BE RESILIENT: EXAMINING THE RELATIONSHIP BETWEEN STAFF NURSE INCIVILITY AND UNDERGRADUATE NURSING STUDENTS' SENSE OF BELONGING TO THE NURSING PROFESSION

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DOCTOR OF PHILOSOPHY

by

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BE RESILIENT: EXAMINING THE RELATIONSHIP BETWEEN STAFF NURSE INCIVLITY AND UNDERGRADUATE NURSING STUDENTS' SENSE OF BELONGING TO THE NURSING PROFESSION

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ABSTRACT

Background: Sense of belonging is essential for nursing students to develop and grow within the nursing profession. Unfortunately, incivility threatens the sense of belonging in nursing students.

Purpose: The purpose of this cross-sectional study is to determine the relationship between staff nurse incivility and undergraduate nursing students' sense of belonging in nursing school, describe the presence of incivility in minority undergraduate nursing students, and determine how semester in the nursing program and weight are associated with incivility and sense of belonging. Baumeister and Leary's (1995) need to belong theory was chosen as the framework for this study.

Methods: A convenience sample of 123 junior and senior nursing students from two nursing schools in New Mexico were recruited to participate in this study. The concepts were measured using the Uncivil Behavior in Clinical Nursing Education

(UBCNE) and Sense of Belonging in Nursing School (SBNS) surveys. Correlation coefficient, descriptive statistics, Fisher r-to-z transformation, 95% confidence intervals were calculated.

Results: One-hundred and twenty-three pre-licensure undergraduate nursing students completed the study, resulting in 44.7% response rate. The results showed a statistically significant, inverse correlation between the UBCNE and SBNS. However, there was no association between staff nurse incivility and undergraduate nursing student sense of belonging among the cohort. Of the minority undergraduate nursing students, American Indian or Alaskan Native students reported the highest mean frequency of incivility. There was no significant difference noted between correlations based on level in the program or body mass index.

Discussion: This was the first study to assess the relationship between staff nurse incivility and undergraduate nursing students' sense of belonging in nursing school. As the experience of incivility increased in the clinical environment, the overall sense of belonging in nursing school decreased. Yet, staff nurse incivility was not associated with sense of belonging in the cohort, highlighting the impact of acceptance in the students' social group.

Conclusion: This study reported the relationship between incivility and sense of belonging in the nursing profession. The findings of this study may be useful for nursing educators, nursing students, staff nurses, and healthcare organizations who facilitate clinical experiences for nursing students.

APPROVAL PAGE

The faculty listed below, appointed by the Dean of the School of Nursing & Health Studies, have examined a dissertation titled, "BE RESILIENT: Examining the Relationship Between Staff Nurse Incivility and Undergraduate Nursing Students' Sense of Belonging to the Nursing Profession," presented by Sarah E. Patel, candidate for the Doctor of Philosophy degree, and certify that in their opinion it is worthy of acceptance.

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ABBREVIATIONS

BMI	Body mass index
COVID-19	Coronavirus disease 2019 pandemic
CRT	Cognitive rehearsal therapy
IRB	Institutional Review Board
NMNEC	New Mexico Nursing Education Consortium
NMSU	New Mexico State University
PI	Primary investigator
REDCap	Research electronic data capture
SBNS	Sense of Belonging in Nursing School scale
SFCC	Santa Fe Community College
SPSS	Statistical Package for the Social Sciences
UBCNE	Uncivil Behavior in Clinical Nursing Education
UMKC	University of Missouri-Kansas City

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DEDICATION

To my sons, Rohan and Aryan, for allowing Mommy to reach for the stars and moon. To my husband, Tim, for holding me up to touch the sky.

CHAPTER 1

INTRODUCTION

With an expected retirement of one million registered nurses in the next 15 years, nursing students are the future workforce to care for the aging and complex patient populations (American Association of Colleges of Nursing, 2017b). A sense of belonging for nursing students, defined as the perception of acceptance, security, and respect in the nursing profession (Hagerty et al., 1992; Levett-Jones et al., 2009), within the clinical environment is stronger than the need to provide quality patient care (Levett-Jones et al., 2007). Non-negative interactions and experiences in the clinical environment, classroom, and among cohort members are critical in creating belongingness among nursing students.

Sadly, stressful situations faced by nurses and nursing students can lead to incidents of incivility (American Nurses Association, 2015b). Incivility is the presence of disrespectful behaviors that defy societal norms resulting in psychosocial or physiological distress (Andersson & Pearson, 1999; Patel & Chrisman, 2020). With rates of incivility estimated to affect up to 88% of nursing students (Marchiondo et al., 2010; Sanner-Stiehr & Ward-Smith, 2017), incivility among our future nurses has reached epidemic proportions during the past decade impairing the safety and satisfaction of our patients. Incivility is damaging nursing students' commitment to and feelings of belonging in the profession. However, there are no quantitative studies connecting a deterioration in sense of belonging among undergraduate nursing students with experiences of incivility. This study filled a gap in the literature by examining the relationship between staff nurse

incivility and undergraduate nursing students' sense of belonging, a critical factor to nursing success.

The significance of incivility in the nursing profession as experienced by undergraduate nursing students will be reviewed in the ensuing chapter. The review is a brief overview of the current research examining incivility and sense of belonging among nursing students, which will be expanded in Chapter 2. After providing a brief review of literature in Chapter 1, the specific research aims and questions for this study will be presented.

Significance and Innovation

Incivility impairs the safety and satisfaction of nurses within healthcare organizations leading to increased intent to leave the profession (Oyeleye et al., 2013). According to the American Nurses Association (2015b), 21% of nursing turnover is due to incivility which results in an annual loss of revenue $22,000 to $64,000 per nurse due to rehiring and retraining requirements (Oyeleye et al., 2013). The number of nurses who leave the profession (21%) is low when compared to the reported prevalence of incivility in the healthcare work environments is 64.7% (Clark et al., 2014a). A staggering 88% of students report experiencing incivility during their nursing education (Marchiondo et al., 2010). Thus, incivility is threatening to widen the nursing shortage gap.

Not only is incivility in healthcare affecting nurses, nursing students, and healthcare organizations, but it is also negatively effects patients due to distraction and nurses' inability to fully concentrate on their work leading to errors. The cost of incivility results in over $19 billion in medical errors, adverse events, and negligent injuries (Andel et al., 2012; Studdert et al., 2008). Qualitative research suggests an impaired social image

and sense of belonging results from incivility (Ahn & Choi, 2019; Courtney-Pratt et al., 2018; LaSala et al., 2016; Stanley et al., 2020). Even in understaffed situations, healthy work environments can be created by a sense of belonging thereby decreasing patient mortality odds by 12% (Aiken et al., 2012).

In nursing students, the desire to belong in the nursing profession is stronger than the need to provide quality patient care (Levett-Jones et al., 2007). Incivility and an impaired sense of belonging have both been connected to depression and low self-esteem (Cockshaw et al., 2013; Lasiter et al., 2012; Leary et al., 2001; Marchiondo et al., 2010; Martel, 2015; Sargent et al., 2002; Thomas, 2015; Wing et al., 2015). While Grobecker (2016) found that a positive sense of belonging among nursing students in clinical placements were related to an increase in the students' motivation and confidence which increased their learning, Martel (2015) connected incivility to students' personal perceptions of inadequacy and incompetence. Yet, this could be part of a bigger problem, including an impairment on critical thinking skills from incivility due to the deterioration in self-confidence.

This study aimed to establish the relationship between incivility and low sense of belonging, and it was the first study to apply the need to belong theory as the theoretical framework to studies focusing on incivility towards nursing students. According to the Baumeister and Leary (1995), the need to belong in society develops through frequent, non-negative interactions of mutual care and concern. However, the experience of incivility may prevent nursing students from belonging in the nursing profession. The need to belong theory provides a mechanism to explain the deleterious effects of incivility on nursing students' sense of belonging in the nursing profession.

While minority and gender inequality has been assessed in sense of belonging research indicating perceived discrimination towards Native American, Asian, and male students (Sedgwick et al., 2014; Sedgwick & Kellett, 2015), nursing research incivility lacks diversity. Minorities, especially people of Hispanic and Native American descent, are consistently underrepresented in the current incivility and sense of belonging research. This lack of diversity limits generalizability and assumptions of the current published research. This study expanded the current knowledge on the impact of incivility to nursing students' sense of belonging and implicated the need for educational interventions to build a community for students during clinical rotations to counter the adverse effects of incivility from staff nurses.

Background

Incivility is the perception of actions that demean, dismiss, or exclude an individual resulting in psychosocial or physiological distress (Patel & Chrisman, 2020). Using the complex adaptive systems theory, Oyeleye et al. (2013) surveyed 61 nurses, primarily white (82%) and female (87%), to examine the relationship between workplace incivility, stress, burnout, turnover intention, and psychological empowerment (or one's sense of control, competence, and achievement in their work) in nurses using the Perceived Stress Scale, Maslach Burnout Inventory, Uncivil Workplace Scale, Workplace Incivility Scale, Kelloway's Scale, and Spreitzer's Empowerment Scale. The authors found a significant correlation between stress, burnout, turnover intention, and incivility. The psychological empowerment scores did not correlate with any variables, but the results supported the assumption that higher levels of stress and burnout can lead to

workplace incivility. The survey included tertiary and community hospital nursing staff; however, due to a large nonresponse rate, the study lacked diversity and generalizability.

Further, new graduate nurses not only face the workplace demands as an inexperienced nurse but also the expectations of a new job in a different environment where they are learning to belong (Wing et al., 2015). Wing et al. (2015) examined the relationship between new graduate nurses' perceptions of structural empowerment, workplace incivility, and mental health symptoms using Kanter's theory of structural empowerment. To measure the variables, 394 new graduate nurses (94.7% female, 5.3% male) completed the Conditions for Work Effectiveness Questionnaire, Workplace Incivility Scale, and the State of Mind subscale from the Pressure Management Indicator. The new graduate nurses reported low levels of incivility overall but higher levels of supervisor incivility than coworker incivility. Although incivility was associated with increased rates of anxiety and depressive symptoms, structural empowerment was associated with lowered the rates of coworker incivility, depressive symptoms, and anxiety symptoms. Not only does incivility results in increased symptoms of anxiety and depression in new graduate nurses, but incivility also experienced in nursing school is affecting the psychological health of nursing students.

Marchiondo et al. (2010) examined the effect of incivility from faculty members in academia on nursing students' satisfaction with the nursing program using the Nursing Education Environment Scale, Workplace Incivility Scale, and Incivility in Nursing Education Survey. Of the 152 participants, 88% reported experiencing uncivil behaviors perpetrated by a faculty member in the classroom or clinical rotations. The experiences of incivility from faculty members related to 22% of dissatisfaction with the program. Of

these experiences, 35% of students reported symptoms of anxiety, depression, or nervousness due to the uncivil events. However, the study had limited generalizability with only 11.8% of students identifying as a member of a minority group (5.3% Black, 3.3% Asian/Pacific Islander, 1.3% American Indian, and 1.9% Hispanic) and 9.2% male.

While Marchiondo et al. (2010) investigated the effect of faculty member incivility on student nurses' program satisfaction, Thomas (2015) assessed nursing students' experiences with incivility in the clinical setting using the meaning making model and theory of caring. Within the 12 qualitative interviews, students reported feeling unprepared to deal with incivility suffered during clinical experiences, and experienced behavioral and emotional harm from the encounters of incivility. In a similar phenomenological study, Martel (2015) assessed the lived experiences of undergraduate nursing students' experiences with staff nurses incivility in the clinical setting. Using the Social Critical Theory, Martel connected incivility to students' personal perceptions of inadequacy and incompetence.

Sense of belonging in the nursing profession is cultivated through environmental factors, open communication, and the acceptance into the social group (work) as a nurse (Fiske & Taylor, 2017; Hunter & Cook, 2018). In a literature review, Levett-Jones et al. (2007) found the desire to belong is stronger on nursing students than the need to provide quality patient care, which was later identified in qualified interviews with undergraduate nursing students (Levett-Jones & Lathlean, 2008). Thus, this justifies Maslow's (1943) belief that learning and self-actualization can only be achieved if the desire to belong is met.

After interviewing 18 students in the qualitative phase of a mixed-methods study, Levett-Jones and Lathlean (2008) determined self-confidence and investment in the clinical rotation was noted among students who felt they belonged on the hospital unit, while symptoms of anxiety, depression, and apprehension were noted among students who did not "fit" in the clinical unit. Grobecker (2016) supported these themes in a correlational study of 1296 undergraduate nursing students with a larger minority representation of 22.6% (Hispanic 9.0%, Back 4.6%, Asian American 3.7%, Asian Pacific/Islander 3.7%, and Native American 1.6%) using the Belongingness Scale-Clinical Placement Experience and Perceived Stress Scale. Nursing students' learning, motivation, and confidence were higher when they experienced a sense of belonging in the clinical environment.

Rejection and the lack of a caring, responsive environment contributes to student attrition (O'Keeffe, 2013). However, in a study of 960 first-year undergraduate college students, sense of belonging positively correlated with a student's intention to remain in college using the Sense of Belonging Scale, Academic Attitudes Scale, questions assessing intention to remain in college, and second year enrollment records (Morrow & Ackermann, 2012). Similarly, in a longitudinal study of 420 experienced nurses, the intention to stay with an organization was strongly related to the sense of inclusion and belonging (Armstrong-Stassen & Schlosser, 2011).

The development of a positive sense of belonging in nursing is connected to self-confidence and job satisfaction, but maladaptive belonging is associated with negative psychological impairments. Sadly, nursing students are faced with rejection by nurses and patients in the hospital and disregarded for their inexperience, gender, age, ethnicity,

and body mass index (Ahn & Choi, 2019; Albloushi et al., 2019; Courtney-Pratt et al., 2018; Sedgwick et al., 2014; Sedgwick & Kellett, 2015; Sliter et al., 2012). In a phenomenological research study, 14 seasoned nurses and nurse administrators reported stress, symptoms of depression, and major medical issues resulting from incivility (LaSala et al., 2016).

Not only does impaired sense of belonging correlate to the presence of depressive symptoms, it also leads to impaired self-esteem (Leary et al., 2001). Utilizing the principles of the Sociometer Theory and Dominance Theory, Leary et al. (2001) conducted a quasi-experimental design with 103 undergraduate students (50 males, 53 females) in an introductory psychology course. In the study, participants rated four other potential group members on characteristics of leadership and group membership. Then, false feedback was provided to the participants on the perceptions of others on their own leadership and group member characteristics. After reviewing their scores, the participants completed a survey created by the authors on self-esteem. Within the study, acceptance had a stronger impact on self-esteem than dominance, indicating a lack of social acceptance (belonging) results in lower self-esteem. While limited data is present on sense of belonging development in nursing, the body of literature is growing with themes and ideas to create a sense of belonging among nurses and nursing students (Hunter & Cook, 2018; Lampinen et al., 2018a; Levett-Jones & Lathlean, 2008; Tahereh et al., 2017). However, there are no studies correlating nursing students' perceptions of impaired belonging to the experiences of staff nurse incivility.

Further, there is evidence that sense of belonging may be experienced differently during a nursing student's education. Demographic factors, including semester (Clark et

al., 2014b) in the nursing program and weight status (Sliter et al., 2012), are associated with uncivil behaviors and sense of belonging. In a longitudinal study assessing the perceptions of civility and incivility on stress relieving and coping strategies, Clark et al. (2014b) found the overall perception of civility decreased from sophomore year to senior year, while the perception of faculty-to-student incivility increased. Although not assessing the relationship between incivility rate and weight status in nursing students, Sliter et al. (2012) surveyed 341 respondents and found the mean incivility rate was significantly higher in undergraduate students who were overweight or obese.

Similarly, students in their senior semester of nursing school (Patel et al., in press) or those with a higher BMI (Carroll-Scott et al., 2015; Gilstad-Hayden et al., 2014) may be at greater risk for having a lower sense of belonging in the nursing profession. In the psychometric development of the Sense of Belonging in Nursing School (SBNS) scale, Patel et al. (in press) found a statistically significant, weak inverse correlation (r = -.20, p<0.01) between sense of belonging and undergraduate nursing students in the fifth semester of nursing school. Gilstad-Hayden et al. (2014) assessed the association between students' BMI and school climate, or positivity score, in 12 public elementary schools. Out of the 12 schools with 1009 participants, positive school culture was associated with a decrease in BMI among students. In a follow up study, Carroll-Scott et al. (2015) compared the data from the 12 elementary schools to residential census data for 811 preadolescents in the same age group. A great connectedness, or belonging, to the individual's school was significantly associated with a lower BMI. However, there are no studies assessing the impact of weight status on sense of belonging or incivility among

nursing students. Exploration of these associations would inform interventions in this area.

Problem Statement

Stressful situations faced by nurses and nursing students can lead to the display of raw, negative emotion (American Nurses Association, 2015b). These raw, negative emotions do not always result in negative consequences. Nonetheless, these emotions can enable incivility to develop causing nursing students to experience depression and an impaired self-esteem and inadequacy (Lasiter et al., 2012; Marchiondo et al., 2010; Martel, 2015; Thomas, 2015; Wing et al., 2015). There are no studies to connect incivility faced by nursing students to a deterioration in sense of belonging and there is a need to understand these associations across semesters in the nursing program. Therefore, the purpose of this study is to determine if a relationship exists between staff nurse incivility and undergraduate nursing students' sense of belonging in the nursing profession, and how semester in the nursing program and weight are associated with staff nurse incivility and undergraduate nursing students' sense of belonging.

Nature of the Study

This cross-sectional study aims to determine if a relationship exists between staff nurse incivility and undergraduate nursing students' sense of belonging in the nursing profession. The secondary aim is to determine if an association exists between staff nurses' incivility and lower sense of belonging in nursing students by semester and weight measured by BMI. If a correlation exists between staff nurse's incivility and nursing students' sense of belonging, interventions can be designed, tested, and then implemented. These interventions would be designed to promote nursing students' sense

of belonging, their ability to manage staff nurse incivility, and promote staff nurses' competence to overcome incivility in their workplace (Anthony & Yastik, 2011).

Research Questions

The following research questions were tested by this study:

1. What is the relationship between staff nurse incivility and undergraduate nursing students' sense of belonging to the nursing profession?
    a. Hypothesis 1a: An inverse correlation would be observed between staff nurse incivility and undergraduate nursing students' sense of belonging. That is, undergraduate nursing students who experience a greater number of incidents of staff nurse incivility would report a lower sense of belonging in the nursing profession.
2. What is the frequency of incivility reported by minority undergraduate nursing students?
3. Among undergraduate nursing students, what is the association between incivility and sense of belonging based on semester in the nursing program?
    a. Hypothesis 3a: The relationship between incidents of incivility and sense of belonging would be stronger among 4th semester nursing students.
4. Among undergraduate nursing students, what is the association between incivility and sense of belonging based on body mass index?
    a. Hypothesis 4a: The relationship between incidents of incivility and sense of belonging would be stronger among undergraduate students with higher BMI.

Theory

Since 1983 when research on incivility in nursing began, the pedagogy of the oppressed, the incivility spiral, and Kanter's theory of structural empowerment have been the main theories utilized to frame the research (Andersson & Pearson, 1999; Laschinger et al., 2012; Martel, 2015; Roberts, 1983; Spence Laschinger et al., 1997; Wing et al., 2015). The incivility spiral, pedagogy of the oppressed, and structural empowerment theories provide a framework for describing incivility in the workplace (Andersson & Pearson, 1999), explaining the impact of oppressed behaviors on nursing (Freire, 2000; Roberts, 1983), and testing interventions to improve civility in an organization (Spence Laschinger et al., 1997), respectively. Yet, these theories fail to describe or predict the impact of incivility on an individual's sense of belonging. While unaccounted for in the literature on incivility in nursing, the need-to-belong theory provides the connection to describe and predict the effect of incivility on an undergraduate nursing students' sense of belonging in the nursing profession.

