Nurses' and nursing students' intent to stay

The impact of quality of life, work environment, and work satisfaction

By Rhoda A. Owens, PhD, RN; Patricia Moulton Burwell, PhD; and Thomas Petros, PhD

Prior to the COVID-19 pandemic, nurse workforce recruitment, retention, and prevention of turnover were critical issues facing nurse managers and healthcare systems. Although COVID-19 is now close to becoming endemic, the nationwide nursing shortage continues and further adds to this dire workforce situation. An adequate nurse workforce supply is essential for healthcare systems to provide safe, quality patient care as well as to sustain nursing staff and patient satisfaction.[1]

The direct financial cost incurred for losing and replacing a nurse is significant due to orientation costs and several other known factors. The average cost of turnover for a bedside RN is $40,038 and ranges from $28,400 to $51,700, resulting in the average hospital losing $3.6 million to $6.5 million per year.[1] To reduce their nursing staff shortages, nurse leaders and healthcare systems rely on costly strategies such as agency/travel nurses, using overtime, and offering premium pay.[1] Because of the COVID-19 pandemic, the use of travel nurses jumped to more than 200% and remains high.[1] For every 20 travel RNs eliminated, a hospital can save $4,203,000 on average.[1] Alternative, cost-effective, innovative solutions and policies are desperately needed to recruit and retain qualified, skilled nursing staff. Nurse leaders rely on recruitment and retention of licensed nurses and soon-to-graduate nursing students to maintain their nursing workforce at safe levels.
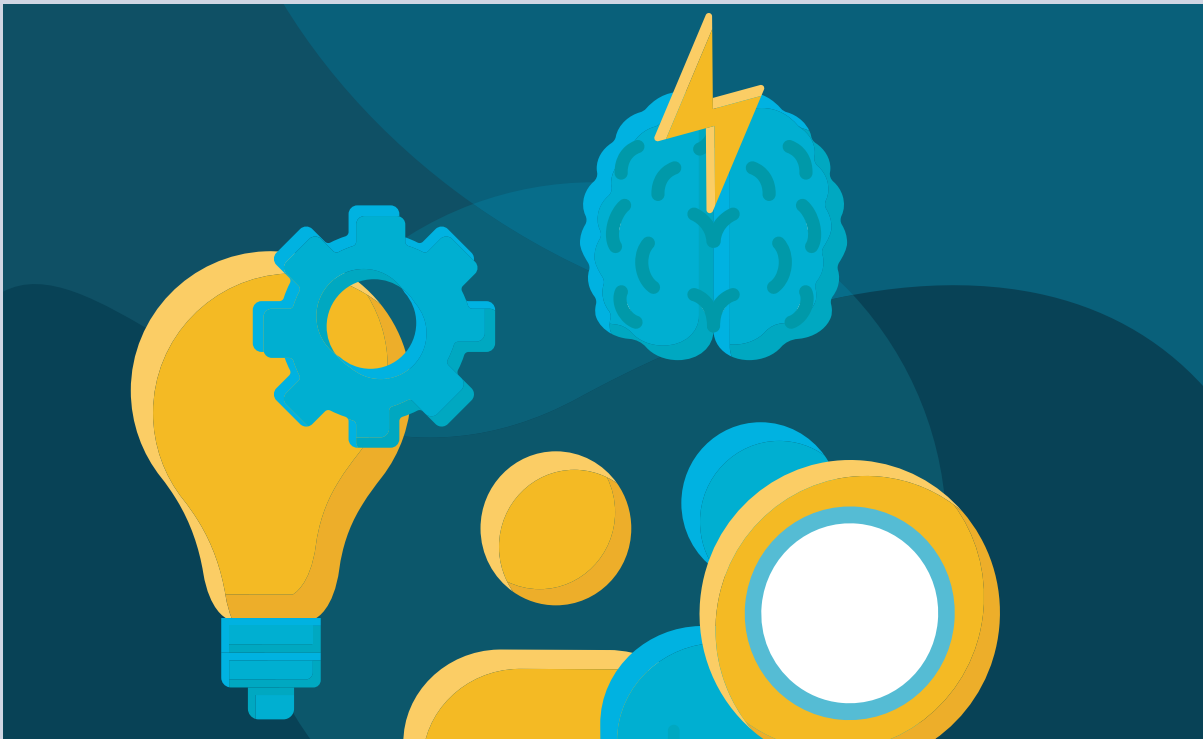
In 2019, North Dakota's (ND) Governor asked an appointed ND Nursing Shortage Task Force to propose initiatives to further develop, retain, and attract nursing workforce to the state. The research team developed and conducted a study to help meet this request. The purpose of this convergent, mixed-methods design was to explore and identify factors that influence nurses' and nursing students' intent to stay in ND and at their workplaces. A further purpose was to explore best practices and policies that encourage nurses and nursing students to remain in the state and at their workplaces. Data were collected from practicing nurses and nursing students enrolled in the last year of their respective nursing programs. Researchers explored participants' professional quality of life, work environment, work satisfaction, and intent to stay. A variety of nurses and nursing education program students throughout the state were included.

