The impacts of faculty caring on nursing students’ intent to graduate: A systematic literature review

Dalton Henderson a, Kerry A. Sewell b, Holly Wei c, *a

a Senior Nursing Honor Program, East Carolina University College of Nursing, Greenville, NC, USA
b Research Librarian, Laupus Library, East Carolina University, Greenville, NC, USA
c East Carolina University College of Nursing, Greenville, NC, USA

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Objectives: To examine the current studies about the impacts of faculty caring on nursing students’ intent to graduate and provide recommendations. The nursing profession continues to face nursing shortages. One of the solutions recognized to alleviate the shortage is increasing the number of students graduating from nursing schools. It lacks a literature review synthesizing the current research about the impacts of faculty caring on nursing students’ intent to graduate and indicate areas for future research.

Methods: This is a systematic literature review. The search of the literature was guided by the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA). Databases searched included MEDLINE via PubMed, CINAHL, PsycINFO, and ProQuest Search. Search terms included ‘attrition’, ‘dropout’, ‘graduation rate’, ‘faculty’, ‘instructor’, ‘professor’, ‘nursing’, and ‘caring’.

Results: Ten articles met the inclusion criteria. The articles were conducted in the Associate Degree of Nursing and the Bachelor of Science in Nursing programs. Nursing faculties played a significant role in students’ intent to graduate by building students’ confidence, creating a compassionate learning environment, and promoting students’ competence. Faculties’ caring behaviors, including respecting students, showing empathy, and using caring communication skills, were essential characteristics to affect students’ learning environments.

Conclusions: The findings indicate that students’ perceptions of faculty caring can affect their perceptions of the learning environment and sense of belonging, and therefore, impact their intent to graduate. Students’ perceptions of their instructors’ caring behaviors are instrumental in motivating them to continue learning. The capacity of faculty caring plays a significant role in students’ success.

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What is known?

- The nursing profession continues to face nursing shortages.
- High attrition rates are reported in nursing programs.
- Students learn better in a civil and compassionate environment.

What is new?

- Students perceive that faculties’ caring can affect their learning environment.
- Faculties’ caring behaviors are important characteristics and a driving force for their intent to graduate.
- The capacity of faculty caring plays a significant role in students’ success.

1. Introduction

The nursing profession continues to face the challenges of nursing shortages. Nursing shortage can have significant impacts on patient care quality, affecting patient-to-nurse ratios and patient outcomes [1]. On study found that in the areas with high rates of understaffed nurses, patients experienced a significant increase in hypoxemia and hypotension in post-anesthesia care [2]. Nursing is a profession that is physically and intellectually demanding. While factors affecting the shortage are manifold and complex, a couple of...
issues that the discipline of nursing faces include increased retirement from older nurses and a decreased number of students entering the nursing profession [3]. One of the solutions recognized to alleviate the nursing shortage was to increase the number of students graduating from nursing schools [3].

Nursing students, on the other hand, also experience a high level of academic stress. Students' stress arises from many factors, one of which is how they perceive faculties' caring behaviors [4]. Nursing faculties' empathy towards students and their learning environments can positively influence students' professional development and promote students' determination to continue their study [4]. However, faculty who lack empathy towards students and their learning environments can lead to negative consequences in students' learning and quality of life [4,5]. A challenge that nursing schools face and a factor that impacts the number of nursing students entering the profession is the high attrition rates, which is reported as high as 50% in some areas of the United States [6,7]. This high attrition rate needs to be addressed as a part of the measures to alleviate nursing shortage, in which nursing school faculties can play a significant role.

Incorporating human caring curriculum into education may help students alleviate their stress and improve learning outcomes [8,9]. Educating nursing students ways to handle their stress may help students become emotionally resilient, which may help them cope with the difficulties that they face and provide a compassionate and high quality of care [8,9]. Students learn better in a civil and compassionate environment that is based on mutual respect and positive encouragement [10,11]. If not careful, nursing faculties can translate feelings of superiority over their students into behaviors of incivility, which may be perceived as controlling and unempathetic by students [11,12]. Research has been conducted about the impact of nursing faculties' caring behaviors on students' retention in nursing schools. It lacks a literature review synthesizing the current research on the topic. Therefore, the purpose of this review was to examine the current studies about the impacts of faculty caring on nursing students' intent to graduate and provide recommendations.

