

Evolution of Watson's Human Caring Science in the Digital Age

Kathleen Sitzman, PhD, RN, *East Carolina University, College of Nursing*

Abstract

The emergence of the digital age has expanded the role of the nurse to include frequent digital interactions with instructors, peers, patients, managers, organizations, communities, and beyond. Also, because digital resources provide expansive teaching/learning/sharing opportunities where challenges related to geography, proximity, time, language, culture, and economics do not preclude accessibility, new possibilities for establishing global caring/learning communities have emerged where transdisciplinary, multicultural, diverse cohorts from all over the world have opportunities to come together to learn about caring and share unique perspectives and experiences. Ten studies based on Watson's human caring theory, all with a focus on teaching, conveying, and sustaining caring in online nursing classrooms, have validated the applicability and relevance of utilizing Jean Watson's human caring theory to better understand the phenomenon of caring in digital settings.

Keywords: digital caring, caring online, Jean Watson, caring science, mindfulness

Watson's Caring Science in Education and Practice

“Caring is considered by many as one central feature within the metaparadigm of nursing knowledge and practices” (Watson & Smith, 2002, p. 456). As the nursing profession evolves over time, the day-to-day practice of professional caring also evolves. Ongoing exploration of what it means to care in all areas of nursing practice is key to preserving caring as nursing's core. Definitions of nurse caring through time have focused on nurses attending to the physical and emotional needs of others during face-to-face encounters (Judd & Sitzman, 2014; Nightingale, 1859). Extensive knowledge development has clarified how caring in the nursing profession can be perpetuated through face-to-face interactions that model caring in educational activities, peer interactions, and nurse-client encounters among teachers, students, and professional colleagues (Bevis & Watson, 2000; Touhy & Boykin, 2008). Watson's human caring theory, introduced in nursing literature in 1979 (Watson, 1979), has provided an enduring theoretical foundation for exploring, understanding, and enacting key caring dimensions in nursing and beyond. Fundamental elements of this theory include:

- Transpersonal caring moments/caring occasions, wherein “. . . the one caring connects with and embraces the spirit of the other through authentic, full attention in the here and now, and conveys a concern for the inner life and personal meaning of another (Sitzman & Watson, 2014).
- Ten Caritas Processes to support caring comportment (Sitzman & Watson, 2014):
 1. Demonstrate lovingkindness, compassion, and equanimity with self and others.
 2. Be fully and authentically present.
 3. Nurture personal sensitivity through spiritual awareness and practice.

4. Cultivate trusting-loving-caring relationships.
5. Engage in authentic, nonjudgmental listening/interacting in both positive and negative situations.
6. Promote creative problem solving through full use of self and resources.
7. Employ transpersonal teaching and learning methods that honor the learner's frame of reference.
8. Create holistically healing environments at all levels.
9. Assist with basic needs as sacred acts.
10. Open oneself to mystery and unknowns, and allow for miracles.

The emergence of the digital age has expanded the role of the nurse to include interactions in cyberspace, where face-to-face contact is largely absent and digital interactions such as e-mail, texting, and online learning are integral (Sitzman, 2016a; Sitzman & Watson, 2017). Because digital interactions are now elemental to the nursing role in most professional settings, understanding how to model, teach, convey, and sustain digital caring is critical to maintaining caring as a core value in nursing. Watson (2002) anticipated this trend before digital interactions in nursing practice became widespread and commonplace:

The interface of technology and human technology changes the basic ontological position of separation and embraces—or is required to be open to—an ontological position of unity, connectedness, and transpersonal consciousness and technology that transcend time, space, and physicality. . . . The implications invite new horizons of human technology evolution, which can embrace virtual and real, nonphysical and physical caring in a new order for new meanings [to emerge]. (p. 43)

Watson (2002) describes electronic/digital/virtual human interactions as nonlinear and disembodied experiences where caring and

connection can be nurtured in new ways that are not limited by proximity, time, or space. Watson's human caring theory has provided a lens through which digital interactions can be conceived as opportunities for reaching across distance and time to convey, teach, and share caring and love with any and all who have access to digital resources.

Are Hallmarks of Human Caring Theory/Caritas Practice Evident in Digital Nursing Interactions?