Current state of nurse work environment, work satisfaction, and intent to stay

Intent to stay is defined as the "degree of positive affect that an individual has toward the idea of voluntarily leaving the employer or an organization."[2] In other words, the individual plans to voluntarily stay with his or her employer.[2] Studies and literature describe several factors that promote or decrease nurses' intent to stay at their positions and healthcare facilities.

Researchers have discovered several healthy work environment factors that encourage nurses' work satisfaction and their intent to stay. Factors include support for professional development, competitive pay and benefits, and low amounts of overtime.[3] Being able to display their professional values and ethical beliefs—such as caring, activism, advocacy, professionalism, and justice—while caring for patients encourages nurses' intent to stay.[3] Autonomy, challenge, and the opportunity to use their knowledge and skills in their positions are important to nurses.[4] Nurses also value collaborative interprofessional relation-

ships with other team members, including providers who make them feel acknowledged, valued, respected, and knowledgeable.[4] Another recent study found comparable results for NPs.[5] In addition, allowing NPs to practice within their full scope of practice was important to NP's work satisfaction and intent to stay.[5]

Incivility negatively impacts the work environment by having a detrimental effect on individuals, teams, organizations, and patient safety, and is a major reason why nurses leave their positions.[6] Incivility is defined as "a wide range of lower intensity acts of aggression, including failing to act when action is warranted, that may result in psychological distress for the individuals involved."[7] Incivility includes various nonverbal and verbal behaviors (such as eye-rolling, refusing to listen, making rude and belittling comments, and intentionally excluding others), and others failing to

intervene when incivility occurs.[7] Nurses and nurse leaders have an ethical responsibility to create a healthy work environment that maintains a culture of civility and kindness in which colleagues, staff, students, patients, and families are treated with dignity and respect.[8]

Nurse leaders can further facilitate a healthy work environment, satisfaction, and intent to stay. One study discovered that reasons nurses stay at their current positions were related to their nurse manager's perceived traits. Desirable nurse leadership traits included being accessible and actively involved in the unit, filling a coach and/or mentor role, being caring and supportive, role modeling professionalism, and having clear and open communication with nursing staff.[4]

Nurse residency programs can increase first-year hire retention rates to above 90%.[9] Nurse residency programs promote a healthy workplace environment

and retention of new graduates by easing their transition to practice and increasing their confidence, clinical decision-making, feelings of support, and work satisfaction, and decreasing their reality shock.[9]

Lastly, nurses have personal and career goal reasons for staying at a job. The ability to maintain work/life balance and having family that live close to their place of employment are important.[3,4] In addition, nurses who have a choice of working part-time versus full-time, in their preferred practice area, and have self-scheduling as well as their nurse manager's support to attend social or family functions, are factors that promote a healthy workplace environment, improve work satisfaction, and encourage their intent to stay.[4]

