

ORIGINAL ARTICLE

Professional commitment, resilience and intent to leave the profession among nurses during the COVID-19 pandemic - a descriptive study

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Abstract

Aim: The three-component model of commitment, resilience and selected nurse characteristics were tested as predictors of nurses' intent to leave the profession.

Background: In the wake of the COVID-19 pandemic, news reports suggest that a mass exodus of nursing professionals is occurring.

Method: This nonexperimental, descriptive, correlational, predictive study used a cross-sectional approach to collect survey data from a convenience sample of 189 registered nurses (RNs) who were providing direct patient care in adult inpatient units with a high likelihood of admitting patients diagnosed with COVID-19 and met other eligibility requirements.

Results: Most (73.5%) plan to remain in the nursing profession and feel highly resilient. Only affective commitment demonstrated a significant relationship to the intention to leave the nursing profession.

Conclusions: The study was conducted after the pandemic had been in effect for a prolonged time, and it is likely the nurses with the intent to leave the profession had already left. The findings provide a glimpse of a sample of nurses drawn from a population likely much different from only a few months prior.

Implications for Nursing Management: Strategies to retain nurses should include efforts to strengthen professional commitment and build resilience.

KEYWORDS

intention to leave, nurse resilience, professional commitment

1 | BACKGROUND

The coronavirus disease 2019 (COVID-19) emergency has highlighted the tremendous strength of nurses. Reports from around the world showed the dedication and motivation of nurses to continue to serve their patients while experiencing system-level barriers, burnout and other symptoms of distress. Early COVID-19 pandemic studies report that a mass exodus of nurses may be looming (Boily & Gentile, 2020; Caulfield, 2020; Johnson & Johnson, 2021; Khullar, 2020). During the early phases of the COVID-19 pandemic, 35% of 5130 registered nurse (RN) respondents reported that the pandemic had decreased their satisfaction in the profession; 45% voiced plans to either retire earlier than anticipated, pursue education or training outside of nursing, or leave the nursing profession to pursue other employment (Stokowski et al., 2020). This report is consistent with others (Ford, 2020; International Council of Nurses, 2021; Johnson & Johnson, 2021; Khullar, 2020; Volmer, 2020; Winston, 2020) which projected that between 46% and 67% of nurses will either leave their current facility or quit the profession altogether. Furthermore, pre-existing nursing turnovers compounded the adverse effects of the pandemic on the nursing profession (Al Sabei et al., 2022); nonetheless, an interprofessional teamwork model has been shown to mitigate the effects of burnout.

The financial implications of this loss of nurses have been estimated at \$137 billion (Volmer, 2020) even while health care organizations invest in multiple resources to retain nurses. Professional commitment and resilience have been identified as key factors contributing to retention (Alharbi et al., 2019; Ang et al., 2019; Argus & Sekvaraj, 2020). If commitment and resilience are related to nurses' intent to leave the nursing profession, then strategies for strengthening commitment and resilience are vital aims that may help support incoming and existing nurses (Argus & Sekvaraj, 2020; Lee et al., 2000).

1.1 | Theoretical foundation

Allen and Meyer (1990) developed the three-component model of commitment to describe the psychological link between an individual and the decision to continue in an occupation, career or profession. The three components are affective (attachment to a profession), normative (obligation to remain in the profession) and continuance (perceived costs of leaving a profession). According to the model, an individual's psychological commitment to a profession is based on an emotional link to the profession (Blau, 2003; Lee et al., 2000). Individuals continue to participate in a profession because they want to do so (affective), because they feel obligated to do so (normative) or because they need to do so (continuance). The model assumes (a) the main focus of one's life is an individual's profession, (b) education increases professional commitment and (c) professional commitment is related to retention in the profession.

