

Original Article

Nursing Students' Perspective of Faculty Caring using Duffy's Quality Caring Model: A Q-Methodology Study

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Abstract

Background: Researchers of nursing education have found that students best learn concepts of caring from caring interactions with faculty, classmates, and patients. This places nursing faculty in the position to influence students' opinions and impact student acceptance and respect for the concept of caring within the nursing profession. However, literature shows that students do not always perceive faculty's caring and caring acts to exist.

Objective: The purpose of the study was to explore contemporary nursing students' perceptions of which characteristics, qualities, or behaviors exhibited by faculty are consistent with caring in academic settings, such as classrooms, simulation, and skills laboratory using Duffy's Quality Caring model.

Methodology: Q-methodology, a research method specifically used to study people's "subjectivity" or viewpoints, was used. This method consists of five steps, which are concourse development, creating of Q-statements from the concourse, data collection via Q-sort, which rank orders the Q-statements, data analysis using correlations and factor analysis, and lastly, interpretation of factors that assisted in the identification of model Q-sort(s) and descriptions of the perceptions.

Results: Three factors emerged, and the model Q-sorts associated with each were entitled "content-conscious," "cheerleader," and "consumer-focused."

Conclusion: Most contemporary pre-licensure nursing students see the delivery of content effectively and efficiently as the most caring behavior faculty can exhibit. Additionally, students believe that they should receive a quality product they have purchased and that faculty displays caring by helping them reach their goals. Lastly, only a small portion of students desire caring faculty who mentor them and support them emotionally. This information could help faculty understand contemporary nursing students and the characteristics that students feel demonstrate caring to better support student success and program outcomes.

Keywords: caring science curriculum; Q-methodology; nursing students; faculty caring

Introduction

Caring is considered the essence of nursing (Watson, 1998; Brown, 2011). Educators and researchers of nursing education have found that students best learn concepts of caring from caring interactions with faculty, classmates, and patients (Brown, 2011; Labrague et al., 2015). Brown

(2011) identified the need for emphasis on caring in nursing education, as they understood that nursing students needed to understand this concept to translate caring to future patients. By understanding what caring in nursing is, one can better learn it and, in turn, better practice it (Watson, 1998, Hill & Watson, 2011;). This places nursing faculty in the unique position to impact

student acceptance and respect for the concept of caring within the nursing profession.

Though caring is often best learned through caring interaction, current literature supports that faculty's caring and students do not always perceive caring acts to exist (Zamanzadeh et al., 2015; Labrague et al. 2016; and Henderson et al., 2020). In part, this misconception can be accredited to the balance of caring and imbalance of power in the student-faculty relationship (Henderson et al., 2020). Additionally, what characteristics, qualities, or behaviors students identify as being consistent with faculty caring can vary, thus contributing to a perceived lack of caring on the part of faculty by students. Research indicates that faculty role-modeling caring may impact what students learn about caring and how they demonstrate caring in clinical situations (Kelly, 2007; Labrague et al., 2015; Henderson et al., 2020). Suppose students' perceptions of faculty caring are not congruent with the faculty's. In that case, differences in learning about this vital nursing concept can result, and learning related to caring in nursing can be negatively impacted. Evidence supporting what students perceive as caring and caring behaviors exhibited by faculty is sparse and outdated (Henderson et al., 2020). An understanding of what contemporary students perceive as caring, nurses' caring behaviors, and, more specifically, of nursing faculty in academic settings is needed to ensure these attributes and behaviors are consistently modeled for students.

Background: The institution that is the site of study is a public university in the southeastern United States. Additionally, the school of nursing has two separate campuses. The caring science curriculum at the study's site was implemented by the dean and staff beginning in 1992. The caring science curriculum's goal was to allow for the connection of heart, soul, mind, spirit, and emotions of students and teachers while also inviting passion, intellect, morals, and love into the classroom (Hall & Watson, 2011). Students explore several theorists throughout this curriculum, including Jean Watson, Milton Mayeroff, and Joanne Duffy. These caring theories are taught to students, but every semester students participate in caring group activities that cross between the classroom and clinical settings. Also, the nursing department governing body has

committees dedicated to addressing students' needs in the "Caring for Students Committee" and the needs of faculty in the "Caring for Faculty Committee."