Professional quality of life
Professional quality of life has been a topic of few nursing workforce studies; it's defined

as "how one feels in relation to their work as a helper and is influenced by positive and negative aspects of a job."[10] Healthy workplace environments are important for promoting overall professional quality of life. This in turn promotes nurses' intent to stay, work satisfaction, patient safety, and positive patient outcomes.[10-12]

Compassion satisfaction and compassion fatigue are two aspects of professional quality of life.[10] Compassion satisfaction is a positive feeling related to the pleasure derived from an individual's ability to do their job well.[10] Compassion fatigue is a negative feeling and includes two parts: burnout and secondary traumatic stress.[10] Burnout involves difficulty dealing with work or doing your job effectively and feelings of hopelessness, exhaustion, frustration, anger, and depression.[10] Secondary traumatic stress is about "work-related, secondary exposure to people who have experienced extremely or traumatically stressful events."[10] Therefore, an unhealthy work environment can decrease a nurse's overall professional quality of life.[10-12]

Prior to conducting this study, researchers completed a comprehensive literature review and couldn't locate mixed-methods studies that explored several education and licensure levels of practicing nurses' and nursing students' intent to stay in one study. Nurse managers and healthcare facilities rely on nurses and soon-to-graduate nursing students to fill their vacancies and maintain their nursing workforce to promote cost-effective, safe, quality patient care. Given these literature gaps, this study was important to further explore factors, policies, and best practices that influence both nurses' and nursing students' professional quality of life, work environment and satisfaction, and intent to stay at their workplaces and in ND. The mixed-methods research question was: In what ways do the significant quantitative and qualitative data findings converge?

Methods

The ND Center for Nursing's (NDCFN's) research team used a mixed-methods convergent design and conducted the study from 2019 to 2020.[13] A university's Institutional Review Board approved the study. Students enrolled in the last year of their respective programs (soon-to-graduate) and practicing nurses completed a self-administered online survey. The 80-question survey for nurses and students included a combination of valid and reliable instruments (Professional Quality of Life [ProQOL], Intent to Stay in the State and Employer, Index of Work Satisfaction).[10,14-16] Tool questions about work weren't included in the unlicensed student's survey who weren't yet employed. In addition, demographic data for nurses and nursing students were collected via the National Forum of State Nursing Workforce Centers' Minimum Dataset (MDS)–Supply MDS.[17]

A purposeful sampling method was used for the online survey, which was made available by the research team to approximately 21,031 practicing nurses through the NDCFN, various professional nursing organization websites, and statewide enewsletters. The posted website links contained details about the study and a link to the survey. The research team collaborated with 14 ND nursing program deans and directors to distribute the online survey to their students. Clicking on the link and completing the survey provided implied consent. The link was available for 6 months for practicing nurses and 6 weeks for nursing students. Participants spent 15-20 minutes completing the survey.

In addition, the research team conducted in-person focus groups per purposeful sampling throughout the state with practicing nurses and nursing students enrolled in their last year in their respective programs. Nursing students were recruited from the same programs that completed the online survey. Separate focus groups were conducted with practicing nurses and nursing students. An interview guide was developed and used by the team to conduct the digitally recorded focus group sessions (see *Figure 1*). Nurse focus group dates and times were advertised on the NDCFN and nursing professional organization websites. The research team collaborated with nursing program deans/directors on scheduling the student focus groups. Participant informed consent was obtained at the start of each focus group session.