Although a relatively new theoretical framework, the need-to-belong theory, has served to predict the impact of negative behaviors on the perception of belonging in varying groups from elementary school students to healthcare professionals (Girardi et al., 2015; Stenseng et al., 2014; Yagil & Medler-Liraz, 2017). For example, in a cross-sectional study focused on belonging in healthcare workers, Girardi et al. (2015) studied the association between interpersonal conflict at work on negative affectivity and serum biomarkers for stress in 121 healthcare workers. The variables were measured using the three items on the Q-Bo test for interpersonal conflict at work, Strain-Free Negative Affectivity scale, and serum cytokines and interleukin. Negative affectivity was

positively associated with interpersonal conflict at work (γ=.337, *p*=.017). The need-to-belong theory served to explain the impediment of interpersonal conflict on forming healthy, interpersonal relationship (Girardi et al., 2015).

The need-to-belong theory conceptualizes a mechanism to explain the deleterious effects of incivility on nursing students' relationship to the nursing profession. According to Baumeister and Leary (1995), the need to belong in society develops through frequent, non-negative interactions of mutual care and concern. The main concept in the theory is the need to belong. The need to belong is "a need to form and maintain at least a minimum quantity of interpersonal relationships" (Baumeister & Leary, 1995, p. 499). While the visual expressions and desire to maintain social relationships differ among cultures, race, and genders, the need to belong is a fundamental building block of human motivations. Without adequate social relationships, individuals risk affliction with mental and physical illnesses, including depression and higher mortality rates (Baumeister, 2012).

The second implied concept in the theory is non-negative behaviors. Non-negative behaviors are encounters that are not hostile, abusive or demoralizing (Baumeister, 2012). The theorists realized that frequent interactions could be satisfying if the contact is not hostile, abusive, or demoralizing. However, the experience of incivility, or actions that demean, dismiss, or exclude an individual, prevent nursing students from belonging in the nursing profession.

Definition of Terms

For this study, the two key concepts are *incivility* and *sense of belonging*. Incivility is the undergraduate nursing student's perception of rude, hostile, exclusionary,

or dismissive behavior experienced from staff nurses in the clinical environment resulting in psychosocial or physiological distress (Anthony & Yastik, 2011; Patel & Chrisman, 2020). Incivility represents negative behaviors that prevent a student from feeling a sense of belonging, or the ability to form and maintain relationships, in the nursing profession. Sense of belonging is the feeling of being valued, accepted, secure, and respected in the clinical environment, classroom, and among the cohort as an undergraduate nursing student to the nursing profession (Hagerty et al., 1992; Levett-Jones et al., 2009). The sense of belonging is acquired through the formation of interpersonal relationships, connecting the research to the theoretical concepts in the need-to-belong theory (Baumeister & Leary, 1995).

Assumptions

Based on the literature reviewed in detail in Chapter 2, the assumptions made for the purpose of this study from the literature reviewed were:

1. Nursing students experience incivility. Regardless of the clinical location or program, nursing is a stressful profession, and this stress results in uncivil behaviors despite best intentions (Anthony & Yastik, 2011; Babenko-Mould & Laschinger, 2014; Martel, 2015; Thomas, 2015).
2. Nursing students are not provided education on strategies to respond to incivility in the clinical environment (Thomas, 2015).

Scope and Delimitations

The scope of this study is undergraduate nursing students at a university and community college in New Mexico. Delimitations for the study were:

1. Nursing students with 150 inpatient clinical hours who have successfully completed the third semester in the nursing school curriculum.
2. Nursing students who are enrolled in the one of the 2020 Fall or 2021 Spring junior or senior nursing concept courses at one of two selected schools.
3. The use is a cross-sectional study design resulting in data that provides a single snapshot of the experiences of incivility and the relationship with sense of belonging.
4. A convenience sample of 123 students recruited to ensure an adequately powered sample (Polit & Beck, 2020).

Summary

Incivility is detrimental to nurses, nursing students, and patients. Unfortunately, the incidents of incivility have reached epidemic proportions during the past decade; thus, nursing students' desire to remain in the nursing profession is impaired which threatens to increase the current nursing shortage. The need-to-belong theory is unaccounted for in the literature on incivility in nursing, and its application to incivility in nursing could provide further understanding of it. While qualitative research suggests an impaired sense of belonging results from incivility, there are no quantitative studies establishing the connection between incivility and a damaged sense of belonging in the nursing profession. This study aims to fill this void.

Chapter 2 contains an overview of the current literature on incivility and sense of belonging development in the nursing profession. This section will demonstrate the connection between incivility and an impaired sense of belonging in the nursing

profession, while providing more insights into the research gaps of staff nurse incivility on undergraduate nursing students' perception of belonging.

CHAPTER 2

LITERATURE REVIEW

Scholars in multiple disciplines have researched incivility, where the focus has been on describing its frequency, impact, associations, and measurement methods. Incivility in general results in poor physical health (Dillon, 2012; Dupré et al., 2014; Nixon et al., 2011), job insecurity (Merecz et al., 2009), and depression (Dupré et al., 2014), and in nursing specifically, results in medical errors, impaired patient safety, adverse patient events, and poor patient satisfaction (American Nurses Association, 2015a; Laschinger et al., 2013). Research studies indicate that burnout, turnover, low self-esteem, stress, anxiousness, defeat, tension, and distress in students and staff nurses are all linked to incivility in nursing (Clark et al., 2014b; Gibbons, 2011; Leiter et al., 2010; Oyeleye et al., 2013; Suliman & Halabi, 2007). In addition, a sense of belonging, which is postulated to contribute to positive outcomes that could moderate associations with incivility yet is understudied in this capacity.

The following review of the literature provides a summary of incivility and sense of belonging in nursing. Two main themes were identified in published research on incivility in nursing: incivility in the workplace and incivility in academia. Within nursing literature, sense of belonging is developed from nursing student clinical placement to workplace satisfaction. These themes merge to connect students' experiences with incivility during clinical rotations.

Incivility

Incivility is disrespectful behavior that defies the societal norms in the workplace (Andersson & Pearson, 1999). This disrespectful behavior of incivility can be verbal or

nonverbal actions that demean, dismiss, or exclude an individual throughout the nursing, from academia to the workplace, resulting in psychosocial or physiological distress for all individuals involved in the incident (Patel & Chrisman, 2020, p. 6).

Workplace Incivility

Research that connects different types of incivility faced within health care workplace is abundant (Campana & Hammoud, 2015; D'Ambra & Andrews, 2014; Fida et al., 2016; Laschinger et al., 2013; Lewis & Malecha, 2011; Oyeleye et al., 2013; Read & Laschinger, 2013; Wing et al., 2015). In the workplace, there are three different perpetrator groups of incivility: patients or their family members, supervisors, and other healthcare personnel including nursing students. While patient-to-nurse incivility will be discussed separately, supervisor-to-nurse and nurse-to-nurse incivility will be reviewed together, because a large portion of the literature analyzes both concepts of incivility concurrently.

Patient-to-Nurse Incivility

This form of incivility occurs when nursing staff face discourteous behavior from patients or patients' family members. Studies in this area mainly focus on the impact of incivility from patients on nursing staff burnout (Campana & Hammoud, 2015; Speroni et al., 2014). In a descriptive, cross-sectional study with 378 nurses (325 female), Alshehry et al. (2019) discovered that patient-to-nurse incivility (mean 2.44, SD 0.80) is experienced more often than nurse-to-nurse (mean 2.18, SD 0.69), supervisor (mean 1.90, SD 0.66) or physician incivility (mean 2.42, SD 0.79) using an adapted version of the Nurse Incivility Scale, with scores ranging from 1 (never) to 5 (many times) on the Likert scale, and Quality of Nursing Care scale. Layne et al. (2019) determined that intensive

care and intermediate care nurses experience more incivility as determined on the Nurse Incivility Scale from patients and/or their family members (mean 2.86) than general care nurses (mean 2.62), specialty care nurses (mean 2.49) or nursing clinical support staff (mean 2.25) in a descriptive study following Swanson's Theory of Caring with 414 nurses.

Unlike the previous studies which focused on describing the frequency of patient and family incivility to nurses, Campana and Hammoud (2015) surveyed 75 nurses sampled from the Minnesota Board of Nursing directory on the experiences of incivility from patients and families to determine the impact of interpersonal justice (or the act of providing timely and adequate information) and informational justice (or the act of treating an individual with dignity and respect) on burnout. Using the Maslach Burnout Inventory, Cortina Incivility Scale, and Perceived Interpersonal Justice scale, the study, grounded in the theory of justice salience hierarchy, revealed higher levels of burnout on the among nurses on the days when incivility was experienced but failed to statistically support lower levels of burnout when organizations promoted interpersonal justice. There was a positive relationship between lower levels of burnout and the portrayal of informational justice within an organization. However, the study did not report the frequency of patient-to-nurse incivility, had a limited response rate (6%), and was a primarily female sample (93%) (Campana & Hammoud, 2015). Unfortunately, nursing incivility research does not consistently assess and report the presence of patient-to-nurse incivility. Rather, the focus is mainly on supervisor and nurse incivility.

Supervisor-to-Nurse and Nurse-to-Nurse Incivility

Staff experience this form of incivility horizontally (supervisors) or laterally (other nursing nurse). Studies in this area focus on the impact of incivility from supervisors and nurse on burnout, turnover intentions, work productivity, stress levels, and mental health (D'Ambra & Andrews, 2014; Fida et al., 2016; Laschinger et al., 2013; Lewis & Malecha, 2011; Oyeleye et al., 2013; Read & Laschinger, 2013; Wing et al., 2015). In one such correlational study, Lewis and Malecha (2011) analyzed the effect of incivility on the work environment, productivity, cost, and management skills of 659 direct care nurses using the Nursing Incivility Scale and Work Limitation Questionnaire, which measures productivity by the degree of interference an individual has to perform their job. Participants reported the highest levels of incivility in the general workplace environment (mean 3.36, SD 0.734), from other nurses (mean 3.36, SD 0.816), and physicians (mean 3.14, SD 1.03), but lower from their direct supervisor (mean 2.32, SD 1.07) and patients or visitors (mean 2.02, SD 0.846). The authors found a 20% decrease in workplace productivity due to incivility, resulting in $11,518 of nonproductive time per nurse. There was no correlation between management skills and the rates of incivility in the work environment. However, the survey had a low response rate at 8% with 597 female respondents (90.5%), decreasing the generalizability of the sample (Lewis & Malecha, 2011).

Moreover, incivility experienced by the nursing staff decreases patient satisfaction and results in an increase in patient health complications. In addition to looking at patient-to-nurse incivility, Alshehry et al. (2019) surveyed 378 nurses in a hospital setting on the impact of workplace incivility on the quality of nursing care. Using the Nursing

Incivility Scale, incivility from patients and/or visitors (mean 2.44, SD 0.80), other nurses (mean 2.18, SD 0.69) and physicians (mean 2.42, SD 0.79) was experienced somewhat to often, while it was lowest from their supervisors (mean 1.90, SD 0.80). The authors found a statistically significant decrease on the overall quality of nursing care from nurse-to-staff incivility. In a descriptive, cross-sectional study of 192 Korean hospital nurses, Woo and Kim (2020) found a significant decrease in a nurse's compassion competence, or the awareness and ability to reduce one's suffering per the Compassion Competence Scale, when exposed to workplace incivility on the Korean Nursing Incivility Scale. The reported prevalence of workplace incivility (mean 2.35, SD 0.62) occurred somewhat to often on a 5-point Likert scale, but the authors did not report the experiences of incivility from other nurses, physicians, or patients and/or visitors. Yet, high level of psychological capital, which includes the components of hope, optimism, resilience, and self-efficacy on the Psychological Capital Questionnaire, in nurses moderated the effects of workplace incivility on compassion competence (Woo & Kim, 2020).

Instead of assessing the relationship of incivility on compassion competence, Oyeleye et al. (2013) explored the relationship between workplace incivility in the hospital and stress, burnout, intention to leave, and psychological empowerment (or one's sense of control, competence, and achievement in their work). Using the Complex Adaptive Systems theory, Oyeleye et al. (2013) surveyed 61 nurses from 44 hospitals and 17 community centers using the Perceived Stress Scale, Maslach Burnout Inventory, Uncivil Workplace Behaviors, Workplace Incivility Scale, Kelloway's Scale, and Spreitzer's Psychological Empowerment Scale. The Workplace Incivility Scale measures incivility on seven items using a 5-point Likert scale, which in this study were added

together for an overall incivility score with high scores indicated an higher frequency of incivility in the workplace. In the study, nurses reported a high incident of incivility with workplace incivility ranging from 19 to 74 (mean 40.5, SD 64). The authors found a significant correlation between stress, burnout, incivility, and turnover intention. The psychological empowerment scores did not correlate with any variables but did support the assumption that higher levels of stress and burnout can lead to workplace incivility. The survey included tertiary and community hospital nursing staff; however, due to a large nonresponse rate, the study lacked diversity and generalizability with 86% of participants as female and 82% white (Oyeleye et al., 2013).

However, the experience of incivility is different for inexperienced nurses, who are also facing the demands of learning their role as a nurse in a new environment. Wing et al. (2015) examined the relationship between new graduate nurses' perceptions of structural empowerment, workplace incivility, and mental health symptoms using Kanter's theory of structural empowerment. Using a predictive, non-experimental design, the authors surveyed 394 new graduate nurses with the Conditions for Work Effectiveness Questionnaire, Workplace Incivility Scale, and State of Mind subscale of the Pressure Management Indicator. New graduate nurses reported low levels of incivility overall (mean 1.29, SD 0.50), supporting previous research from Laschinger et al. (2013) and Read and Laschinger (2013), but reported higher levels of supervisor incivility (mean 1.51, SD 0.65). Although incivility increased the rates of anxiety and depressive symptoms, structural empowerment lowered the rates of coworker incivility, depressive symptoms, and anxiety symptoms (Wing et al., 2015). Both Oyeleye et al. (2013) and

Wing et al. (2015) correlated incivility in nursing to negative impacts on mental health and stress, that can lead to lower work productivity (Lewis & Malecha, 2011).

Incivility in Nursing Academia

Incivility in nursing academia revolves around the experiences of students, faculty, and administration. The literature on incivility in nursing academia focuses on three main types of incivility that might affect student learning: faculty-to-students, students-to-faculty, and students-to-students. The studies on faculty-to-students incivility, students-to-faculty incivility, and students-to-students incivility target the effects to impaired student learning and mental health (Authement, 2016; Clark, 2008; Clark et al., 2014c; El Hachi, 2020; Jenkins et al., 2013; Lasiter et al., 2012; Marchiondo et al., 2010). While faulty-to-faculty incivility is another form of incivility in nursing academia, the current literature does not analyze the effect of faculty-to-faculty incivility on students or learning outcomes (Burger et al., 2014; Clark, 2013; Clark et al., 2013; Peters, 2014).

Faculty-to-student incivility results in symptoms of depression, anxiety, and negatively impacts patient care. In a cross-sectional survey, Marchiondo et al. (2010) examined the effect of incivility from faculty on the effects to students' mental health using the Nursing Education Environment survey, Workplace Incivility scale, and Incivility in Nursing Education survey. Out of the 152 participants, 88% reported experiencing uncivil behaviors perpetrated by a faculty member in classrooms or clinical rotations. Of these experiences, 35% of students reported symptoms of anxiety, depression, or nervousness because of the uncivil event (Marchiondo et al., 2010). A major strength of the study was a 100% response rate of the recruited participants.

However, the 89.5% of the participants were female and 86.8% were White, limiting the diversity of the study.

In another study, instead of analyzing the impact on mental health, Lasiter et al. (2012) studied faculty members' role in the incivility spiral on student learning. During the mixed methods study, the authors studied 152 senior nursing students using the Nursing Education Environment survey and an open-ended questionnaire. Of the 152 responses, content analysis was conducted on 94 responses with 86 (91.5%) females and 8 (8.5%) male students. Of the main themes identified, incivility from faculty related to students' perceptions of being stupid. According to Lasiter et al. (2012), the experiences of incivility from faculty can negatively impact student learning, performance, and patient care.

El Hachi (2020) further demonstrated the negative effective of incivility from faculty to an impairment in nursing students' self-confidence. Guided by Clark's conceptual model for fostering civility in nursing education, the author interviewed nine nurses (8 females, 1 male) on their lived experiences with faculty incivility prior to graduation. The experience of uncivil faculty comments in the classroom left students feeling incompetent and unmotivated. In addition, the nursing students lack the trust required to express their opinions (El Hachi, 2020).

While El Hachi (2020), Lasiter et al. (2012), and Marchiondo et al. (2010) focused solely on faculty-to-student incivility, Clark et al. (2014c) analyzed students' use of stress relieving and coping strategies with the perceptions of civility and incivility in a mixed methods survey among faculty-to-students and students-to-students over a three-year period. To measure incivility, the author developed a survey with four quantitative

items measuring incivility on a 6-point Likert scale, where 6 was extremely civil and 1 was not civil at all. On the previous incivility scales, lower scores indicated less incivility, while higher scores on this scale indicated more incivility. Over the three-year period, a cohort of 68 nursing students were surveyed during their sophomore, junior, and senior years in the program with a response rate of 79.4%, 100%, and 97%, respectively. In the study, the level of overall civility decreased from sophomore year (mean 5.33, SD 1.10) to senior year (mean 4.68, SD 1.13) and the perception of faculty-to-student incivility increased from sophomore year (mean 5.24; SD 0.64) to senior year (mean 4.31, SD 1.04), but the time spent on stress and coping strategies remained the same. Although the three studies (Clark et al., 2014c; Lasiter et al., 2012; Marchiondo et al., 2010) focused on different aspects of incivility in academia, the effects of incivility could impact students' critical thinking development and intention to remain in the profession.

Incivility towards Students during Clinical Experiences

Incivility in nursing is not isolated to experiences in academia or the workplace. The synthesis of the literature on the impact of incivility in the health care workplace and nursing academia leads to the connection through the movement of students between the two environments. While students are in clinical rotations, they experience incivility from staff nurses and other healthcare workers. Studies on the effects of incivility towards nursing students during clinical experiences focused on the students' experiences with incivility as perpetrated by staff nurses (Anthony & Yastik, 2011; Babenko-Mould & Laschinger, 2014; Martel, 2015; Thomas, 2015).

Using the principles of grounded theory, Thomas et al. (2015) described the experiences of undergraduate nursing students experiencing incivility in their first clinical

experience. Twenty-six students provided unstructured, hand-written, daily diary entries after their clinical experiences for six weeks, totaling 30 days. Upon analysis, the students felt dismissed and unwelcome in the environment when they were without mentors. Supporting these conclusions, Ahn and Choi (2019) interviewed 32 senior nursing students to explore the experiences of incivility during clinical experiences. In the study, the students felt a lack of respect and disregard for their knowledge and training as future nursing professionals from the staff nurses. In a similar study assessing the lived-experiences of 29 undergraduate nursing students, Courtney-Pratt et al. (2018) determined students' perceived the environment as unwelcoming and became reluctant to return, further supporting the work by Thomas et al. (2015).

Instead of describing student nurses' experiences with incivility, Babenko-Mould and Laschinger (2014) utilized a cross-sectional survey design grounded in the incivility spiral and burnout theories to examine the relationship between student nurse burnout and incivility experienced in clinical rotations from staff nurses and clinical instructors. According to the incivility spiral, the starting point of the spiral begins with an incident of uncivil behavior from the oppressor and the perception of incivility on the oppressed. When the incivility leads to social damage to the oppressed individual's identity, the perception leads to coercive behavior from both parties. Secondary spirals occur when members observe, but do not prevent, incivility within a work environment (Andersson & Pearson, 1999). One hundred and twenty-six undergraduate students participated in the study with a 66.3% response rate (Babenko-Mould & Laschinger, 2014). Emotional exhaustion (r=0.42, p<0.001) and cynicism (r=0.289, p<0.05) were significantly related with students who experienced higher rates of staff nurse incivility (mean 1.83, SD 0.61)

on an adapted version of the Workplace Incivility Scale, where 1 was never and 5 was everyday. While the study did not provide details on the racial demographics of the participants, only 2.4% of the participants were male.

Instead of examining burnout, Thomas (2015) explored students' emotional and behavioral responses to incivility perpetrated by staff nurses during clinical rotations. Based on the Theory of Caring, Thomas interviewed 12 undergraduate nursing students with open-ended questions regarding their experiences with incivility in the clinical environment. According to Thomas (2015), students felt unprepared to deal with incivility suffered during clinical experiences.

