A Qualitative Exploration of Students' Perception of Care When Learning Online:
Implications for Online Teaching and Faculty Professional Development

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ABSTRACT

The dramatic shift to remote learning due to the COVID-19 pandemic has highlighted certain global challenges associated with online learning, including our need to better understand the nature of caring relationships in online learning. In the present study, Noddings's care-centered model of education was applied to explore students' perception of care and caring behaviors in online courses and the design and pedagogical practices associated with a sense of being cared for based on interviews with 14 online learners. Findings from this study support the notion that online learning environments are robust enough to allow for caring relations to emerge. However, the analysis of student data pointed to a possible missing element in Noddings's model when applied to online learning, namely "anticipating." Further, the study highlighted the critical role played by instructors' competencies in designing collaborative learning activities and feedback processes in the enactment of care ethics when teaching online. A discussion of findings and their implications for online teaching is provided.

KEYWORDS

Care Theory, Ethics of Care, Faculty Professional Development, Online Learning, Online Teaching

INTRODUCTION

Due to the unprecedented scale at which digital technologies and online learning are being adopted globally, tending to issues of emotional engagement and experiences of online students become even more critical if we are to create online learning experiences that are transformative and empowering (Burke & Larmar, 2020; Corbera et al., 2020; Gravett et al., 2021; Rose, 2017; Singh, 2017). The expansion of online learning opportunities and the flexibility it offers has allowed non-traditional students access to education and lifelong learning, but it has also created additional challenges including the need to respond to the diversity in online students' social, economic, and cultural backgrounds as well as the variation in their goals, needs, and expectations compared

to on-campus cohorts (Burke & Larmar, 2020). Another major challenge associated with online learning is the physical distance and the resulting sense of disengagement and isolation, which can lead to communication gaps and a decline in student engagement when learning online (Al-Freih, 2021; Greer, 2023; Kızılcık & Türüdü, 2022; Moore, 1993; Singh, 2017). The physical distance and diversity in online learners' profiles necessitates careful consideration of the human element and how to cultivate a strong sense of identity, belonging, and connectedness in the digital space (Burke & Larmar, 2020; Greer, 2023; Robinson et al., 2017; Rose, 2017; Singh, 2017; Uusiautti et al., 2017). As opportunities and demand for online learning increase, it is crucial to understand the student experience if we are to design effective and sustainable online learning experiences that acknowledge and recognize the ethical, emotional, psychological, and social implications of technology integration for student learning and development.

As Moore et al. (2022) noted, little scholarship existed on online students' mental health and emotional well-being prior to the pandemic. However, the sudden and disruptive impact of the COVID-19 pandemic on education at all levels highlighted major areas in need of re-evaluation to enable a sustainable culture of inclusivity and care in our online learning and teaching practices (Bozkurt et al., 2020; Corbera et al., 2020; Gravett et al., 2021; Tang et al., 2021). That said, scholars have suggested that the role of care and caring relations may be even more significant in online learning environments given the unique affordances and limitations they present (Burke & Larmar, 2020; Deacon, 2012; Greer, 2023; Robinson et al., 2020; Rose, 2017; Rose & Adams, 2014; Tang et al., 2021).

So, how are caring relations established and maintained in online learning spaces? What behaviors (i.e., instructors' actions and dispositions towards students and the course), pedagogical practices (i.e., strategies, techniques, and activities used to support student learning and engagement), and design elements (i.e., digital tools, resources, and course content and structure that shape the online learning space) do students perceive as being indications of care? And what are the skills and competencies needed by instructors to enact caring pedagogies when teaching online? The purpose of this study is to explore these questions based on the lived experiences of online students through the lens of Noddings's care theory (1984, 2008, 2012). Specifically, the topics of inquiry that guided this study included the following:

1. What instructor behaviors, pedagogical choices, and design elements do students perceive as caring when learning online?
2. From a student perspective, what are the skills and literacies needed by instructors to enact ethical care when teaching online?

LITERATURE REVIEW

Noddings's Ethics of Care

One of the most influential figures in shaping our understanding of care ethics and its central role in education is Noddings (1984, 2005, 2008, 2012). Noddings identifies establishing and maintaining caring relations as foundational to the practice of teaching (Noddings, 1984). In ethical care, according to Noddings, caring relations are characterized by "engrossment" and "nonselective receptivity" to the expressed needs of the cared-for (Noddings, 2005, 2012). The carer in these instances sets aside their personal assumptions and preconceived notions or values. Instead, receptive attention is what guides caring relations between the carer and the cared-for, in which the attention of the carer is genuine, nonjudgmental, and receptive to "what-is-there in the other's message" (Noddings, 2008, p. 163). Central to Noddings's philosophy is the relational nature of care: an encounter can only be characterized as caring when the cared-for acknowledges and recognizes that care has been received (Noddings, 2005).