Knowledge development related to caring in online nursing education has illuminated the nature of caring practice in everyday teaching/learning situations where physical proximity is absent and a myriad of nonproximal interactive opportunities are routinely employed to maintain ongoing human-to-human caring connections. Results from 10 caring online studies that utilized Watson's caring science as a guiding framework have validated the applicability of Watson's work in this environment (Hebdon, Clayton, & Sitzman, 2016; Leners & Sitzman, 2006; Mann, 2014; Mastel-Smith, Post, & Lake, 2015; Sitzman, 2010, 2015, 2016a, 2016b; Sitzman, Jensen, & Chan, 2016; Sitzman & Leners, 2006).

Ten Studies That Explored Digital Caring

Results from the 10 studies listed above suggest that Caritas practice can be conveyed, sustained, and taught in digital settings. Table 1, entitled Ten Studies Related to Digital World Caring, provides a brief overview of findings from each of the 10 studies.

Four of the studies focused on nursing student perceptions of caring in online classrooms. Sitzman and Leners (2006) published results of a pilot study that focused on 11 undergraduate nursing students' perceptions of caring and uncaring in online classrooms. Themes emerged that clarified student preferences and concerns in the online classroom setting. Leners and Sitzman (2006) replicated the Sitzman & Leners (2006) study, this time focusing on 39 graduate nursing students' perceptions of caring and uncaring in online classrooms. Themes emerged that provided insight into the caring needs of graduate nursing students in online classroom settings. Sitzman (2010) then completed a larger national study, based on results of the two pilot studies (Leners & Sitzman, 2006; Sitzman & Leners, 2006) discussed above, with 122 undergraduate nursing students that clarified specific student-preferred caring behaviors for instructors who teach online. Mann (2014) replicated the Sitzman (2010) study with 48 online RN-BSN students. Study participants identified three important

Table 1*Ten Studies Related to Digital World Caring*

Study	Findings
Sitzman & Leners (2006) explored 11 undergraduate nursing students' perceptions of instructor caring in online nursing classrooms.	<p>Eight themes emerged:</p> <ul style="list-style-type: none"> • Frequent feedback • Timeliness • Reciprocity of caring online • Personal connection and empathy • Clarity • Multiple contact opportunities • Second-fiddle worries • Teacher's commitment to learning
Leners & Sitzman (2006) explored 39 graduate nursing students' perceptions of instructor caring in online nursing classrooms.	<p>Six themes emerged:</p> <ul style="list-style-type: none"> • Empathic perspective • Timeliness of communication • Tone of appreciation • Being the best I can be • Finding a chord of harmony • Feeling the passion of caring online
Sitzman (2010) completed a national study in which 122 undergraduate nursing students clarified what they perceived to be caring online instructor behaviors in online classrooms.	<p>Four general caring online behavioral attributes were identified: clarity/expertise, timeliness, empathic presence, and full engagement/accessibility (Sitzman, 2010, p. 176). Preferred behaviors included:</p> <ul style="list-style-type: none"> • Provide clear and detailed written instructions for course activities and assignments. • Engage in timely communication. • Demonstrate excellence, passion, and enthusiasm in relation to teaching/learning. • Provide individual, private guidance when needed. • Refer to specifics in students' work so they know it has been read. • Ensure accessibility so students are able to get help when needed. • Share ongoing online challenges and remedies so students know they are not alone.

(Table 1 continued)

Table 1 (continued)

Study	Findings
<p>Mann (2014) replicated the Sitzman (2010) study with 48 RN–BSN students at historically black colleges and universities.</p>	<p>The three most important activities an instructor could do to create a caring online learning environment included:</p> <ul style="list-style-type: none"> • Attention to detail in organization and clarity • Prompt and detailed assignment feedback • Prompt response to students' questions
<p>Sitzman (2016b) completed a national study involving 56 nursing instructors who were asked to identify student cues that prompted caring interventions in online classrooms, the nature of the caring interventions they initiated, and student response to caring interventions.</p>	<p>Cues that prompted caring fell into 6 categories:</p> <ul style="list-style-type: none"> • Academic struggle • Appeals for help • Concerning behaviors • Withdrawal • Personal problems • Positive events <p>Instructor responses fell into 3 categories:</p> <ul style="list-style-type: none"> • Reaching out • Concrete academic support • Intentional caring comportment <p>Student responses fell into 3 categories:</p> <ul style="list-style-type: none"> • Gratitude • Finding their voice • Academic improvement
<p>Twenty-six of the 56 respondents in the Sitzman (2016b) national study provided unsolicited rich narrative detailing their experiences of caring in online nursing classrooms, which resulted in an additional nested study (Sitzman, 2015) that further explored instructor perceptions of caring in online settings.</p>	<p>Three themes emerged that described an iterative process for interacting with students in a caring manner online:</p> <ul style="list-style-type: none"> • <i>Sensing</i> circumstances • <i>Connecting</i> through reaching out • <i>Facilitating</i> growth and learning based on individual needs

