD, RN
Julie Solomon, PhD

OBJECTIVE: An educational program including online generic and nursing-specific content was evaluated for self-assessed leadership skill outcomes.

BACKGROUND: Leadership development for nurses in direct care positions has not received the same support as for nurses in formal leadership positions. Pandemic and workforce changes make it critical that leadership skills be built at all levels of nursing.

METHODS: Early-career nurses (≤10 years of experience) were recruited to participate in an online leadership development program offering 9 LinkedIn Learning courses, 3 leadership courses from Sigma, an e-book, and a discussion board.

RESULTS: Most participants who responded to both immediate postsurvey and 3-month follow-up survey (98.6% of n = 69) reported having applied new or improved abilities in their nursing practice to at least a small degree, and the majority reported having done so to a moderate or great degree.

CONCLUSION: This online leadership development program was valued and was associated with improved self-assessed leadership.

Leadership in nursing has often been equated with nursing management or defined narrowly to include only formal leadership positions. To the contrary, leadership in nursing happens in all positions, regardless of the formal title, and the most effective care teams have many leaders within them. The pandemic, with its impact on nurse retention globally, means that leadership skills have become even more important. As the health system changes in response to the impact from the pandemic (eg, more team nursing), the need for leadership skills among all nurses will also increase. Anecdotal reports suggest that nurses who would have previously been considered to have too little clinical experience are assuming formal leadership positions (eg, charge nurse, assistant unit manager) because there are so few remaining nurses with more clinical experience. Although travel nurses, who are increasing in number, may have greater clinical experience, they are not generally assigned to formal leadership positions.

A number of leadership development programs exist for nurses who are planning for or assuming formal leadership roles, including those offered by the American Organization for Nursing Leadership as well as state-based chapters for nursing leaders. The American Organization for Nursing Leadership identified competencies for these programs for formal leaders, through a rigorous approach. In addition, some specialty organizations offer leadership development programs (eg, Academy of Medical-Surgical Nurses).

As a global organization, Sigma Theta Tau International Honor Society of Nursing (Sigma) has provided in-person leadership development activities for...
nurses in clinical settings in North America and Africa for more than 15 years. Evaluation findings showed that participants reported enhanced leadership knowledge, skills, and behaviors after engagement with the program. Building on these successful programs, Sigma reenvisioned its leadership activities to focus on nurses in direct care positions as a way to empower and support them to be leaders in care settings regardless of formal title. Sigma also shifted to a hybrid virtual (online education) and in-person program, even before the pandemic. Partnering with the Johnson & Johnson Foundation and an external evaluator, Sigma developed, implemented, and evaluated an online leadership development program for early-career nurses working in direct care positions. The principal aim of the evaluation was to assess whether participants improved over time in self-reported leadership abilities and resilience.

Methods

Program Description

The Nurse Empowerment Program consisted of 9 online leadership courses from LinkedIn Learning that were not healthcare specific (lasting from 34 to 84 minutes per course); 3 online courses from Sigma that were specific to nursing and had nursing continuing professional development (NCPD) hours associated with them (ranging from 1.6 to 5.4 hours); an e-book, Critical Conversations in Healthcare (Cite 5), focused on critical conversations (3 hours of NCPD credit); and 5 nursing-specific case studies with an associated asynchronous discussion platform (0.25 hours of NCPD credit per case study posted about).

LinkedIn Learning is an online educational platform with more than 5000 courses that focus on high-level leadership as well as specific applied content for business. Selected LinkedIn Learning courses focused on leadership were used in a previous nurse leadership development program pilot with 2 health systems. They were well received by the early-career nurses, who also identified the need for nursing-specific content. Thus, the Sigma courses, e-book, and discussion board were added to the current program. All the content was made available via Sigma’s learning management system (LMS). There was no charge for participation. Participation in the evaluation study was optional. The program opened for participants on April 1, 2021, and closed on July 14, 2021. Participants could work at their own pace, on their own schedules, within this period.