Quantitative data were analyzed to determine factors across multiple dimensions that impact participants' intent to stay in ND and their workplaces. Descriptive statistics, bivariate correlations, and simultaneous multiple regression analysis

Figure 1: Interview guides for nurse and nursing student focus groups

Practicing nurses
1. What factors do you consider when choosing a place of employment?
2. What factors attracted you to work in North Dakota?
3. Do you intend to stay working in North Dakota and/or your place of employment? Why or why not?
4. Do you work in a rural area? What factors influenced you to work or not work in a rural area?
5. Discuss factors that may cause you to change your place of employment. Why?
6. Do you have any recommendations for North Dakota employers that would further encourage you to consider employment in North Dakota and their facilities?
7. Do you have plans to work up the career ladder or pursue further education in the future? What are your career goals?

Nursing students (in final year of program)
1. What factors do you consider when choosing your first nursing practice position?
2. Will you be working in North Dakota after graduation? Why or why not?
3. Discuss factors that may cause you to change or stay at your place of employment. Why?
4. Will you be working in a rural area? What factors influence you to work or not work in a rural area?
5. Do you have any recommendations for North Dakota employers that would further encourage you to consider employment in North Dakota?
6. Do you have plans to work up the career ladder or pursue further education in the future? What are your career goals?

were completed with 12 predictor variables and 2 dependent variables. Descriptive statistical analysis occurred with the demographic data (see *Tables 1, 2, 3, 4,* and *5*). See *Figure 2* for *Reasons to stay in ND* questions. For all statistical analyses, the level of significance was $P < .05$.[18] Qualitative data analysis methods for the verbatim transcripts, participants' written responses, field notes, and reflective journals followed Braun and Clarke's qualitative data analysis method.[19]

Integration of the separate qualitative and quantitative data occurred by merging both databases. For this current study, the researchers compared the separate qualitative and significant quantitative results to determine what ways the significant data results converged. As a result, the researchers reached common conclusions on the convergence between the qualitative and significant quantitative data sets and analyses (see *Table 5*).[13]

Results

Demographic characteristics. A total of 763 nurses began the survey and 727 nurses completed the online survey. The 36 incomplete surveys were discarded. All participants were working in a variety of ND practice settings, such as academia, hospitals, clinics, and community health.

A total of 201 nursing students began the online survey and 187 completed the survey. The 14 incomplete surveys were discarded. Students were enrolled in multiple types of programs and were in the last year of their programs. Some students were working part-time or full-time as an RN or LPN while pursuing their degrees (see *Table 1*).

The 29 focus groups consisted of 228 students from 11 ND nursing programs, and 9 focus groups were conducted with 48 practicing nurses throughout the state. Nurses were in various stages of their careers, such as RN, LPN, and APRN, and were working in ND. Participant nurses ranged in age from 23 to 65 years old ($M =$

45.17, $SD = 11.48$). Nursing students' ages ranged from 18 to 57 years old ($M = 26.91$, $SD = 7.57$) (see *Table 2*).

Quantitative data
Practicing nurses. *Table 3* displays average scores for the practicing nurse predictor and dependent variables. Significant results that support reasons practicing nurses would stay at their employers were related to pay, autonomy, organizational policies, and burnout. The higher the nurses scored on the pay ($t = 2.222$, $P < .05$), organizational policies ($t = 3.14$, $P < .05$), and autonomy ($t = 2.331$, $P < .05$), the more likely the nurses would stay at their workplaces or employers. Reasons nurses gave for staying in ND aligned with their indication they'd remain working in ND ($t = 11.275$, $P < 0.05$). Lastly, the more nurses reported burnout signs and symptoms ($t = -4.039$, $P < .05$), the less likely they'd stay at their current employers (see *Table 5*).