1.2 | Objectives

This study assessed the efficacy of the three-component model of commitment (Meyer et al., 1993) in predicting nurses' intent to leave the profession due to the COVID-19 pandemic. Resilience was added as a variable to determine if it improved the model's predictive ability. Finally, nurse age, level of education, work experience and frequency of caring for patients with COVID-19 were considered for correlation with nurse intent to leave the profession. Three research questions were posed as follows:

1. Are affective commitment, normative commitment and/or continuance commitment, uniquely or in combination, significant predictors to nurse intention to leave the nursing profession? What are the relative contributions of these variables on nurses' intention to leave the nursing profession?
2. Does the addition of resilience improve the ability of the model to predict intent to leave the nursing profession?
3. Are nurse age, educational level, years of experience in nursing and frequency of caring for patients with COVID-19, uniquely or as a linear composite, significantly correlated to nurse intent to leave the profession? What are the contributions of these variables on predicting nurses' intent to leave the profession?

1.3 | Literature review

Chang et al. (2015) studied professional commitment using the components of the Meyer et al. (1993) professional commitment model which indicated that continuance commitment, was most likely to predict nursing retention. On the same line, Çamveren and Kocaman (2021) found a strong correlation between intent to leave the profession and affective commitment to the profession. It is arguable that professional commitment is influenced by work attitudes, job stressors, negative emotions, emotionally charged patient experiences and lack of support (ten Hoeve et al., 2020). Results from various studies suggest that high resilience enhances nurses' ability to remain in the profession (Alharbi et al., 2019; Ang et al., 2019; Tseng et al., 2018); as such, understanding how resiliency interacts with other characteristics may help shed light on nurses' coping abilities and perseverance during challenging events.

2 | METHODS

2.1 | Setting and sample

This nonexperimental, predictive study used a cross-sectional approach to collect data from a convenience sample of RNs. Participants were recruited from a pool of approximately 1754 nurses employed by four hospitals in a multihospital system in the southeastern United States. The sample size was determined based on guidance from Field (2011) who advises that regression with six or fewer

predictors requires between 60 and 100 participants. This study examined fewer than six predictors and included a sample size of 175 nurses.

Eligibility criteria included RNs providing direct patient care, who had been a RN for at least one year and did not have a prescheduled, age-related plan to retire from nursing within the upcoming 12 months. This included RNs working per diem, part-time or full-time on an adult medical-surgical unit, progressive care unit (PCU), intensive care unit (ICU) or emergency department (ED). Also included were RNs designated as staff nurses, charge nurses or supervisors who had direct contact with patients. Excluded were RNs working in a paediatric unit, obstetrics, in a procedural area, surgical services, specialty units, skilled nursing facility, rehabilitation or outpatient departments and RNs working as nurse managers, nurse directors or nurse educators who had no direct contact with patients.

Nurses were informed of the study through the organization's electronic newsletter and flyers displayed in staff lounges and other high-traffic areas. Participants were offered a small incentive for their participation. The newsletter and flyers contained a QR code to link potential participants to the informed consent document and the study survey instruments posted on the Free Online Survey platform.

2.2 | Instruments

In addition to demographic items used to assure eligibility and to describe the sample, data were collected using two research instruments with excellent psychometric estimates among nurses and other populations (Connor & Davidson, 2003; Meyer et al., 1993). Instruments were self-administered, and responses were reflected on a Likert scale.

Using the three-component model of professional commitment (Meyer & Allen, 1991), Meyer et al. (1993) developed and tested the Occupational Commitment Scales among nursing students ($N = 662$) and RNs ($N = 603$). The instrument consists of 18 items divided into distinct subscales which operationalize each of the three components of commitment. An additional three-item measure of intent to leave the nursing profession. The authors assured the quality of the 18-item instrument through psychometric testing with principle components analysis, confirmatory factor analyses and Cronbach's alpha (α) obtained at two different points (affective commitment, $\alpha = .87$ and $.85$, continuance commitment $\alpha = .79$ and $.83$ and normative commitment $\alpha = .73$ and $.77$). No estimates were reported for the three-item measure of intent to leave the profession.

A 7-point Likert scale response is provided which ranges from 1 indicating *strongly disagree* or *least intent to leave* and 7 indicating *strongly agree* or *maximum intent to leave*. Five items require reverse scoring. The responses on each commitment subscale and intention to leave scale are averaged to yield a score that may range from 1 to 7. Higher average scores indicate a stronger commitment to the profession or intention to leave the profession, while lower scores indicate weaker commitment or less intention to leave (Meyer et al., 1993).

