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Relationships among stress, resilience, and incivility in undergraduate nursing students and faculty during the COVID-19 pandemic: Policy implications for nurse leaders

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ABSTRACT

Background: Developing successful targeted interventions to reduce incivility for undergraduate nursing students and educators will require understanding the differences in their unique experiences. Although resilience may act as protective buffer against stressors, little is known about the relationships between stress, resilience, and perceptions of the frequency of incivility in the academic environment.

Purpose: The purpose of this study was to compare relationships among and differences between perceptions of incivility frequency and self-reported stress and resilience levels in undergraduate nursing students and faculty during the COVID-19 pandemic.

Method: A comparative descriptive and correlational research design was utilized. An online survey was used to collect data from undergraduate nursing students and faculty (n = 710) at one public university.

Results: Students were significantly more stressed and less resilient than faculty. Faculty reported significantly greater low and high-level student and low-level faculty incivility behaviors than students.

Conclusion: Understanding student and faculty perceptions of uncivil behavior frequency occurring at the intersection of high stress and moderate resilience levels is key to the creation of targeted interventions and policy development.

Introduction

Incivility in nursing education is a persistent global problem that threatens the psychological and physiological health of faculty and students (Eka & Chambers, 2019). Incivility in nursing education is defined as “a range of rude or disruptive behaviors or failing to take action when action is warranted; these behaviors and inactions may result in psychological or physiological distress for the people involved and if left unaddressed, may progress into threatening situations (or result in temporary or permanent illness or injury)” (Clark, 2017, p. 14). To develop effective, evidence-based policies to address incivility in nursing education, site specific research about student and faculty experiences with incivility should be conducted to determine the needs of individual institutions.

The COVID-19 pandemic has resulted in increased uncertainty and higher self-reported stress, depression, and anxiety levels for students in higher education settings (Fitzgerald & Konrad, 2021; Son et al., 2020; Wang et al., 2020). The link between increased stress levels and incivility in nursing academic settings has been well described in the literature (Clark, 2017, Clark et al., 2020, Rawlins, 2017), however, minimal evidence exists to describe how resilience relates to stress and incivility in nursing education and how these relationships may differ between students and faculty. Resilience, or “a quality of bouncing back and moving on in life after adversity” (Earvolino-Ramirez, 2007, p. 76), is an underexplored factor that could be a part of future interventions to train students and faculty about how to cope with stress and incivility and prevent it from influencing poor outcomes. To our knowledge, studies have not been conducted that explore these variables as they exist in undergraduate nursing settings during a pandemic. Therefore, the study aim was to compare relationships among and differences between perceptions of incivility frequency and self-reported stress and resilience levels in undergraduate nursing students and faculty to help inform the development of policies and interventions that can be used to respond to incivility in pre-licensure academic settings.

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Background

Incivility in nursing education

The American Nurses Association (ANA) position statement, “Incivility, Bullying, and Workplace Violence,” established that addressing uncivil behavior in practice and academia is an ethical expectation for Registered Nurses and their employers (ANA, 2015). Uncivil behaviors in nursing education can range from disruptive (lower-level) to threatening (higher-level) and can occur in student-to-student, student-to-faculty, faculty-to-student, or faculty-to-faculty encounters (Clark, 2017). Examples of mild disruptive behaviors in the academic environment include eye rolling or sarcasm, whereas severe threatening behaviors can include intimidation, racial and ethnic slurs, or physical violence. Clark (2017) also described the continuum of civility to incivility in nursing education as a “dance”, which reflects the “reciprocal nature of faculty and student encounters” and through which a civil environment can be co-created (p. 51). Uncivil encounters in nursing education can result in poor mental health outcomes, unethical clinical performance, and unsafe patient care (Clark, 2017). The prevalence and consequences of incivility in pre-licensure nursing education, through the lenses of students and faculty, will be differentiated in the following paragraphs.