In a similar study, Martel (2015) not only examined seven nursing students' lived experiences with incivility during clinical rotations, but also analyzed the meanings for the students behind the events. In doing so, the author connected incivility to students' personal perceptions of inadequacy and incompetence. While research links perceptions of inadequacy with feelings of incompetence, there are few studies to learn whether students' perception of incompetence from incivility impairs the development of belonging and critical thinking skills (Martin, 2002).

Sense of Belonging

According to Hagerty et al. (1992), sense of belonging is the "experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment" (p.173). The concept of belongingness as a personal investment is key regardless of the environment. The literature is divided on effective development of belongingness and the negative consequences when an impairment occurs to an individual's sense of belonging.

Development and Positive Impact of the Sense of Belonging

Levett-Jones et al. (2007) completed a concept critique on the sense of belonging related to clinical placements for nursing students. The authors evaluated work satisfaction, length of clinical placements, and conformity on nursing students' "fit" within the nursing community. According to Levett-Jones et al. (2007), the desire to belong is stronger on nursing students than the need to provide quality patient care. Thus, this justifies Maslow's (1943) believe that learning and self-actualization can only be achieved if the desire to belong is met.

To further evaluate the sense of belonging among nursing students in clinicals, Levett-Jones and Lathlean (2008) interviewed 18 students as part of a mixed methods study to determine factors impacted by their sense of belonging. The study was conducted at two universities in Australia and one in the United Kingdom. Four main themes were identified specific to the effect of belongingness on learning: motivation to learn, self-directed learning, anxiety- a barrier to learning, and confidence to ask questions. Self-confidence and investment in the clinical rotation was noted among students who felt they belonged on the unit, while symptoms of anxiety, depression, and apprehension were noted among students who did not "fit" in the clinical unit (Levett-Jones & Lathlean, 2008). The study by Grobecker (2016) supported these themes by showing an improvement on nursing students' learning, motivation, and confidence when they experienced a strong sense of belonging in the clinical environment.

Winter-Collins and McDaniel (2000) surveyed 95 new graduate nurses to determine if sense of belonging impacted their job satisfaction. Among the participants,

there was limited variability in satisfaction or sense of belonging by degree type or work setting, but a significant correlation was present between total workplace satisfaction and sense of belonging (Winter-Collins & McDaniel, 2000). However, the study did not compare sense of belonging and job satisfaction to workforce retention.

While not related to workplace retention, Morrow and Ackermann (2012) surveyed 156 students to determine the impact of belonging on college retention. Sense of belonging through faculty support (β=.19, p =.03) and perceived peer support (OR= 2.06, p<0.05) had a positive correlation to the intention of college retention but paled in comparison to the impact of personal motivation (OR -1.95, p<0.05) on college retention (Morrow & Ackermann, 2012).

Not only does a positive sense of belonging impact retention on new employees and students, it also improves retention in seasoned nurses. Armstrong-Stassen and Schlosser (2011) studied "perceived insider status" (belonging) on the "intention of older workers to remain with their organization" (p. 321). After surveying 420 seasoned nurses in Canada, the authors concluded the intention to stay with an organization was strongly related to the sense of inclusion and belonging (r=0.67, p=0.05) (Armstrong-Stassen & Schlosser, 2011).

Negative Consequences Due to Impaired Sense of Belonging

The development of a positive sense of belonging in nursing is connected to self-confidence and job satisfaction, but maladaptive belonging is associated with negative psychological impairments. While not specific to nursing environments, Sargent et al. (2002) analyzed the relationship of belongingness among 443 Navy recruits to the development of depressive symptoms. As hypothesized by the authors, a negative

correlation existed between a low sense of belonging and depressive symptoms (r= -.455, pp <0.01) (Sargent et al., 2002).

Cockshaw et al. (2013) built on the work by Sargent et al. (2002) to determine if a moderating effect occurs between workplace and general community belonging on depressive symptoms. The authors surveyed 369 individuals to determine their sense of belonging in the community, membership within the workplace, and depression scale. Cockshaw et al. (2013) determined there were no buffering effects on the sense of belonging between the workplace or general community, and 45% of variance in depressive symptoms were related to deficits on the sense of belonging in either environment.

Not only does impaired sense of belonging correlate to the presence of depressive symptoms, it also leads to impaired self-esteem (Leary et al., 2001). Leary et al. (2001) conducted three studies to evaluate the impact of dominance and social acceptance, a concept relevant to belonging, on self-esteem. The first (n=103) and second (n=115) studies utilized a quasi-experimental design to provide false feedback to participants on others' desire to have them as a leader or member in a psychology class group project. In the first two studies, participants rated four other potential group members on characteristics of leadership and group membership. Then, false feedback was provided to the participants on the perceptions of others on their own leadership and group member characteristics. After reviewing their scores, the participants completed a survey created by the authors on self-esteem. The quasi-experimental studies indicated dominance and social acceptance are responsively correlated to self-esteem. The third study (n=180) used a correlation design to assess the relationship between acceptance, dominance measures,

and self-esteem. Acceptance was measured on the Socially Supportive Behaviors and Inclusionary Status Scale; dominance was measured on the California Psychological Inventory, dominance subscale of the Adjective Check List, and 5 ad hoc items written by the researchers; and self-esteem was measured on the Rosenberg Self-Esteem Inventory. A sense of perceived dominance and social acceptance in the workplace by peers related to a positive self-esteem. However, acceptance had a stronger impact on self-esteem than dominance, indicating a lack of social acceptance (belonging) results in lower self-esteem (Leary et al., 2001).

Connecting Sense of Belonging and Incivility

As discussed in Chapter 1, sense of belonging is perceived when an individual feels valued, accepted, secure, and respected in their environment. The desire to belong in the nursing profession is stronger for students than the need to provide quality patient care (Levett-Jones et al., 2007). Incivility from faculty creates fear of self-expression and honesty from the students as valued participants (El Hachi, 2020). Within the clinical environment, nursing students feel disrespected (Ahn & Choi, 2019; Thomas et al., 2015) and unwelcome (Courtney-Pratt et al., 2018). This prevents students from becoming functioning members of the nursing profession.

Incivility and the lack of belonging in the workplace produce the same negative consequences of depression and an impaired self-esteem or inadequacy by the individual (Cockshaw et al., 2013; Lasiter et al., 2012; Leary et al., 2001; Marchiondo et al., 2010; Martel, 2015; Sargent et al., 2002; Thomas, 2015; Wing et al., 2015). While limited data are present on sense of belonging development in nursing, the body of literature is growing with themes and ideas to create a sense of belonging among nurses and nursing

students (Hunter & Cook, 2018; Lampinen et al., 2018a; Levett-Jones & Lathlean, 2008; Tahereh et al., 2017). However, there are no studies to connect incivility to an impairment in the sense of belonging among nursing students. This is the first step in understanding incivility to improve safety and patient care in the clinical and classroom nursing environment.

With an expected retirement of one million registered nurses in the next 15 years (American Association of Colleges of Nursing, 2017b), nursing students are the future workforce. Unfortunately, 17.5% of new registered nurses leave the profession within their first year of work and 33.5% leave within two years of licensure (Flinkman et al., 2013; Kovner et al., 2014). By understanding the relationship of incivility on sense of belonging in nursing, educational interventions may lead to an increase resiliency of nurses and nursing students to the effects of incivility and decrease the attrition within the nursing profession.

Gaps in the Literature

Several theories have been utilized in incivility literature including the Freire's social critical theory, incivility spiral, complex adaptive systems, Kanter's theory of structural empowerment, perceived organizational membership framework, sociometer theory, dominance theory, theory of justice salience hierarchy, and Swanson's theory of caring. However, the need-to-belong theory is unaccounted for in the incivility literature. While a newer theoretical framework, the need-to-belong theory has served to predict the impact of negative behaviors on the perception of belonging in varying groups from elementary school students to healthcare professionals (Girardi et al., 2015; Stenseng et al., 2014; Yagil & Medler-Liraz, 2017). In a cross-sectional study focusing on belonging

in healthcare workers, Girardi et al. (2015) studied the association between interpersonal conflict at work on negative affectivity and serum biomarkers for stress among 121 healthcare workers. The variables were measured using the three items on the Q-Bo test for interpersonal conflict at work, Strain-Free Negative Affectivity scale, and serum cytokines and interleukin. Negative affectivity was positively associated with interpersonal conflict at work (γ=.337, p=.017). The need-to-belong theory explained the impediment of interpersonal conflict on forming healthy, interpersonal relationship.

While minority and gender inequality has been assessed in sense of belonging research indicating perceived discrimination towards Native American, Asian, and male students (Sedgwick et al., 2014; Sedgwick & Kellett, 2015), nursing research on incivility lacks diversity. In the studies reviewed, the majority of participants were White or female (Alshehry et al., 2019; Campana & Hammoud, 2015; Hunter & Cook, 2018; Lampinen et al., 2018a; Lasiter et al., 2012; Lewis & Malecha, 2011; Marchiondo et al., 2010; Oyeleye et al., 2013; Wing et al., 2015). Ethnic/racial minorities, especially of Hispanic and Native American descent, were consistently underrepresented in the current incivility and sense of belonging research, further limiting generalizability and assumptions of the current research.

In the literature, there are several studies assessing the correlation of incivility to an increased prevalence of burnout, decreased sense of interpersonal justice (Campana & Hammoud, 2015; Oyeleye et al., 2013), and lowered workplace productivity (Lewis & Malecha, 2011). The reporting prevalence of incivility in nursing is 64.7% (Clark et al., 2014a), with nurses experiencing incivility ranging from once (1) to sometimes (2) on a 5-point Likert scale in a 12-month period (Lewis & Malecha, 2011; Oyeleye et al., 2013;

Woo & Kim, 2020). However, 88% of nursing students report experiencing incivility during their educational career (Marchiondo et al., 2010). Incivility from faculty creates fear of self-expression and honesty from the students as valued participants (El Hachi, 2020). Within the clinical environment, nursing students feel disrespected (Ahn & Choi, 2019; Thomas et al., 2015) and unwelcome (Courtney-Pratt et al., 2018). In the clinical setting, Levett-Jones and Lathlean (2008) determined self-confidence and investment in the clinical rotation was noted among students who felt they belonged on the unit, while symptoms of anxiety, depression, and apprehension were noted among students who did not "fit" in the clinical unit. Without a sense of community or belonging, nursing students are unable to develop into functioning members in the nursing profession. Thus far, no studies have correlated staff nurse incivility to an impairment on students' sense of belonging in the nursing profession.

Conclusion and Summary of Gaps

Since nursing was first identified as an oppressed group with tendencies for incivility in 1983 (Roberts), there has been extensive research analyzing the effects of incivility on staff nurses in the workplace and on students in the academic classroom. This review of literature, which examined research in incivility in nursing and its effects, highlighted a key gap. While qualitative literature suggests an impairment on sense of belonging and social image among nurses from incivility, there have been no studies establishing a relationship between the perception of incivility suffered by undergraduate nursing students during clinical rotations on their sense of belonging in the nursing profession. Addressing this gap has potential to tailor nursing interventions to overcome incivility and decrease the attrition rate of new graduate nurses.

CHAPTER 3

THEORETICAL FRAMEWORK AND METHODOLOGY

Since research initiated in 1983 on incivility in nursing, the pedagogy of the oppressed, the incivility spiral, and Kanter's theory of structural empowerment have been the main theories utilized to frame the research (Andersson & Pearson, 1999; Laschinger et al., 2012; Martel, 2015; Roberts, 1983; Spence Laschinger et al., 1997; Wing et al., 2015). The incivility spiral, pedagogy of the oppressed, and structural empowerment theories provide a framework for describing incivility in the workplace (Andersson & Pearson, 1999), explaining the impact of oppressed behaviors on nursing (Freire, 2000; Roberts, 1983), and testing interventions to improve civility in an organization (Spence Laschinger et al., 1997), respectively, but these theories fail to describe or predict the impact of incivility on an individual's sense of belonging. The need to belong theory provides this connection. This chapter will describe and evaluate the relevance of the need to belong theory to nursing incivility research. This will be followed by a discussion of the methodology for the BE RESILIENT study including design, setting, sample, instruments, procedures, and data analysis.

Need to Belong Theory

To guide the theory analysis, the framework for analysis and evaluation of nursing theories by Fawcett and Desanto-Madeya (2012) was utilized. Fawcett and Desanto-Madeya (2012) view theory analysis as "a nonjudgmental, detailed examination of the theory" (p.312).

Scope and Origin of Need to Belong Theory

In theory analysis, scope relates to the realm of the theory's operations and can be a grand, middle range, or practice theory (Fawcett & Desanto-Madeya, 2012). The need to belong theory was hypothesized by Baumeister and Leary (1995) to describe the fundamental need of individuals to fit within their culture and society. Baumeister is a social psychologist, whose work focuses on belongingness, social rejection, and self-esteem (University of Pennsylvania, n.d.). Leary is a social psychologist whose research focuses on social motivation, identity, and self-reflection (Duke University, n.d.). Baumeister and Leary's development of the need to belong theory took place in the late 1980s and early 1990s, when research focused on the hidden motives of human behavior (Baumeister, 2012). At that time, work centered on the awareness, fear, and desire to overcome human mortality. The terror management theory by Solomon et al. (2015) explained anxiety as a product of the awareness of human mortality. Baumeister and Leary recognized that terror management theory failed to consider social rejection as a trigger of anxiety (Baumeister, 2012).

The original purpose of the need to belong theory was to describe the impact of social relationships on an individuals' need to belong, or fit, within their society (Baumeister, 2012; Baumeister & Leary, 1995). The origins of the middle-range need to belong theory are Abraham Maslow, Sigmund Freud, and Aristotle. The need to belong theory was developed deductively from terror management theory and hierarchy of needs theory to determine if the lack of fulfilling social lives leads to anxiety (Baumeister, 2012).

Context of Need to Belong Theory

Context in Fawcett and Desanto-Madeya's theory refers the situation of a theory in relation to the nursing metaparadigm. While not a nursing theory, the need to belong theory addresses three aspects of the nursing metaparadigm. The theory discusses the impact of non-negative (environment) human interactions (person) to sustain a fundamental well-being (health) but, need to belong theory does not directly relate to nursing processes or goals (Baumeister & Leary, 1995; Butts & Rich, 2018; Fawcett & Desanto-Madeya, 2012). In nursing school, the sense of belonging is created through interactions with staff and instructors in the clinical environment (Ashktorab et al., 2017), interactions with faculty in the classroom (Zumbrunn et al., 2014), and interactions with classmates or cohort members (Gerrard & Billington, 2014). These environments are critical in the development of undergraduate nursing students.

According to Baumeister and Leary (1995), individuals who lack frequent, quality interactions are at risk for mental and physical illness, decreasing the health of the individual. The parent theories, hierarchy of need and terror management theories, focused on the health of the individual in relation to the environment (Baumeister & Leary, 1995). During the creation of the need to belong theory, the authors attempted to develop a theory to understand the interpersonal human behavior and impacts caused by ineffective social relationships (Baumeister & Leary, 1995).

Content of Need to Belong Theory

Concepts

The only identified concept in the theory is the *need to belong.* According to Baumeister and Leary (1995), the need to belong is "a need to form and maintain at least

a minimum quantity of interpersonal relationships" (p.499). While the physical and emotional expression of and maintenance of social relationships may differ among cultures, races, and genders, the need to belong is a fundamental building block of human motivation (Baumeister, 2012; Baumeister & Leary, 1995). Without adequate social relationships, individuals are affected by mental and physical illness, including depression and increased mortality rates (Baumeister, 2012).

While need to belong is the single concept discussed by Baumeister and Leary, *non-negative behaviors* is an additional, central concept in the need to belong theory. Non-negative behaviors satisfy the need to belong without being hostile, abusive, or demoralizing (Baumeister, 2012). While at first Baumeister and Leary (1995) indicated that the interactions between individuals needed to be pleasant or affectively positive, the theorists realized that frequent interactions could be satisfying without exuberance if the contact is not hostile, abusive, or demoralizing (Baumeister, 2012). In this study, the sense of belonging molds well with the need to belong, but the concept of incivility provides the antithesis to non-negative behaviors.

Assumptions

Baumeister and Leary (1995) concluded their nine assumptions were necessary for need to belong to be a fundamental motivation. According to Baumeister and Leary (1995),

> A fundamental motivation should (a) produce effects readily under all but adverse conditions, (b) have affective consequences, (c) direct cognitive processing, (d) lead to ill effects (such as on health or adjustment) when thwarted, (e) elicit goal-oriented behaviors designed to satisfy it (subject to motivational patterns such as

> object substitutability and satiation, (f) be universal in the sense of applying to all people, (g) not be derivative of other motives, (h) affect a broad variety of behaviors, and (i) have implications that go beyond immediate psychological functioning. (p.498)

Under normal circumstances, these assumptions are consistent with the research for a well-formed sense of belonging among nurses in the clinical, school, and workplace contexts (Armstrong-Stassen & Schlosser, 2011; Grobecker, 2016; Levett-Jones & Lathlean, 2008; Levett-Jones et al., 2007; Morrow & Ackermann, 2012; Winter-Collins & McDaniel, 2000). Despite incivility damaging nurses and nursing students' commitment to the profession, research is lacking in nursing to determine if negative behaviors, specifically incivility, impair the sense of belonging for students or staff nurses.

Propositions

Baumeister and Leary (1995) provided two major propositions in the need to belong theory. The first proposition was the need for frequent interactions with other individuals (Baumeister and Leary, 1995). The interactions need to be viewed as non-negative encounters by both individuals (Baumeister, 2012). The second proposition was a "framework of mutual concern and caring that extends into past and future [encounters]" (Baumeister, 2012, p. 125). The two propositions are relational. Without both frequent and non-negative interactions extending for the foreseeable future, the interactions were not substantial to fulfill the need to belong for an individual.

While Baumeister and Leary (1995) did not provide a model to clarify the theory, Figure 1 is a conceptualization of the need to belong theory. Within the theory, need to

belong is the result of frequent, non-negative behaviors and mutual caring and concern. When both propositions intersect, the fundamental motivation need to belong is achieved (Baumeister, 2012; Baumeister & Leary, 1995). Individuals develop a sense of belonging when the need to belong is met. The environments in nursing school are the clinical experiences, classroom experiences, and interactions with classmates or cohort members.

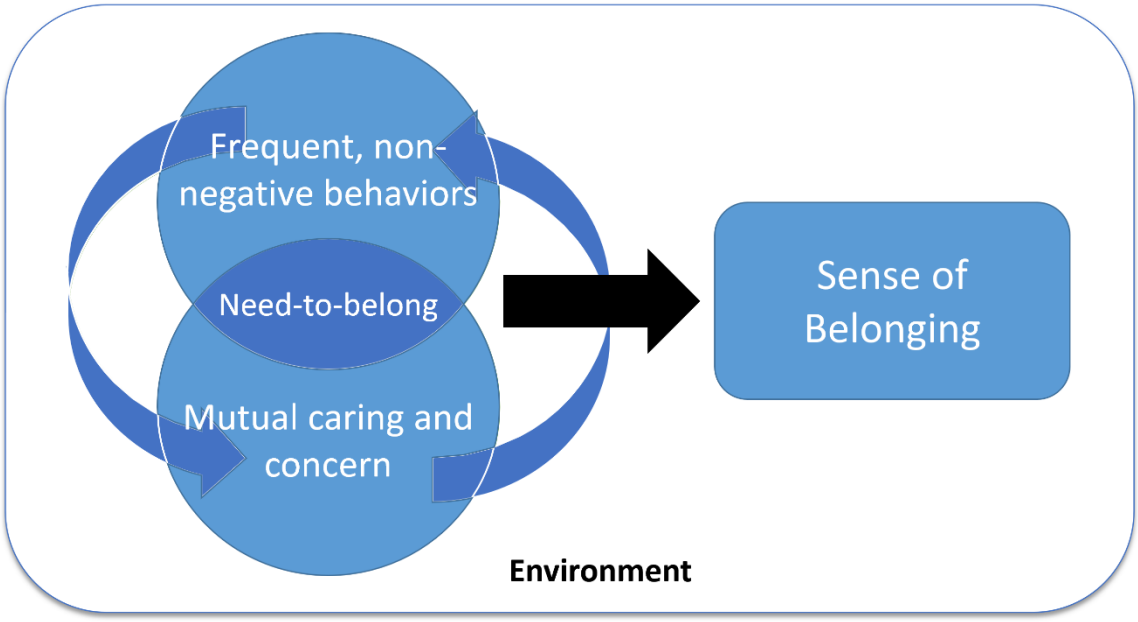

Figure 1. Need to Belong Theory (Adapted from Baumeister and Leary [1995]).