2. Methods

2.1. Study design

This is a systematic literature review. The search of the literature was guided by the Preferred Reporting Items for Systematic reviews and Meta-Analyses (PRISMA; [13]). The strategies of the search were developed by all the authors (DH, KS, HW), including a university research librarian (KS). The search was done by the librarian (KS) and confirmed by the third author (HW).

2.2. Databases sources

Databases searched included MEDLINE via PubMed, CINAHL, PsycINFO, and ProQuest Search. Search terms included ‘dropped from,’ ‘attrition,’ ‘graduation rate,’ ‘faculty,’ ‘instructor,’ ‘professor,’ ‘nursing,’ and ‘caring.’ The search terms were first mapped to the MeSH Headings in MEDLINE and then combined with keywords for the search. The initial search was restricted to the title and abstract fields of articles. Full texts of articles were read to further screen the literature for the review.

2.3. Inclusion and exclusion

To be included, studies examined a) the impacts of nursing faculties’ caring behaviors, defined as empathy, civility, or verbal and emotional interpersonal interactions with students; b) students in undergraduate nursing programs; c) students’ intent to graduate. Studies were excluded if the student dropout rates were only related to course workload and rigor in the nursing programs.

2.4. Search process

The research librarian (KS) conducted the search based on the search strategies developed by the authors. The search was subsequently mapped to the controlled vocabulary and syntax for the remaining databases. Results were restricted to the last five years and English language publications to obtain the most current studies in the area of the review. The latest search was completed on May 23, 2019. Records were deduplicated using EndNote and then loaded into Covidence for further screening of duplicates. The titles and abstracts were screened for relevance, after which the full texts of articles were reviewed. The search process was illustrated in the PRISMA Chart (Fig. 1).

2.5. Quality assessment

The quality assessment of the studies was conducted using the Mixed Methods Appraisal Tool [14]. Each article was assessed based on the relevance of the sampling strategy to address the research question, the representation of the sample on the target population, the appropriateness of the measurement, the risk of non-response bias, and the suitability of statistical analysis to answer the research question. Every “yes” to the criteria was assigned 20% for a total of 100%. We listed the assessment scores in Table 1.

2.6. Data extraction and synthesis

Two authors (DH and HW) extracted the data from the articles. The following information was extracted from the studies: study design, data collection instruments, results of each study, and notes or recommendations. The authors read every article thoroughly before extracting the data. A constant comparison strategy was used to compare the findings of each article as they emerged and find major themes among the data extracted.

3. Results

3.1. Demographics of the studies reviewed

Ten articles met the inclusion criteria and were included in the review. As shown in the PRISMA Flow Chart (Fig. 1), the initial search yielded 702 results. Records were deduplicated using first EndNote and then Covidence. Following deduplication, 433 unique citations remained. Titles and abstracts were screened in Covidence by two authors (DH and KS). The full text of 41 articles was reviewed by two authors (DH and HW), with ten articles meeting the inclusion criteria of the review.

The articles were mainly conducted in the Associate Degree Nursing (ADN) and Bachelor of Science in Nursing (BSN) programs. Studies were conducted in various countries, such as the United States, Greece, India, Philippines, Nigeria, Iran, and Finland, with one study focused on male nursing students. Sample sizes ranged from 6 to 536 students.

3.2. Students’ perceptions of the impact of faculties caring

In the literature reviewed, nursing students perceived that
nursing faculties played a significant role in students’ education and personal life. Nursing faculties played a significant role in students’ intent to graduate by building students’ confidence, creating a compassionate learning environment, and promoting students’ competence. Faculties’ caring behaviors, including respecting students, showing empathy, and using caring communication skills, were essential characteristics to affect students’ learning environments.

3.2.1. Building students’ confidence

Based on the findings of this review, students’ confidence was defined as the ability to be self-reliant in new situations. Instilling confidence and being respectful were the most personal caring behaviors. Differences occurred based on students’ social demographics, such as different countries and ethnicities. In the studies which examined students in Greece, India, the Philippines, and Nigeria, the most important caring attribute for an instructor was “instills confidence through caring” [11,15]. In contrast, a research study in Iran found that the most important attribute among nursing students was that the instructors were respectful to students and had positive sharing behaviors [16]. Instilling confidence in students through caring ranked as the second most important attribute, according to the study [16].