Student reported incivility: prevalence and consequences

Nursing students report high levels of uncivil faculty and student behaviors. In a sample of 192 nursing students, Clark et al. (2012) found that students reported “racial, ethnic, sexual, or religious slurs, criticizing nontraditional subcultures, and taking credit for others’ work” as top uncivil student behaviors occurring at a prevalence of over 85% by students in the online learning environment (Clark et al., 2012, p. 152). For the same sample, students reported the top three uncivil faculty behaviors as making personal attacks or threatening comments, name calling, and making verbal insults or rude comments at a prevalence of over 85% (Clark et al., 2012). In a longitudinal study conducted over three years, undergraduate nursing students reported that overall civility levels and quality of faculty-student civility significantly decreased (Clark et al., 2014).

Consequences of experiencing uncivil behavior for nursing students have been reported across the literature, and include feeling distressed (Courtney-Pratt et al., 2018; Rose et al., 2020; Sauer et al., 2017; Thomas, 2018), lacking confidence (Courtney-Pratt et al., 2018; Thomas, 2018), experiencing poor learning outcomes (Holtz et al., 2018; Park & Kang, 2021), and questioning nursing as a career (Courtney-Pratt et al., 2018; Thomas, 2018). In a qualitative study of 24 undergraduate nursing students, students interpreted uncivil student behavior as a justifiable response to uncivil faculty behavior (Altmiller, 2012), adding support to the “dance” of incivility phenomenon that Clark (2017) has found in her work.

Faculty reported incivility: prevalence and consequences

Nursing faculty report experiencing uncivil behaviors from faculty and students in nursing education (Clark, 2017; Clark et al., 2012). For example, in a sample of 20 faculty and 192 students, Clark et al. (2012), found that faculty identified the top three uncivil student behaviors occurring “usually” or “always” in the online learning environment included name calling, making verbal insults or rude comments, and making belittling comments to others about a faculty member at a prevalence of over 80%. In a national study of nursing faculty from 40 U.S. states, 68% (n = 506) reported that faculty-to-faculty incivility was a moderate or serious problem (Clark et al., 2013). In a follow-up survey of nursing faculty and administrators (n = 1074) from all regions of the US, 50.6% of the respondents described faculty to faculty incivility as a moderate or serious problem (Clark et al., 2020). In a study comparing the perceptions of incivility in faculty and students from four different schools of nursing, Aul (2017) reported that 71% of faculty viewed incivility as a moderate or serious problem, but that students’ perceptions ranged from 26.1 to 73% depending on the program in which they were enrolled.

Because of uncivil behaviors in nursing education, nursing faculty are at risk of decreased productivity and ultimately leaving nursing education (Peters, 2014). In a qualitative study of eight nursing faculty participants, Peters (2014) reported several themes that emerged about faculty-to-faculty incivility, including “feeling belittled as though being treated like a child” and “struggling with a decision to remain in academia” (p. 219). In a national study designed to describe nursing faculty and administrators’ perceptions of civility and incivility, the most common contributors to incivility in the academic environment included roles and expectations that were unclear, demanding workloads, observing colleagues acting with a sense of entitlement, and high individual and organizational stress levels (Clark et al., 2020). Retention of nursing faculty is a worthy goal, as the national nurse faculty vacancy rate is estimated at 6.5% and faculty shortages are cited as a barrier to increasing student enrollment in nursing programs (American Association of Colleges of Nursing, 2020a).

Relationship between stress, incivility, and poor outcomes in nursing education

Stress, which can be defined as any response causing tension to the body, mind, or spirit related to any events occurring occasionally or recurrently over time (Centers for Disease Control, 2019), is a contributing factor to, and consequence of, uncivil behavior for nursing students (Rawlins, 2017). Nursing students report high stress related to course workload, test anxiety, fear of the unknown, and uncivil behavior in the academic setting (Sauer et al., 2017). Stress can lead to ineffective coping among nursing students in nursing education and contribute to decreased productivity, poor academic performance, and a decline in one’s mental and physical health (Centers for Disease Control and Prevention, 2019; Sauer et al., 2017). In nursing students, experiencing higher levels of incivility were associated with higher stress levels and lower mental and physical health scores (Rose et al., 2020).