Table 1: Sample participant demographics (online survey completion)

Nurses	n = 727	%
Female	676	93
Male	51	7
White (non-Hispanic)	691	95
Hispanic	7	1
Black	7	1
Asian	16	2
Native American/Alaska Native	8	1
Native Hawaiian/Pacific Islander	0	0
RN	596	82
LPN	83	11
APRN	48	7
Nursing students	**n = 187**	**%**
Female	172	92
Male	15	8
White (non-Hispanic)	172	92
Hispanic	5	3
Black	4	2
Asian	0	0
Native American/Alaska Native	4	2
Native Hawaiian/Pacific Islander	2	1
BSN program	73	39
ADN program	54	29
Practical nursing certificate program	25	13
MS program	20	11
DNP program	15	8
PhD program	0	0
Licensed as LPN	26	14
Licensed as RN	43	23
Not licensed as an RN or LPN	118	63
Working as an LPN or RN	52	28
Not working as an LPN or RN	135	72

Nursing students employed as licensed nurses. *Table 4* displays the average scores for the predictor and dependent variables for nursing students who are currently licensed and employed as RNs or LPNs. Quantitative data analysis further revealed three significant results pertinent to his study (see *Table 5*). The more reasons these students gave for wanting to stay and work in ND, the higher was their intent to stay in ND ($t = 5.013$, $P < .05$). The more reasons employed students gave for wanting to stay and work in ND, the higher was their intent to stay in their workplaces or at their employers ($t = 2.454$, $P < .05$). The higher the employed students scored on compassion satisfaction, the more likely they would stay at their employers ($t = 2.386$, $P < .05$).

Nursing students not employed as licensed nurses. *Table 4* displays the average scores for the predictor variables and the dependent variable for students not working as RNs or LPNs. Quantitative data analysis further revealed two significant results. The more reasons students gave for wanting to stay and work in ND, the higher was their intent to stay in ND ($t = 7.047$, $P < .05$) (see *Table 5*). In addition, the older they were, the more likely they would stay in ND ($t = 3.193$, $P < .05$).

Qualitative data

Four similar themes emerged from the nurse and nursing student focus group qualitative data analysis and included: 1) Theme 1: competitive pay and benefits, 2) Theme 2: healthy workplace environments, 3) Theme 3: career goals, and 4) Theme 4: personal goals and reasons. Of interest to note is that nurses and soon-to-graduate nursing students discussed similar factors, best practices, and policies that influenced them to stay at their employers or in ND (see *Table 5*).

Convergence of quantitative and qualitative data

This study's question was: In what ways do the significant quantitative and qualitative

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data findings converge? *Table 5* displays the four themes and convergence with the significant quantitative results for nurses and soon-to-graduate students (employed and not employed as RNs or LPNs).

Discussion

Researchers for this study discovered that nurses and nursing students expressed similar factors that increase their intent to stay with their employers and in ND. Factors that promote nurses' intent to stay at their employers may also encourage them to stay in ND. Because healthcare facility nurse leaders rely on nurses and students close to graduation to fill their vacant positions, it's important for them to consider factors that improve their work satisfaction, professional quality of life, and intent to stay. Nurse managers can seek input from nurses and students, and evidence-based findings about cost-effective innovative interventions and policies that can address nursing workforce shortages and further promote safe quality patient care. Even though this current study was completed before and during the COVID-19 pandemic, findings are important for nurse managers to consider as the transition to a COVID-19 endemic continues.

Recent research discovered that a variety of competitive pay and benefits policies promote nurse intent to stay, recruitment, and work satisfaction.[3,5,20] Findings for this current study were similar; however, the present study adds to research gaps since its sample included practicing nurses at all practice and educa-

tion levels and soon-to-graduate nursing students at a variety of education levels.

Prior research concludes that factors experienced in a healthy workplace environment support overall professional quality of life, prevent burnout, and encourage intent to stay.[10,11,21] Findings

of this current study were similar for practicing nurses whose intent to stay at their employers improved when they didn't experience burnout. For licensed and employed nursing students, when their compassion satisfaction was high, their intent to stay at their employers was high.