Recruitment and Eligibility

Participants were recruited via outreach to nursing organizations, individual nursing leaders in hospitals and health systems, and professional networks in the United States and Canada. Because there is a dearth of nurses from historically marginalized groups in nursing leadership positions, recruitment approaches included nursing organizations representing nurses from these populations. The contacts were sent a short description of the program that they could then use to identify nurses who were eligible to participate. Eligibility criteria included being an RN from any educational background/degree and within the first 10 years of a nursing career. Recruitment took place between mid-January and April 2021. Pearl Institutional Review Board reviewed the program evaluation and determined it was exempt.

Instruments and Data Collection

The Sigma LMS platform and LinkedIn Learning captured data on program exposure, including number of LinkedIn Learning and Sigma program courses completed (in whole or in part), e-book completion (based on participant attestation), and case study discussion posting. Outcome and program feedback data were collected by online surveys at 3 time points: before program exposure (pre), at the end of the program (post), and 3 months after the end of the program (follow-up).

Leadership abilities were measured before program initiation and immediately post completion using 17 questions for which participants rated their abilities using a 7-point Likert-type scale (1, very low, to 7, very high). These questions were derived from experts in nursing practice who had identified the abilities needed by nurses in leadership positions in practice settings, and they were tied to Nurse Empowerment Program content. Although the questions were intended to be scored individually (there was no total scale score), the researchers evaluated the internal consistency of the items (Cronbach’s $\alpha = 0.94$). Other aspects of reliability and validity of the questions were not formally assessed.

Resilience was assessed before program initiation, immediately post completion, and at 3-month follow-up using the Connor-Davidson Resilience Scale 2-item version (CD-RISC2) with 5 scaled response options (0-4). Vaishnavi et al. report high convergent and divergent validity in diverse populations (although not nurses) and evidence of high test-retest reliability for the abbreviated scale.

Application of leadership abilities acquired or improved through the program was assessed immediately
post program completion using 2 questions—“Have you applied leadership abilities that you acquired or improved through the Nurse Empowerment Program in your nursing practice?” and “Moving forward, do you expect to apply leadership abilities that you acquired or improved through the Nurse Empowerment Program in your nursing practice?”—each with 4 response options (not at all, to a small degree, to a moderate degree, to a great degree). The 2nd question was also asked at 3-month follow-up.

Feedback on the program was obtained via 1 question at immediate post (“Do you feel that what you learned from the Nurse Empowerment Program was worth the time it took to take the courses?”) and 1 question at 3-month follow-up (“Did your participation in the Nurse Empowerment Program add value to your professional development as a leader?”), each with 4 response options (definitely yes, probably yes, probably no, definitely no). Reliability and validity of the questions were not formally assessed.

Analysis
Descriptive statistics were used to examine the frequency and distributions of all study variables in the presurvey, immediate postsurvey, and follow-up survey. The nonparametric Wilcoxon signed rank test was used to analyze change over time in leadership ability scores and resilience, due to data distribution. Simple linear and logistic regression models were used to look at associations between program participation and outcomes of interest, including change in self-reported leadership abilities and resilience from pre to immediate post, change in application of leadership abilities to practice from immediate post to follow-up, and at least 1 reported career advancement at follow-up. Statistical significance was set at \( P < 0.05 \). Analyses were conducted using SPSS 26 IBM Statistics 2019 (Armonk, New York).

Results

Study Participation
There were 780 participants who accessed the content. Because providing leadership development was paramount, participation in the study component (surveys) of the program was not required to access program content. As a result, only a subset of participants submitted program surveys: 170 submitted presurveys and immediate postsurveys, 106 submitted follow-up surveys, 69 provided both postsurveys and follow-up surveys, and 67 provided presurveys, postsurveys, and follow-up surveys. There were no significant differences in the demographic characteristics of those who completed the surveys compared with nonresponders. Nurses who completed the surveys had significantly greater program exposure than those who did not.

Program Exposure
Among the 170 who submitted presurveys and post-surveys, completion of particular program components varied by the type of material (Table 1). For the LinkedIn Learning component, more than one-third completed all 9 available courses. More than half completed all 3 Sigma courses, and more than half completed the e-book. Fewer than 10% attested to reading and posting about at least 1 case study.