(Table 1 continued)

Table 1 (continued)

Study	Findings
Sitzman (2016a) then analyzed information in previous caring online studies (Leners & Sitzman, 2006; Mann, 2014; Sitzman, 2010, 2015, 2016b; Sitzman & Leners, 2006) to assess whether consistent caring communication patterns were evident.	<p>Six consistent communicative elements emerged:</p> <ul style="list-style-type: none"> • Offering full presence • Acknowledging shared humanity • Attending to the individual • Asking for and providing frequent clarification • Demonstrating flexibility • Acknowledging challenges and pointing out favorable opportunities
Mastel-Smith et al. (2015) explored faculty perceptions and expressions of caring presence in online classrooms and integrated findings with Watson's Caritas Processes.	<p>Four themes emerged from the data:</p> <ul style="list-style-type: none"> • <i>Online teaching experiences</i> that encompassed feelings about online teaching, teaching philosophy, technology, communication, teaching methods, and student engagement. • <i>Similarities and differences between online and face-to-face teaching</i> including absence of physical proximity, online interaction as a great equalizer, time management, availability to students, disclosure/anonymity, and knowing students. • <i>Online presence</i> defined by course preparation, communication patterns with students, and being part of the students' learning experiences. • <i>Online caring presence</i> including valuing student success, conveying positive/helpful affirmations, offering caring feedback, and engaging in active cultivation of a caring community/environment.
Sitzman et al. (2016) examined the usefulness of a Caring Science, Mindful Practice MOOC for a broad international audience that included nurses, allied health professionals, and others.	<p>Results suggested that the course content was found to be useful and widely applicable by participants in varied disciplines due to</p> <ul style="list-style-type: none"> • Higher than expected course activity levels and content completion • Excellent overall course ratings • Specific learner-created plans to apply new knowledge in personal and professional life
Hebdon et al. (2016) explored specific caring intentions of participants who completed the same Caring Science, Mindful Practice MOOC that was examined in the Sitzman et al. (2016) study.	<p>Five primary themes emerged from the data:</p> <ul style="list-style-type: none"> • The ripple effect from caring and interconnection • The importance of self-care to support the provision of optimal care for others • Validation of caring/mindfulness practices in varied settings • Infusion of caring science into mentoring relationships at work • Application of caring and mindfulness concepts personally and professionally

Note: MOOC = massive open online course.

activities an instructor could do to create a caring online learning environment.

Three subsequent studies explored nursing faculty perceptions of caring in online classrooms. Sitzman (2016b) asked nursing instructors to indicate what student cues prompted caring interventions in online classrooms. The first study (Sitzman, 2016b) had 56 respondents who provided brief answers to questions in three areas of inquiry that included identification of student cues that prompted caring interventions, the nature of the caring interventions, and student response to caring interventions. Results yielded information about specific caring cues and responses in online nursing classrooms. Twenty-six of the 56 respondents in this study also provided unsolicited rich narrative detailing their day-to-day experiences of caring in online nursing classrooms, which resulted in an additional nested study (Sitzman, 2015). Three themes emerged that described an iterative process for interacting with students in a caring manner in online nursing classrooms.

Sitzman (2016a) then analyzed information in the six studies discussed above (Leners & Sitzman, 2006; Mann, 2014; Sitzman, 2010, 2015, 2016b; Sitzman & Leners, 2006) to determine if there were consistencies in caring communication patterns that could be discerned from the study data. Six consistent communicative elements emerged that outline parameters of a caring lexicon that could be used in digital environments.

Mastel-Smith et al. (2015) explored faculty perceptions and expressions of caring presence in online classrooms and integrated findings with Watson's Caritas Processes 1–9. Four themes emerged from the data that characterized similarities and differences between face-to-face and online instruction and presented dimensions of online caring presence.