Connor and Davidson (2003) have done extensive work on the measurement of resilience which has resulted in various versions of the Connor and Davidson Resilience Scale. Campbell-Sills and Stein (2007) reduced the original 24 items to a 10-item unidimensional scale and tested data collected from approximately 500 participants. The 10-item version demonstrated good internal consistency ($\alpha = .85$) and construct validity, and scores on the shorter measure were highly correlated with scores on the original 24-item instrument ($r = .92$).

Participants reflected on how they felt over the past month and responded on a 5-point Likert scale wherein 0 indicates *not true at all* and 4 indicates *true nearly all of the time*. Responses are summed to provide a composite score ranging from 0 to 40, with higher scores indicating greater resilience (Connor & Davidson, 2003). In this study, the measures of professional commitment, affective commitment, normative commitment, continuance commitment and intention to leave the nursing profession were measured using a 7-point Likert scale. Responses were first summed and then divided by the number of items on the subscale to produce an average for the scale. Higher values indicate stronger commitment or higher intent to leave.

3 | RESULTS

Three hundred individuals logged onto the electronic survey, but 104 did not meet eligibility and were excluded. Of these 104 nurses who were excluded, 20 had been a RN for less than one year; 20 did not provide a response to the screening item asking if they planned an age-related retirement from working within the upcoming 12 months. Seven provided incomplete responses to the instruments and were not included in the analyses. Analyses were carried out on complete data generated from 189 participants.

Statistical analyses were carried out using IBM SPSS Statistics version 27. Descriptive statistics were used to describe the sample and results for the variable scores. A frequency histogram and the Kolmogorov-Smirnov statistic (KS) were used to evaluate the distribution of the dependent variable, intent to leave the nursing profession. Each instrument was evaluated for reliability as internal consistency using Cronbach's alpha (α). The research questions were answered by linear hierarchical multiple regression.

The majority of the 189 participants were female ($n = 171$, 90.5%) with few males ($n = 18$ (9.5%). The majority were Caucasian ($n = 157$, 84.9%), 36 (19.1%) identified as Hispanic, BSN prepared ($n = 123$, 65.1%), working full-time ($n = 176$, 93.1%), as a staff nurse ($n = 158$, 83.6%) and had been working as a RN between one to six - years ($n = 95$, 50.3%). Only five (2.6%) reported never having provided nursing care for a patient with COVID-19. A detailed description of the sample is provided in Table 1.

Overall professional commitment, the mean for all 18 items on the professional commitment scale ($M = 4.81$, $SD = 0.92$), indicates that the participants had a moderately high level of professional commitment. This overall score was further divided into subscales representing the three components model of commitment. Affective

TABLE 1 Characteristics of participants

Characteristic	n	%
To which type of nursing unit primarily assigned		
Medical-surgical	38	20.1
Progressive care	100	52.9
Intensive care	29	15.3
Emergency department	22	11.6
Primary job position		
Staff nurse	158	83.6
Charge nurse	17	9.0
Nursing supervisor	14	7.4
Approximately how many years as a RN		
1 to 5 years	95	50.3
6 to 10 years	34	18.0
>10 years	60	31.7
Employment status		
Full-time employee	176	93.1
Part-time employee	9	4.8
Per diem (PRN) employee	4	2.1
How often provide care for someone with a COVID-19 diagnosis		
Never	5	2.6
Rarely	23	12.2
Occasionally	35	18.5
Sometimes	17	9.0
Often/frequently	48	25.4
Usually	23	12.2
Always	38	20.1
Age range		
20 to 29 years	60	31.7
30 to 39 years	50	26.5
40 to 49 years	41	21.7
50 to 59 years	27	14.3
60 to 69 years	11	5.8
Race		
Black or African American	3	1.6
Asian/Pacific Islander	6	3.2
Caucasian	157	84.9
Multiracial	15	8.1
Other (Arabic and Asian Indian)	2	1.1
Highest level of education completed in nursing		
Associate degree	44	23.3
Diploma	3	1.6
Bachelor degree	123	65.1
Master degree	19	10.1

Note: $N = 189$.