Significance, Internal Consistency, Parsimony

The significance of a theory justifies its use and importance to nursing (Fawcett & Desanto-Madeya, 2012). The need-to-belong theory is a borrowed theory from social psychology (Baumeister, 2012; Baumeister & Leary, 1995). While it was not written for the nursing profession, the need-to-belong theory provides new methods for viewing the importance of non-negative behaviors on social integration, including the social integration of our new nursing students into the profession of nursing. Impaired sense of belonging among nurses and nursing students leads to low self-esteem, and low self-

esteem in nurses can impair patient safety (Leary et al., 2001). These three areas impact the person, health, and environment supporting the significance of need-to-belong theory in the nursing metaparadigm.

Internal consistency focuses on the congruence of a theory's content and context of application (Fawcett & Desanto-Madeya, 2012). As discussed in the analysis section of this paper, the concepts and propositions of the need-to-belong theory are harmonious. The concept need to belong describes the desire to form and maintain social relationship. This desire to form and maintain relationships is achieved through frequent, non-negative behaviors extending into the foreseeable future, the two propositions of the theory. The need to belong concept is explicitly defined and consistently used within the theory (Baumeister and Leary, 1995). The research reviewed above using the need-to-belong theory demonstrated semantic consistency by the concept of need to belong being consistently applied across populations and settings. (Baumeister & Leary, 1995; Girardi et al., 2015; Stenseng et al., 2014; Yagil & Medler-Liraz, 2017).

In contrast with the concept of need to belong, the concept of non-negative behaviors is not explicitly labeled within the theory causing a lack of semantic clarity (Baumeister & Leary, 1995). Instead, the concept of non-negative behaviors is implied throughout the theory as interactions lacking hostility, abuse, or demoralization between individuals are necessary to fulfill the need to belong. Unfortunately, the lack of including the concept of non-negative behaviors in the need-to-belong theory may hinder semantic clarity and parsimony of the theory.

According to Walker and Avant (2011), "A parsimonious theory explains a complex phenomenon simply and briefly without sacrificing the theory's content,

structure, or completeness" (p.205). The need-to-belong theory presents the phenomenon straightforwardly without unnecessary repetition, but the theory may be oversimplified as a result. In the need-to-belong theory, Baumeister and Leary (1995) identified one concept and two propositions. While the two propositional statements clearly convey the content and context of the need-to-belong theory, the singular concept of need to belong does not encompass the non-negative behaviors and interactions which are essential for an individual to form and maintain social relationships. Although the need-to-belong theory has not had any elements added, the concept of non-negative behaviors is essential to the meaning of the need-to-belong theory and does not sacrifice the theory's parsimony.

Application of Need-to-Belong Theory to the BE RESILIENT Study

While the need-to-belong theory has not been used in research involving incivility in nursing, it has provided a theoretical framework for research looking at social isolation, interpersonal conflict at work, and emotional exhaustion among preschool children, healthcare workers, and service workers (Girardi et al., 2015; Stenseng et al., 2014; Yagil & Medler-Liraz, 2017). The need-to-belong theory meets a need in this study by conceptualizing a mechanism to explain the deleterious effects of incivility on nursing students' relationship to the nursing profession. The theory will inform the research question, hypothesis, and data collection method.

For this study, the key concepts will be incivility, sense of belonging, and need to belong. Incivility is the undergraduate nursing student's perception of rude, hostile, exclusionary, or dismissive behavior experienced in clinical rotations (Anthony & Yastik, 2011), which may not be directed at a specific individual or individuals. Unlike bullying,

incivility usually does not involve repeated, harmful actions with an intent to humiliate or offend (American Nurses Association, 2015a). From other studies, incivility represents negative behaviors that prevent a student from feeling a sense of belonging or forming and maintaining relationships in the nursing profession. Sense of belonging is the feeling of being valued, accepted, secure, and respected in the clinical environment as an undergraduate nursing student (Hagerty et al., 1992; Levett-Jones et al., 2009). Need to belong is the desire to form and maintain social relationships (Baumeister & Leary, 1995). The sense of belonging is acquired through the formation of interpersonal relationships, connecting the research to the theoretical concepts in the need-to-belong theory (Baumeister & Leary, 1995).

According to the propositions of Baumeister and Leary (1995), the need to belong develops through frequent, non-negative interactions of mutual care and concern. However, the experience of incivility prevents nursing students from belonging in the environment, supporting the hypothesis that an inverse correlation exists between incivility and the sense of belonging for nursing students in the clinical environment, and a mediation effect will be found in the relationship between the impaired sense of belonging and the students' desire to maintain and form relationships in the nursing profession. Undergraduate nursing students who experience more incidents of incivility from staff nurses will have a lower sense of belonging.

Strengths and Challenges of Need-to-Belong Theory

The use of Baumeister and Leary's need-to-belong theory provides a unique perspective on how impaired interpersonal relationships diminish the need to belong and sense of belonging among nursing students. A simultaneous opportunity and challenge of

the need-to-belong theory is its simplicity. Although non-negative behaviors is an additional, implied concept, the original theory involves a single concept, the need to belong (Baumeister, 2012; Baumeister & Leary, 1995). The need-to-belong theory is minimally tested. Despite a frequent use of the *concept* of need to belong, the theory has not been use prevalently in scientific literature. Nonetheless, the need-to-belong theory provides a potentially rich avenue for research related to incivility and sense of belonging among nurses and nursing students.

The applicability of the theory promotes use in various settings (Baumeister & Leary, 1995). The theoretical concept has been applied in various populations, including preschool aged children, service employees, and healthcare workers (Girardi et al., 2015; Stenseng et al., 2014; Yagil & Medler-Liraz, 2017). Finally, the simplicity of the concepts and propositions prevents misrepresentation of the theory in research, a major strength. In the next section, the methodology for the study will be reviewed.

Methodology

Design

This study used a cross-sectional design to assess the relationship between staff nurse incivility and undergraduate nursing student sense of belonging to the nursing profession. A convenience sample was recruited of junior and senior nursing students enrolled in the two prelicensure programs during Spring 2021. Surveys were administered to the nursing students at the end of a Health and Illness Concept course session.

Setting

Junior and senior nursing students were recruited from an associate and baccalaureate nursing school, Santa Fe Community College (SFCC) and New Mexico State University (NMSU), respectively. The two schools are similar in relation to demographics, size, and nursing curriculum (New Mexico Nursing Education Consortium, 2017) . Letters of support granting access to the nursing student population were obtained from each of the respective Deans of each college and are attached as Appendix A.

Located in Santa Fe, NM, SFCC is a community college serving more than 15,000 students per year. The School of Sciences, Health, Engineering and Math provides educational instruction for undergraduate nursing students to obtain a degree in nursing. New Mexico State University (NMSU) is a comprehensive research university located in Las Cruces, NM, which provides undergraduate degree and graduate degree programs for students.

As a minority-majority state, the universities and community colleges within New Mexico provide nursing education for students from a variety of ethnic and cultural backgrounds (University of New Mexico, n.d.). The student population at the colleges include approximately 45% Hispanic, 39% White, 6% American Indian, 4% Asian, 3% African American, and 6% other ethnicities. On average, 85% are female and 16% are male with ages ranging from 17 to 65 years, which is comparable to the national nursing program enrollment data (S. Pichette, personal communication, February 23, 2018). New Mexico has a higher enrollment of Hispanic and American Indian students compared to the national average of 8% and 1.5% respectively. (National League of Nursing, 2014a).

This allowed for an oversampling of American Indian students (4.1%) and students with a Hispanic ethnicity (56.9%) who are underrepresented in existing sense of belonging and incivility literature (Anthony & Yastik, 2011; Oyeleye et al., 2013).

Sample

A convenience sample of 275 junior and senior nursing students were recruited for this study, with 123 surveys completed and used for data analysis. A sample size of 123 was required to achieve a power level of 0.80 with a 0.05 significance level for an estimated small correlation of 0.25 (Polit & Beck, 2020). Inclusion criteria were: 1) successful completion of the second semester nursing school curriculum, 2) minimum completion of 150 clinical hours in inpatient settings as documented in the clinical course calendars, 3) attendance at one of the two schools, and 4) willingness to use personal electronic device (personal laptops, cellphones, or tablets) to complete the survey. Students who had not completed at least 150 inpatient clinical hours or were unwilling to use their personal electronic device to complete the survey were excluded.

The sample size was achievable because each year the nursing schools enroll 432 students: NMSU enrolls 288 and SFCC enrolls 144 (New Mexico Nursing Education Consortium, 2017). Approximately 275 students were eligible to participate in the study. All eligible Health and Illness Concept courses were utilized to recruit students for participation. Anticipated response rate was 34% based on similar studies (Babenko-Mould & Laschinger, 2014; Oyeleye et al., 2013) with an actual study response rate of 44.7%.

Instruments

Uncivil Behavior in Clinical Nursing Education Scale

Incivility was measured by the Uncivil Behavior in Clinical Nursing Education (UBCNE) scale. The UBCNE is a 12-item self-administered survey using a 5-point Likert scale developed by Anthony, Yastik, MacDonald, and Marshall (2014). The survey scores range from 0-48, with higher scores indicating more experiences of incivility suffered in clinical rotations. The instrument measures three behaviors related to incivility: exclusionary, hostile/rude, and dismissive. The initial instrument was developed testing the three subscales, but after examination of initial item-analysis statistics, the dismissive subscale was combined with the hostile/rude subscales. This was due to a high divergent validity between dismissive and hostile/rude behaviors. (r = -.11). The overall instrument has high internal consistency reliability ($\alpha = 0.88$), and the two subscales (exclusionary and hostile/rude/dismissive) have internal reliability alpha scores ranging from 0.83- 0.88. The subscales demonstrate a strong intercorrelation ($r = 0.46$, $p < 0.001$) indicating a connection to uncivil experiences.

The survey demonstrates interrater reliability with item-level response consistency for the total test ranging from 0.39 to 0.74. However, test-retest reliability has not been examined. To establish content validity, two experts on incivility in nursing assessed the tool for clarity and relevance with two items removed from the original scale, but the authors did not include the content validity index (CVI) to demonstrate this information. The face validity was assessed with 10 nursing students for readability, understanding, and application to incivility in the clinical setting. To test convergent validity, Anthony et al. correlated high levels of stress with perceived incivility (r =

0.51). The subscales reported moderate to strong correlations between stress and incivility (hostile/rude/dismissive, $r = 0.54$; exclusionary, $r = 0.31$) (Anthony et al., 2014). For the UBCNE, the students selected the best answer for the 12 items describing the frequency they experienced the described situation in their last clinical rotation. Letter of use for the instrument is included in Appendix B. The instruments used in the study are included in Appendix C.

Sense of Belonging in Nursing School Scale

Sense of belonging was measured by the Sense of Belonging in Nursing School (SBNS) scale (see Appendix C). A brief overview of the SBNS scale will be provided here, with further details in Chapter 4. The SBNS is a 19-item self-administered survey using a 5-point Likert scale that was recently developed (Patel et al., in press). The scale measures the sense of belonging in nursing students in their experiences in clinical with staff nurses and instructors, classroom with faculty, and with their fellow nursing students. For the SBNS, the students indicated the degree to which they agree or disagree with the 19 items based on interactions in clinical experiences, classroom, and among classmates. The summed survey scores range from 19 to 95 on a 5-point Likert scale (1=strongly disagree, 2=disagree, 3=neutral, 4=agree, 5=strongly agree) Higher scores indicated a high sense of belonging in nursing school. The overall instrument has high internal consistency reliability ($\alpha = 0.914$), and the four subscales have internal reliability alpha scores of 0.952 (classmates), 0.902 (classroom), 0.904 (clinical-staff) and 0.926 (clinical-instructors).

The development of the SBNS scale was guided by an integrative literature review following Whittemore and Knafl (2005) modified framework. The nineteen

articles addressed sense of belonging in clinical placements (53%, n=10), workplace (21%, n=4), college classroom or environment (11%, n=2), and mixture of the three environments (16%, n=3). The review included qualitative research (53%, n=10), quantitative research (21%, n=4), and mixed methods (26%, n=5). The three themes that emerged were: 1) acceptance (Albloushi et al., 2019; Boath et al., 2016; Borrott et al., 2016; Brady et al., 2019; Christensen et al., 2019; Ebert et al., 2019; Grobecker, 2016; Honda et al., 2016; Hunter & Cook, 2018; Lampinen et al., 2018b; Manokore et al., 2019; Mohamed et al., 2014; Sedgwick et al., 2014; Sedgwick & Kellett, 2015; Zarshenas et al., 2014); 2) interdependence (Albloushi et al., 2019; Boath et al., 2016; Christensen et al., 2019; Honda et al., 2016; Hunter & Cook, 2018; Lampinen et al., 2018b; Mohamed et al., 2014); and 3) sense of security (Albloushi et al., 2019; Brady et al., 2019; Christensen et al., 2019; Ebert et al., 2019; Hunter & Cook, 2018; Manokore et al., 2019; Pimmer et al., 2019; Thomson et al., 2017; van der Riet et al., 2018). Acceptance, interdependence, and a sense of security were not independent themes, but each theme was interconnected and essential for nurse students to experience a sense of belonging in the classroom, clinical environment, or among colleagues.

In the literature review, acceptance in nursing is expressed as being valued, respected, esteemed, and welcomed in the nursing environment (Lampinen et al., 2018a). Interdependence is the fellowship created when an individual belongs to and shares in the responsibilities of the nursing community (Albloushi et al., 2019; Boath et al., 2016). A sense of security is the development of a supportive environment when academic advisors, clinical faculty, staff nurses, and nursing colleagues are available to answer questions, advocate for the individual, and provide mentorship (Brady et al., 2019;

Christensen et al., 2019; Ebert et al., 2019; Hunter & Cook, 2018; van der Riet et al., 2018).

Items were worded to capture the resulting themes of belongingness: acceptance (i.e. I am accepted by my classmates), interdependence (i.e. The nursing staff include me in their conversations during clinical) and a sense of security (i.e. I trust the faculty in guiding my education). To further establish content validity, four experts in survey development, psychometric testing, nursing education, and educational psychology reviewed the tool for clarity of item wording and item relevance to sense of belonging in nursing school. Suggestions were provided to ensure item phrasing was similar throughout the scale. Upon establishment of content validity, the instrument was piloted with a sample of 110 nursing students to examine face validity and conduct exploratory factor analysis on the items. Instrument face validity was established with an open-ended question asking for the students' perception of sense of belonging in nursing. Student responses to the open-ended question were grouped by pattern and theme and showed considerable congruence with the three themes identified in the integrative literature review discussed above. Structural construct validity was tested using principal component exploratory factor analysis with varimax rotation resulting in a four-factor structure related to the nursing environment. Figure 2 shows the SBNS scale factor structure relation to themes and theoretical constructs. It includes 2 constructs (care and concern and non-negative behaviors) that occur in the environment for undergraduate nursing student sense of belonging development, 3 themes (acceptance, interdependence, and sense of security), 4 environments (clinical-staff, clinical-instructor, classroom, and

cohort), and the 19-items items accepted on their 4 factor loadings in the environments. Test-retest reliability and convergent validity were not examined.

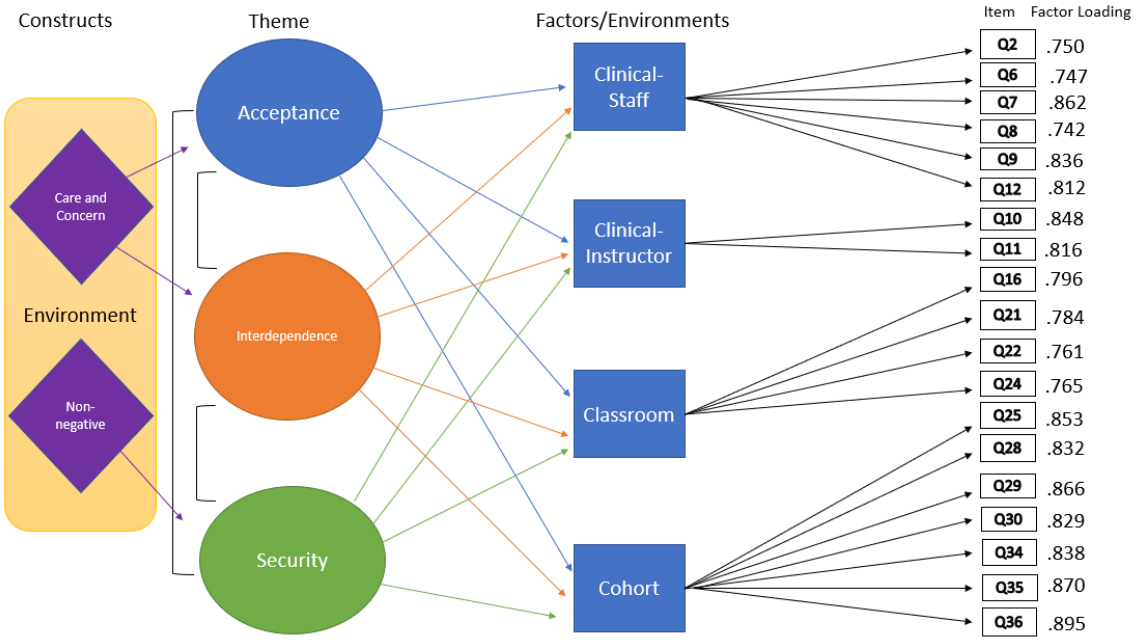

Figure 2. SBNS scale factor structure relation to themes and theoretical constructs

Demographics

The Demographics data-questionnaire (See Appendix C for Demographics questionnaire) was developed specifically for this study to collect data about the participants. Data collected included age (years), ethnicity (Hispanic, Non-Hispanic), race (Black, Caucasian, Asian, American Indian/Alaskan Native, Native Hawaiian or Pacific Islander, other), gender (male, female, non-binary), and marital status (married, not married, separated, divorced, widowed). Self-reported weight and height were collected, and then converted to body mass index (BMI) values. For this study, the BMI classifications were underweight (<18.5 kg/m^2), normal (18.5 kg/m^2 to <25 kg/m^2), overweight (25.0 kg/m^2 to <30 kg/m^2), obese class 1 (30 kg/m^2 to <35 kg/m^2), obese class 2 (35 kg/m^2 to <40 kg/m^2), and obese class 3 (>40 kg/m^2) (Centers for Disease Control

and Prevention, 2021). Demographic questions were asked regarding the nursing program including: the school of enrollment, semester in the nursing program, type of nursing program enrollment (associate degree or baccalaureate degree), and specialty location of clinical rotations (Labor & Delivery, Intensive Care, etc.).

Procedures

Institutional Review Board approval was obtained from the University of Missouri-Kansas City (UMKC), NMSU, and SFCC. As NMSU and SFCC do not have reliance agreements, the programs required approval from their own IRBs. The Primary Investigator (PI), Sarah Patel, presented the research project and discussed the participation requirements with the junior and senior students enrolled in the Health and Illness Concept courses in Spring 2021 at SFCC and NMSU during a synchronous virtual meeting (i.e. Zoom). Participants were notified all questions on the UBCNE and SBNS were required for completion, but a "Decline to Respond" option was provided. After presenting the requirements for participation, risks and benefits of the study, the PI left the virtual session to ensure confidentiality for the students, while a research assistant remained to answer any additional questions from the students. While the decision to participate in the study may be public knowledge within the course, the survey data was reported in the aggregated form to prevent public disclosure or the attempt to link participant response data to the respondent. The email addresses for the PI, faculty advisor and research assistant were provided for the students to address any follow-up questions. The participants were informed completion of the survey materials indicated consent for the study.