However, analysis of the pre-licensure nursing program's end of semester course evaluations and exit surveys for the last five years demonstrate that students and faculty appear to view caring behaviors and attributes differently. There appears to be a disconnect between faculty caring behaviors and students' perceptions of those behaviors as caring. Therefore, the purpose of this multiple-phase study was to explore contemporary nursing students' perceptions of which characteristics, qualities, or behaviors exhibited by faculty are consistent with caring. This information may then be used to help nurse educators identify best practices to promote positive faculty-student relationships, ultimately enhancing student success. The research question addressed in this study was: What characteristics, qualities, or behaviors exhibited by faculty do pre-licensure undergraduate nursing students in a caring science curriculum perceive as indicating that faculty are caring?

Methodology: Q-methodology was used in this study's design because it is a method specifically used to study people's "subjectivity" or viewpoints (Brown, 1982; Watts & Stenner, 2012). Q-methodology consists of qualitative and quantitative characteristics and comprises five steps to implement (Watts & Stenner, 2012). These steps include: (a) development of a concourse, (b) selection of Q statements from the concourse which form a Q sample, (c) completion of a Q sort in which participants rank-order the Q sample, (d) data analysis of the Q sorts using correlations and factor analysis, and (e) interpretation of the significant factor loads that assisted in the identification and description of model Q sort(s). Each model Q sorts identify the perceptions or viewpoints of the participants.

Duffy's Quality Caring Model (2018) focuses on relationship-based caring and is the framework for which the institutional setting created their caring science curriculum. The basis of this model is the nurse-patient relationship. Duffy (2018) stated that nurses should engage in caring relationships for the patient to feel cared for. The engagement in

genuine caring relationships is defined by Duffy's eight caring factors, which, if implemented, help solidify the caring relationship. These caring factors are as follows: mutual problem solving, attentive reassurance, appreciation of unique meanings, healing environment, human respect, encouraging manner, basic human needs, and affiliation needs (Duffy, 2018). Because this framework is the basis of the caring science curriculum from which the participants come, the researchers used the eight caring factors to guide the development of the concourse and Q-sample used for data collection. After data analysis, this framework guided the interpretation of results.

Institutional review board approval was obtained before the beginning of the study. With Q-methodology, the sample size is not as crucial as is obtaining a heterogeneous sample of the participants (Watts & Stenner, 2012). Therefore, a purposive, heterogeneous sample of the first and second-year, currently enrolled pre-licensure undergraduate nursing students who have completed at least one semester of the nursing program in the caring science curriculum were recruited for the study. Participant recruitment occurred at several points throughout two semesters and on both campuses sites to ensure an adequate and appropriate sample was obtained. Informed consent was also obtained from all participants, and numerical coding was added to the data gathered before analysis to maintain anonymity.

Data analysis used several statistical processes, including by-Pearson correlation, factor analysis, factor loading, and factor rotation using an alpha value of 0.05 to determine statistical significance. A freeware program called PQMethod 2.35 (Schmolck, 2014) was used to analyze the data. The following criteria guided the analysis: (a) ability to explain as much of the variance in the correlation matrix as possible, (b) minimizing the number of confounding sorts (sorts that load on more than one factor), (c) minimizing non-significant sorts (sorts not loading on any one factor), and (d) avoidance of significantly correlated factors (Watts & Stenner, 2012). Once factors were identified, a constant comparative process was used to explore viewpoints related to the topic being studied to create themes for the identified factors. Post-sort written explanations

of the participants' placement of Q statements at the far ends of the card sort grid (+5, -5) were obtained during data collection and offered further viewpoints for the model Q's final interpretative process sorts.

Results

The researcher's interpretation of the resultant factors and factor arrays comes from an informed understanding of the research topic, statistical analysis of Q statement placements, and consideration of participants' statements collected (Watts & Stenner, 2012). Three highly significant factors, which operationalized pre-licensure nursing students' perspectives about faculty caring behaviors and characteristics, were revealed (Table 1, 2, and 3). Forty-one Q-sort were collected, with three factors identified to account for 90% ($n = 37$) of the Q sorts. Only 10% or four Q sorts were not represented in the following interpretations because they did not significantly load on any one factor. Once factor analysis was completed, and significantly loaded factors were identified, a return to a qualitative process was used to interpret the participants' factors or shared viewpoints. The three statistically significant factors (model Q-sorts) were labeled "content-conscious," "cheerleader," and "consumer-focused."