Demographics and Professional Background
Among the 170 participants who submitted presurveys and postsurveys, 89% identified as female; most lived in the United States (85.9%); and more than 90% had a BSN or higher as their highest degree in nursing (Table 1). Approximately half were working primarily in surgical/perioperative and/or medical/surgical nursing at the time of program participation; years in clinical practice were approximately evenly split between 5 or less and 6 to 10. Among the US nurses, 12.9% identified as Black or African and 10.6% identified as Asian; more than half identified as White or Caucasian.

Outcomes
For the 17 self-reported leadership abilities, survey respondents showed increases in mean scores ranging from 2.6% to 20.7% (Table 2). On the basis of means, the highest scoring abilities at presurvey were “establish and maintain trust among the team” and “listen using the eyes, ears, and heart.” The lowest scoring abilities were “deal effectively with people resistant to change” and “be appropriately assertive in team conflict.” At immediate postsurvey, the highest scoring abilities were “listen using the eyes, ears, and heart,” followed by “consider points of view different from your own.” The largest self-assessed change, based on means, was observed for “deal effectively with people resistant to change,” followed by “apply effective reflection strategies during negative situations.” Score changes were statistically significant (based on the Wilcoxon signed rank test) for 16 of the 17 abilities. The only leadership ability that did not show a significant increase was “establish and maintain trust among the team.”

Completion of all 3 Sigma courses and e-book completion were each significantly associated with increases over time in 3 self-perceived leadership abilities: “be appropriately assertive in team conflicts”; “be authentically positive with negative coworkers, patients, and clients”; and “use positive thinking strategies during negative situations” (\( P < 0.05 \) for all; Table 3). The number of Sigma courses completed was likewise significantly associated with participants’ perceived ability to “be authentically positive with negative
coworkers, patients, and clients” and “use positive thinking strategies during negative situations” \((P < 0.05\) for both). No other associations between LinkedIn Learning and Sigma program exposure or e-book completion were observed.

Among respondents to all 3 surveys, the resilience score (per CD-RISC2) showed a statistically significant increase from presurvey to immediate postsurvey; the 3-month follow-up score trended downward from program end but did not differ significantly from the immediate postscore or prescore, based on the Wilcoxon signed rank test (Table 2). Change in resilience from pre to immediate post was not associated with program exposure (Table 3).
Nearly all of those who responded to both the immediate postsurvey and 3-month follow-up survey (98.6% of n = 69) reported having applied new or improved abilities in their nursing practice to at least a small degree, and the majority reported having done so to a moderate or great degree. Completion of nursing-specific program components (Sigma courses, e-book) was significantly associated with an increase in the application of leadership abilities from post to follow-up. Specifically, completing a greater number of Sigma courses ($B = 0.17, SE = 0.06, P = 0.007$), completing all Sigma courses ($B = 0.44, SE = 0.16, P = 0.007$), and attesting to completing the e-book ($B = 0.38, SE = 0.16, P = 0.02$) were associated with a positive change from post to follow-up in application of the leadership abilities.

There was no increase in the application of leadership abilities over time based on completion of LinkedIn Learning courses (when evaluated by number of courses or by completion of all courses). In the area of nursing career advancement, at 3-month follow-up, almost half of survey respondents reported an expansion of responsibilities without a title change (45.7%), and more than one-fourth reported either a merit-based pay increase (27.9%) or a promotion to a new position (27.2%; Table 4). Of those who reported at least 1 career advancement at 3-month follow-up, approximately two-thirds attributed the advancement, at least in part, to the program. No significant associations were evidenced between program exposure and experiencing at least 1 nursing career advancement.