Nursing students in the United States had similar perceptions of their instructors, with the highest-ranking attribute being “instills confidence through caring” [17]. This article [17] also found a correlation between increased age of students and increased perceptions of their professors caring. This could be due to students’ life experiences and generational similarities between older students and their professors [17]. Fifer [17] also connected an increase in working hours of students to a decrease in the perception of their instructor caring, which could be attributed to the increased levels of stress on students both financially and mentally. In regard to race, Fifer [17] and Torregosa et al. [18] found that non-white students had an increased perception of their instructors caring overall. When students perceived caring in their faculties, who showed a personal level of care and helped students build their confidence, students were better apt to listen and learn.

3.2.2. Creating a compassionate learning environment

A compassionate classroom environment was referred to as an environment in which students felt understood, challenged, and encouraged. Students least reported attribute in all studies was that instructors exhibited “control versus flexibility” [11,15]. Control was defined as not allowing students to problem-solve and forcing students to follow instructions exactly as what faculties said. Flexibility, in contrast, allowed students to learn in a way that fit students the best while faculties provided support and guidance on safe practice [17]. Students reporting a lack of flexibility perceived
| Author(s)          | Sample            | Methods/Instruments                        | Major findings                                                                                                                                                                                                 | Quality score |
|-------------------|-------------------|--------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------|
| Mikkonen et al.   | 12 nursing students | Structured interviews                      | Empathy from instructors promoted a constructive learning experience and a 80% caring learning environment while a lack of empathy obstructed students’ learning. Students said that when they received empathy from their instructors, they were motivated to learn more, continue their studies, study harder, achieve better learning outcomes, and become better in class. A caring learning environment was perceived to reduce stress, promote communication, and build a positive student-teacher relationship. Lack of motivation in learning included unreachable standards set by the instructor and lack of guidance in learning and unfairness in course evaluation.                                                                 | 100%          |
| Mott [5]          | 6 nursing students | Open-ended interview questionnaire          | All participants had at least one experience with a faculty bully that impacted 60% of students. Themes summarized included: 1) bullying is an emotional experience, 2) respect is a mutual act, 3) resilience and persistence are key for success, 4) the learning environment is everything for students, and 5) perception is a reality. Emotions included: a) fear/intimidation (83%), b) frustration/anger/sadness/depression (67%), c) demeaning/belittled/felt stupid (67%), and d) decreased self-confidence (50%). | 80%           |
| Labrague et al.   | 450 nursing students | Nursing Students’ Perception of Instructor Caring (NSPIC) | Students care about how their instructors care for them. The highest-ranked subscale of the NSPIC in this study was to “instill confidence through caring,” indicating that instructors need to care and be confident in their students to promote growth. The lowest-ranked subscale was “control vs. flexibility,” suggesting that instructors should create better assignments allowing students to think for themselves and still follow the lead of instructors.                                                                 | 100%          |
| Mohammadpour et al. | 178 nursing students | Incivility in Nursing Education-Revised (INE-R) Survey | 61.8% of the participating students indicated that they had “sometimes” and “always” experienced “unfair assessment” during the last year. 14.6% had experienced “insincerity and coldness towards others.” 14% had always experienced “inefficient or ineffective teaching methods” and “refusing to talk about re-examinations, test deadlines, or revising grades.” 69.7% of the participants had never experienced “sending inappropriate or impolite emails to others.” 44.9% of the students indicated never experienced and “mentioning discriminative ideas (racial, ethnic, gender and others).” In the NSPIC survey, the highest-rated items by the participating nursing students in the order of the rank included that my instructor 1) helps me envision myself as a professional nurse, 2) makes me feel that I can be successful, 3) instills a sense of hopefulness in me for the future, 4) shows genuine interest in patients and their care, and 5) believes in me. As to students self-rated caring using the CBI survey, students rated the ability of ‘assurance’ the highest, followed by respectfulness, knowledge and skills, and connectedness (being the lowest). The NSPIC correlated significantly with the CBI ($r = 0.587$, $P < 0.001$), indicating the significant relationships between faculty caring and students’ self-perceptions of caring capabilities. Instructors’ instilling confidence through caring contributed most significantly to students’ CBI scores. | 100%          |
| Labrague et al.   | 586 nursing students | Nursing Students’ Perception of Instructor Caring (NSPIC) survey and the Caring Behavior Inventory (CBI) | In all categories, the faculty examined in this study were found to be above the 60% minimum requirement for the students to perceive them as caring, but there was still a gap shown that needed improvement. The increase in the age of students led to an increase in perceptions of caring. An increase in working hours led to a decrease in the perception of instructors caring. Nonwhite participants indicated an increase in their perception of professors caring in all scales measured. Students who perceived their instructors as caring reported higher course grades. Students were more likely to interact with faculty when they perceived faculty as caring. Students’ perceptions of faculty having a positive outlook, and being compassionate had an increasing effect on performance. For students who perceived racial discrimination on campus, their perceptions of faculty caring/trusting. ‘When students’ perceptions of campus racial discrimination increased, the positive relationships between students’ perceptions of faculty trust and students’ academic performance were becoming stronger. This finding indicated that at a time of feeling racial discrimination, faculties’ trust promoted students’ academic performance. Reasons for attrition included: 1) training program — organization of the training program and lack of support from faculty/teaching staff, 2) clinical placement — poor clinical placement with lack of emotional and practical support from staff, 3) theory-practice gap, and 4) personal circumstances. | 100%          |
| Zamanzadeh et al. | 160 BSN students  | Nursing Students’ Perception of Instructor Caring (NSPIC) |                                                                                     | 80%           |
| Fifer [17]        | 232 ADN nursing students | Nursing Students’ Perception of Instructor Caring (NSPIC) survey |                                                                                     | 80%           |
| Torregosa et al.  | 327 nursing students | Nursing Students’ Perception of Instructor Caring (NSPIC) Perceptions of Prejudice and Discrimination |                                                                                     | 80%           |
| Hoeve et al. [19] | 17 nursing students | Semi-structured interviews |                                                                                     | 80%           |
their instructors as less caring, which had a negative impact on students’ clinical learning experience. However, there was an argument that instructors must be controlling in clinical practice to protect patients, students, and their personal nursing license, and flexibility could be given to students with proper assignments and direction [19]. In a compassionate learning environment, students felt cared for because they thought that their voices were heard and that they were supported to learn.