Table 2: Sample participant demographics (focus groups)

Nurses	n = 48	%
Female	47	98
Male	1	2
White (non-Hispanic)	48	100
Hispanic	0	0
Black	0	0
Asian	0	0
Native American/Alaska Native	0	0
Native Hawaiian/Pacific Islander	0	0
ND residence	43	90
Minnesota residence	5	10
BSN	21	43
MS	17	33
ADN	7	16
Diploma	1	2
DNP	2	4
PhD	1	2
Nursing students	**n = 228**	**%**
Female	203	89
Male	25	11
White (non-Hispanic)	189	83
Hispanic	14	6
Black	11	5
Asian	3	1
Native American/Alaska Native	9	4
Native Hawaiian/Pacific Islander	2	1
ND residence	202	89
Other state residence	26	11
BSN program	103	45
MS program	0	0
ADN program	59	26
Practical nursing certificate program	52	23
DNP program	9	4
PhD program	5	2

Table 3: Study variables and descriptive statistics for practicing nurses (n = 727)

Predictor variables	Mean (SD)	Possible range
Pay	20.71 (9.09)	6–42
Professional status	37.34 (7)	7–49
Autonomy	32.27 (8.12)	8–56
Organizational policies	25.06 (8.88)	7–49
Task requirements	22.74 (6.24)	6–42
Interaction		
Nurse-nurse	25.45 (5.37)	5–35
Nurse-physician	24.44 (6.69)	5–35
Age (years)	48.41 (12.52)	20–82
Compassion satisfaction	40.12 (6.39)	10–50
Secondary traumatic stress	19.83 (5.98)	10–50
Burnout	22.62 (6.56)	10–50
Reasons to stay in ND	2.48 (2.14)	0–12
Dependent variables		
Intent to stay with employer	10.24 (4.43)	4–20
Intent to stay in ND	10.98 (4.72)	4–20

Table 4: Study variables and descriptive statistics for nursing students (n = 228)

Nursing students (employed as RNs or LPNs) (n = 52)		
Predictor variables	**Mean (SD)**	**Possible range**
Compassion satisfaction	39.6 (5.64)	10-50
Secondary traumatic stress	21.12 (6.69)	10-50
Burnout	23.68 (5.81)	10-50
Age (years)	33.69 (9.68)	19-62
Reasons to stay in ND	3.36 (2.62)	0-12
Dependent variables		
Intent to stay with employer	11.33 (4.56)	4-20
Intent to stay in ND	11.24 (4.92)	4-20
Nursing students (not employed as RNs or LPNs) (n = 135)		
Predictor variables	**Mean (SD)**	**Possible range**
Age (years)	24.72 (7.41)	20-45
Reasons to stay in ND	3.5 (2.87)	0-12
Dependent variable		
Intent to stay in ND	12.67 (4.6)	4-20

Once again, findings of this present study add new findings to prior research because the sample included practicing nurses and licensed nursing students. Healthcare facility nurse managers and leaders should regularly evaluate all nursing staff for professional quality-of-life components (compassion satisfaction, secondary traumatic stress, and burnout). Furthermore, innovative interventions could be adopted that improve professional quality of life for all nursing staff. Prevention measures should include psychosocial support such as supportive counseling sessions and access to helpful resources and education.[11,12] These efforts can lead to establishing healthy workplace environments that promote nurse professional quality of life, work satisfaction, intent to stay, patient safety, and positive patient outcomes.

In addition, findings in this study support other factors that further foster a healthy workplace environment, nurse work satisfaction, and intent to stay. Healthcare system nurse leaders should implement policies that support nurses' autonomy and ability to work in their full scope of practice as allowed by state regulations and licenses. For example, the present study discovered that even though ND is a full-practice state, some NP's scope of practice was limited whereas other NPs could work as allowed by state licensure. Nurse leader efforts can include collaborating with state policy makers to ensure states allow NPs full practice. At present, 23 states plus the District of Columbia are full NP practice states.