Content Conscious - Factor One: The first factor, "content-conscious" accounts for the largest portion of participants (46%, $n = 17$). Significant Q-statements that students strongly agreed with (+5 and + 4) include faculty teaching the material using detailed explanations of real-life examples and having teachers communicate expectations and provide helpful feedback. Students that loaded onto this factor commented that they want confident teachers. They appreciate faculty who share their experiences in the profession and can communicate "the why" of content. One student explained why they strongly agreed (+5) with Q-statement 19, "should be knowledgeable about content," by stating, "*the content is why we're all here; it should be explained well.*" Another student strongly agreed (+5) with Q-statement 17, "be willing to explain difficult content in more detail," by stating, "*I feel like this is a crucial part of my learning. Sometimes it is very difficult to find reliable or comprehensible answers*

online/references. It is important to me to understand the why to understand the how."

Conversely, the students who sorted into the factor "content-conscious" perceived the statement they most disagreed (-5) with regarding a caring faculty behavior was Q-statement 29, "allow the students to come late to class" stating "It is disrespectful for a student to arrive late to class. The students should know the expectations. Unless there is a valid reason, tardiness should not be accepted.". Students also most disagreed (-5) with Q-statement 52 "makes you feel like they are in this struggle with you," stating "I feel that the professor should not be in the struggle with us, but they have gone through the struggle before us and then can teach us from that experience."

Cheerleader - Factor Two: The second factor, "cheerleaders," accounted for the smallest portion of participants (16%, $n = 6$) and included most agreed (+5 and +4) statements students use to identify faculty caring behaviors as "being kind," "being helpful," and "being understanding," "being a teacher who will push students to do one's best," "bring out the best in students," and "show genuine concern for students' academic success." Students who sorted into this factor most strongly agree with Q-statement 40, "that faculty show they are vested in the student's learning" and Q-statement 25 that faculty "show respect to the student" stating "When teachers show respect to others it shows that they genuinely care much more for you. Lack of respect indicates that they don't think much of you – aside from being their student." Conversely, students in this factor strongly disagree with Q-statement 31 "Is someone who works with you if you need an extension on an assignment" stating, "I believe that you should be able to have time management skills and if a caring faculty truly cares about you, they should expect to uphold a standard on when turning in assignments on time."

Consumer-Focused - Factor Three: The third factor was labeled "consumer-focused" and accounted for 38% ($n = 14$) of participants. Students in this factor strongly agreed (+5) with Q-statement 59 "should help students reach the goal of becoming a nurse" by stating, "The faculty should help the students' reach the goal of becoming a nurse because that is what we are here for and that's what we paid for." Another student stated, "The main purpose of choosing nursing is to obtain a BSN and pass the NCLEX. We rely on proper material, tools, and evaluation to achieve this goal." Students in this factor also strongly agree with Q-statement 14, "does their best to teach students the content" by stating, "this is important because there is so much content available and not enough time to learn all of the information, so we need teachers to teach the content needed." Other students in this factor expressed the same sentiment stating, "does their best to teach content; so I can learn and get the most out of class" and "It shows they're motivated to teach us so we can be the best nurses."

Conversely, students in this factor, interestingly, strongly disagreed (-5) with Q-statements "knows their students by name." Students in this factor stated, "interpersonal relationships are not a big priority. We strive to pass as a whole.", "Knowing the students by their names does not have a major impact on the instructor or how well they teach.", "they don't need to (know) my name to care." and "I don't think it really matters as long as they teach right." Lastly, like factor one, "content-conscious," students in the "consumer-focus" factor strongly disagreed with Q-statement 29, "allow the student to come to class late," stating, "It's unprofessional to come to class or work late. That shows irresponsibility, and a professor shouldn't allow that. This should only be okay if it's an excused absence or emergency" and "The teacher should not allow the student to come late to class because it takes away from the learning experience."