Likewise, faculty experience stress that could contribute to uncivil behavior, with contributing factors that include managing high workload demands, attending to multiple foci such as teaching, scholarship, and service, and insufficient support from administration (Clark et al., 2020; Rawlins, 2017). Stress and high workloads were found to be contributors to faculty-to-faculty incivility in a national study of nursing faculty (72% of respondents, n = 588) (Clark et al., 2013). In an integrative review, Rawlins (2017) found that stress is a factor influencing uncivil behavior, and that uncivil behavior disrupts the teaching-learning environment. In addition, incivility is a catalyst for higher levels of absenteeism, decreased job satisfaction, burnout, job turnover, and poor collaborative efforts in maintaining quality patient care in health care settings (Clark et al., 2015; Courtney-Pratt et al., 2018).

It should be noted that among the changes caused by the COVID-19 pandemic, students and faculty experienced an unprecedented disruption of normal academic experiences, necessitating the rapid development of online and virtual classroom and clinical experiences to ensure continued opportunities for student academic progression (American Association of Colleges of Nursing, 2020b; National League for Nursing, 2020). While these changes in academic experiences occurred quickly in the early months of the pandemic, they were refined and maintained as the year progressed. Little is known about the similarities or differences in self-reported perceived stress levels experienced by students and faculty or about their perceptions of the frequency of incivility occurring during COVID-19.
Resilience in nursing education

Resilience is a dynamic, modifiable, person- and context-specific process that can change over time. According to Wagnild and Young (1993), resilience is organized into five essential characteristics, including: purpose, perseverance, equanimity, self-reliance, and existential aloneness. An integrative review of resilience in nursing education found three key themes in a sample of 19 articles: resilience is an important concept in nursing education, it is studied as either a process or trait, and resilience relates to protective factors that help individuals recover from stress (Reyes et al., 2015). These themes provide a backdrop for more recent studies conducted involving resilience in nursing education. Cleary et al. (2018) found positive relationships among resilience, performance in undergraduate nursing studies, and professional experience placements. Nursing programs that assist students with developing skills related to resilience may help students to be better prepared to manage the unique challenges in nursing practice (Low et al., 2019). Keener et al. (2021) discovered that higher levels of resilience in rural nursing faculty predicted higher quality of life scores in social relationship, physical and psychological health, and environmental domains. However, little is known about how resilience relates to stress and incivility in nursing education and how these relationships may differ between students and faculty.

Therefore, the purpose of this study was to compare relationships among and differences between perceptions of incivility frequency and self-reported stress and resilience levels in undergraduate nursing students and faculty during the COVID-19 pandemic. A secondary purpose of the study was to use the results to help inform the development of policies and interventions to encourage civility and respond to incivility in our pre-licensure academic settings.

Methods

Design, setting, and sample

All three authors of this study served as members within a college of nursing undergraduate civility taskforce for a pre-licensure Bachelor of Science in Nursing (BSN) program. The civility taskforce convened from Spring 2018 to Spring 2020 and explored recent research related to incivility in academic settings to put forth recommendations for the development of a department-specific policy. The overarching taskforce purpose was to generate evidence to inform interventions for incivility in nursing education, as well as help guide our institution’s efforts to improve the nursing education environment. This research study was designed based on this review of literature and a desire to better understand the relationships that stress and resilience may have with perceptions of incivility in our undergraduate students and faculty.

Using a comparative descriptive and correlational research design, this study explored associations among self-reported stress, self-reported resilience, and the perceptions of incivility frequency in a convenience sample of undergraduate nursing students and faculty from a large pre-licensure Bachelor of Science in Nursing (BSN) program in the southwestern United States. We hypothesized that there would be a difference between undergraduate nursing students and faculty on self-reported stress, resilience, and incivility frequency scores.