### Table 2. Change in Self-assessed Leadership Abilities (Pre to Post) and Resilience per CD-RISC2 (Pre to Post and 3-Month Follow-up)

| Leadership Ability Item                                      | n   | Pre: Mean (SD) Median | Post: Mean (SD) Median | % Change, Means P, Medians |
|-------------------------------------------------------------|-----|-----------------------|------------------------|----------------------------|
| Add value to a meeting                                      | 161 | 4.78 (1.19) 5         | 5.51 (1.17) 6         | 15.3 0.00*                  |
| Participate actively in a collaborative team                | 160 | 5.70 (1.05) 6         | 6.07 (0.95) 6         | 6.5 0.00*                  |
| Establish and maintain trust among team members             | 157 | 5.84 (1.09) 6         | 5.99 (0.99) 6         | 2.6 0.08                   |
| Listen using the eyes, ears, and heart                     | 158 | 5.78 (1.19) 6         | 6.17 (0.98) 6         | 6.7 0.00*                  |
| Give unbiased positive feedback                             | 160 | 5.22 (1.21) 5         | 5.69 (1.08) 6         | 9.0 0.00*                  |
| Address conflict positively and respectfully                | 155 | 4.86 (1.27) 5         | 5.65 (1.12) 6         | 16.3 0.00*                 |
| Be appropriately assertive in team conflict                | 155 | 4.54 (1.34) 5         | 5.31 (1.24) 6         | 17.0 0.00*                 |
| Be appropriately cooperative in team conflict              | 156 | 5.15 (1.23) 5         | 5.80 (1.06) 6         | 12.6 0.00*                 |
| Be authentically positive with negative coworkers, patients, and clients | 158 | 4.99 (1.27) 5         | 5.72 (1.16) 6         | 14.6 0.00*                 |
| Use inclusivity to promote engagement in work environment   | 158 | 5.38 (1.13) 5         | 5.97 (1.05) 6         | 11.0 0.00*                 |
| Thrive in a changing work environment                      | 158 | 5.46 (1.17) 6         | 6.01 (1.01) 6         | 10.1 0.00*                 |
| Lead yourself and others through change                    | 154 | 5.09 (1.14) 5         | 5.79 (1.03) 6         | 13.8 0.00*                 |
| Deal effectively with people resistant to change            | 156 | 4.39 (1.25) 5         | 5.30 (1.16) 6         | 20.7 0.00*                 |
| Use collaboration to make meetings more effective           | 157 | 4.86 (1.26) 5         | 5.64 (1.17) 6         | 16.0 0.00*                 |
| Consider points of view different from your own            | 161 | 5.58 (1.04) 6         | 6.13 (0.98) 6         | 9.9 0.00*                  |
| Apply effective reflection strategies during negative situations | 159 | 4.78 (1.25) 5         | 5.64 (1.17) 6         | 18.0 0.00*                 |
| Use positive thinking strategies to recover during challenging situations | 158 | 4.84 (1.17) 5         | 5.70 (1.12) 6         | 17.8 0.00*                 |

| Resilience n Pre: Mean (SD) Median | Post: Mean (SD) Median | Follow-up: Mean (SD) Median | Pre to Post: % Change, Means P, Medians | Post to Follow-up: % Change, Means P, Medians | Pre to Follow-up: % Change, Means P, Medians |
|-----------------------------------|------------------------|----------------------------|----------------------------------------|---------------------------------------------|---------------------------------------------|
| CD-RISC2 score                    | 67                     | 6.67 (1.04) 7 | 6.93 (0.83) 7 | 6.87 (0.91) 7 | 3.9 0.04* | −0.9 0.15 | 3.0 0.79 |

*Statistically significant, $P < 0.05$.
More importantly, the majority indicated themselves to have higher ability levels after program ex-post, indicating that the participants considered themselves demonstrated a significant increase from pre to immediate post. Sixteen of 17 self-assessed leadership abilities demonstrated a significant increase from pre to immediate post, with two-thirds (64.5%) reporting that it definitely did. At 3-month follow-up, nearly two-thirds of immediate postsurvey respondents (64.2%) reported that program learnings were worth the time invested. At 3-month follow-up, the evidence supports that the program met a leadership development need and was associated, at least in part, with career advancement. Although the completion of LinkedIn Learning courses was not associated with increases in the self-assessed leadership abilities or career development, the study participants who completed presurveys and postsurveys engaged widely with the courses, with a substantial percentage completing all 9 LinkedIn Learning courses. The LinkedIn Learning courses were designed to introduce foundational skills, whereas the Sigma program components were designed to enable using the new or strengthened abilities. Although the effectiveness of skills application in the workplace is unknown, with more than one-fourth reporting promotion to a new position with two-thirds attributing that to the program at 3-month follow-up, the evidence supports that the program met a leadership development need and was associated, at least in part, with career advancement.