Table 1: Factor 1 – Distinguishing statements

No.	Q-Statements	Ranking	Z-score	Duffy**
19	should be knowledgeable about content	5	2.27*	6
17	be willing to explain difficult content in more detail	5	1.99	6
2	give helpful feedback	4	1.80*	1
60	Should communicate expectations	4	1.79*	6
38	Helps the student understand what they did wrong	3	1.43*	1
13	implements constructive criticism given to them	3	1.27*	1
4	real-life examples for all content	3	0.95	6
44	should appreciate the differences of learning styles	2	0.63	5
30	not be punitive in their teaching and/or grading style	2	0.53*	7
27	is understanding	1	0.37*	4
59	help student's reach the goal of becoming a nurse	1	0.34*	8
34	does not overload students with unnecessary reading	1	0.28*	6
46	other things going on in their life outside of school	1	0.24*	5
24	should be non-judgmental	1	0.12*	3
16	is one that can mentor me	0	0.07	8
43	should show genuine concern for your academic success	0	-0.02*	4
41	knows their students by name	0	-0.10*	2
12	is kind	0	-.032*	3
9	should appreciate cultural differences	-1	-.043*	5
47	should show they care for our wellbeing	-1	-.051*	7
48	should show they care for our wellbeing	-1	-.052*	7
54	motivates the students	-1	-0.67*	4
10	understand that nursing school is difficult for students	-2	-0.81*	5
51	helps us pass tests by teaching us what will be on it	-2	-0.81*	1
6	wants everyone to succeed	-2	-0.82*	4
37	pushes me to do my best	-3	-0.87*	1
31	works with you if you need an extension on an assignment	-3	-0.94*	5
21	should bring out the best in their students	-3	-0.95*	4
15	should help with test taking strategies	-3	-0.95*	1
33	makes the learning environment fun	-4	-1.48*	6
52	makes you feel like they are in this struggle with you	-5	-1.87*	1
29	allows the students to come late to class	-5	-2.35*	5

P < .05 ; * Indicates Significance at P < .01 ** Duffy's Quality Caring Model

1 – mutual problems solving; 2 – attentive reassurance; 3 – human respect; 4 – encouraging manner; 5 – appreciation of unique meaning; 6 – healing environment; 7 – basic human needs; 8 – affiliation needs

Table 2: Factor 2 – Distinguishing statements

No.	Q-Statements	Ranking	Z-score	Duffy
40	should show that they are vested in your learning	5	1.63*	2
39	is helpful	4	1.53*	1
12	is kind	4	1.48*	3
37	pushes me to do my best	4	1.44*	1
21	should bring out the best in their students	4	1.36*	4
43	should show genuine concern for your academic success	3	1.30*	4
27	is understanding	3	1.26*	4
50	is honest	3	1.17*	3
59	help student's reach the goal of becoming a nurse	3	0.98*	8
18	helps the student overcome test anxiety	3	0.95*	7
48	Cares about my wellbeing	2	0.94*	7
2	give helpful feedback	2	0.77*	1
41	knows their students by name	2	0.62*	2
5	not just another student	1	0.46*	5
23	makes the student feel valuable	1	0.41*	2
42	should be friendly	1	0.25*	3
13	implements constructive criticism given to them	0	0.13*	1
19	should be knowledgeable about content	0	0.12*	6
44	should appreciate the differences of learning styles	0	0.11	5
10	understand that nursing school is difficult for students	0	0.09	5
33	makes the learning environment fun	-1	-0.03	6
14	does their best to teach students the content	-1	-0.19*	6
38	helps the student understand what they did wrong	-1	-0.55*	1
46	other things going on in their life outside of school	-2	-0.57*	5
57	grade students fairly	-2	-0.61*	3
7	believes in second chances	-2	-0.64*	3
26	should believe that the student wants to learn	-2	-0.70	5
3	makes tests that truly reflect what students learned	-3	-1.13*	1

35	makes time for each individual student	-3	-1.15*	2
34	does not overload students with unnecessary reading	-3	-1.26*	6
17	be willing to explain difficult content in more detail	-4	-1.37*	6
4	real-life examples for all content	-4	-1.44*	6
51	helps us pass tests by teaching us what will be on i	-4	-1.55*	1
30	not be punitive in their teaching and/or grading style	-5	-2.39*	7
31	works with you if you need an extension on an assignment	-5	-2.64*	5

P < .05 ; * Indicates Significance at P < .01 ** **Duffy's Quality Caring Model**

1 – mutual problems solving; 2 – attentive reassurance; 3 – human respect; 4 – encouraging manner; 5 – appreciation of unique meaning; 6 – healing environment; 7 – basic human needs; 8 – affiliation needs

Table 3: Factor 3 – Distinguishing statements

No.	Q-Statements	Ranking	Z-score	Duffy
59	help student's reach the goal of becoming a nurse	5	2.21*	8
17	be willing to explain difficult content in more detail	4	1.62	6
49	stress can influence our ability to perform well	4	1.28*	6
19	should be knowledgeable about content	3	1.20*	6
46	other things going on in their life outside of school	3	1.12*	5
51	helps us pass tests by teaching us what will be on it	3	0.90*	1
38	helps the student understand what they did wrong	3	0.87*	1
34	does not overload students with unnecessary reading	3	0.86*	6
25	shows respect for students	2	0.77*	3
55	should be empathetic to my concerns about the class	2	0.62*	5
10	understand that nursing school is difficult for students	2	0.56	5
4	real-life examples for all content	1	0.52	6
43	should show genuine concern for your academic success	1	0.50*	4
32	we have no idea what it's like being a real nurse	1	0.41*	8
45	listens to you	1	0.27	4
21	should bring out the best in their students	0	0.24*	4
48	Cares about my wellbeing	0	0.13*	7
2	give helpful feedback	0	0.12*	1
37	pushes me to do my best	0	-0.05*	1
27	is understanding	-1	-0.16*	4
58	should have timely replies	-1	-0.58*	1
33	makes the learning environment fun	-2	-0.60	6
53	is receptive to the insight of students	-2	-0.74*	2