From an ethics of care perspective, creating a moral climate wherein trust and caring relations between instructors and students can be established and maintained is not the only aim of education. Another major, and equally important, aim is to create the conditions under which student moral understanding and ability to care for others can develop (Noddings, 1995, 2008). By demonstrating to students genuine care through attentive listening, modeling caring attitudes and behaviors, and open dialogue about morality and moral life, they learn what it means to care for themselves and others. Further, a care-centered approach to education is one that provides opportunities for students to not only receive care but also extend and express their care to others under the supervision and guidance of their instructor.

Based on these principles, Noddings (2008) proposed a care-centered model for education consisting of four components: modeling, dialogue, practice, and confirmation. When approaching education and learning from a care perspective, this model can serve as a framework to guide pedagogical decisions in relation to instructor behaviors, learning interactions, and course/activity design. Each element is associated with explicit aims and behaviors.

Through the first element, "modeling," students learn what it means to care through their interactions and relationships with their instructors. In these encounters, instructors demonstrate to students caring behaviors and attitudes (Noddings, 2005, 2008, 2012). First and foremost, caring instructors take the initiative in engaging with students and developing relationships with them. They show they care by giving attention to their students—anticipating their needs and learning more about their backgrounds, wants, and aspirations (Noddings, 2005, 2012). Using this information about their students, an instructor responds in a way that recognizes their diversity and nurtures their relationship (Noddings, 2005). As such, Noddings emphasizes the emergent nature of care ethics and argues that caring behaviors cannot be predetermined or identified outside of context. "Genuine care" is responsive, triggered by the expressed needs of the cared-for and highly contextual (Noddings, 2008).

"Dialogue," the second element of Noddings's model and the most fundamental from an ethics of care perspective, is how caring instructors learn more about their students and their needs, aspirations, and talents (Noddings, 2005, 2008). In a care-centered environment, authentic dialogue is motivated by a mutual search for understanding and is characterized as open-ended and non-judgmental. Through conversations and attentive listening, students and instructors create a bond as they speak openly and freely to each other in a safe and trusting environment (Noddings, 2008, 2012).

"Practice" is the third element of Noddings's model. While modeling aims to demonstrate to students, through their interactions and relationships with their instructors, how to express and receive care, practice aims to provide opportunities for students to enhance and develop their attitudes and abilities regarding providing care to others, under the guidance and encouragement of their instructors (Noddings, 2008). In learning contexts, this is implemented via well-designed collaborative activities and group work, peer-to-peer support, service learning, and participation in learning communities (Noddings, 2008). Incorporating care as a central value in pedagogical activities creates a more positive learning environment that emphasizes cooperation and shared learning over competition and grading (Noddings, 2012).

The final element of Noddings's care-centered model is "confirmation," which refers to the conscious action of the carer in affirming the best in the cared-for. Through confirmation, instructors support and encourage the development and growth of their students (Noddings, 2008, 2012). This can be fostered by planning for opportunities for dialogic and open feedback during the learning journey. However, for acts of confirmation to be impactful, a strong and meaningful bond between instructor and students must exist, which can be established through modeling and dialogue (Noddings, 2008).

Noddings's theory of care situates the act of caring within meaningful relationships and was conceptualized within a face-to-face environment. Given the "facelessness" and physical distance that characterizes online teaching and learning, many researchers have questioned the nature of interactions and relationships formed through technologies and the influence this has in shaping how we show and receive care (Burke & Larmar, 2020; Robinson et al., 2020; Rose, 2017; Rose & Adams, 2014).