Abbreviation: RN, registered nurse.

commitment scores (individuals continue to participate in a profession because they *want to do so*) were high, $M = 5.69$, $SD = 1.04$. Normative commitment scores (individuals continue to participate because they *feel obligated to do so*) were moderately high ($M = 4.97$, $SD = 1.36$) and consistent with the overall commitment scores. Scores for continuance commitment (individuals continue to participate because they *need to do so*) fell approximately in the lower half of the scale, $M = 3.77$, $SD = 1.47$, indicating a lower level of commitment on this component.

Scores for the dependent variable, intention to leave the nursing profession, were not normally distributed ($KS = .090$, $df = 189$, $p < .001$) with values tending to pile up on the lower end of the scale, skewness = .282, kurtosis = $-.704$, suggesting that these nurses do not intend to leave the profession. While among this sample, the scores for intention to leave the nursing profession were overall low, indicating a higher intention to remain in the profession, concerns persist regarding the number of nurses leaving and predicted to leave the profession. The data were further explored to determine the percentage of the sample that answered in the higher range (scores 5, 6, 7) and in the lower range (scores 1, 2, 3) on the one item asking specifically how likely it is that they would leave the nursing profession within the next year. The majority ($n = 139$, 73.5%) answered in the lower range indicating they likely would remain in the nursing profession; however, a small but concerning minority ($n = 23$, 12.1%) reported a higher likelihood of leaving with one of these reporting a definite intent to leave; 27 (14.3%) responded with the more neutral position of 4.

The measure of resilience utilized a 5-point Likert scale, 0 to 4. Item responses were summed for a composite score with a possible range of scores from 0 to 40 with higher scores indicating greater resilience (Connor & Davidson, 2003). Actual scores ranged from 13 to 40 ($M = 31.56$, $SD = 5.00$) indicating that over the previous month, the participants felt highly resilient.

Cronbach's α was calculated for each of the scales. All met or exceeded the benchmark of 0.70, which was accepted as an indication of reliability. A summary of scores for the individual scales and measures of reliability as internal consistency is provided in Table 2. Spearman correlations and significance at alpha < 0.05 were calculated. Nurse respondents' commitment was negatively correlated with intention to leave nursing ($r = -0.356$, $p < 0.001$). Nurses who recorded as being more resilient were also less likely to intend to leave the profession ($r = -0.160$, $p = 0.028$) and had higher affective commitment scores ($r = 0.430$, $p < 0.001$). However, caring for COVID-19 patients was not significantly correlated with any of the variables of interest except for education ($r = 0.154$, $p = 0.035$).

Research question 1 sought to determine if the measures of affective commitment, normative commitment and/or continuance commitment, as a composite or uniquely, have a predictive relationship with the intention to leave the nursing profession. Research question 2 considered the predictive relationship of the three components of professional commitment and added the measure of

TABLE 2 Psychometric properties for measurement scales and subscales

Scale	<i>M</i>	<i>SD</i>	Range	Cronbach's α
Professional commitment total score	4.81	0.92	1.89–7	.837
Affective commitment	5.69	1.04	2.67–7	.835
Normative commitment	4.97	1.36	1–7	.812
Continuance commitment	3.77	1.60	1–7	.884
Intention to leave the nursing profession	3.21	1.47	1–7	.763
Resilience	31.56	5.00	13–40	.822

Note: The possible range of scores for scales: professional commitment, affective commitment, normative commitment, continuance commitment and intention to leave the nursing profession: 1 to 7 with higher scores indicating stronger commitment or intention to leave while lower scores indicate weaker commitment or intention to leave (Meyer et al., 1993). The possible range of scores for resilience scale: 0 to 40 with higher scores indicating greater resilience (Connor & Davidson, 2003).