44	should appreciate the differences of learning styles	-3	-0.84*	5
12	is kind	-3	-0.85*	3
13	implements constructive criticism given to them	-3	-0.97*	1
30	not be punitive in their teaching and/or grading style	-4	-1.49*	7
31	works with you if you need an extension on an assignment	-4	-1.89*	5
41	knows their students by name	-5	-2.34*	2
29	allows the student to come late to class	-5	-3.13*	5

P < .05 ; * Indicates Significance at P < .01 ** **Duffy's Quality Caring Model**

1 – mutual problems solving; 2 – attentive reassurance; 3 – human respect; 4 – encouraging manner; 5 – appreciation of unique meaning; 6 – healing environment; 7 – basic human needs; 8 – affiliation needs

Table 4: Demographics Listed by Factor

Demographic Characteristic	Factor 1 Content-conscious (17 total)	Factor 2 Cheerleader (6 total)	Factor 3 Consumer-focused (14 total)
Gender	12 Female	4 Female	13 Female
	5 Male	2 Male	1 Male
Age	13 < 25	4 < 25	13 < 25
	2 = 26-30	2 = 31-40	1 = 26-30
	2 = 41-50	0 = 41-50	0 = 41-50
Program level	8 Junior	2 Junior	9 Junior
	9 Senior	4 Senior	5 Senior
Campus	11 = Campus 1	3 = Campus 1	8 = Campus 1
	6 = Campus 2	3 = Campus 2	6 = Campus 2

Table 5: Consensus Statements

No.	Statement	Rank Factor 1	Rank Factor 2	Rank Factor 3
1	should be approachable	2	2	2
8	should be patient	-1	0	-1
20	should be supportive	0	0	0
22	should be compassionate	0	-1	0
28	should be considerate	1	0	0
36	should be flexible	-1	-3	-3
45	listens to you	2	2	1
56	should be encouraging	0	-1	1-

Discussion

In Q-methodology, demographic information can be used to inform the factor interpretation. When analyzing the demographic data for this study, no relationships between the demographic characteristics of gender, age, the campus of instructions, or semester within the program were found that would further explain the significantly loaded factors (Table 4). These findings are similar to Labrague et al. (2016), in which they evaluated 450 nursing students' perceptions of faculty caring in four different countries, India, Greece, Nigeria, and the Philippines. They, too, found that even though the concept of caring could have cultural components, no demographic data statistically correlated with their findings. This may indicate that caring behaviors, in an academic setting, reflect more the learner's needs than defined as the needs of a student entering a profession based on caring.

This thought can be further supported by looking at the consensus statements for this study. Consensus statements are those which do not load on any one factor significantly. Another way to consider consensus statements are those Q statements that all students agreed with and ranked similarly. Since Q-methodology's goal is to distinguish between Q-statement rankings and thus generate significantly loaded individual factors, the

consensus statements end up not playing a role in forming the model Q-sorts. The consensus statements for this study (table 5) are revealing in that they show, based on the neutral ranking of Q statements by all participants, that characteristics of being compassionate, considerate, flexible, or encouraging are not as indicative of faculty caring behaviors as those that define the significantly loading factors described above.

Again, nursing students in the academic setting may find the proficient use of effective teaching strategies as more caring, as noted by factor one labeled "content-conscious." The often thought of student-teacher relationship includes being encouraging, considerate, and compassionate. These findings are like several studies that found that students believe effective teachers are prepared, use active teaching strategies, and that students place greater value on how knowledgeable the educator is than on the relationships (Kelly, 2007; Al Nasser et al., 2014; Labrague et al., 2015; Matthew-Maich et al., 2015; and Reising, James, and Morse, 2018). This is also reflected in factor two of this study, "consumer focused," in which 38% of student participants strongly disagreed (-5) with the Q-statement that faculty demonstrate caring by "knows students by their name." This finding was interesting because assumptions that are often the basis of best practices stress the importance of educators

knowing the students by name (Chambliss, 2014; Pralle, 2016; and Cooper et al., 2017). Another indicator that supports the idea that nursing students desire to have sufficient class time is that 84% strongly disagreed (-5) with allowing "coming to class late" (Q-Statement 29) was a caring faculty behavior. Nursing students felt that allowing students to come late to class was an issue of concern. For example, they felt this is disrespectful to other students, disruptive, and not unprofessional. This could indicate that nursing students in this study relate professionalism to caring rather than the characteristics of being patient, supportive, considerate, and encouraging.