**Table 3. Association Between Program Exposure and Change in Self-reported Leadership Abilities and Resilience From Pre to Post**

| Ability/Resilience                  | No. LIL Courses Completed | No. Sigma Courses Completed | Full LIL Component Completed | Full Sigma Component Completed | e-Book Completed |
|------------------------------------|---------------------------|-----------------------------|------------------------------|-------------------------------|-----------------|
| Add value to a meeting             | 0.02 (0.03)               | 0.08 (0.07)                 | 0.18 (0.19)                  | 0.23 (0.19)                   | 0.28 (0.19)     |
| Participate actively in a collaborative team | 0.01 (0.03)               | 0.02 (0.07)                 | 0.14 (0.19)                  | 0.08 (0.18)                   | 0.13 (0.18)     |
| Establish and maintain trust among team | -0.04 (0.03)              | 0.03 (0.07)                 | -0.19 (0.19)                 | 0.03 (0.19)                   | 0.004 (0.19)    |
| Listen using eyes, ears, and heart | -0.01 (0.03)              | -0.02 (0.06)                | -0.21 (0.17)                 | 0.001 (0.17)                  | 0.03 (0.17)     |
| Give unbiased, positive feedback   | -0.01 (0.03)              | 0.04 (0.07)                 | 0.05 (0.19)                  | 0.08 (0.19)                   | 0.13 (0.19)     |
| Address conflict positively and respectfully | 0.753                     | 0.614                       | 0.783                        | 0.671                         | 0.491           |
| Be appropriately assertive in team conflict | -0.03 (0.04)             | 0.16 (0.08)                 | 0.05 (0.23)                  | 0.45 (0.22)                   | 0.46 (0.22)     |
| Be appropriately cooperative in team conflict | 0.03 (0.04)              | 0.09 (0.08)                 | -0.36 (0.21)                 | 0.31 (0.22)                   | 0.15 (0.22)     |
| Be authentically positive with negative coworkers, patients, and clients | -0.02 (0.04)              | 0.16 (0.08)                 | -0.36 (0.21)                 | 0.50 (0.21)                   | 0.47 (0.21)     |
| Use inclusivity to promote engagement in work environment | 0.562                     | 0.045*a                     | 0.098                        | 0.020*a                      | 0.028*a         |
| Thrive in a changing work environment | -0.02 (0.03)              | 0.04 (0.07)                 | -0.08 (0.18)                 | 0.16 (0.18)                   | 0.21 (0.18)     |
| Lead yourself and others through change | -0.01 (0.03)              | 0.08 (0.07)                 | 0.19 (0.20)                  | 0.19 (0.20)                   | 0.31 (0.20)     |
| Deal effectively with people resistant to change | 0.002 (0.04)             | 0.05 (0.08)                 | 0.18 (0.22)                  | 0.12 (0.22)                   | 0.30 (0.22)     |
| Consider points of view different from your own | 0.02 (0.04)              | 0.11 (0.08)                 | 0.22 (0.23)                  | 0.22 (0.22)                   | 0.12 (0.22)     |
| Apply effective reflection strategies during negative situations | 0.02 (0.03)              | 0.05 (0.08)                 | -0.02 (0.20)                 | 0.14 (0.20)                   | 0.09 (0.20)     |
| Use positive thinking strategies to recover during challenging situations | 0.02 (0.03)              | 0.17 (0.07)                 | 0.24 (0.20)                  | 0.45 (0.20)                   | 0.43 (0.20)     |
| Resilience per CD-RISC2 scale      | 0.01 (0.03)               | 0.06 (0.06)                 | 0.02 (0.03)                  | 0.30 (0.16)                   | 0.14 (0.16)     |

Abbreviation: LIL, LinkedIn Learning.

*aStatistically significant, *P < 0.05.

**Program Feedback**

Nearly two-thirds of immediate postsurvey respondents (64.2%) reported that program learnings were worth the time invested. At 3-month follow-up, 96.3% of survey respondents reported that program participation probably or definitely added value to their professional development as leaders, with nearly two-thirds (64.5%) reporting that it definitely did.