This study was approved by the University’s Institutional Review Board (IRB). Participants were recruited using convenience sampling in the Fall of 2020. Student inclusion criteria included being enrolled in either a pre-nursing course (pathophysiology, pharmacology, or introduction to nursing) or their final four semesters of nursing school and be able to read and understand English. RN-to-BSN students, graduate nursing students, and students who were <18 years old were excluded from this study. Faculty must have worked with undergraduate pre-licensure students to be included in the study. Participation was voluntary and anonymous.

Measures

In this study, we sought to measure the variables of stress, resilience, and the frequency of uncivil behaviors in undergraduate nursing students and faculty. Students and faculty were asked to complete the following surveys: the Perceived Stress Scale, the Resilience Scale, and the Incivility in Nursing Education-Revised scale.

Stress

Self-reported nursing student and faculty stress levels during the past 4 weeks were measured using the Perceived Stress Scale (PSS), a 10-item survey that uses five-point Likert scale questions (Cohen et al., 1983). Scores on the PSS-10 range from 0 to 40 with higher scores indicating increased stress levels. Use is in the public domain and is at no cost. The PSS-10 is an established tool with good internal consistency reliability and acceptable criterion validity. In a review of 12 studies using the PSS-10, the Cronbach’s alpha was >0.70 (Lee, 2012). In the current study, the median imputed Cronbach’s alpha was 0.88 for the PSS-10.

Resilience

Resilience was measured using the Resilience Scale 14 (RS-14), a 14-item Likert-scale survey with good internal consistency reliability and construct validity. Scores range from 1 to 7. Item scores are summed to result in a total score ranging from 14 to 98. Higher scores suggest greater resilience. In a review of 8 studies that used the RS-14, the Cronbach’s alpha ranged from 0.81 to 0.94 (Wagnild, 2009). In the current study, the median imputed Cronbach’s alpha value for the RS-14 was 0.92. Permission to use the scale was obtained from the scale developer.

Frequency of uncivil student and faculty behaviors

The frequency of uncivil student and faculty behaviors were measured using the Incivility in Nursing Education-Revised (INE-R). This 48-item Likert-scale survey consists of 24 student and 24 faculty behaviors that reflect four subscales: student low-level incivility behaviors (SLLIB), faculty low-level incivility behaviors (FLLIB), student high-level incivility behaviors (SHLIB) and faculty high-level incivility behaviors (FHLIB). Participants were asked to rate the incivility of each behavior on a 1 (not uncivil) to 4 (highly uncivil) scale and identify how often each behavior occurred in the past 12 months from 1 (never) to 4 (often). Higher scores indicate higher incivility and increasing frequency. In the INE-R validation study, the Cronbach’s alpha was 0.96 for student behaviors, and 0.98 for faculty behaviors (Clark et al., 2015). In the current study, the median imputed Cronbach’s alpha value was 0.98 for both the student and faculty behavior subscales. Additionally, the INE-R asks participants to generally rate the civility of the nursing program and to identify strategies to improve the level of civility in nursing programs. Permission to use the scale was obtained from the survey developer.

Study investigators developed demographic questions to obtain information from participants that included: age, sex, culture and/or ethnic group, and marital status. As a reflection of demographic characteristics that can influence stress levels, participants were also asked whether they were a primary caregiver for a child under age 18 or older adult family member >13 h per week and if they live >1 h away from the university. For students, additional questions included whether they were enrolled in >13 semester hours and/or working >13 h each week during the current semester, their current program level (pre-nursing, J1, J2, S1, S2), and whether they have failed a nursing course. Faculty were asked to report their years of employment.

Data collection

In September 2020, approximately 6 months into the COVID-19 pandemic, recruitment e-mails were sent to a total of 3551 undergraduate students and 186 faculty to invite their participation in the web-
based study. Data collection occurred during the 2nd-8th weeks of the semester. Four follow-up emails were sent to encourage participation and remind them of the study closing date. Participant data were collected using a secure, password-protected, web-based application. The survey could be completed using a computer, tablet, or cell phone in a setting of their choosing. An incentive was offered for participating in the research study. After completing the study surveys, participants could choose to click on an additional link provided for a secondary survey and enter their university e-mail address for a random drawing to win one of six $25.00 Amazon gift cards.