TABLE 3 Hierarchical regression results for intent to leave the nursing profession

Variable	<i>B</i>	95% CI for <i>B</i>	<i>SE B</i>	β	R^2	ΔR^2
Step 1					0.21	0.21
Constant	7.41	[6.07–8.74]	0.68			
Affective commitment	−0.60	[−0.81 – −0.40]	0.10	−0.42***		
Normative commitment	−0.10	[−0.25–0.05]	0.75	−0.09		
Continuous commitment	−0.07	[−0.20–0.68]	0.07	−0.07		
Step 2					0.21	0.20
Constant	7.30	[5.70–8.89]	0.81			
Affective commitment	−0.62	[−0.84 – −0.39]	0.11	−0.43***		
Normative commitment	−0.10	[0.25–0.05]	0.07	−0.09		
Continuous commitment	−0.06	[−0.20–0.73]	0.07	−0.07		
Resilience	0.00	[−0.04–0.05]	0.02	0.02		

Abbreviations: CI, confidence interval; LL, lower limit; UL, upper limit.

*** $p < .001$.

resilience to determine if this additional variable improved the prediction of the model. Hierarchical multiple regression with four theoretical predictors was used to identify the predictors of intent to leave the profession. The three components of commitment were added in the first block of analysis; resilience was added in the second block. The analysis found that in model 1, 21.5% ($R^2 = 0.215$, $adj R^2 = 0.202$) of the variance in the dependent variable was explained by the model and that the predictive ability of the model was significant, $F(3, 185) = 16.88$, $p = <0.001$. In model 2, with the addition of the variable of resilience, again, 21.5% ($R^2 = 0.215$, $adj R^2 = 0.198$) of the variance in the dependent variable was explained by the model, and the relationship was significant, $F(4, 184) = 12.61$, $p = <0.001$. However, an examination of the beta weights (β) in both models revealed that the only variable that was significantly related to intent to leave the profession was affective commitment. This relationship was inverse; as scores for affective commitment increased, scores for intent to leave the nursing profession decreased. Adding the variable of resilience did not improve the ability of the model to predict the intention of leaving the nursing profession. Table 3 provides a summary of the results.

Research question 3 used intention to leave the nursing profession as the dependent variable but considered nurse age, nurse educational level, years of experience in nursing and frequency of caring for patients with COVID-19 as possible predictors. Linear multiple regression found that the composite model only explained 2.9% ($R^2 = 0.029$, $adj R^2 = 0.008$) of the variance in the dependent variable, and the relationship was not significant, $F(4, 184) = 1.36$, $p = 0.248$. Further, none of these individual variables were significantly related to intent to leave the nursing profession. Table 4 provides a summary of the results.

4 | DISCUSSION

Based on the findings from this sample, the three-component model of professional commitment was only partially supported. Neither the moderately high scores for normative commitment (obligation to remain in the profession) nor the relatively low scores for continuance commitment (perceived costs of leaving a profession) were influential in the intention to leave the profession. The higher the affective

TABLE 4 Regressions of associations between intention to leave the nursing profession and nurse age, nurse education level, years of nursing experience and frequency of caring for patients with COVID-19

Variable	B	SE	t	p	95% CI
Constant	2.86	0.49	5.88	<.001	[1.90–3.81]
Age range	–0.23	0.12	–1.89	.061	[–0.47–0.01]
Education level	0.12	0.12	1.00	.317	[–0.11–0.35]
Years as RN	0.21	0.17	1.19	.233	[–0.13–0.54]
Frequency of caring for patients with COVID-19	0.00	0.06	0.03	.972	[–0.12–0.12]

Abbreviation: CI, confidence interval; RN, registered nurse.

commitment scores were significantly associated with lower intention to leave scores. This finding is consistent with the findings reported by Çamveren and Kocaman (2021) but different from those reported by Chang et al. (2015) and Meyer et al. (1993) who found that continuance commitment was most predictive of nursing retention. While resilience was high, it was not predictive of professional commitment. This finding diverges from previous studies (Alharbi et al., 2019; Ang et al., 2019; Rodriguez-Key et al., 2019; Tseng et al., 2018; Wocial, 2020) that found resilience to be a predictor.