**Discussion**

Sixteen of 17 self-assessed leadership abilities demonstrated a significant increase from pre to immediate post, indicating that the participants considered themselves to have higher ability levels after program exposure. More importantly, the majority indicated...
nurses to apply the skills in their day-to-day practice. It is therefore not surprising that completion of the Sigma courses and resources was associated with increased abilities and application of the abilities, because the content was specific to the work environment of the participants.

The mean resilience scores for the participants in this study are similar to those among new anesthesiology residents, medical students, and pediatric oncology nurses, which ranged from 6.3 to 6.5.5,7,8 However, the significant change in score from pre to immediate post was small and did not persist at 3-month follow-up. This is not surprising, because the program’s primary focus was leadership development.

The program was highly rated among the participants, with the great majority finding value in it. A majority of participants who reported having experienced a career advancement at 3-month follow-up attributed the advancement to their participation in the program.

This evaluation study has a number of limitations. First, study participants comprised interested volunteers; findings therefore may not be generalizable to the general US and Canadian population of early-career nurses. The sole reliance on self-assessed leadership abilities (vs assessment by supervisors or colleagues) is a 2nd limitation. Third, the small sample size may account for the lack of association between program exposure and changes in key outcome variables.

Fourth, the study did not collect data on whether participants were involved in other leadership development programs during the Nurse Empowerment Program period; this, and lack of a comparison group, precluded controlling for other potential influences on leadership development. Finally, the 3-month follow-up period did not allow for a robust assessment of job changes into more formal leadership positions or whether new or improved leadership skills are applied over the long term.

Conclusion

Leadership development among nurses providing direct care has traditionally received significantly less support and attention than continuing education for clinically focused content. The crisis of the pandemic has highlighted the need to prepare nurses for leadership activities, regardless of their formal positions. Evidence from the evaluation of the Nurse Empowerment Program shows that nurses will use online materials for leadership development, find the materials of use in improving their leadership abilities, apply those abilities in the workplace, and attribute short-term nursing career advances, at least in part, to the program.

References

1. Buchan J, Catton H, Shaffer FA. Sustain and Retain in 2022 and Beyond. Philadelphia, PA: International Centre on Nurse Migration; 2022. https://www.cgfns.org/wp-content/uploads/2022/01/Sustain-and-Retain-in-2022-and-Beyond-The-global-nursing-workforce-and-the-COVID-19-pandemic.pdf. Accessed June 30, 2022.

2. AONE/AONL. AONE/AONL Nurse Manager Competencies. Chicago, IL: AONE/AONL; 2015. https://www.aonl.org/resources/nurse-leader-competencies. Accessed March 8, 2022.

3. Academy of Medical-Surgical Nurses. (2021). Clinical leadership development program. https://www.amsn.org/learning-development/amsn-elevate-series/clinical-leadership-development-program. Accessed March 8, 2022.

4. Morin K, Small L, Spatz DL, Solomon J, Lessard L, Leng SW. Preparing leaders in maternal-child health nursing. J Obstet Gynecol Neonatal Nurs. 2015;44(5):633-643. doi:10.1111/1552-6909.12730.

5. Davidson JRT. Connor-Davidson Resilience Scale (CD-RISC) Manual. 2021; [unpublished]. www.cd-risc.com. Accessed August 12, 2022.

6. Vaishnavi S, Connor K, Davidson JR. An abbreviated version of the Connor-Davidson Resilience Scale (CD-RISC), the CD-RISC2: psychometric properties and applications in psychopharmacological trials. Psychiatry Res. 2007;152(2-3):293-297.

7. Eisenach JH, Sprung J, Clark MM, et al. The psychological and physiological effects of acute occupational stress in new anesthesiology residents: a pilot trial. Anesthesiology. 2014;121(4):878-893.

8. Monrad SU, Zaidi NLB, Gruppen LD, et al. Does reducing clerkship lengths by 25% affect medical student performance and perceptions? Acad Med. 2018;93(12):1833-1840.