3.2.3. Being competent

Based on the literature reviewed, being competent was referred to as students’ perceptions of their instructors’ capacity to effective teaching and student learning. One study found that 61.8% of the students had either sometimes or always experienced “unfair assessment” from their instructors in the previous year [12]. The same study also found that almost 15% of the students had experienced “insincerity and coldness to others” from their instructors, and 14% had always experienced “inefficient or ineffective teaching methods” and “refusing to talk about re-examinations, test deadlines, or revising grades.”

These findings were connected to a study that looked into why students chose nursing as a professional career. Students typically chose nursing because of the aspect of human contact and care [19]. For the students in the study who had considered dropping out, the main reasons included dissatisfaction about the training program, lack of support from faculties, being unprepared for clinical practice, and personal life circumstances [19]. When instructors did not exhibit competent teaching abilities and did not compromise with their students, a negative impact was made on their learning environment. Faculties’ caring competence had an impact on students’ drive to continue the nursing program, which was instrumental to the success of a nursing student.

3.2.4. Respecting students

Respecting students was defined as approaching students in the same respectful way a colleague should be treated. A study which interviewed six ADN/BSN nursing students in the mid-western United States found that all of the students interviewed had at least one faculty “bully” [5]. Mott [5] also found that 83% of the students interviewed experienced “fear/intimidation,” 67% felt “frustration/anger/sadness/depression,” 67% were made to feel “demeaned or belittled,” and 50% experienced “decreased self-confidence.” Though it was found in Mott’s study that students became more resilient after experiencing a faculty bully, a negative impact was still made on their learning environment and experience.