As nurse educators in a curriculum based on caring science, it may be important to reflect upon and remember that students' genuine caring ultimately goes back to how well we teach them. The two factors, "content-conscious" and "consumer-focused," that account for 84% of the Q-sorts in this study, indicate that students do indeed care that nurse educators are experts in their present content. Students care that nurse educators can effectively use examples from their practice to explain the content and be willing to go that extra step to explain difficult content to connect with the student. As mentioned earlier, the Q-statements were aligned with the eight caring factors in Duffy's Quality Caring Model. All positively placed Q-Statements in both the "content-conscious" factor one and "consumer-focused" factors aligned with Duffy's caring factor one, mutual-problem solving and caring factor six, healing environment (table 1, 2, and 3). When applying Duffy's caring factors to the academic setting, one can now see how students perceive a healing environment, the classroom, and how educators and students are in a relationship that stresses mutual problem solving and learning content effectively.

This finding can also be reflected in what Benner (1982) meant when explaining how nursing students go from novice to expert nurses. Benner noted that novices have no experience. Therefore, the development of knowledge needs to begin with practical associations repeated often and then begin to be linked to experiences gained during the educational process. Novice nursing students want to be shown why content is essential and how to use experts' content to transition to becoming a

nurse (Benner, 1982). This concept was again revisited and emphasized further in Benner et al. (2010) *Educating nurses: A call for radical transformation*, which has been used throughout academia and the healthcare industry to improve nurses' education. It may be that nurse educators have stereotyped or labeled the contemporary nursing student as demanding and challenging to teach. Nursing education may have strayed away from teaching pedagogy that effectively meets the students' academic needs—ultimately impacting their perceptions of caring.

Lastly, when considering the contemporary nursing student's perceptions of caring, nurse educators need to consider the influence of the socio-economic underpinnings of the time and personal contextual issues rather than just the student's generational characteristics.

As many know, college programs are expensive and cost thousands of dollars a year to receive an education. (Bustamante, 2019). Students in higher education understand the consumer-based society in which they live, and by paying for an education, a student has certain expectations they want to be met. Contemporary nursing students are no different, and this was reflected in factor three, "consumer-conscious." These students not only perceive caring faculty as one who can "explain difficulty content in more detail" (Q-statement 17), they perceive caring faculty behaviors that help them meet their goals of becoming a nurse and understand the stressors they are under in trying to meet this goal.

In the study conducted by Labrague et al. (2015), in which they quantitatively determined students' perceptions of faculty caring, they found that faculty need to improve most on the behaviors related to controlling the educational environment and become flexible meet the student's needs. This can explain why students in the "consumer-conscious" factor perceive faculty caring as behavior that helps them meet their goals. Again, as noted by the consensus statements shared in Table 5, caring attributes of encouragement, support, and compassion need to be provided in the context of helping students meet their goal of becoming a nurse and not just part of the normalized behaviors faculty assume they should exhibit.

Limitations: Much of the strength and reliability of data collection using Q-methodology comes from creating statements that broadly represent viewpoints related to the phenomena being studied. However, the literature does not reveal a prescribed stopping point when exploring the discourse related to the studied phenomena and used to generate viewpoint statements (Brown, 1982, Watts & Stenner, 2012). Therefore, the researchers cannot be assured that the Q statements used during data collection provided a full representation of the phenomena' possible viewpoints. Also, because Q-methodology uses a purposive sample, there are limitations to applying these results to the general population and the fact that the participants were nursing students from one public institution in the southeast using a caring science-based curriculum.

Conclusion: Though results are not generalizable due to the nature of the study's design, the authors believe that the findings can add to the conversation of how to model caring behaviors in academic settings, such as in the classroom, in simulation, or in the skills laboratory. By extending our influence and modeling caring in the academic setting, students will feel cared for and are motivated to care for others. Ultimately, this will impact the patients they will be taking care of.

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