De-identified survey data from 891 participants were downloaded from the web-based application and prepared for analysis. Participants (39 individuals) who did not meet the inclusion criteria were deleted from the database. Entries from participants who did not complete the demographic questions and did not provide answers to the questions in the first or subsequent surveys (142 individuals) were also removed. Data from a total of 710 individuals were utilized for analysis, a student and faculty response rate of 19.6% and 18.8% respectively.

Statistical analysis

Continuous parameters are reported as mean ± standard deviation, and discrete parameters are reported as n and percent (%). Shapiro-Wilk tests were computed to assess normality, and Cronbach Alpha tests were performed to assess internal consistency on the survey-based data. Mann-Whitney U tests were computed to compare faculty with students on continuous variables. Spearman rank-order coefficients were computed to identify associations between continuous variables. Data were analyzed for patterns of missing data using pattern plots. The patterns of missing data were found to be arbitrary (non-montone), assumed to be missing at random, and subsequently multiple imputation was implemented to account for missing data. Complete case analyses were also performed, and there were no differences in results. Therefore, the findings presented here reflect the analyses of the imputed data. Analyses were performed using SPSS 27.0 for Windows.

Results

Student participants were more likely to be female (87.6%), single (58.8%), and to be between the ages of 18–34 (71.9%). Pre-nursing students comprised 62.8% of the total sample. Over half of the student sample reported working >13 h a week (52.3%) and being enrolled in >13 h in the current semester (42.2%). The majority of the faculty participants were between the ages of 45 and 64 (68.6%), female (82.9%), and married (65.7%). One-third (34.3%) of faculty respondents reported caregiving responsibilities for a child under the age of 18. Most of the faculty (94.2%) had <15 years of employment with the university. Refer to Table 1 for additional sample demographics.

Table 1 describes the mean scores, standard deviations, and survey ranges using pooled mean and standard deviations from the imputed surveys to measure the findings presented here reflect the analyses of the imputed data. Analyses were performed using SPSS 27.0 for Windows.

| Variable | Undergraduate nursing students (n = 675) | Undergraduate nursing faculty (n = 35) |
|----------|----------------------------------------|---------------------------------------|
| Age | 18–24: 278 (41.2%) | 18–24: 34 (97.1%) |
| | 25–34: 307 (30.7%) | 25–34: 3 (8.6%) |
| | 35–44: 141 (20.9%) | 35–44: 2 (5.7%) |
| | 45–54: 44 (6.5%) | 45–54: 0 (0%) |
| | >55: 4 (0.7%) | >55: 0 (0%) |
| Gender | Female: 591 (87.6%) | Female: 33 (94.3%) |
| Ethnicity | Black: 138 (20.4%) | Black: 3 (8.6%) |
| | Hispanic/Latino: 173 (25.6%) | Hispanic/Latino: 1 (2.9%) |
| | Asian: 98 (14.5%) | Asian: 1 (2.9%) |
| | White: 239 (35.4%) | White: 29 (82.9%) |
| | Other: 21 (3.8%) | Other: 1 (2.9%) |
| Marital Status | Single: 397 (58.8%) | Single: 3 (8.6%) |
| | Married: 223 (33%) | Married: 23 (65.7%) |
| | Widowed: 56 (8.1%) | Widowed: 9 (25.7%) |
| Caregiver of a Child | <18 | Yes: 254 (37.6%) |
| | Adult | >13 h/wk | Yes: 47 (7%) |
| Live >1 h away | Yes: 285 (42.2%) | No: 390 |
| Faculty Years of Employment | <5 years: 13 (37.1%) | 5–10 years: 10 (28.6%) |
| | >16 years: 3 (5.8%) | >11–15 years: 10 (28.6%) |
| | >15 years: 10 (28.6%) | No: 390 |
| Program level (PN – S2) | PN: 438 (62.8%) | Junior 1: 77 (11%) |
| | Junior 2: 33 (4.7%) | Senior 1: 67 (9.6%) |
| | Senior 2: 60 (8.6%) | Senior 2: 60 (8.6%) |
| Enrolled in >13 h/semester | Yes: 353 (52.3%) | No: 322 |
| Working >13 h/semester | Yes: 285 (42.2%) | No: 390 |
| Failed a course | Yes: 60 (8.9%) | No: 615 |
Spearman correlation coefficients were computed to assess the relationships reported by nursing faculty among the study variables (stress, resilience, and the frequency of low/high incivility behaviors in nursing students and faculty). There was a weak negative correlation between stress and resilience in faculty that approached significance ($r_s = -0.293, p = .08$). A weak positive correlation was found between faculty stress and increased frequency of reporting high level faculty incivility that approached significance ($r_s = 0.285, p = .08$). Significant positive correlations existed for faculty between reporting higher frequency scores on the low student incivility and reporting frequency scores for higher student incivility ($r_s = 0.552, p < .001$) and lower faculty incivility ($r_s = 0.331, p < .058$). Similarly, there was a significant positive correlation among nursing faculty reporting higher frequency scores on the low and high student incivility subscales ($r_s = 0.538, p < .006$) and on the high faculty incivility subscales ($r_s = 0.388, p < .037$) (Table 4).