Concerning the intimidation and fear, some instructors were also perceived as prejudice. A study on the perception of instructors on male nursing students found discriminatory behaviors that consistently favored female students [20]. The male students in the study reported the following experiences: gender bias, being singled out, doing mainly stuff, limitations in clinical settings, and no male role models [20]. Thus, when students felt being biased, they did not feel that they belonged, and their learning environment was compromised. For male students to feel comfortable, Powers et al. [20] suggested faculties implementing gender-neutral terminology into nursing examples and lectures and treating all students as equals.

4. Discussion

This literature review examined the current research regarding undergraduate nursing students’ perceptions of faculty caring and its impacts on students’ intent to graduate. The findings indicate that students’ perceptions of faculty caring can affect their perceptions of the learning environment and sense of belonging, and therefore, impact their intent to graduate. Students’ perceptions of their instructors’ caring behaviors are instrumental in motivating them to continue learning. Faculties play a crucial role in building students’ confidence, creating a compassionate learning environment, being competent, and respecting students.

Faculties’ role in building student confidence is highly important. Students’ level of confidence contributes to both their success in nursing schools and the nursing profession. Their perceptions of their own skill level can be an indicator of their ability to perform well in clinical practice [21]. Building students’ level of confidence is recognized as one of the most effective methods of teaching nursing students [22]. Instructors who exhibit positive and caring behaviors promote students to build confidence and become more ready to join the professional nursing field [11]. Future research can longitudinally study the effect of faculties’ caring on promoting nurse confidence and resilience and reducing job-related stress or burnout.

The studies reviewed demonstrate that the learning environment that faculties create plays a substantial role in whether or not a student chooses to continue their education. Nursing students consider their instructors as a bridge between their nursing school study and the professional practice world. Mikkonen et al. [4] find that students are more likely to be motivated, continue their studies, and achieve better outcomes when their instructors treat them with empathy rather than disrespect. Torresgosa et al. [18] also indicate that students who perceive their instructors as caring report higher course grades and are more likely to interact with faculties. Accordingly, instructors, who exhibit empathy, respect, and competence to their students, are more likely to promote a positive learning environment encouraging and supporting students to work hard and continue on their path to becoming nursing professionals.

Students consider respect for students as an essential aspect of an instructor caring [16]. The disrespect from faculty is a primary cause of incivility between instructors and students [16]. Being respectful of students creates a trusting environment in which students can thrive and grow. A lack of respect between instructors and students can leave students a negative outlook on nurses and the profession [10]. Nursing is considered as both science and art [23], and thus, teaching nursing students should also focus on science and art [24,25], delivering knowledge in a caring and compassionate manner. Research by Horton-Deutsch et al. [26] calls faculties to become nurse leaders and take risks to do the right thing to support students. Perkins et al. [27] recognize the stress that students experience during their study and recommends faculty caring and encouragement to help students reduce stress. The
capacity of faculty caring plays an instrumental role in students' success in schools and their nursing careers later in life.

5. Recommendation and implication

This review shows that students' perceptions of faculty caring can have a crucial impact on their success in education. Correlations exist between faculties' caring behaviors and students' positive outlook of their education. Based on the literature reviewed, we summarize the following suggestions for nursing faculty.

5.1. Focusing on individual students’ needs

Faculties need to be aware of students’ learning environment and tailor their teaching in the most beneficial way possible to students’ learning outcomes [15]. Students express positive and negative experiences with faculties when they are part of a larger group and express the desire and need for an individualized teaching plan [19]. Individual students need to be the primary concern of a nursing instructor [17]. Nursing instructors who are consciously aware of their teaching strategies and behaviors and adjust them to fit the needs of the students create a more responsive and comfortable learning environment.

5.2. Providing continuing education and mentoring programs for instructors

Finding new ways to educate instructors on appropriate caring behaviors is beneficial to students. Mikkonen et al. [4] suggest providing continuing education for instructors, in which instructors can develop and increase their empathic skills and understand the importance of showing empathy on students’ learning and professionalism. Other suggestions for continuing education of instructors come from Labrague et al. [11] who suggest nurse educators become certified, which can benefit both instructors and students. Continuing education on instructing faculty empathy skills may promote students' perceptions of what nursing means to them and keep students on the path to finish their nursing education.