Two Studies Related to a Caring Science, Mindful Practice Massive Open Online Course

Digital resources provide expansive teaching/learning/sharing opportunities where challenges related to geography, proximity, time, language, culture, and economics do not preclude accessibility. New possibilities for establishing global caring/learning communities have emerged where transdisciplinary, multicultural, diverse cohorts from all over the world come together to learn about Watson's caring science and share unique perspectives about caring experiences and applications. Two studies explored the teaching and learning experiences in a massive open online course (MOOC) entitled *Caring Science, Mindful Practice: Implementing Watson's Human Caring Theory*. This free and open

course is taught in the Canvas Learning Management System annually in May and January. It is open to anyone in the world with access to a computer. To date, 1,947 individuals have interacted with the course. This MOOC provides nurses, health care providers, and others from varied disciplines an opportunity to come together in an international 4-week-long online asynchronous course to learn about Watson's human caring theory and how to engage in simple mindfulness practices (Nhat Hanh, 2009) to support firm intent to care and consistent caring comportment in personal and professional life. The course is moderated by a volunteer team made up of seven nurses who are knowledgeable about caring science and two expert instructional designers from all over the United States. Students join from all over the world to share their experiences, ideas, and understandings related to caring in asynchronous discussion boards. The discussions are rich, deep, loving, kind, supportive, and creative, and reflect many different cultural perspectives and approaches.

The aim of the first study (Sitzman et al., 2016) was to examine the usefulness of a MOOC about Watson's caring science and mindfulness for a broad international audience that included nurses, allied health professionals, and others. Results affirmed that the course content was found to be useful and widely applicable by participants in varied cultures and disciplines (Sitzman et al., 2016).

The aim of Hebdon et al. (2016) was to explore specific caring intentions of MOOC participants upon course completion. Results reflected learner commitment to establishing and maintaining a firm intent to care personally and professionally. Results from both Sitzman et al. (2016) and Hebdon et al. indicated that caring content resonated with learners, and that it can be effectively taught in international, transdisciplinary, free, and open online teaching/learning situations. Broadly diverse rosters of participants in both the MOOC and the Caring Online trainings have demonstrated that the desire to learn about and practice professional caring transcends disciplinary and cultural boundaries. Participants consistently expressed gratitude for the opportunity to have their experiences, practices, and perceptions validated by others who were interested in cultivating Caritas practice. Each MOOC session to date has demonstrated that establishing global caring online teaching–learning–sharing communities is possible and that Watson's human caring science is relevant in and beyond nursing.

Examples of Caring Science and the Digital Realm

Examples of transpersonal caring moments and Caritas Practices in digital settings were evident in the words of researchers and study participants in all 10 studies.

Examples of digital transpersonal caring moments include:

- (Researcher comment) “. . . elements of intuitive interaction were also identified. . . and referred to as inherent in an empathic approach to online education. Students stated that online caring involved ‘being in tune with the thoughts and feelings of others’ and faculty ability to ‘sense overload from a distance’” (Leners and Sitzman, 2006, p. 317).
- (Faculty comment) “Each student needs to know that you are there, there for them, and care about them and their success” (Sitzman, 2016b, p. 67).
- (Faculty comment) “I contact the student when I notice. . . a difference. . . I inquire if something is happening that is impacting their ability to fully participate at the expected level and ask that they reply to me so that I can understand what is happening and offer suggestions to help them improve performance” (Sitzman, 2015, p. 26).

The 10 Caritas Processes with corresponding digital examples of Caritas practice gleaned from the 10 studies are presented in Table 2.

Conclusion

When considered as an integrated whole, knowledge development stemming from the 10 studies discussed in this paper represents confirmation that Watson's human caring theory is relevant and applicable in digital settings. Comments from researchers and study participants illuminate an ongoing dynamic process of interpretation and application related to constructing ways to care in digital environments.

Effective integration of a theoretical framework into two vastly different settings such as digital and face to face is a hallmark of universality and elemental resonance. Human caring theory is fluidly applicable in both of these contexts because the basic tenets of Watson's work resonate with the primal core of love from which caring intentionality originates before emerging into face-to-face, digital, or other domains of being. Watson's work transcends time, space, and proximity, allowing it to serve as an effective framework for exploration and discovery now and into the future as new ways of interacting, connecting, loving, and caring unfold.