Those individuals who entered the survey but were screened out of the sample raise concerns. A large number were screened out of the sample because they did not answer if they had an upcoming, planned retirement. This nonresponse may indicate internal ambiguity in their intention to leave the profession. An equally large number were screened out because they had not been in the nursing workforce for at least 1 year suggesting that more experienced nurses are leaving and being replaced with inexperienced, new graduates.

5 | LIMITATIONS

Issues have been identified that limit confidence in the results and the ability to generalize the findings. Participants were all drawn from one geographic area, were all employees of one large, multifacility health care organization and provided self-reports to the research instruments. While the phenomenon of interest was a commitment to the nursing profession and not a commitment to an organization, it is possible that, despite being assured anonymity, participants provided what they considered the most socially acceptable or protective responses which may not be true reflections of their circumstances.

COVID-19 produced a rapidly changing work and social environment which likely impacted the recruitment pool and participants' responses. COVID-19 cases were first identified in the late 2019. The first wave of the pandemic came to the United States in March and then President Trump declared a nationwide emergency. The second wave occurred in January 2021. Over these two waves, hospitals and morgues began to fill, and nurses began to leave their positions. Data for this study were collected between 10 June 2021 and 19 November 2021, when the nation was in a third wave of the pandemic (Centers for Disease Control & Prevention [CDC], 2022). The exodus of nurses from the workplace that occurred over the first two waves, before the data

collection period, may have resulted in a recruitment pool of nurses who had already decided to remain in the nursing profession. It is not known if these already departed nurses represent a permanent departure from the profession or a temporary hiatus from the nursing workforce.

The incidence of COVID-19 infections, hospitalizations and deaths was dynamic throughout the data collection period. National and local news stations provided daily updates on the number of infections and related deaths. On 19 August 2021, a South Florida news station reported that, according to the Florida Hospital Association and the CDC, over the previous eight weeks, Florida averaged more than 20,000 new COVID-19 cases per day and was among the leading areas in the nation for new COVID-19 hospital admissions; 34.1% of all hospital inpatients and 54.2% of adults admitted to intensive care units were infected (WPLG Inc., 2021). The rapidly evolving situation likely affected the participants' perception of the immediacy of personal threats, possible consequences and intended actions.

At the same time that public accolades were being showered on nurses for bringing their valuable skills to work, nurses were being aggressively recruited by health care agencies across the nation offering exorbitant wages to travel to their facilities and work as a nurse for a contracted period. Nurses were feeling admired and appreciated.

6 | CONCLUSIONS

This study was conducted during what has repeatedly been called *unprecedented times* with the aim of learning what strengths nurses draw on that enable them to continue to be a nurse during trying times or what leads a nurse to consider leaving the nursing profession that they worked so hard to join. The study was conducted after the pandemic had been in effect for a prolonged time, and it is likely the nurses with the intent to leave the profession had already left. As such, the findings provide a glimpse of a population that was likely different than it was only a few months previously.

7 | IMPLICATIONS FOR NURSING MANAGEMENT

Nurses with strong affective commitment are emotionally attached to being a nurse. They know why their work matters and understand the

importance of their contributions. They like being a nurse, they are proud to be a nurse, they have incorporated being a nurse into their self-image, are enthusiastic about nursing and plan to stay in the nursing profession. They stay in nursing because of internal rewards and not because they feel pressure from external sources. These internal rewards are powerful, protective motivators that enable the nurse to overcome professional adversities, hardships and personal peril as those imposed by entering an underresourced health care facility to provide patient care during an uncertain and changing pandemic. In an effort to protect our most valuable resource, the nursing workforce, it is vital to continue efforts to build and support the significant attributes acknowledged in this study.

CONFLICT OF INTEREST

Carol Lawrence, Erica Schivinski and John Bruewer are employees of Lee Health. Carol Lawrence, John Bruewer, Susan Holland and Gesulla Cavanaugh are members of the Lee Health Nursing Research Council. Jo Ann Kleier has no conflict of interest to declare.

ETHICS STATEMENT

Ethical considerations for the protection of human subjects were approved as exempt status by the institutional review boards for Lee Health and Nova Southeastern University (IRB protocol number 2021-170-NSU).

DATA AVAILABILITY STATEMENT

Data may be obtained from the authors with IRB approval.

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