**Discussion**

To our knowledge, this is one of the first comprehensive reports that explore how stress, resilience, and the frequency of uncivil student and faculty behaviors relate and compare across student and faculty subsamples in undergraduate nursing education. In the student subsample, stress and resilience were inversely and significantly correlated, while stress and all forms of student and faculty uncivil behaviors were positively and significantly correlated. This finding validates a theme across codes of conduct that define acceptable and unacceptable behaviors" as the second and third highest rated suggestions respectively.

Spearman correlation coefficients were calculated to explore the relationships among nursing student scores on the PSS10, RS14, and the four INE-R student and faculty frequency of incivility subscale scores. A significant negative correlation between stress and resilience was reported by students ($r_s = -0.567, p < .001$); as stress levels increased, resilience levels decreased. In addition, there was a significant positive correlation between stress and reporting increased frequencies of all types of incivility behaviors in students: SLLIB ($r_s = 0.269, p < .001$), SLLIB ($r_s = 0.119, p < .001$), FLLIB ($r_s = 0.291, p < .001$), and FLLIB ($r_s = 0.219, p < .001$). Therefore, for students, as stress levels increased the frequency of reporting low and high-level uncivil behaviors observed in other students and faculty also increased. In addition, there were significant negative correlations for student respondents among resilience and reporting increased frequencies all types of incivility behaviors: SLLIB ($r_s = -0.312, p < .001$), SLLIB ($r_s = -0.163, p < .001$), FLLIB ($r_s = -0.271, p < .001$), and FLLIB ($r_s = -0.202, p < .001$). This indicates that as student resilience scores decreased, their frequency of reporting uncivil behaviors in student colleagues and faculty increased (Table 3).

Spearman correlation coefficients were computed to assess the relationships reported by nursing faculty among the study variables (stress, resilience, and the frequency of low/high incivility behaviors in nursing students and faculty). There was a weak negative correlation between stress and resilience in faculty that approached significance ($r_s = -0.293, p = .08$). A weak positive correlation was found between faculty stress and increased frequency of reporting high level faculty incivility that approached significance ($r_s = 0.285, p = .08$). Significant positive correlations existed for faculty between reporting higher frequency scores on the low student incivility and reporting frequency scores for higher student incivility ($r_s = 0.876, p < .001$) and lower faculty incivility ($r_s = 0.552, p < .001$) but not high faculty incivility frequency scores ($r_s = 0.331, p < .058$). Similarly, there was a significant positive correlation among nursing faculty reporting higher frequency scores on the low and high student incivility subscales ($r_s = 0.538, p < .006$) and on the high faculty incivility subscales ($r_s = 0.388, p < .037$) (Table 4).