The entire process for instruction and completion of survey materials took approximately 15 minutes. A survey code and web link were displayed in the meeting chat, and students were instructed to complete the survey on their personal electronic device. Follow up reminders for survey completion were sent to the instructor to post in the course announcements or email to the course roster. After completion, the participants provided their name and email address in an unassociated survey link to receive a $10.00 Amazon gift card for compensation of their time. To maintain confidentiality, a research assistant emailed participants their Amazon gift card, and all contact information was deleted once the card had been sent.

Human Subjects Protection

Participants had the right to ask questions. Privacy and/or confidentiality of participants was maintained through the following process: a) participant names were not requested on the demographic survey; b) number codes were established for each unique survey to protect participant identity and maintain confidentiality; c) the study results were reported in terms of group data; d) only the researcher, research assistant, and faculty supervisor had access to the study data; and e) data will be retained for seven years in a encrypted, computerized data management system. Participants were informed of procedures used to protect their confidentiality. While anonymity with participation in the study cannot be ensured, the data will be reported as aggregated data to prevent public disclosure. Potential risks from participating in the study include loss of time and psychological harm from the stress of reliving experiences of staff nurse incivility. There was no physical risk or threat of physical harm to the participants during the study. The study did not involve minors. Study participants did not acquire any potential direct

benefits from their involvement in the project and/or acquire any potential benefits to society that justify involvement in this study. However, participants may have gained a greater awareness about themselves through introspection and self-reflection by participant in the study and in answering the interview questions. Participants may have also gained satisfaction that the information they provide may guide the future of nursing education. Participants were informed of the researcher's, faculty supervisor's, and research assistant's names, addresses, phone numbers, and email addresses for questions that may arise.

Data Management

The surveys were administered via personal electronic devices through Research Electronic Data Capture (REDCap) (Harris et al., 2009). REDCap is an encrypted, web-based platform designed to support data capture for research studies, providing 1) an intuitive interface for validated data entry; 2) audit trails for tracking data manipulation and export procedures; 3) automated export procedures for seamless data downloads to common statistical packages; and 4) procedures for importing data from external sources (Harris et al., 2009). REDCap immediately and securely captured and stored all demographic and variable data collected from respondents.

Data Analysis

The PI exported data from REDCap into SPSS (version 27) for analysis. The PI conducted the data analyses with support from a biostatistician. Data were cleaned, examined for missing values, responses of "Decline to Respond", and outliers, and coded.

Aggregate data are reported for the demographics. Percentages were computed and reported for the demographic variables measured at the nominal level (gender,

ethnicity, race, semester in nursing school, type of nursing program, and location of last clinical). Means, range, and standard deviations were computed for the equal interval data (age).

RQ1: What is the relationship between staff nurse incivility and undergraduate nursing students' sense of belonging in nursing school?

The level of the data for the dependent variable (sense of belonging) and independent variable (incivility) are scaled values from ordinal data. Sense of belonging was summed by the overall results among the scaled value for clinical-instructor, clinical-staff, cohort, and classroom-domains. Incivility was summed by the overall data, hostile-mean, and exclusionary scaled values. Pearson Correlation coefficient was computed to assess the relationship between the perceived incidents of incivility measured with the UBCNE scale and sense of belonging in nursing with the SBNS scale at a significance level of 0.05 (Kellar & Kelvin, 2013).

RQ2: What is the frequency of incivility reported by minority undergraduate nursing students?

Means and standard deviations were calculated for the Hostile-Mean and Exclusionary behaviors scales (ordinal measures) from the UBCNE.

RQ3: Among undergraduate nursing students, what is the association between incivility and sense of belonging based on semester in the nursing program?

Fisher r-to-z transformation and 95% confidence intervals (CI) were calculated using Psychometrica (Lenhard & Lenhard, 2014) to analyze the significance of the difference between the correlations of perceived incidents of incivility and sense of belonging based on level in the nursing program.

RQ4: Among undergraduate nursing students, what is the association between incivility and sense of belonging based on weight?

Fisher r-to-z transformation and 95% CI were calculated using Pyschometrica (Lenhard & Lenhard, 2014) to analyze the significance of the difference between the correlations of perceived incidents of incivility and sense of belonging based on weight and BMI.

Summary

This chapter reviewed and rationalized the selection of the need to belong theory for this study. A description of scope and origins, context, and content of the need to belong theory were provided. Then, the application of the need to belong theory was provided for the foundation of the BE RESILIENT study. The methodology used in the BE RESILIENT study concludes the chapter. The next chapter further discusses the development of the SBNS tool, instrument to measure sense of belonging.

CHAPTER 4

INSTRUMENT DEVELOPMENT[1]

In nursing school, the sense of belonging is not only created through interactions in the clinical environment (Ashktorab et al., 2017), but also through interactions in multiple environments in the classroom (Zumbrunn et al., 2014) and among classmates or cohort members (Gerrard & Billington, 2014). While the Belongingness Scale-Clinical Placement Experience measures belonging in clinical experiences (Levett-Jones et al., 2009), a comprehensive tool to develop undergraduate nursing students' sense of belonging with the environments (clinical, classroom, and among the cohort) critical to nursing school was needed (Lampinen et al., 2018a). Chapter 4 is a review of the development and psychometric testing of the SBNS scale (Patel et al., in press). This instrument development and psychometric review was accepted for publication by the *Journal of Nursing Measurement* on May 29, 2021 with an anticipated publication date in 2022.

Abstract

Background and Purpose: While sense of belonging is essential for human motivation, impaired belonging among nurses can impact the care and safety of patients. This article reports the development and psychometric testing of the Sense of Belonging in Nursing School (SBNS) scale to assess nursing students' sense of belonging in three different environments: clinical, classroom, and among the student cohort. Method: Principal component exploratory factor analysis with varimax rotation was used to

[1] This chapter is an article that was accepted for publication in the Journal of Nursing Measurement. Accepted for publication May 29, 2021.

determine the construct validity on the 36-item SBNS scale with a sample of 110 undergraduate nursing students. Cronbach's alpha was used to determine the scale's internal consistency. Results: The scale was reduced to 19-items with high internal consistency (α=0.914). Principal component analysis then identified four factors (sub-scales) with high internal consistency: clinical staff (α=0.904), clinical instructor (α=0.926), classroom (α=0.902), and classmates/cohort (α=0.952). Conclusion: The SBNS scale is a reliable and valid tool to measure sense of belonging across three environments among nursing students. Further research is needed to determine the scale's predictive validity.

Introduction

Individuals are motivated by their sense of belonging, or the ability to be accepted in and by their social group (Fiske & Taylor, 2017). According to Maslow (1943), sense of belonging must be met before esteem, learning, and self-actualization are achieved, and it is a critical component of human productivity. The need-to-belong theory describes the fundamental need of individuals to fit within their culture and society (Baumeister & Leary, 1995). A high sense of belonging in nursing students has been associated with a motivation to learn, increased confidence, college retention, and job satisfaction (Levett-Jones & Lathlean, 2008; Morrow & Ackermann, 2012; O'Keeffe, 2013; Winter-Collins & McDaniel, 2000). Sense of belonging is cultivated through environmental factors, behavioral interactions with open communication, and personal factors (Lampinen et al., 2018a). The purpose of this study was to discuss development, validation, and psychometric properties of the Sense of Belonging in Nursing School (SBNS) scale that

assesses nursing students' sense of belonging in the classroom, clinical environment, and within the cohort.

Background and Conceptual Framework

Background

Hagerty et al. (1992) defined sense of belonging as the "experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment" (p. 173). An individual's personal investment is key to developing a sense of belonging regardless of other confounding variables. Individuals with a strong sense of belonging feel valued in the environment and have a sense of congruence with other individuals. Rieck and Crouch (2007) linked sense of belonging to connectiveness, or the ability to relate to others. Experiences in multiple environments, including the clinical environment (Ashktorab et al., 2017), the classroom (Zumbrunn et al., 2014), and among classmates or cohort members (Gerrard & Billington, 2014), are essential in creating belongingness among nursing students. While Levett-Jones et al. (2009) developed a scale to assess belonging of nursing students in clinical placements, there is no comprehensive scale developed to assess nursing students' sense of belonging in the classroom, clinical environment, and within the cohort, all critical environments in which belonging may be fostered (Sedgwick et al., 2014; Zumbrunn et al., 2014).

An integrative review was conducted to guide the development of a comprehensive sense of belonging in nursing school scale. The review revealed three themes with defining characteristics relevant to sense of belonging in nursing: acceptance (Albloushi et al., 2019; Brady et al., 2019; Ebert et al., 2019), interdependence (Boath et al., 2016; Honda et al., 2016; Hunter & Cook, 2018), and a sense of security (Christensen

et al., 2019; van der Riet et al., 2018). These themes are essential for nursing students to feel belonging in the classroom, clinical environment, and/or among colleagues. These identified themes further demonstrate that dimensions of belonging are not isolated, but rather they are interconnected.

Nurses and nursing students yearn to be accepted in the clinical and classroom environments (Albloushi et al., 2019; Boath et al., 2016; Borrott et al., 2016; Brady et al., 2019; Christensen et al., 2019; Ebert et al., 2019; Grobecker, 2016; Honda et al., 2016; Hunter & Cook, 2018; Lampinen et al., 2018a; Manokore et al., 2019; Mohamed et al., 2014; Sedgwick et al., 2014; Sedgwick & Kellett, 2015; Zarshenas et al., 2014). This desire to fit within the nursing environment is stronger than the need to provide quality patient care (Levett-Jones et al., 2007). Without this acceptance in the environment, nurses are at risk for depressive symptoms and impaired self-esteem (Cockshaw et al., 2013; Leary et al., 2001; Sargent et al., 2002), which could impair patient care and safety. Sense of belonging mediates the effect of exclusion on mental health disorders among individuals (Li & Jiang, 2018). That is, feeling excluded is negatively related to belonging, which in turn is negatively related to mental health distress.

Although nurses and nursing students desire to be valued, accepted, and respected in their environments, individuals may be excluded due to race, gender, age, and ethnicity (Albloushi et al., 2019; Sedgwick et al., 2014; Sedgwick & Kellett, 2015). For example, in college classrooms, students with disabilities experience diminished belonging due to microaggressions (Harris, 2017). With call for greater inclusivity by the American Association of Colleges of Nursing (2017a), there is a need to improve a sense of

belonging among nursing students; however, there remains a lack of validated tools to assess this.

In nursing, teamwork and collaboration are essential to ensure quality patient care. The nursing team develops a shared goal and sense of responsibility for the unit and patients (Christensen et al., 2019; Hunter & Cook, 2018; Lampinen et al., 2018a). A sense of security also allows individuals to become comfortable in the nursing environment. By establishing comfort in their location, the nurse's desire to learn is motivated (Honda et al., 2016), and their ability to connect with others, become a member of the team, and extended acceptance is developed (van der Riet et al., 2018). Due to the impact on confidence, job satisfaction, nursing retention, patient care, and patient safety, a comprehensive scale is needed to assess and identify areas for improving nursing students' sense of belonging in the classroom, clinical environment, and within the cohort.

Conceptual Framework

The conceptual framework guiding the SBNS scale is the need-to-belong theory (Baumeister & Leary, 1995). The need-to-belong theory was hypothesized by Baumeister and Leary to describe the fundamental need of individuals to fit within their culture and society. The theory was developed deductively from the terror management theory and hierarchy of needs to determine if the lack of social involvement and acceptance leads to anxiety (Baumesiter, 2012). The need-to-belong theory describes the impact of non-negative human interactions to sustain a fundamental well-being.

Baumeister and Leary (1995) provided two major propositions in the need-to-belong theory. The first proposition was the need for frequent interactions with other

individuals. The interactions need to be viewed as non-negative encounters by both individuals (Baumeister, 2012). The second proposition was a "framework of mutual concern and caring that extends into past and future [encounters]" (Baumeister, 2012, p. 125). The two propositions are relational. Without both frequent and non-negative interactions extending for the foreseeable future, the interactions were not substantial to fulfill the need to belong for an individual. Within the SBSN scale, positive interactions with faculty, staff nurses, and classmates were considered that lead to satisfying social involvement and acceptance.

Methods

Sample and Data Collection

This cross-sectional study was conducted in the Fall of 2019 and focused on sense of belonging in a broad sample of undergraduate nursing students throughout the United States. Using convenience sampling, recruitment for the study occurred through targeted social media posts on Facebook. Inclusion criteria for the study included: 1) enrollment as an undergraduate student in a school of nursing, 2) 18 years of age, and 3) willingness to complete the survey. After receiving permission from site administrators, an electronic survey link was posted in four nursing groups weekly for four weeks. The four Facebook groups, Tribe-RN, Show Me Your Stethoscope (SMYS): A Nation of Nurses, (masked for review) College of Nursing Student Nurses Association (SNA), and Surviving Nursing School with Nurse Angie, require members to answer questions identifying their position in healthcare prior to joining the group. Tribe-RN, SMYS, and Surviving Nursing School with Angie accept members nationally, without proof of nursing school admission, while the (masked for review) SNA page monitors participants for enrollment

to that university. Participants completed the survey anonymously and on their own time. Over the four weeks, 160 nursing students completed the consent form for the study to validate the SBNS scale.

Measure

The SBNS scale was initially a 36-item self-report scale developed by the authors. The scale measures sense of belonging in nursing students related to their experiences across three environments: in clinical rotations with staff nurses and instructors, the classroom with faculty, and with their fellow nursing students. Questions are worded to capture themes related to acceptance, interdependence, and a sense of security, all which are essential to belonging. The scale was originally designed to have three subscales, measuring experiences related each of the environments described previously.

Answer choices are based on the degree a student agrees or disagrees with each statement. A five-point Likert scale was used to determine degree of agreement, with 1= *strongly disagree*, 2= *disagree*, 3= *neutral*, 4= *agree*, and 5= *strongly agree*. The five-point Likert scale was chosen to provide a reasonable variety of agreement options without overwhelming the participants, as might occur with a seven-point Likert scale. Items are written in both positive and negative terms to reduce response bias, with the negative items being reversed at the scoring stage. Demographic data were also measured, including the following: gender, age, race, type of nursing program, semester in program, and current clinical location.

Ethical Considerations

Approval for the study procedures was obtained from the Institutional Review Board at University of Missouri-Kansas City. Participants were informed that their responses would remain anonymous. Electronic consent was given prior to initiating the study.

Data Analysis

Data analyses were conducted in IBM-SPSS version 27 (IBM Corp., Armonk, NY, 2020). The scale items were analyzed using principal component exploratory factor analysis with varimax rotation to determine the construct validity. Cronbach's alpha was used to determine the scale's internal consistency. These analyses are described more in-depth with the resulting data below.

Results

Demographic Characteristics of the Participants

As this was an exploratory study, there was no desired sample size, and the study duration was four weeks due to time and resource limitations. A total of 160 total participants opened the survey in that 4-week period and 110 scales were completed and used for data analysis, resulting in a 68.75% completion rate. Out of 50 participants with incomplete scales, 10 individuals only completed the consent portion, and 40 completed only the demographic surveys.

Participants were primarily females (96.4%) between the ages of 18 and 44 years of age. Ethnicities of participants ranged, with 70% White, 22.7% Hispanic or Latino, 2.7% American Indian or Alaskan Native, 1.8% Black, 0.9% Asian, and 1.8% Other.

Most participants were in Baccalaureate nursing programs (69.1%). Table 1 shows the full demographic data for the 110 participants.

Psychometric Testing of the SBNS Scale

The Kasier-Meyer-Olkin (KMO) measure (0.871) indicated that sampling adequacy was appropriate to yield distinct and reliable factors. To understand the SBNS structure, principal component analysis with varimax rotation (with Kaiser

Table 1

Demographic Characteristics of Participants [in the SBNS Tool Development]

Characteristics	Sample and Percent[a] (%)
Gender (n=110)	
Male	4 (3.6%)
Female	106 (96.4%)
Age (n=110)	
18-24	54 (49.1%)
25-34	29 (26.4%)
35-44	18 (16.4%)
45-54	7 (6.4%)
55-64	1 (0.9%)
65-74	1 (0.9%)
Race (n=110)	
White	77 (70.6%)
Black	2 (1.8%)
Asian	1 (0.9%)
Hispanic or Latino	25 (22.7%)
American Indian or Alaskan Native	3 (2.8%)
Native Hawaiian or Pacific Islander	0 (0%)
Other	2 (1.8%)
Degree Program Type (n=110)	
Associate	34 (31.2%)
Baccalaureate	76 (69.1%)
Semester in Nursing School (n=108)	
1	15 (13.8%)
2	9 (8.3%)
3	35 (32.1%)
4	31 (28.4%)
5	12 (11.0%)
6	7 (6.4%)

Clinical Location (n=123)	
Medical-Surgical	44 (40.0%)
Geriatrics	10 (9.1%)
Intensive Care	16 (14.5%)
Pediatrics	1 (0.9%)
Obstetrics	8 (7.3%)
Community	8 (7.3%)
Psychiatric/Mental Health	9 (8.2%)
Other	14 (12.7%)

[a] Not all percentages add up to 100%

Normalization) was conducted using Eigenvalues with a cutoff value of 1.0. Initial results indicated that six factors explained 71.74% of the variance. We carefully examined the variance of up to seven factors and determined that the four-factor structure was most appropriate to explain undergraduate nursing students' sense of belonging in the clinical environment with staff nurses and instructors, classroom with faculty, and among the cohort. The rotated component loadings for the first four-factors are shown in Table 2. Component factors of less than 0.3 have been suppressed to aid interpretation.

Table 2

Rotated Component Matrix[a]

Item		Component			
		Factor 1 Cohort	Factor 2 Classroom	Factor 3 Clinical-Staff	Factor 4 Clinical-Instructor
Q36	I am accepted by my classmates.	.895			
Q35	My classmates respect me.	.870			
Q29	I am comfortable around members of my class.	.866			
Q25	I have a strong bond with other members of my class.	.853			
Q34	I am invited to events outside of class.	.838			
Q28	If I miss a class, my classmates ask about me.	.832			

Q30	My classmates are available to help me when needed.	.829			
Q31r	My classmates do not care if I am at class.*	-.772			
Q33	My beliefs and culture are valued by my classmates.*	.765			
Q26	I am a member of my cohort.*	.762			
Q27	My classmates value my questions during class.*	.661			
Q16	The faculty promote an inclusive environment.		.796		
Q21	I am comfortable approaching the faculty with my concerns.		.784		
Q24	The faculty support my learning.		.765		
Q22	I trust the faculty in guiding my education.		.761		
Q20r	The faculty do not care about my perceptions or observations.*		-.755		
Q19	The faculty respect me as a student.*		.714		
Q23	The faculty include me in classroom discussions.*		.706		
Q13	The faculty value my feedback on the classes.*		.701		
Q18	The faculty are available when I have questions.*		.634		.300
Q7	The nursing staff respect me as a student.			.862	
Q9	I am welcomed as a nursing student at the clinical site.			.836	
Q12	The nursing staff include me in their conversations during clinical.			.812	
Q2	I fit in with the nursing staff during my clinical rotations.			.750	
Q6	I am included in the care of the of patients.			.747	
Q8	The nurse precepting me shares information with me regarding patient care.			.742	
Q3r	I am in the staff's way during my clinical rotations.*			-.737	
Q4r	The staff nurse I am assigned to does not value my opinion on patient care.*			-.707	
Q5	The nursing staff know my name.*			.687	
Q10	My clinical instructor was available to help me when needed.		.360		.848

Q11	My clinical instructor supported my learning.	.440	.816

r denotes items that are reverse scored.
*indicates items that were removed from the final instrument.

Thirty-one of the items loaded onto the four factors; eleven on factor 1, nine on factor 2, nine on factor 3, and two on factor 4. Five items (1, 14, 15r, 17, and 32) cross-loaded or were poorly correlated with the four factors (Table 3). Item 1 "*The faculty valued my input on assigning my preceptor*" loaded equally on factor 2 and factor 3, while item 14 "*If I miss a class, my instructor notices*" was poorly correlated to the four factors.