Faculty mentoring programs are also valuable to develop junior faculties. Swanson, Larson, and Malone [26] find that successful mentoring programs foster junior faculties’ academic success as scholars and educators. Effective mentoring programs help mentors and mentees build a productive relationship that is consisted of mutual respect, trust, and open communication. Effective mentoring programs can provide a win-win situation for both nursing schools and junior faculties [28]. Faculties can build their reputations and careers, and universities can benefit from the increasing contributions of the junior faculties.

5.3. Developing students’ empathetic and caring behaviors

Another aspect of the learning environment where professors have influence is to facilitate the development of students’ caring behaviors. Teaching strategies should include simulations, games with educational value, and patient narratives, which could actively engage students in developing and using their empathy skills and caring behaviors [15,29]. These teaching strategies can promote students’ perceptions of faculty ‘control’ versus ‘flexibility,’ which is ranked low by students in the studies reviewed. Simulation activities allow instructors to give full flexibility to students and explain to them what can be done differently without the risk of harm to patients or students [15,29].

6. Limitation

The focus of the literature review is mainly on undergraduate students’ perceptions of the impact of faculty caring. The studies in the review are conducted on nursing students in the ADN and BSN programs, which, thus, cannot represent nursing students in general. Nonetheless, this review has provided evidence that demonstrates the impact of faculty caring on students’ success. Based on the findings of the review, research gaps are recognized. Research is needed to examine the practical ways to promote faculty caring and the long-term effects of faculty caring on students’ professional development. For example, future research may longitudinally study the impact of faculties’ caring in nursing schools on promoting nurse confidence and resilience and reducing job-related stress or burnout.

7. Conclusion

This paper has critically evaluated and summarized the current literature about students’ perceptions of faculty caring behaviors. The learning environment faced by nursing students has an impact on their ability or intention to graduate. Improving graduation rates in nursing schools will impact the overall field of nursing. A significant impact on the learning environment is the faculty of nursing schools, who is the anchor of the nursing program. Faculties need to balance their control versus flexibility and exhibit caring behaviors to build students’ confidence, create a compassionate learning environment, be competent, and promote students’ growth and success in their nursing skills and knowledge. Faculty caring plays a fundamental role in improving students’ learning outcomes and intent to graduate.

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Conflicts of interest

The authors report no conflicts of interest.

CRediT authorship contribution statement

Dalton Henderson: Conceptualization, Data method-ology, Writing - original draft. Kerry A. Sewell: Methodology, Resources. Holly Wei: Conceptualization, Methodology, Supervision, Writing - review & editing.

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.ijnss.2019.12.009.

References

[1] Rosenberg K. RN shortages negatively impact patient safety. AJN Am J Nurs 2019;119: 51-51.
[2] Kiekkas P, Tsekoura V, Aretha D, Samios A, Konstantinou E, Igoumenidis M, et al. Nurse understaffing is associated with adverse events in postanaesthesia care unit patients. J Clin Nurs 2019;28(11–12):2245–52.
[3] Cherry J, Jacob SR. Contemporary nursing: issues, trends, & management. seventh ed. St. Louis, Missouri: Elsevier; 2017.
[4] Mikkonen K, Kyngas H, Kääriäinen M. Nursing students’ experiences of the empathy of their teachers: a qualitative study. Adv Health Sci Educ 2015;20(3):669–82.
[5] Mott J. Undergraduate nursing student experiences with faculty bullies. Nurse Educ 2014;39(3):143–8.
[6] Newton SE, Moore G. Use of aptitude to understand bachelor of science in nursing student attrition and readiness for the national council licensure
examination-registered nurse. J Prof Nurs 2009;25:273–8.

[7] Harris RC, Rosenberg L, Grace O’Rourke ME. Addressing the challenges of nursing student attrition. J Nurs Educ 2014;53(1):31–7.

[8] Wei H, Fazzone PA, Sitzman K, Hardin SR. The current intervention studies based on watson’s theory of human caring: a systematic review. Int J Hum Caring 2019 Jan;23(1):4–22.