Table 2

Ten Caritas Processes With Corresponding Digital Examples From Studies

Caritas Processes (Adapted From Sitzman & Watson, 2014)	Corresponding Digital Examples
1. Demonstrate lovingkindness, compassion, and equanimity with self and others.	(Faculty comment) "I encourage you to be kind to yourself as you embark on this. . .you do not have to be perfect" (Mastel-Smith et al., 2015, p. 148). (Faculty comment) "I value the sacrifices you are making to be in school and believe that you want to do your best. Here is an area that needs your reflection on how to improve" (Sitzman, 2016b, p. 67).
2. Be fully and authentically present.	(Student comment) "Letting us know they were there. . .by actually reading what was posted and responding—let the students know there was someone there that really cares" (Sitzman & Leners, 2006, p. 256). (Faculty comment) "[Sometimes I say to the student] 'I notice that you seem overwhelmed. Tell me what is concerning you. How can I help?'" (Sitzman, 2015, p. 27).
3. Nurture personal sensitivity through spiritual awareness and practice.	(Faculty comment) ". . .you must check your ego at the door and put on your caring attitude once you sit down at the computer. . ." (Sitzman, 2015, p. 27). (Faculty comment) "I have given many students spiritual gift tests, and then I meet with them over the phone or online [to discuss results]" (Sitzman, 2015, p. 27).
4. Cultivate trusting—loving—caring relationships.	(Researcher comment) ". . .[student] respondents discussed the belief that caring online is a reciprocal process that requires commitment" (Sitzman & Leners, 2006, p. 256). (Student comment) "Caring is taking the time to assure that both parties understand what is expected and needed from the other" (Sitzman & Leners, 2006, p. 257).
5. Engage in authentic, nonjudgmental listening/interacting in both positive and negative situations.	(Student comment) ". . .caring instructors actively sought feedback re: graded evaluations, e.g. confusing exam questions, written homework [sic] and may change grading if appropriate" (Sitzman, 2010, p. 176). (Faculty comment) "[I] encourage expression of thought and feeling. . .expression is a form of self-reflection and learning. I also share with them during difficult situations reflection and expression can be therapeutic and helpful. . ." (Sitzman, 2015, p. 27).
6. Promote creative problem solving through full use of self and resources.	(Faculty comment) "Students were encouraged to be creative and "...think outside the box. You will be the innovator, the creator, the trailblazer"" (Mastel-Smith et al., 2015, p. 148). (Faculty comment) "I will usually take time to respond with examples or step-by-step instructions so that the student is able to figure out whatever it is they are frustrated with. I provide many details and explanations to help them along. I've also asked questions or inquired if they have tried a different approach toward solving the problem" (Sitzman, 2016b, p. 66).
7. Employ transpersonal teaching and learning methods that honor the learner's frame of reference.	(Student comment) "Try to understand and respect the learning that is taking place on the students [sic] part even if it is not in a way that the instructor might have intended" (Sitzman, 2010, p. 176). (Faculty comment) "I always start any response/email. . .by saying something like. . .'Thank you for inquiring into. . .' I also tell the student that if they are asking this question, then other students are also thinking the same. . ." (Sitzman, 2016b, p. 66)
8. Create holistically healing environments at all levels.	(Student comment) ". . .it is important to have class schedules, requirements, postings, etc. easily accessible and understandable so it isn't a nightmare trying to figure out what you need to do and how to turn in your work" (Sitzman, 2010, p. 175). (Student comment) "Online faculty caring helps me be the best I can be. . ." (Leners & Sitzman, 2006, p. 317).

(Table 2 continued)

Table 2 (continued)

Caritas Processes (Adapted From Sitzman & Watson, 2014)

Corresponding Digital Examples

9. Assist with basic needs as sacred acts.

(Faculty comment) "I cannot stress [enough] the importance of treating each student as a valuable member of your course. Each student email ends with a thank you for their questions, or a thanks for sending information. . .if they make a suggestion I thank them for their time and interest. It is important the student know that they are a valuable member of the course and that [the nursing program] cares about each one" (Sitzman, 2016b, p. 67).

(Faculty comment) "Our priority is communicating with you, so if there are any problems, we will work to solve them" (Mastel-Smith et al., 2015, p. 148).

10. Open oneself to mystery and unknowns, and allow for miracles.

(Faculty comment) "They [the students] really are beautiful people, you just need to figure out where they are coming from and then deal appropriately" (Sitzman, 2015, p. 28).

(Faculty comment) "I personally find this teaching environment to be open, creative, interpersonal, and rewarding" (Sitzman, 2015, p. 28).

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Author Note

Kathleen Sitzman, PhD, RN, CNE, FAAN is Professor, East Carolina University, College of Nursing, Greenville, NC, USA.

Correspondence regarding this article may be sent to Dr. Kathleen Sitzman, 526B Village Green Drive, Morehead City, NC 28557 USA. Electronic mail may be sent via the Internet to sitzmank@ecu.edu.