Table 3

Poorly Fitting or Cross-loading Items

Item		Component			
		Factor 1 Cohort	Factor 2 Classroom	Factor 3 Clinical-Staff	Factor 4 Clinical-Instructor
Q1	The faculty valued my input on assigning my preceptor.	-.031	.360	.438	.186
Q14	If I miss a class, my instructor notices.	.083	.165	.093	.000
Q15r	I am just another student taking the class.	-.105	-.446	-.173	.006
Q17	The course faculty know me by name.	.067	.358	.179	-.008
Q32	My classmates know me by name.	.596	.029	.228	.145

r denotes items that are reverse scored.

In a slight departure from the three themes, acceptance, interdependence, and a sense of security, identified in the literature review, the items in the SBNS loaded to four factors: interactions with classmates, faculty in the classroom, staff nurses in clinical, and instructors in clinical. The items loading onto factor 1 focused on the relationship and interactions of nursing students with their classmates. For example, item 36 "*I am*

accepted by my classmates" and item 35 "*My classmates respect me*" focused on perceptions of the nursing students' relationships with their classmates. The items loading on factor 2 related to experiences during school with faculty members, such as item 16 "*The faculty promote an inclusive environment*." The final two variables related to experiences in clinical. Factor 3 is specific to interactions between the nursing students and staff nurses. An example of factor 3 is item 7 "*The nursing staff respect me as a student*." Item 10 "*My clinical instructor was available to help me when needed*" and item 11 "*My clinical instructor supported my learning*" demonstrate sense of belonging created by instructors in clinical for nursing students. These four factors were labeled *Classmates/Cohort, Classroom, Clinical-Staff,* and *Clinical-Instructors,* respectively.

After labeling and reviewing the items, the factor correlations were reviewed. Several iterations were conducted to create a condensed, reliable scale. After review, several items were removed when their essence/meaning was duplicated in other questions. The 12 items removed were 3r, 4r, 5, 13, 18, 19, 20r, 23, 26, 27, 31r, and 33. The remaining items had component loading factors at or above of .76. Therefore, the final SBNS scale resulted in 19-items, with a total of four subscales: (1) Classmates/Cohort has 7 items, (2) Classroom has 4 items, (3) Clinical-Staff has 6 items, and (4) Clinical-Instructors has 2 items. Table 4 shows the resulting 19-item SBNS instrument.

Table 4

The 19-item Sense of Belonging in Nursing School (SBNS) Scale

Reflect on your interactions with staff nurses during your current clinical experience. Indicate the degree in which you agree or disagree with the statement.

Question	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
I fit in with the nursing staff during my clinical rotations.					
I am included in the care of the patients.					
The nursing staff respect me as a student.					
My precepting nurse shared information with me regarding patient care.					
I am welcomed as a nursing student at the clinical site.					
The nursing staff include me in their conversations during clinical.					

Reflect on your interactions with your clinical instructor during your current clinical experience. Indicate the degree in which you agree or disagree with the statement.

Question	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
My clinical instructor was available to help me when needed.					
My clinical instructor supported my learning.					

Reflect on your classes in nursing school. Indicate the degree in which you agree or disagree with the statement.

Question	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
The faculty promote an inclusive environment.					
I am comfortable approaching the faculty with my concerns.					
I trust the faculty in guiding my education.					
The faculty support my learning.					

Reflect on your experiences with your nursing classmates over the last semester. Indicate the degree in which you agree or disagree with the statement.

Question	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
I have a strong bond with other members of my class.					
If I miss a class, my classmates ask about me.					
I am comfortable around members of my class.					
My classmates are available to help me when needed.					
I am invited to events outside of class.					
My classmates respect me.					
I am accepted by my classmates.					

Reliability of the SBNS and Subscales

Cronbach's alpha was used to measure the internal consistency of the SBNS and each subscale (after removal of the poorly-fitting items and redundant questions). Reliability coefficients for the SBNS and subscales were high: SBNS scale (total) 0.914, Classmates subscale 0.952, Classroom subscale 0.902, Clinical-Staff subscale 0.904, and Clinical-Instructors subscale 0.926.

Scores and Ranges

Scores on the 19-item SBNS can range from 19 to 95. The participants scored a mean of 73 (SD 12.43), which ranged from 37 to 95. The lower 25 percentile score 66 or less. On average, the SBNS took less than 5 minutes for participants to complete.

Discussion

This study examined a newly developed scale to analyze nursing students' sense of belonging in the classroom, clinical environment, and within their cohort. Principal component exploratory factor analysis with varimax rotation identified four subscales in the SBNS scale, reflecting the three environments of a nursing student's interactions throughout their education. These findings further demonstrate that the theme of belonging is not isolated, but rather it is interconnected in the primary nursing environments in which a student engages. Of the four subscales, students were able to relate their experiences with classmates stronger to being accepted, valued, and respected in the nursing profession. Research shows that instructors who foster a sense of belonging, peer acceptance, and respect increased perceptions of belonging among students in the classroom (Zumbrunn et al., 2014).

Overlap was seen with the clinical and classroom environments aligning with the various faculty responsibilities. Every interaction with a faculty member can promote or inhibit sense of belonging by creating a sense of security for the student in the classroom or clinical environment (Sedgwick et al., 2014). Three items (10, 11, and 18) loaded onto both the *classroom* and *clinical-instructor* subscales, further demonstrating the role faculty have in cultivating students' integration in the nursing community. Additional demographic questions are needed to determine if the classroom and clinical instructors being evaluated in the SBNS scale are the same individuals to explain the overlap.

While key attributes for students to develop their sense of belonging in nursing school are prevalent, the literature did not address issues diminishing belonging during nursing school. When individuals have a high sense of belonging in their environment, they feel valued, accepted, and respected (Albloushi et al., 2019; Sedgwick et al., 2014; Sedgwick & Kellett, 2015). Incivility causes individuals to lose trust, respect, and feel undervalued for their contributions to the profession (Addison & Luparell, 2014; Ahn & Choi, 2019; LaSala et al., 2016; Logan & Malone, 2018; Mott, 2014). Further studies are planned by the authors to evaluate the relationship between incivility and sense of belonging using the SBNS, including with confirmatory factor analyses.

Limitations

Facebook provided access to a large, diverse nursing student population. However, it is difficult to validate the representation of 110 students to the US nursing student population. According to Fire et al. (2014), around 83 million accounts on Facebook are not associated with real user profiles. Of the four Facebook groups used in this study, only one tracks and requires student status to be accepted into the group. All

the Facebook groups utilized for the study allow members to join who are nursing majors enrolled in pre-requisite courses.

With the student population accessed through Facebook, additional demographic data are needed to determine if differences exist with general program location and sense of belonging perception. Demographic questions to determine program location will be added to future studies using the SBNS to examine regional or program differences. No students chose to identify as a non-binary gender. Research has shown that individuals may be excluded based on race, gender, ethnicity, and religion (Albloushi et al., 2019; Sedgwick et al., 2014; Sedgwick & Kellett, 2015), thus, further work is needed to determine whether the SBNS is valid among inclusive gender classifications.

While the study had a high reliability within the sample population, male (3.6%) and Black (1.8%) students are underrepresented in this study. The national enrollment in nursing programs is 12.2% Black and 15% male students (National League of Nursing, 2014a, 2014b). Thus, it is unknown if the scale would have the same reliability coefficients with higher representation of Black and male students. Further testing is needed to determine validity of the scale with a more diverse student sample.

Comparison of the SBNS Scale to the Belongingness Scale- Clinical Placement Experience

The following section is not in the accepted manuscript but was included here to further discuss how the SBNS scale is different from the Belongingness Scale-Clinical Placement Experience. The Belongingness Scale-Clinical Placement Experience assesses belongingness solely in clinical experiences (Levett-Jones et al., 2009). After surveying 362 nursing students in Australia and England, the authors identified three factors for the

scale. The three-factor solution was identified as esteem (beliefs, values, and attitudes learned and developed through interactions in an environment that create a self-image), connectedness (active involvement with another individual that produces a sense of comfort, well-being, and reduces anxiety), and efficacy (conscious awareness of one's ability to control actions and the perceived confidence for learning or performing tasks). While the Belongingness Scale-Clinical Placement Experience is a valid and reliable scale, the scale only measures belonging in one environment of the nursing school experience. However, the nursing student experience also takes place in the classroom and in interactions with the nursing student cohort. Therefore, the development of a comprehensive scale was needed to measure sense of belonging in the clinical environment, classroom experiences, and interactions with the cohort.

On the other hand, the SBNS scale was developed to measure the themes of acceptance, interdependence, and a sense of security as identified in an integrative literature review on sense of belonging in nursing. Acceptance in nursing is expressed as being valued, respected, esteemed, and welcomed in the nursing environment (Lampinen et al., 2018a). Interdependence is the fellowship created when an individual belongs to and shares in the responsibilities of the nursing community (Albloushi et al., 2019; Boath et al., 2016). A sense of security is the development of a supportive environment when academic advisors, clinical faculty, staff nurses, and nursing colleagues are available to answer questions, advocate for the individual, and provide mentorship (Brady et al., 2019; Christensen et al., 2019; Ebert et al., 2019; Hunter & Cook, 2018; van der Riet et al., 2018). Unlike the Belongingness Scale-Clinical Placement Experience which followed a three-factor solution, the SBNS scale developed into a four-factor solution

based on the environments, clinical with staff nurses and instructors, classroom, and cohort experience, essential to nursing school sense of belonging development. This four-factor solution further solidifies the scale into the need-to-belong theory which demonstrates sense of belonging is dependent upon the environment.

Conclusion/Relevance to Nursing Education and Research

"Nurses [and nursing students] experience a sense of belonging when they are valued members of the nursing team" in a secure environment (Hunter & Cook, 2018, p. 3168). The literature is heavy with qualitative analysis on the formation and attributes of belonging in nurses and nursing students; thus, the development of the SBNS scale advances sense of belonging research in nursing by providing a relatively quick, comprehensive quantitative tool for nursing research and education. The SBNS scale measures sense of belonging in nursing students in the classroom and clinical environments, and with members of their cohort. Given that the instrument was completed in 5 minutes, the SBNS could be a useful tool to include in larger survey studies that need to account for belongingness. Future studies using the SBNS are needed to further validate the psychometric integrity of the instrument and its predictive validity in a student population with greater diversity.

Summary

This chapter reviewed the development of the development and psychometric testing of the SBNS scale. This next chapter discusses participation response rates, sample demographics, and preliminary analyses. The statistical findings for each proposed research question and hypothesis are provided.

Chapter 5

RESULTS

Chapter 4 provided an overview of the development of the SBNS scale. Chapter 5 is organized by a discussion of participation response rates, sample demographics, preliminary analyses, and findings for each research question and hypothesis.

Participation Rates

Participants were recruited from February 1, 2021 to May 5, 2021. Two hundred and seventy-five students met eligibility criteria and were approached for participation in the study. Of these, 139 consented and 123 completed the survey, representing 50.5% and 44.7% participation and response rates, respectively.

Sample Demographics

For the 139 participants who consented to participate in the study, 123 surveys were completed and used for data analysis, resulting in an 88.5% completion rates. Participants were primarily females (87.9%) between the ages of 18 and 44 years of age. While most participants in the study were White (79.7%), 56.9% identified as a Hispanic ethnic background. Most participants were in a baccalaureate nursing program (93.5%) with their most recent clinical experience being in medical-surgical nursing (35%), intensive care (22.8%), or other (22%). Over 76.1% of students self-reported being in the normal (49.5%) or overweight (26.6%) BMI classification. Table 5 shows the demographic data for the 123 participants. Two participants did not provide their age, and 14 did not provide their height or weight for BMI conversion.

Table 5

Participant Demographics

Characteristics	Mean ± SD or Frequency (%)
Gender (n=123)	
Male	14 (11.3%)
Female	109 (87.9%)
Age (n=121)	27.31 ± 7.634
18-24	65 (53.7%)
25-34	35 (28.9%)
35-44	15 (12.4%)
45-64	5 (5.0%)
Race (n=123)	
Black	2 (1.6%)
White	98 (79.7%)
Asian	5 (4.1%)
American Indian or Alaskan Native	5 (4.1%)
Native Hawaiian or Pacific Islander	2 (1.6%)
Other	11 (8.9%)
Ethnicity (n=123)	
Hispanic	70 (56.9%)
Non-Hispanic	53 (43.1%)
Degree Program Type (n=123)	
Associate	8 (6.5%)
Baccalaureate	115 (93.5%)
Semester in Nursing School (n=123)	
3	18 (14.6%)
4	62 (50.4%)
5	43 (35.0 %)
Clinical Location (n=123)	
Medical-Surgical	43 (35.0%)
Geriatrics	2 (1.6%)
Intensive Care	28 (22.8%)
Pediatrics	12 (9.8%)
Obstetrics	10 (8.1%)
Other	28 (22.8%)
Body Mass Index Classification (n=109)	
Underweight	5 (4.6%)
Normal	54 (49.5%)
Overweight	29 (26.6%)
Obese Class 1	13 (11.9%)
Obese Class 2	8 (7.3%)

Reliability of the Instruments

Cronbach's alpha was used to measure the internal consistency of the SBNS, SBNS subscales, UBCNE, and UBCNE subscales in this study, which were similar to previous studies (Anthony et al., 2014; Patel et al., in press). Reliability coefficients for the SBNS and subscales for this study were: SBNS scale (total) 0.907, cohort subscale 0.904, classroom subscale 0.936, clinical- staff subscale 0.887, and clinical-instructors 0.923. Reliability coefficients for the UBCNE and subscales in this study were: UBCNE (total): 0.891, hostile-mean subscale 0.849, and exclusionary subscale 0.895.

Data Analysis

In this study, one student failed to complete both the SBNS and demographic scales; an additional student was recruited to reach the desired sample size. A Kolmogorov-Smirnov test indicated the data for the UBCNE (p= 0.022) and SBNS scale (p= <.001) were not normally distributed. Significant skewness to the left (≤ -1.0) was present in the SBNS scale, clinical-instructor subscale, and classroom subscale, while slight skewness to right (≥ 1.0) was noted with the hostile mean subscale in the UBCNE. Since assumptions were not met for normal distribution, non-parametric tests were performed for the statistical analyses in this study.

Table 6 describes the score ranges for the UBCNE and SBNS scales. Considering the lowest possible score for the UBCNE is 0.0, and the highest possible score is 4.0, the mean UBCNE score was 1.0011 with a range of 0 to 2.83, indicating nursing students rarely experienced incidents of incivility. Regarding the SBNS, the lowest possible score was 1.0, and the highest possible score was 5.0. The average score was 3.928, with a range of 1.0 to 5.0, indicating a moderately high sense of belonging in nursing school.

Table 6

Summary of the UBCNE & SBNS Scores

	Mean ± SD	Range	Kurtosis	Skewness
UBCNE	1.0011 ± .738	0-2.83	-.512	.524
Hostile-Mean	.8095 ± .718	0-3.71	2.276	1.215
Exclusionary	1.2738 ± 1.027	0-4	-.275	.703
SBNS	3.9283 ± .606	1-5	3.414	-1.265
Cohort	3.9999 ± .758	1-5	1.440	-.881
Clinical-Staff	3.671 ± .788	1-5	.314	-.480
Clinical-Instructor	4.374 ± .942	1-5	3.422	-1.840
Classroom	3.9654 ± .948	1-5	.870	-1.022

There were no missing data points for the UBCNE and SBNS scales. Six participants "Declined to Respond" to 5 questions in the UBCNE (2) and SBNS (3) scales (Table 7). The participants who "Declined to Respond" where primarily female (83%) with a mean age of 24.2.

Table 7

Summary of the "Declined to Respond" Questions

Question	Participant Record Number
UBCNE Question 5 "Avoided taking report from you"	33 60 72
UBCNE Question 6 "Avoided giving you report"	33
SBNS Question 4 "My precepting nurse shared information with me regarding patient care"	13 19 60
SBNS Question 18 "My classmates respect me"	92
SBNS Question 19 "I am accepted by my classmates"	92

Results

Hypothesis 1 Findings

Prior to data collection, it was anticipated that Pearson's correlation would be used to test hypothesis 1. However, per the Kolmogorov-Smirnov test, the data were not normally distributed. Therefore, to investigate if there was a statistically significant association between staff nurse incivility and undergraduate nursing students' sense of belonging in nursing school, the nonparametric Spearman's rho correlation was conducted. Figure 3 demonstrates the scatterplot showing a weak, inverse association (r=0.11) between staff nurse incivility and undergraduate nursing students' sense of belonging. One potential outlier was noted on the scatterplot as noted by the arrow. Consequently, the data points were analyzed with (Figure 3) and without the outlier (Figure 4). The value was -0.355 (without) and -0.358 (with). A 95% CI was also examined, which overlapped showing no significant difference [-0.501 to -0.189]; [-0.503 to -0.193]. Therefore, the decision was made to include the outlier into the statistical analysis.

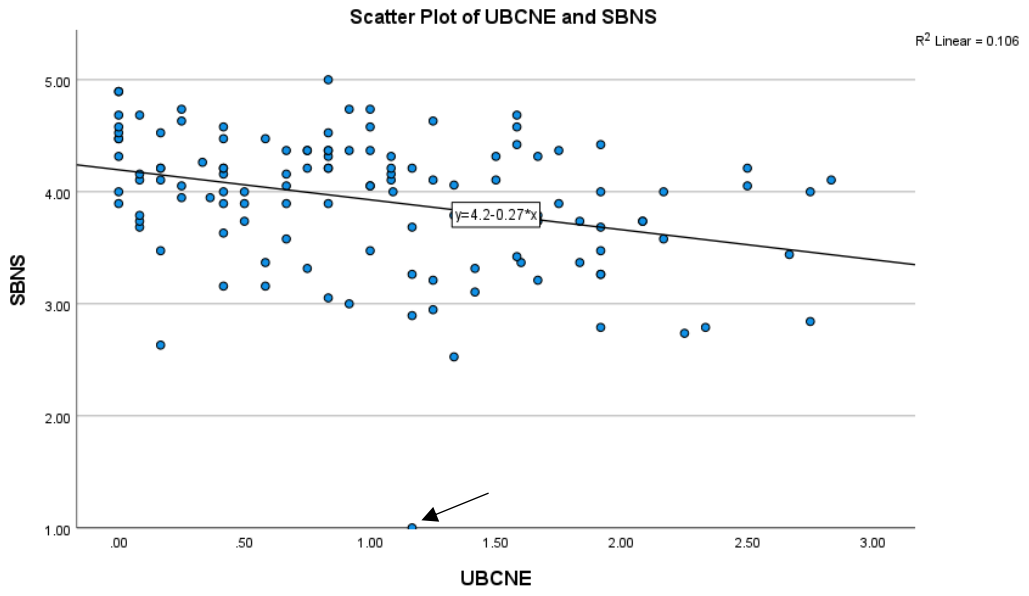

*Figure 3***.** Scatter plot of UBCNE and SBNS scales

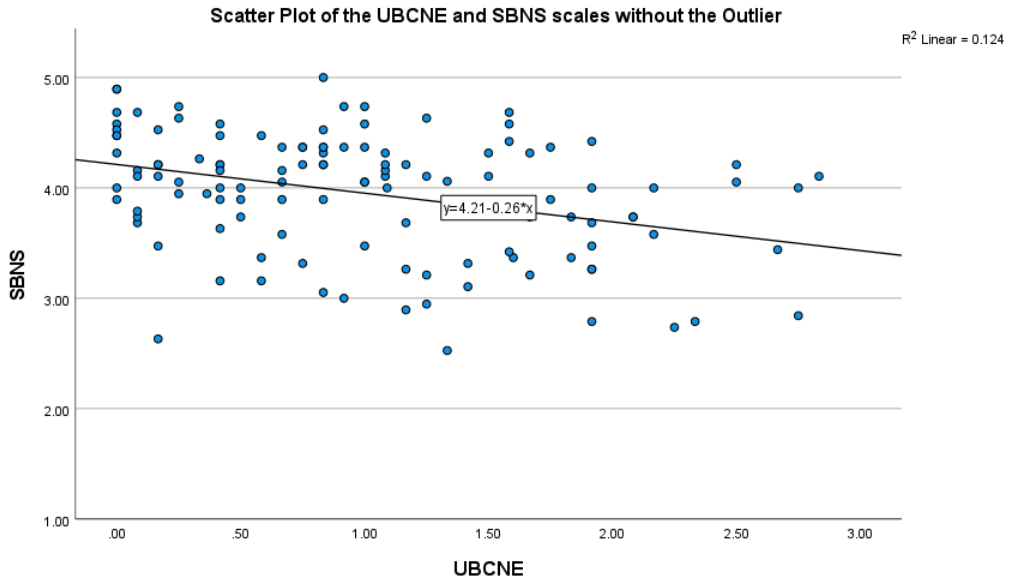

Figure 4. Scatter plot of the UBCNE and SBNS scales without the outlier

RQ1: What is the relationship between staff nurse incivility and undergraduate nursing students' sense of belonging in nursing school?

a. Hypothesis 1a: An inverse correlation would be observed between staff nurse incivility and undergraduate nursing students' sense of belonging. That is, undergraduate nursing students who experience a greater number of incidents of staff nurse incivility would have a lower sense of belonging in the nursing profession.