Table 5: Qualitative and quantitative data analysis convergence—Practicing nurses and nursing students (working as RNs or LPNs, and not licensed as RNs or LPNs)

Qualitative findings—practicing nurses and nursing students	Quantitative findings—practicing nurses (intent to stay in ND)	Quantitative findings—practicing nurses (intent to stay with their employer)	Quantitative findings—nursing students (practicing and not practicing as RNs or LPNs) (intent to stay in ND)	Quantitative findings—nursing students (practicing as RNs or LPNs) (intent to stay with employers)
Theme 1: Competitive pay and benefits Tuition reimbursement; professional development; sign-on bonuses; relocation expense assistance; on-site day care; retention bonuses; and health, vision, and dental insurance	$t = 11.275$ (Reasons to stay in ND)	$t = 2.222$ (Pay)	$t = 5.013$ (Reasons to stay in ND—practicing as RNs, LPNs) $t = 7.047$ (Reasons to stay in ND—not RNs, LPNs)	$t = 2.454$ (Reasons to stay in ND)
Theme 2: Healthy workplace environments Feeling appreciated; providing and valuing professional development; interprofessional teamwork; effective communication; civil work environment; safe nurse/patient ratios; supportive orientation and preceptor programs; new graduate nurse residency programs; nurse leaders model and promote healthy work environment characteristics	$t = 11.275$ (Reasons to stay in ND)	$t = 2.331$ (Autonomy) $t = 3.14$ (Organizational policies) $t = -4.039$ (Burnout)	$t = 5.013$ (Reasons to stay in ND—practicing as RNs, LPNs) $t = 7.047$ (Reasons stay in ND—not RNs, LPNs)	$t = 2.386$ (compassion satisfaction) $t = 2.454$ (Reasons to stay in ND)
Theme 3: Career goals Able to work in their choice of practice area (such as surgery, medical, pediatrics); support for advancement in education and career; work full-time; preference for rural or urban setting	$t = 11.275$ (Reasons to stay in ND)	$t = 3.14$ (Organizational policies)	$t = 5.013$ (Reasons to stay in ND—practicing as RNs, LPNs) $t = 7.047$ (Reasons to stay in ND—not RNs, LPNs)	$t = 2.454$ (Reasons to stay in ND)
Theme 4: Personal goals and reasons Job availability; family and/or spouse, significant other location; community amenities, lifestyle, and recreation opportunities; passion for rural or urban care	$t = 11.275$ (Reasons to stay in ND)		$t = 5.013$ (Reasons to stay in ND—practicing as RNs, LPNs) $t = 7.047$ (Reasons to stay in ND—not RNs, LPNs)	$t = 2.454$ (Reasons to stay in ND)

Note: Table 5 displays the mixed-methods integration and convergence of the significant qualitative and quantitative data analysis results. The four qualitative themes and summaries are listed on the far-left column. Four similar themes emerged for all participants. Each column is labeled with the specific corresponding participant category for the significant quantitative results that are appropriately listed in each column to support the four themes. The significant quantitative data results that converged with each of the four themes are listed in the same row as the corresponding theme. For all quantitative data analysis, significance was $P < .05$.

Other states have reduced or restricted NP practice.[21]

Other measures to promote a healthy workplace environment include allowing nurse input on nurse staffing systems and policies related to patient-care processes. Furthermore, supportive leaders who coach, mentor, and appreciate their nursing staff can improve nurse work satisfaction and intent to stay as well. Nurse residency and preceptor programs are important. Nurse administrators should establish "no tolerance" policies for incivility behavior because maintaining civil healthy work environments is

Figure 2: Reasons to stay in North Dakota (questions for predictor variable)

Please indicate your reasons to stay working in North Dakota (may select more than one answer). (Y = yes; N = no)