**Discussion**

To our knowledge, this is one of the first comprehensive reports that explore how stress, resilience, and the frequency of uncivil student and faculty behaviors relate and compare across student and faculty subsamples in undergraduate nursing education. In the student subsample, stress and resilience were inversely and significantly correlated, while stress and all forms of student and faculty uncivil behaviors were positively and significantly correlated. This finding validates a theme across
the literature about stress being associated with incivility in nursing education (Clark, 2017; Rawlins, 2017; Sauer et al., 2017). Conversely, resilience and all forms of uncivil behaviors were inversely and significantly correlated for students. Our findings indicating significant relationships between student stress, resilience, and uncivil student and faculty behaviors is novel because data were collected about 6 months into the COVID-19 pandemic, reflecting these phenomena in a time of worldwide uncertainty.

Stress

In our sample, student and faculty average scores for stress differed significantly. The average stress score for students in our sample (m = 20.25, SD = 7.13) was higher than in a sample of 87 Canadian nursing students (m = 16.69, SD = 7.01) who participated in a study about associations between incivility, stress, and health (Sauer et al., 2017). Students may experience greater stress due to new expectations encountered as part of becoming a member of the nursing profession and uncertainty about their academic progression in the midst of being socialized into the nursing profession during a pandemic. Students' stress may also stem from a perceived power-differential in the academic environment in the presence of nursing faculty, who ultimately decide if their progress is satisfactory to continue in the nursing program. The increased stress reported by precursure nursing students and faculty is similar to the findings of increased stress in frontline healthcare workers during the pandemic (Moore & Kolencik, 2020).

Resilience

It is interesting and expected that the average score for resilience was significantly lower for students compared to faculty. Resilience scores trend upward in the general population with age (Wagnild, 2009, 2014). Our student scores were slightly higher than the norm for their age groups and indicated that our sample had a “moderate” level of resilience. It is an encouraging finding that students and faculty had, on average, moderate levels of resilience during the COVID-19 pandemic. Supporting and enhancing resilience could be the part of the foundation for future interventions to decrease incivility in nursing education (Cleary et al., 2018; Keener et al., 2021; Low et al., 2019).

Perceptions of incivility frequency and program civility ratings

Although faculty reported lower stress scores and higher resilience, their average frequency rating was greater than students' ratings for low- and high-level uncivil student behaviors and low-level uncivil faculty behaviors. The frequency of uncivil behavior for faculty in our sample was consistent with literature suggesting that faculty report a high overall prevalence of uncivil behaviors in nursing education (Aul, 2017; Clark et al., 2013; Clark et al., 2020). Faculty may report more frequent incivility due to having an established paradigm for expected professional behavior from students and other faculty that, if not met, could be deemed uncivil. The faculty perception of uncivil behaviors occurring more frequently could also be influenced by their role. Students in the classroom or clinical site typically see and interact with only one instructor. In contrast, faculty are working with many students and often with more than one section or cohort of students. Being in contact with many students could result in faculty experiencing more instances of uncivil behavior in the nursing education setting. For example, if there is a widespread belief among a class of students about the difficulty level of an assignment, the faculty member may receive multiple comments in class or via email regarding the issue.

When students and faculty were asked to rate the level of civility in their nursing program, students rated the level of program civility higher than did faculty. A lower program civility rating by faculty seems congruent with their reporting of increased frequency of incivility behaviors. As seen in Table 3, nursing students and faculty agreed that using a computer, phone, or other media device during class, meetings, or activities for unrelated purposes was the most frequently occurring lower-level incivility behavior in faculty and students, which is consistent with the findings of Wagner et al. (2019). Otherwise, the two groups rarely identified the same student or faculty behavior within the INE-R subscales as being the most commonly occurring. This offers nursing education leaders an opportunity to understand the unique perspective of students and faculty regarding incivility and can serve as a starting point for building educational initiatives and designing policies to target the issue of uncivil behaviors.