The results showed a statistically significant, inverse correlation between the UBCNE and SBNS, r_s=-.358; $p < 0.001$. The null hypothesis was rejected. As the experience of staff nurse incivility increased, the sense of belonging in nursing school decreased overall. The strongest inverse correlation was between incivility and sense of belonging in clinical with staff nurses (r_s = -.586, $p < 0.001$). However, there was no

association between staff nurse incivility and undergraduate nursing student sense of belonging among the cohort, r_s=.013, p=.986. Exclusionary behavior from staff nurses in clinical was not associated with sense of belonging in clinical with instructors (r_s= -.173, p= .056), in the classroom (r_s= -.136, p= .134), or among the cohort (r_s= .053, p= .525). Table 8 shows the Spearman's rho correlations for the UBCNE, SBNS, and subscales.

Table 8

Spearman's Rho Correlation output: Incivility and Sense of Belonging

Variable	1	2	3	4	5	6	7	8
1. UBCNE	--	.889**	.903**	-.358**	-.586**	-.233**	-.208*	.013
2. Hostile-Mean	--	--	.624**	-.330**	-.502**	-.236**	-.218*	-.007
3. Exclusionary	--	--	--	-.290**	-.559**	-.173	-.136	.053
4. SBNS	--	--	--	--	.676**	.530**	.735**	.718**
5. Clinical-Staff	--	--	--	--	--	.296**	.398**	.167
6. Clinical-Instructor	--	--	--	--	--	--	.471**	.185*
7. Classroom	--	--	--	--	--	--	--	.341**
8. Cohort	--	--	--	--	--	--	--	--

* $p < .05$ ** $p < .01$

Hypothesis 2 Findings

RQ2: What is the frequency of incivility reported by minority undergraduate nursing students?

The means and standard deviations for the UBCNE, hostile-mean, and exclusionary scales were calculated by race (Table 9), ethnicity (Table 10), and gender (Table 11). Of the minority undergraduate nursing students, American Indian or Alaskan Native students reported the highest mean frequency of incivility at 1.25 ± .421, Hostile-Mean behaviors (.971 ± .395), and Exclusionary behaviors (1.640 ± 1.044).

Asian students (n=5) and male students (n=14) reported the lowest mean frequencies of incivility (.367 ± .427) (.554 ± .493), Hostile-Mean behaviors (.171 ±

.383) (.378 ± .490), and Exclusionary behaviors (.640 ± .654) (.800 ± .781), respectively. Of the incivility behavior subscales, exclusionary behaviors were more frequently experienced among undergraduate nursing students.

Table 9

Means and Standard Deviations of Incivility by Race

Race		UBCNE	Hostile-Mean	Exclusionary
Black (n=2)	Mean	.875	.712	1.100
	Std. Deviation	.177	.202	.707
White (n=98)	Mean	1.032	.832	1.317
	Std. Deviation	.775	.755	1.057
Asian (n=5)	Mean	.367	.171	.640
	Std. Deviation	.427	.383	.654
American Indian or Alaskan Native (n=5)	Mean	1.250	.971	1.640
	Std. Deviation	.421	.396	1.043
Native Hawaiian or Pacific Islander (n=2)	Mean	.958	1.071	.800
	Std. Deviation	.177	.909	.849
Other (n=11)	Mean	.932	.792	1.127
	Std. Deviation	.638	.573	.964
Total (n=123)	Mean	1.001	.810	1.274
	Std. Deviation	.717	.718	1.027

Table 10

Means and Standard Deviations of Incivility by Ethnicity

Ethnicity		UBCNE	Hostile-Mean	Exclusionary
Non-Hispanic (n=53)	Mean	1.030	.817	1.337
	Std. Deviation	.710	.734	.981
Hispanic (n=70)	Mean	.979	.804	1.226
	Std. Deviation	.763	.712	1.065
Total (n=123)	Mean	1.001	.810	1.274
	Std. Deviation	.738	.718	1.027

Table 11

Means and Standard Deviations of Incivility by Gender

Gender		UBCNE	Hostile-Mean	Exclusionary
Male (n=14)	Mean	.554	.378	.800
	Std. Deviation	.493	.490	.78
Female (n=109)	Mean	1.06	.865	1.334
	Std. Deviation	.746	.726	1.042
Total (n=123)	Mean	1.001	.810	1.274
	Std. Deviation	.738	.718	1.027

In the clinical experiences, incivility was most frequently experienced in obstetrical units. Students in obstetrical units reported the mean frequency of incivility at 1.496 ± .756, Hostile-Mean behaviors at 1.071 ± .607, and Exclusionary behaviors at 2.115 ± 1.246 (Table 12). Students assigned to medical-surgical units reported the lowest mean frequency of incivility (.780 ± .637).

Table 12

Means and Standard Deviations of Incivility by Clinical Experience

Clinical Experience		UBCNE	Hostile-Mean	Exclusionary
Medical-Surgical	Mean	.780	.648	.971
(n=43)	Std. Deviation	.637	.550	.945
Geriatrics (n=2)	Mean	1.208	1.000	1.500
	Std. Deviation	.295	.404	.141
Intensive Care (n=28)	Mean	1.158	.969	1.421
	Std. Deviation	.804	.905	.926
Pediatrics (n=12)	Mean	.993	.845	1.200
	Std. Deviation	.986	1.047	1.224
Obstetrics (n=10)	Mean	1.496	1.071	2.115
	Std. Deviation	.756	.607	1.246
Other (n=28)	Mean	.997	.776	1.307
	Std. Deviation	.628	.608	.975
Total (n=123)	Mean	1.001	.810	1.274
	Std. Deviation	.738	.718	1.027

Hypothesis 3 Findings

RQ3: Among undergraduate nursing students, what is the association between incivility and sense of belonging based on semester in the nursing program?

Hypothesis 3a: The relationship between incidents of incivility and sense of belonging would be stronger among 4th semester nursing students.

Prior to data collection, it was anticipated that Pearson's correlation would be used to test hypothesis 4 for the correlation between incivility and sense of belonging based on level in the program. Kolmogorov-Smirnov test indicated the data were normally distributed for individuals in the third semester of the program, and it was not normally distributed for students in the fourth and fifth semester. Therefore, to investigate if the incidents of staff nurse incivility and sense of belonging was different based on semester, the nonparametric Spearman's rho correlation was conducted to analyze the relationship to input in the Fisher's r-to-z transformation.

The relationship between incivility and sense of belonging indicated a statistically significant, inverse relationships for students based on semester (Semester 3 r_s=-.531, p=.023); Semester 4 r_s=-.373, p=.003; Semester 5 r_s=-.329 p=.031). However, there was no significant difference noted between correlations based on semester in the program. Therefore, there was not enough evidence to reject the null hypothesis that the relationship between incivility and sense of belonging is stronger among fourth semester undergraduate students than third or fifth semester students. Table 13 presents the Fisher's r-to-z transformation to assess if a significant difference exists between the correlation of incivility and sense of belonging based on semester in the nursing program.

Table 13

Fisher's r-to-z Transformation of Correlation Based on Semester in the Nursing Program for Incivility and Sense of Belonging

Semester	r_s	95% CI	z	*p*
Semester 3 (n=18)	-.531*	[-0.8, -0.085]	-.69	.245
Semester 4 (n=62)	-.373**	[-0.57, -0.136]		
Semester 4 (n=62)	-.373**	[-0.57, -0.136]	-.245	.403
Semester 5 (n=43)	-.329*	[-0.573, -0.032]		
Semester 3 (n=18)	-.531*	[-0.8, -0.085]	-.825	.205
Semester 5 (n=43)	-.329*	[-0.573, -0.032]		

*p=0.05 **p<.01 CI= confidence interval for r_s

Hypothesis 4 Findings

RQ4: Among undergraduate nursing students, what is the association between incivility and sense of belonging based on weight?

Hypothesis 4a: The relationship between incidents of incivility and sense of belonging would be stronger among undergraduate students' with higher weight.

Prior to data collection, it was anticipated that Pearson's correlation would be used to test hypothesis 4 for the correlation between incivility and sense of belonging in individuals above the mean BMI (25.62 kg/m^2). Kolmogorov-Smirnov test indicated the data were not normally distributed. Therefore, to investigate if the incidents of staff nurse incivility and sense of belonging was different based on BMI, the nonparametric Spearman's rho correlation was conducted to analyze the relationship to input in the

Fisher's r-to-z transformation. While the relationship between incivility and sense of belonging was statistically stronger for individuals with a BMI less than the mean (r_s=-.398, p <.001) compared to individuals with a BMI above the mean (r_s=-.289, p=.044), there was no significant difference noted between correlations based on BMI (z=-.654, p=.257). Therefore, there was not enough evidence to reject the null hypothesis that the relationship between incivility and sense of belonging is stronger among undergraduate students with higher weights. Table 14 presents the Fisher's r-to-z transformation between the correlations of incivility and sense of belonging based on BMI.

Table 14

Fisher's R-to-Z Transformation of Correlation Based on Mean BMI for Incivility and Sense of Belonging

Mean BMI	r_s	95% CI	z	p
BMI ≤ 25.62 kg/m^2 (n=74)	-.398**	[-0.574, -0.186]	-.654	.257
BMI >25.62 kg/m^2 (n=49)	-.289*	[-0.527, -0.008]		

*p=0.05 **p<.01 CI= confidence interval for r_s

To further assess the relationship between correlations for BMI, Fisher's R-to-Z transformations were conducted on the BMI classes. Kolmogorov-Smirnov test indicated the data were not normally distributed for individuals with a normal BMI. Therefore, to investigate if the incidents of staff nurse incivility and sense of belonging was different based on BMI class, the nonparametric Spearman's rho correlation was conducted to analyze the relationship to input in the Fisher's r-to-z transformation. While the relationship between incivility and sense of belonging was statistically stronger for individuals in the normal BMI class (r_s=-.283, p=.038) compared to individuals in the underweight class (r_s = -.500, p=.391), overweight class (r_s = -.338, p=.073), obese class

1 (r_s = -.084, p= .785), and obese class 2 (r_s =.084, p=.844) there was no significant difference noted between correlations based on BMI class. Therefore, there was not enough evidence to reject the null hypothesis that the relationship between incivility and sense of belonging is stronger among undergraduate students with higher weights. Table 15 presents the Fisher's r-to-z transformation between the correlations of incivility and sense of belonging based on BMI class.

Table 15

Fisher's R-to-Z Transformation of Correlation Based on BMI Class for Incivility and Sense of Belonging

BMI Class	r_s	95% CI	z	p
Underweight (n=5)	-.500	[-0.959, 0.684]	-.358	.36
Normal (n=54)	-.283*	[-0.512, -0.016]		
Underweight (n=5)	-.500	[-0.959, 0.684]	-.269	.394
Overweight (n=29)	-.338	[-0.627, 0.033]		
Underweight (n=5)	-.500	[-0.959, 0.684]	-.6	.274
Obese Class 1 (n=13)	-.084	[-0.607, 0.49]		
Underweight (n=5)	-.500	[-0.959, 0.684]	-.757	.224
Obese Class 2 (n=8)	.084	[-0.66, 0.745]		
Normal (n=54)	-.283*	[-0.512, -0.016]	.253	.401
Overweight (n=29)	-.338	[-0.627, 0.033]		
Normal (n=54)	-.283*	[-0.512, -0.016]	-.598	.275
Obese Class 1 (n=13)	-.084	[-0.607, 0.49]		
Normal (n=54)	-.283*	[-0.512, -0.016]		

Obese Class 2 (n=8)	.084	[-0.66, 0.745]	-.801	.212
Overweight (n=29)	-.338	[-0.627, 0.033]	-.719	.236
Obese Class 1 (n=13)	-.084	[-0.607, 0.49]		
Overweight (n=29)	-.338	[-0.627, 0.033]	-.893	.186
Obese Class 2 (n=8)	.084	[-0.66, 0.745]		
Obese Class 1 (n=13)	-.084	[-0.607, 0.49]	-.307	.379
Obese Class 2 (n=8)	.084	[-0.66, 0.745]		

*p=0.05 **p<.01 CI= confidence interval for r_s

Summary

This chapter described the participation response rates, sample demographics, preliminary analyses for assumption testing, and findings for each proposed research question and hypothesis. The next chapter provides a discussion of the relationship of staff nurse incivility and undergraduate nursing student sense of belonging. Strengths and limitations of the BE RESILIENT study are reviewed as well as implications related to these findings.

CHAPTER 6

DISCUSSION

The purpose this cross-sectional study is to determine the relationship between staff nurse incivility and undergraduate nursing students' sense of belonging in nursing school, describe the presence of incivility in minority undergraduate nursing students, and determine how semester in the nursing program and weight are associated with incivility and sense of belonging. This chapter contains an overview and discussion of the results from this study by research question. Strengths and limitations of this study are reviewed. The implications of this study to the theory, nursing education and future research are described, followed by the conclusions.

This is the first study demonstrating a statistically significant, inverse relationship between staff nurse incivility and undergraduate nursing student sense of belonging in the profession. Undergraduate nursing students who experienced a greater frequency of staff nurse incivility had a lower sense of belonging in the nursing profession. Similarly, Hershcovis et al. (2017) indicated incivility is inversely related to belongingness among 300 full-time employees in North America. However, the Hershcovis et al. (2017) study did not sample a particular workforce group instead they allowed participation through Qualtrics to recruit full-time employees in North America who had experienced incivility in the last six-months. Additionally, the study assessed relationships between incivility, belongingness, embarrassment, perpetrator power, somatic symptoms (i.e. low energy and stomach problems) and job insecurity, while this dissertation focused on the association between incivility and sense of belonging.

Overall, there was a relationship noted between the experience of incivility in clinical experiences and a lower sense of belonging in interactions with staff nurses. Yet, staff nurse incivility was not associated with sense of belonging in the cohort, highlighting the impact of acceptance in the students' social group (Gerrard & Billington, 2014; Hunter & Cook, 2018). While not measuring the impact of staff nurse incivility on sense of belonging in nursing students, studies have been conducted to measure the effects of incivility in postal workers on the perception of social support with similar findings. In a cross-sectional study of 950 postal workers, the effects of incivility on anxiety and depressive symptoms were reduced when the worker experienced social support by their co-workers (Geldart et al., 2018).

The overall sense of belonging score was significantly related to sense of belonging in clinical with staff nurses (r_s=.676, $p < 0.01$). Thus, this study further supports the impact of belonging in the clinical environment on overall belonging in the nursing profession for students. After interviewing 18 nursing students, Levett-Jones and Lathlean (2008) found self-confidence and investment in the clinical rotation were noted among students who felt they belonged on the hospital unit. Furthermore, students perceived being accepted and valued as a nursing student in clinical settings by nursing staff was a significant motivator for learning (Levett-Jones & Lathlean, 2008).

In this study, American Indian or Alaskan Native students reported a high frequency of incivility, hostile-rude, and dismissive behaviors on the UBCNE and subscales. American Indian or Alaskan Native students are consistently underrepresented in the literature on incivility in nursing. Minority students feel unwelcome in the nursing environment due to the "lack of people around me who are of the same culture, who can

relate" (Evans, 2008, p. 212). The overall lowest frequency of incivility on the UBCNE, hostile-rude, and dismissive scales in this study was reported by Asian students, which varies from previous research indicating that this group had a feeling of being disliked or perceiving discrimination by fellow students, clinical instructors, and staff nurses (Sedgwick et al., 2014). Although, due to the low representation of these groups, meaningful conclusions cannot be drawn.

Students in this study with a Hispanic ethnical background reported lower frequencies of incivility than non-Hispanic students, which may be due to a higher proportion of Hispanic nurses in New Mexico who can relate with the students' experiences and cultures. However, Hispanic students typically lack a sense of belonging due to a lack of connections within the nursing profession (Woodley & Lewallen, 2021). The lack of minority representation has limited the application of incivility and sense of belonging research, especially for students of Hispanic and Native American descent. This study provided a unique representation of Hispanic students at 56.9%, who reported a lower frequency of incivility than non-Hispanic students. Nationally, 5.6% of nurses report a Hispanic ethnical background (Smiley et al., 2021), while New Mexico has an ethnically diverse workforce with 24.79% Hispanic nurses. The environment of New Mexico provides Hispanic diversity which is different from many other states.

Increasing the diversity of the nursing workforce may improve the sense of belonging among minority nursing students and negate the perception of incivility. Minority students have generally felt a greater degree of dislike by feeling unwelcomed in the clinical environment as compared to their Caucasian counterparts and felt their values, professional and personal, were not shared by registered nurses in clinical

experiences (Sedgwick et al., 2014). Minority students desire connectedness with others who looked like them but find few with other students or faculty (Woodley & Lewallen, 2021).

The introduction of holistic admissions in nursing programs has been shown as a method to increase the diversity of students (Jung et al., 2021; Wros & Noone, 2018; Zerwic et al., 2018). Holistic admission is the review of prospective prelicensure nursing students not only by academic merit, but also by an individual's characteristics, experiences, and motivations to provide equitable admissions for students (Wros & Noone, 2018). However, there are no research studies analyzing the impact of holistic admissions on reducing incivility or increasing sense of belonging in the nursing profession.

Exclusionary behaviors by staff nurses were experienced more frequently by the undergraduate nursing students regardless of ethnicity or racial background. Thus, this research supports the findings by Thomas et al. (2015) and Courtney-Pratt et al. (2018) of undergraduate nursing students feeling dismissed and unwelcomed in the clinical environment. However, these studies did not assess the impact of incivility in other environments associated with nursing school (classroom or cohort).

Students participating in clinical experiences in obstetrical units reported the highest frequency of incivility, while students assigned to medical-surgical units reported the lowest frequency of incivility. This supports findings in a study assessing the impact of leadership styles on the reported prevalence of nurse-to-nurse incivility among 237 staff nurses, in which a higher incident of nurse-to-nurse incivility was reported on obstetric units. However, this finding contrasts with an earlier study by Hunta and Marini

(2012) on the perspectives of 37 clinical nursing faculty on incivility in the practice environment. In the 2012 study, the highest incidence of incivility was reported in acute care settings, while maternal-child (obstetric) units reported the lowest incidence of incivility.

There was no significant difference in the association between staff nurse incivility and undergraduate nursing school sense of belonging based on semester in the nursing program or BMI. Undergraduate nursing students enrolled in their third semester of nursing school had the largest inverse correlation between staff nurse incivility and sense of belonging, while students enrolled in the fifth semester had the lowest correlation. Similarly, in a sample of 375 undergraduate nursing students enrolled in a baccalaureate program in Korea, Kim et al. (2020) found that junior students reported significantly higher frequency of incivility on the Korean version of the UBCNE than senior nursing students.

Not only had the junior students in this study had fewer clinical opportunities, the students in their third semester had primarily experienced nursing school using virtual educational solutions with limited in-person experiences during the coronavirus disease 2019 (COVID-19) pandemic. This study was conducted seven months after the initial lockdowns of the COVID-19 pandemic, which were in effect for New Mexico from March 2020 until July 2021. Thus, limiting students' opportunities to build the meaningful relationships required in a peer-support group. Resilience, or the ability to return to a state of normalcy after adversity, has been shown to develop after many clinical rotations (Lopez et al., 2018). As students' progress through the nursing program,

they develop support systems with peers, preceptors within the clinical units, and faculty members (Lopez et al., 2018).