[9] Horton-Deutsch S, Sherwood G. In: Reflective practice: transforming education and improving outcomes. second ed. Indianapolis: Sigma Theta Tau International; 2017.

[10] Aul K. Who’s uncivil to who? Perceptions of incivility in pre-licensure nursing programs. Nurse Educ Pract 2017;27:36–44.

[11] Labrague LJ, McEnroe-Petitte DM, Papathanasiou IV, Edet OB, Arulappan J, Tsaras K, et al. Nursing students’ perceptions of their instructors’ caring behaviors: a four-country study. Nurse Educ Today 2016;41:44–9.

[12] Mohammadipour M, Hasanvand S, Goudarzi F, Ebrahimzadeh F, Pournia Y. The level and frequency of faculty incivility as perceived by nursing students of Isfahan University of Medical sciences. J Med Life 2018;11(4):334–42.

[13] Moher D, Liberati A, Tetzlaff J, Altman DG, PRISMA Group, for the PRISMA Group. Preferred reporting items for systematic reviews and meta-analyses: the PRISMA statement. PLoS Med 6(7):e1000097.

[14] Hong QN, Gonzalez-Reyes A, Pluye P. Improving the usefulness of a tool for appraising the quality of qualitative, quantitative and mixed methods studies, the Mixed Methods Appraisal Tool (MMAT). J Eval Clin Pract 2018;24(3):459–67.

[15] Labrague LJ, McEnroe-Petitte DM, Papathanasiou IV, Edet OB, Arulappan J. Impact of instructors’ caring on students’ perceptions of their own caring behaviors: students’ caring. J Nurs Scholarsh 2015;47(4):338–46.

[16] Zamanzadeh V, Shohani M, Palmehi T. Nursing students’ perception of instructors’ caring behaviors in Tabriz University of Medical Sciences. J Caring Sci 2015;4(1):55–62.

[17] Fifer P. Associate degree nursing students’ perceptions of instructor caring. Teach Learn Nurs 2019;14(2):103–10.

[18] Torregosa MB, Ynalvez MA, Morin KH. Perceptions matter: faculty caring, campus racial climate and academic performance. J Adv Nurs 2016;72(4):864–77.

[19] Hoeye YT, Castelein S, Jansen G, Roodbol P. Dreams and disappointment regarding nursing: student nurses’ reasons for attrition and retention. Nurse Educ Today 2017;54:28–36.

[20] Powers K, Herron EK, Sheeler C, Sain A. The lived experience of being a male nursing student: implications for student retention and success. J Prof Nurs 2018;34(6):475–82.

[21] Watson D, Monson K, Marshall B. Working on nursing students’ resilience. Kai Taki 1995;25(1):14–6. 1995.

[22] Vallee S, Moridi G, Khaledi S, Garibi F. Nursing students’ perspectives on clinical instructors’ effective teaching strategies: a descriptive study. Nurse Educ Pract 2016;16(1):258–62.

[23] Wei H, Watson J. Healthcare interprofessional team members’ perspectives on human caring: a directed content analysis study. Int J Nurs Sci 2019;6(1):17–23.

[24] Hills M, Watson J. Creating a caring science curriculum: an emancipatory pedagogy for nursing. New York: Springer; 2011.

[25] Wei H, Ming Y, Cheng H, Biao H, Ming J, Wei TL. A mixed method analysis of patients’ complaints: underpinnings of theory-guided strategies to improve quality of care. Int J Nurs Sci 2018;5:377–82.

[26] Horton-Deutsch S, Pardue K, Young PK, Morales ML, Halstead J, Pearsall C. Becoming a nurse faculty leader: taking risks by doing the right thing. Nurs Outlook 2014;62(2):89–96.

[27] Perkins JB, Aquino-Russell C. Graduate nurses experience the sacred during transcendental meditation. Int J Hum Caring 2017;21(4):163–71.

[28] Swanson KM, Larson EL, Malone B. Mentors’ perspectives on supporting nurse faculty scholars. Nurs Outlook 2017;2016(65):315–23.

[29] Li J, Li X, Gu L, et al. Effects of simulation-based deliberate practice on nursing students’ communication, empathy, and self-efficacy. J Nurs Educ 2019;58:681–9.