Non-significant findings

As seen in Table 2, the average scores for the frequency of faculty higher level incivility behaviors were low and there was no significant difference in the average scores reported by students and faculty. This suggests that faculty and students agree on the low frequency of this type of faculty behavior. A weakly positive but non-significant relationship was observed between faculty stress levels and the frequency of reporting high level faculty incivility, which may also be due to the lower frequency of faculty higher level incivility behaviors in our sample. There was a weak, negative, non-significant correlation between stress and resilience in faculty. Wagnild (2009, 2014) reported that average scores on the RS tend to increase slightly with each additional decade of age and that increasing levels of resilience can serve as a psychological mediator when new or unanticipated stressors occur and is similar to the findings of Keener et al. (2021) where higher levels of resilience in rural nursing faculty predicted higher quality of life scores.
Limitations

Convenience sampling was used from one research site, which may limit generalizability of results. The survey length resulted in some individuals choosing to discontinue completing it, requiring data imputation. The cross-sectional and correlational design limit causal inference. Data collection for this study occurred when the participants of the study had been living with the COVID-19 pandemic for 6 months. Data collected during this time may not represent non-pandemic circumstances. Strengths of this study included a large sample size, a racially and ethnically diverse student population, and psychometrically strong survey tools.

Implications for nursing education and research

Positive role modeling and rewarding professional and civil behaviors, the highest rated student and faculty suggestions to improve civility, are interventions that nurse leaders can use in their institution to foster a culture of civility. In our study, students and faculty noted the importance of using surveys to assess civility/incivility to identify areas for intervention and to celebrate areas of strength. It is likely that students and faculty have differing perspectives on incivility and may not always agree, especially regarding behaviors that may be viewed by either group as a grey area or borderline behavior.

To develop the most relevant policies for different undergraduate nursing programs, we recommend establishing a civility taskforce and conducting anonymous surveys of students and faculty at established intervals to identify beliefs about and frequency of civil and uncivil behaviors in the academic environment. Results can inform institutional policies relevant to the unique needs of their nursing students and faculty to address uncivil behaviors. Nursing education leaders should support the provision of education regarding the outcomes of the survey and establish policies that define acceptable and unacceptable behaviors. Existing codes of behavior can be reviewed and modified based on survey results. As recommended by Clark and Ritter (2018) policy development or revisions should include student and faculty representatives, be vetted by nursing program leaders, and reviewed by relevant university support departments (including legal) prior to being voted on by faculty and students.

Despite the COVID-19 pandemic, undergraduate students and faculty in our sample reported resilience levels higher than the normative average reported by Wagnild (2009, 2014). Further research is needed to determine if resilience can act as a mediator for stress and incivility in these populations. The importance of learning and practicing techniques to reduce and manage stress and to support the continued growth of resilience should be emphasized, especially with the additional and unusual stressors encountered during a pandemic. More research is needed to develop evidence-based interventions to reduce stress and support resilience that can be delivered via an online format to undergraduate nursing students. In addition, the current study could be replicated with a larger, multi-site undergraduate nursing student and faculty sample in a post-pandemic environment.

Conclusion

Civility is an expectation for professional growth, development, and excellence in nursing education and is an outcome of the caring and compassionate ethos for which nurses are well known. Creating increased awareness of the importance of incivility and its relationship with stress and resilience in undergraduate nursing students and faculty is an initial step in creating healthy work environments, improving academic performance and most importantly, supporting the provision of safe patient care. As stress and incivility persist in undergraduate nursing programs, socializing all stakeholders about civil interactions, higher standards of practice, and professionalism are vital to producing a culture of caring and ethical practice. Understanding how stress and resilience differ among students and faculty could be critical in developing tailored interventions that could decrease stress, support resilience, and reduce the prevalence of uncivil behaviors in the academic environment. The support of academic nursing leaders is critical to the development of evidence-based program-specific policies to address the ongoing issue of incivility in nursing education for the betterment of our future nursing professionals and patient care.

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Declaration of competing interest

None.

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