In this study, there was no statistically significant difference based on BMI class between staff nurse incivility and sense of belonging among nursing students. Preadolescent students with a higher BMI had a lower sense of belonging, or connectedness, to their school (Carroll-Scott et al., 2015; Gilstad-Hayden et al., 2014). Nonetheless, students with a lower BMI than the mean (25.62 kg/m^2) had a statistically significant, inverse relationship between incivility and sense of belonging, which may indicate a perception of the inability to assist with difficult patient care independently in activities of daily living such as physical transfers or hygiene care.

Strengths and Limitations

Several strengths and limitations have been identified. A strength of this study is the overrepresentation of Hispanic students, which is 19% above the national average among nursing student programs (National League of Nursing, 2014a). Within the incivility and sense of belonging in nursing literature, the Hispanic student voice has consistently been underrepresented limiting the generalizability and assumptions in the research findings.

Another strength of this study was the sampling of students enrolled in nursing programs in the NMNEC. The inclusion of students enrolled in NMNEC programs provided a homogenous sample, as students were receiving the same curriculum in their respective programs. This helped decrease the a potential environmental influence of curricular differences. Nursing programs in NMNEC (2021) are in a collaborative

partnership with a common statewide curriculum. The students, regardless of associate or baccalaureate program, shared the same core courses for their respective programs.

There were several limitations for the study, the first being the correlational design of the study which does not allow causal inference. However, the design does allow the researcher to demonstrate connections between the variables (Polit & Beck, 2020). While causation cannot be deduced due to the design, the study results indicate a connection between staff nurse incivility and sense of belonging in nursing students, which provides a starting point for further research.

The sampling method and resulting accessible population were another limitation of this study. Convenience sampling limits the generalizability of findings. However, this study had a 44.7% response rate, while similar studies with the same type of participants had non-response rates of 33.6- 85% (Babenko-Mould & Laschinger, 2014; Oyeleye et al., 2013). While the enrollment of male and female students in New Mexico is comparable to the national average, there is a lower percentage of African American and Asian students (National League of Nursing, 2014a).

Additionally, as incivility is a sensitive topic, it can uncover distressing symptoms. Students may not be willing to describe or report their experiences with incivility. The unwillingness to report their experiences with incivility could introduce social desirability response bias, or the tendency provide socially acceptable responses (Polit & Beck, 2020). However, the researcher believes students who volunteered to participate in this survey were honest about experiences of incivility and their sense of belonging in the profession. To increase study participation, participants were informed

of procedures to protect their confidentiality and participant data was reported in aggregated form to prevent public disclosure.

Another limitation of the study was that the SBNS scale has not been tested for test-retest reliability or convergent validity. Convergent validity measures the focus, sense of belonging, to other constructs with a hypothesized relationship. Without test-retest reliability of the SBNS scale, the reliability of repeated measurement of sense of belonging is unknown. In addition, the lack of convergent validity could bias findings by reducing confidence that the SBNS scale measures sense of belonging and not another construct (Polit & Beck, 2020). However, during the scale development, face validity, content validity, and structural construct validity were established. Research is needed to further validate the scale to measure undergraduate nursing students' sense of belonging in nursing school.

Finally, the study was conducted during the global COVID-19 pandemic. The data collection for this pandemic initiated approximately seven months after the lockdown in the United States, which were in effect in New Mexico from March 2020 until July 2021 after data collection conclusion. The worldwide shutdowns from the COVID-19 pandemic necessitated the use of virtual simulations and virtual educational solutions to prepare healthcare professionals and resulted in the lack of real-world clinical experiences for nursing students (Tabatabai, 2020). Nurses working on the frontlines during the pandemic have reported a high level of stress and burnout (Murat et al., 2021). While a relationship was hypothesized to exist between staff nurse incivility and nursing student sense of belonging, the correlation may have had a stronger inverse relationship as side effects from the pandemic. The high level of stress and burnout in the clinical

environments could increase the perception of incivility from staff nurses to student nurses.

Implications for the Theory, Nursing Education and Future Research

The BE RESILIENT study was the first study assessing a relationship between staff nurse incivility to student nurse sense of belonging in the nursing profession. The findings from the study have several implications for applying the need-to-belong theory in nursing incivility research and in nursing education and future nursing research.

Theoretical Implications

This study established the applicability of the need-to-belong theory in nursing. Baumeister and Leary (1995) propositioned the need to belong develops through frequent, non-negative interactions of mutual care and concern, which provided the mechanism to explain the relationship between staff nurse incivility to sense of belonging in the profession. Uncivil experiences that nursing students perceive as rude, hostile, exclusionary, or dismissive behaviors are negative and prevent nursing students from experiencing a sense of belonging in the nursing profession. The simplicity of the concepts and propositions in the theory prevented misrepresentation and increased the ease of application in nursing studies.

The findings of this study supported the need-to-belong theory, which was presented earlier in Figure 1. The perception of rude, hostile, and dismissive behaviors of incivility from staff nurses decreases the need-to-belong. These behaviors also temper the development of belonging in nursing students when they are in nursing school. Further development of the theory is needed to establish the implied concept of non-negative behaviors as an identified concept integral to belongingness development. Within the

theory, the environment was implied to engage conditions essential for the need-to-belong to develop. In this study and within the SBNS scale, the environment was expanded to include the clinical experiences, classroom, and interactions with fellow classmates or cohort members.

Implications for Nursing Education

With an expected retirement of one million registered nurses in the next 15 years, nursing students are the future workforce to care for the aging and complex patient populations (American Association of Colleges of Nursing, 2017b). Unfortunately, incivility is damaging nursing students' commitment to the profession. As evidenced in this study, a decreased overall sense of belonging in nursing school was related to an increased frequency of staff nurse incivility. Educational interventions are needed to prepare nursing students to address staff nurse incivility.

While there are no educational interventions grounded in the need to belong theory, cognitive rehearsal is a promising tool for nursing students to overcome incidents of incivility by educating students to address the negative behaviors (Clark & Gorton, 2019). Cognitive rehearsal therapy (CRT) includes training through educational materials, demonstration, rehearsal through role play, feedback, and debriefing (Kamolo & Njung'e, 2021; Sanner-Stiehr & Ward-Smith, 2016). In an experimental, single-blinded randomized cluster design, Sanner-Stiehr and Ward-Smith (2016) compared the effect of a CRT intervention to effectively address lateral violence to a stress-reduction exercise in the control group. The CRT group had a statistically significant increase in self-efficacy between baseline and post-test with students scoring the lowest initial self-efficacy scores having the highest, most sustained increases at the three-month follow-up post-test.

Implications for Practice

Educating students to address staff nurse incivility is not sufficient to prevent the impact on nursing students' sense of belonging development. As this study demonstrated, the increased experience of staff nurse incivility related to a decrease in undergraduate nursing student sense of belonging. The implementation of policies and procedures in the workplace to prevent incivility have been shown to create a safer environment for nurses and nursing students (Dillon, 2012). Sadly, only 60% of employers have explicit policies and procedures in place to enforce an aggression free zone or systems in place for employees to report incidents of aggression (Hills et al., 2013).

Even though educational training is not sufficient, it is a first step needed to increase awareness and to reduce the incidence of incivility experienced by nursing students in the clinical environment. Although this study did not assess the effect of educational intervention on staff nurses incivility directed towards students, Kile et al. (2019) conducted a one group, pre-test, post-test mixed methods pilot study to evaluate the effectiveness of incivility education and CRT to recognize and address nurse-to-nurse incivility in a single post-anesthesia care unit experiencing an increased rate of turnover with reports of uncivil behaviors. Of the 32 staff nurses, 19 (59%) participated in the study. Five educational training sessions, discussing examples of incivility and providing a role-playing session for addressing incivility, were provided to the staff nurses over three weeks. Data were collected at the start of each educational session and six weeks after the intervention using the Nursing Incivility Scale, Nurse Interaction subscale of the National Database of Nursing Quality Indicators, and two open-ended questions. After the intervention, a significant decrease was seen in mean incidents of inappropriate jokes

(5.50, p=0.003), lack of respects (18.75, p=0.003), and displaced frustration (8.29, p=0.043). Even though there was no statistical difference, an overall decrease in uncivil behavior was noted after the intervention. However, the goal of a pilot study is not testing a hypothesis and intervention for effectiveness but ensuring the feasibility of the CRT intervention prior to a future larger study (Polit & Beck, 2020).

Implications for Future Research

Healthcare professionals who mirror the current population are necessary to promote health equity, or the highest level of health attainment for all people. According the National Advisory Council for Nursing Education and Practice (2013), "health outcomes are improved by a match between patient and the care provider relative to race and language" (p. 7). However, Hispanic and American Indian nurses and students are underrepresented in the nursing workforce in the United States. In addition, minority students typically lack a sense of belonging due to a lack of shared cultural experiences to nurses within the nursing profession (Woodley & Lewallen, 2021).

The lack of minority representation has limited the generalization of findings in incivility and sense of belonging research, especially for students of Hispanic descent. While not focusing on incivility or undergraduate nurses' clinical experiences, a study assessing 26 Black nursing students' perceptions on participating in a mentoring program found the presence of Black mentors would help them relate and feel secure in opening up about their experiences and needs in nursing school (Payton et al., 2013). Similarly, Banister et al. (2014) developed a nurse mentor program for minority students to facilitate leadership skill development and transition into the nursing profession. The minority mentoring program has helped lower attrition rate and job turnover for new

graduate nurses during their transition to practice and provided an open, secure environment to promote belonging. However, it is unknown if the presence of nurses with similar backgrounds (i.e. ethnic, racial, educational, etc.) reduces the experience of incivility or increases the sense of belonging in the nursing profession. Further research is needed to assess if the thoughtful assignment of staff nurse-student nurse pairs with similar backgrounds during clinical experiences may reduce the perception of incivility.

While the American Association of Colleges of Nursing (2020) has supported processes to implement holistic admissions procedures with nursing programs to increase the diversity of student enrollment and the future workforce, minority students have reported higher incidents of exclusion and isolation. Yet, students are unprepared to deal with incivility (Thomas, 2015). Not only is research needed on the effect of holistic admissions and experiences of incivility among minority students, but also early interventions strategies including CRT need to be implemented and tested as a response from student nurses to staff nurse incivility (Kamolo & Njung'e, 2021).

Not only are students faced with incivility due to cultural and ethnic backgrounds, but their sense of belonging is negatively affected due to their weight. In this study, nursing students with a lower BMI than the mean (25.62 kg/m^2) had a statistically significant, inverse relationship between incivility and sense of belonging. While research is present on the perception of weight bias from nurses in caring for obese patients (Barra & Singh Hernandez, 2018; Oliver et al., 2021; Yılmaz & Yabancı Ayhan, 2019), future research is needed to analyze the impact of student nurses' weight on staff nurse incivility or sense of belonging and inclusion in the nursing program.

Finally, the SBNS has proven effective to measure sense of belonging with a high internal consistency (Patel et al., in press) among Hispanic and Native American students. Black (1.6%) students were underrepresented in this study. The national enrollment in nursing programs for Black students is 12.2% (National League of Nursing, 2014a). It is unknown if the reliability coefficients of the SBNS would be similar with a higher representation of Black students. In addition, convergent and divergent validity and test-retest reliability have not been conducted on the scale. Thus, further testing is needed to determine reliability of the scale with a more diverse student sample, as well as an examination of convergent and divergent validity and test-retest reliability of the tool.

Conclusion

Sense of belonging is essential for nursing students to develop and grow within the nursing profession. Unfortunately, incivility threatens the sense of belonging in nursing students. This study explored the relationship between incivility and sense of belonging in the nursing profession, described the presence of incivility in minority undergraduate nursing students, and determined how semester in the nursing program and weight were associated with incivility and sense of belonging.

This study reports findings that staff nurse incivility negatively correlates to sense of belonging in the nursing profession for undergraduate nursing students. In this study, American Indian of Alaskan Native students reported a high frequency of incivility, hostile-mean, and exclusionary behaviors by staff nurses compared to other ethnicities. Students of Hispanic ethnicity reported a low mean frequency of incivility compared to non-Hispanic students. However, there was no significant difference noted between the

associations of incivility and sense of belonging based on semester in the nursing program or BMI.

The findings of this study may be useful for nursing educators, nursing students, staff nurses, and healthcare organizations who facilitate clinical experiences for nursing students. Further research is needed on the use of early intervention strategies such as CRT for undergraduate nursing students to address the negative behaviors and prevent future incidents of staff nurse incivility, the effect of thoughtful staff nurse-student nurse assignments in clinical on reducing the perception of incivility, and the perception of weight bias on the experience of incivility or sense of belonging in nursing school.

APPENDIX A

LETTERS OF ACCESS

April 4, 2020

Sarah E. Patel, MSN, RN, C-EFM
Ph.D. Student
School of Nursing and Health Studies
University of Missouri-Kansas City
Kansas City, Missouri 64080

Dear Mrs. Patel:

I am pleased to offer my support for your dissertation study "BE RESILIENT: Examining the Relationship Between Incivility and Sense of Belonging in Undergraduate Nursing Students". As the Dean of the School of Sciences, Health, Engineering and Math at Santa Fe Community College, I fully support this study including providing a 15-minute period for recruiting junior and senior undergraduate nursing students at Santa Fe Community College for your study.

Nursing is facing a critical shortage. Establishing connections between conditions, such as incivility, impairing the formation of nursing students' sense of belonging is critical to address the nursing shortage and ultimately patient outcomes. We look forward to supporting you in your work.

Sincerely,

Jenny Landen

Jenny Landen, PhD Candidate, MSN, APRN, FNP-BC
Dean
School of Sciences, Health, Engineering and Math
School of Fitness Education
Santa Fe Community College

April 4, 2020

Sarah E. Patel, MSN, RN, C-EFM
Ph.D. Student
School of Nursing and Health Studies
University of Missouri-Kansas City
Kansas City, Missouri 64080

Dear Mrs. Patel:

I am pleased to offer my support for your dissertation study "BE RESILIENT: Examining the Relationship Between Incivility and Sense of Belonging in Undergraduate Nursing Students". As the Director of the School of Nursing at New Mexico State University, I fully support this study including providing a 15-minute period for recruiting junior and senior undergraduate nursing students at New Mexico State University for your study.

Nursing is facing a critical shortage. Establishing connections between conditions, such as incivility, impairing the formation of nursing students' sense of belonging is critical to address the nursing shortage and ultimately patient outcomes. We look forward to supporting you in your work.

Sincerely,

Alexa Doig, PhD, RN
Director
Elisa E. and Antonia H. Enriquez Professor
School of Nursing, College of Health and Social Services
New Mexico State University

APPENDIX B

LETTER OF USE

April 5, 2020

Sarah Patel, MSN, RN, C-EFM
Ph.D. Student
School of Nursing and Health Studies
University of Missouri-Kansas City
Kansas City, Missouri 64080

Dear Mrs. Patel:

I am pleased to allow you to use the Uncivil Behavior in Clinical Nursing Education (UBCNE) tool. As the corresponding author, I fully support your plans to use the tool for your dissertation study "BE RESILIENT: Examining the Relationship Between Incivility and Sense of Belonging in Undergraduate Nursing Students".

Incivility is a growing concern in healthcare, risking the health and wellbeing of nurses, other healthcare providers, and patients.

Sincerely,

Maureen Anthony, PhD, RN

Maureen J. Anthony, PhD
Professor Emeritus
McAuley School of Nursing
University of Detroit Mercy

APPENDIX C

INSTRUMENTS USED

Uncivil Behavior in Clinical Nursing Education (UBCNE) Scale

During your last clinical rotation, how often have you had a situation where a nurse(s): (Place an X in the appropriate right hand column.)	**Never 0**	**Rarely 1**	**Occasionally 2**	**Often 3**	**Very Often 4**
1. Embarrassed you in front of others					
2. Rolled their eyes at you					
3. Gave you an incomplete report					
4. Used an inappropriate tone when speaking to you					
5. Avoided taking report from you					
6. Avoided giving you report					
7. Made snide remarks about student nurses					
8. Raised their voice when speaking to you					
9. Did not involve you in a patient care decision you should have been involved in					
10. Did not pass on patient information that you should have been aware of					
11. Told you that you were incompetent					
12. Refused to help you					

Sense of Belonging in Nursing School (SBNS) Scale

Reflect on your interactions with staff nurses during your current clinical experience. Indicate the degree in which you agree or disagree with the statement.

Question	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
I fit in with the nursing staff during my clinical rotations.					
I am included in the care of the patients.					
The nursing staff respect me as a student.					
My precepting nurse shared information with me regarding patient care.					
I am welcomed as a nursing student at the clinical site.					
The nursing staff include me in their conversations during clinical.					

Reflect on your interactions with your clinical instructor during your current clinical experience. Indicate the degree in which you agree or disagree with the statement.

Question	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
My clinical instructor was available to help me when needed.					
My clinical instructor supported my learning.					

Reflect on your classes in nursing school. Indicate the degree in which you agree or disagree with the statement.

Question	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
The faculty promote an inclusive environment.					
I am comfortable approaching the faculty with my concerns.					

I trust the faculty in guiding my education.					
The faculty support my learning.					

Reflect on your experiences with your nursing classmates over the last semester. Indicate the degree in which you agree or disagree with the statement.

Question	Strongly Disagree 1	Disagree 2	Neutral 3	Agree 4	Strongly Agree 5
I have a strong bond with other members of my class.					
If I miss a class, my classmates ask about me.					
I am comfortable around members of my class.					
My classmates are available to help me when needed.					
I am invited to events outside of class.					
My classmates respect me.					
I am accepted by my classmates.					

Demographics

Gender: 1) Male 2) Female 3) Non-binary

Age: _____ years

Ethnicity: 1) Hispanic 2) Non-Hispanic

Race (select all that apply):
1) Black 2) White 3) Asian 4) American Indian or Alaskan Native
5) Native Hawaiian or Pacific Islander 6) Other

Body Mass Index: 1) < 18.5 2) 18.5 - 24.9 3) 25.0 – 29.9 4) >30.0

Semester in Nursing School: 1) 1 2) 2 3) 3 4) 4 5) 5

Type of Nursing Program: 1) Associate 2) Baccalaureate

Location of Last Clinical Experience: 1) Medical-Surgical 2) Geriatrics 3) Intensive Care
4) Pediatrics 5) Obstetrics 6) Community
7)Other

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VITA

Sarah Elizabeth (Humphreys) Patel was born on November 19, 1989, in Union City, Tennessee and was raised in Wingo, Kentucky. She attended public schools in the Hickman County School District, until her senior year. She graduated from Shawnee Mission Northwest High School in 2007. After graduating from high school, Ms. Patel begin her studies to become a registered nurse and graduated in 2011 from Johnson County Community College. After graduation, the Patel family relocated to Los Lunas, New Mexico.

Ms. Patel began her nursing career at Belen Meadows Healthcare and Rehabilitation Center in Belen, New Mexico. After a year and a half, she began working on a medical-surgical unit at the University of New Mexico Sandoval Regional Hospital. During this time, she earned her Baccalaureate of Science in Nursing degree from the University of New Mexico. Ms. Patel spent four years in geriatric and adult medical-surgical care, then she found her niche working in the labor and delivery unit at University of New Mexico Hospital as a staff nurse and later a high-risk antepartum unit educator. She has served as the chair for the New Mexico Association of Women's Health, Obstetrics, and Neonatal Nurses (AWHONN) section. In 2017, she was honored to serve as an Emerging Leader for the national AWHONN organization.

Ms. Patel's passion for education was apparent when working staff members. In the Spring of 2016, she began teaching an obstetric clinical group for the University of New Mexico College of Nursing. Ms. Patel earned her Master of Science in Nursing Education from Grand Canyon University in 2016. In 2017, Ms. Patel was hired as a

faculty member at the University of New Mexico, later assuming the role of Undergraduate Student Success Coordinator.

Ms. Patel has published several articles on nursing education, including two related to her dissertation topic. She has also presented on educational topics, including workplace aggression and sense of belonging in nursing, at local, regional, and national conferences. She received funding for her dissertation study from the Gamma Sigma Chapter in New Mexico of Sigma Theta Tau International. After earning her Doctor of Philosophy degree, Ms. Patel plans to continue her research in nursing education, striving to find innovative ways to increase clinical judgment and clinical reasoning skills in nursing students while enhancing the sense of belonging in the profession.