Student loan repayment following nursing program graduation	Y	N
Continuing-education support through your employer	Y	N
Tuition support to obtain higher nursing degrees	Y	N
Career ladder and advancement opportunities at my employer	Y	N
Residency program offered by my employer	Y	N
Availability of nurse-friendly designated employers	Y	N
Competitive salary and benefits packages	Y	N
State Legendary Nurse recognition award availability	Y	N
Opportunity to belong to active professional associations	Y	N
Mentoring available by my employer	Y	N
Availability of on-site day care or day-care assistance	Y	N
Recruitment/retention bonuses available at my employer	Y	N

vital for promoting intent to stay, work satisfaction, and patient safety. Open communication and collaboration between all nurses and management and other inter-professional team members are also essential. Findings of this present study are consistent with recent research.[6,8,11,12] However, the mixed-methods design with nurses and soon-to-graduate students in the sample adds new findings to the literature.

Lastly, healthcare facility nurse managers and leaders could consider nurses' and students' career goals and personal reasons for choosing their employment. The current study found that reasons such as job availability, location close to family, low cost of living, safe place to live and raise a family, flexible scheduling, desire for work/life balance, opportunities for career advancement, and availability of education programs and/or scholarships also promoted their intent to stay at their employers and seek employment in ND. These findings are congruent with recent research and adds to the literature because nurses and students were included in one study.[3-5]

The next steps for the research team are to use study results to further guide the implementation of the ND Nursing Culture of Excellence Designation Program.[22] This new program is hosted by the NDCFN. The program provides the opportunity for healthcare employers and nurse leaders to work together with all levels of nurses (LPNs, RN, and APRNs) and promote a healthy workplace culture and environment. In addition, this program supports professional identity in nursing formation. Obtaining the designation will signify a work environment that promotes nursing recruitment, development, and retention (intent to stay). Currently, the researchers are conducting an action research study to assess and evaluate the program's effectiveness.[22]

Limitations

Although the purposeful sample size was moderate, this study was limited by using nurses and students located in one rural state. The nursing student and practicing nurse samples in this study lacked diversity, although this is consistent with the homogeneity of ND which is 87% White.[23] Future mixed-methods studies should include nurse and soon-to-graduate student participants with more diverse demographics (such as ethnicity and gender) across multiple states, including more rural states.

Implications for nurse leaders

This pre-COVID-19 pandemic study's results offer insights for nursing leadership at healthcare and professional organizations for developing and implementing innovative and cost-effective policies and best practices that promote a healthy workplace environment, professional quality of life, and work satisfaction that encourage intent to stay. Nurse managers should consider regularly surveying nursing staff on factors that promote a healthy workplace environment and work satisfaction. In these unprecedented times, with the transition to a COVID-19 endemic, additional workplace and personal stressors prevail that can impact work environment and can even cause nurses to leave their employers or careers.

Measures that promote a healthy workplace environment are now more important than ever. Results of this current study further support the need for employers to offer nurses competitive pay and benefits, promote a healthy work environ-

ment, and consider nurses' career and personal goals for wanting to work at a facility. Nurse residency programs are important for facilitating the new graduate nurse's transition to practice. Nurses desire autonomy and to practice based on their qualifications and standards of practice. Nurse leaders should display desirable leadership traits and institute no-tolerance policies for workplace incivility. Healthcare employers and nurse managers can regularly evaluate all nursing staff for professional quality-of-life components (compassion satisfaction, secondary traumatic stress, and burnout). These measures could also include prevention interventions and psychosocial support, such as supportive counseling sessions and access to resources and education.[11,12] An adequate nursing workforce supply is essential for providing cost-effective, safe, quality patient care at rural and urban healthcare facilities. **NM**

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Rhoda A. Owens is an associate professor of nursing at the University of North Dakota College of Nursing and Professional Disciplines in Grand Forks, ND. Patricia Moulton Burwell is the director of the National Forum of State Nursing Workforce Centers in Northwood, ND. Thomas Petros is a professor of psychology at the University of North Dakota College of Arts and Sciences in Grand Forks, ND.