Ethics of Care in Online Teaching

Interest in humanized and care-oriented approaches to online teaching has gained significance as a counterbalance to the reductive narratives surrounding online learning and the instrumental framing of learning technologies as neutral tools (Bayne et al., 2020; Gravett et al., 2021; Selwyn et al., 2020; Zakharova & Jarke, 2022). Many scholars have warned about this conceptualization of technology and argue that integration of technology into the learning and teaching process is only as effective as the pedagogical choices and principles underpinning its use (Singh, 2017). In reference to these pedagogical decisions, Rose (2017, p. 20) notes, "Not only are they rooted in particular beliefs about what is worthwhile and necessary to human flourishing, but they shape relations between human beings, and embody applied forms of justice, equity, and respect." The lack of criticality in technology use and online course design can lead to disempowerment and reinforcement of unequal power dynamics in relationships (Bali & Zamora, 2022; Gravett et al., 2021; Selwyn et al., 2020), bringing to the forefront the need for critical examination of "the role of technologies in care arrangements" as well as "the care dispositions guiding such practices" (Zakharova & Jarke, 2022, p. 105). One particular research framework that has gained significance in the past few years as a lens through which to explore ethics and pedagogy of care in online learning spaces is Noddings's four components model. These studies have explored both instructor and student perceptions of care and identified certain behaviors and pedagogical choices that contribute to and enhance a sense of care and trust in online learning environments (Burke & Larmar, 2020; Kızılcık & Türüdü, 2022; Rabin, 2021; Robinson et al., 2020; Rose & Adams, 2014; Tang et al., 2021; Uusiautti et al., 2017). While these studies have differed in their categorization of certain behaviors and themes under each of these elements, they nonetheless share certain pedagogical practices and design considerations that are noteworthy and significant in the conceptualization of care in online learning environments.

Modeling care was found to be supported through compassionate person-centered interactions and communication (Burke & Larmar, 2020; Rabin, 2021), strong instructor presence (Burke & Larmar, 2020; Robinson et al., 2020), flexibility with course assignments and deadlines (Robinson et al., 2020), and intentional design and use of appropriate teaching methods that provide opportunities for synchronous interactions with peers and instructor (Kızılcık & Türüdü, 2022; Robinson et al., 2020). While some have noted that dialogue, the second element of Noddings's model, was more difficult to enact online (Burke & Larmar, 2020; Rabin, 2021), these studies have identified certain strategies that, when approached and designed intentionally, can enhance a climate of care and support the formation of an online community of learners. These strategies include supporting personal and group communications and interactions both synchronously and asynchronously (Burke & Larmar, 2020; Robinson et al., 2020); encouraging open-ended dialogue among learners, grounded in a culture of respect and with the explicit aim of cultivating caring collaboration and discussion (Burke & Larmar, 2020; Rabin, 2021); being responsive to students' inquiries (Kızılcık & Türüdü, 2022; Robinson, 2020); and eliciting students' opinions and suggestions regarding course design and learning activities (Rabin, 2021; Robinson et al., 2020).

Some strategies that were found to contribute to enhancing a sense of care through practice were providing opportunities for peer-to-peer support (Kızılcık & Türüdü, 2022; Robinson et al., 2020), supporting the formation of a learning community through small talk (Kızılcık & Türüdü, 2022), storytelling (Rabin, 2021), and enhancing students' sense of care about their own learning and its impact on their wider lives through practically based and interactive learning opportunities (Burke & Larmar, 2020). However, some studies found that indicators of practice were limited compared to other elements of Noddings's model and identified instructors' lack of readiness for online teaching as a possible factor influencing instructors' ability to foster a climate of care through practice when teaching online (Robinson et al., 2020). Finally, in all of the studies, enhancing care through confirmation pointed to the significant role that assessment culture and feedback plays in establishing a caring climate in an online course. Dialogic, personal, and purposeful feedback that emphasized learning over grading, as well as the use of alternative assessment strategies such as self- and peer-

assessment, all contributed to a culture of care online (Burke & Larmar, 2020; Kızılcık & Türüdü, 2022; Rabin, 2021; Robinson et al., 2020, 2023).

METHODS

Given our purpose of understanding students' experiences and perspectives on instructor care when learning online, a qualitative research approach was found to be the most suitable and was adopted for this study. Convenience and network sampling were strategies used to locate participants for the study (Merriam, 2009; Patton, 2005). The participants are higher education students located in the United States who were recruited from an online class. The instructor asked their students to also refer friends or family who had taken at least one online class. Participants had the option of being interviewed or responding to the interview questions through an online survey. For those who chose to be interviewed, their interviews were transcribed and anonymized prior to analysis. As such, we utilized hermeneutic philosophy as our theoretical framework for interpretive analysis, which provided us with a foundation for making sense of the transcript text from the written and verbal information which was collected (Patton, 2005). We were interpreting the expressed feelings and descriptions our participants provided in answer to our questions to uncover meaningful phenomena.

Fourteen individuals participated in the study. Eight identified as female and two as male; four chose not to identify a gender. Most participants had extensive experience with online learning, with nine of them having taken at least 10 courses each. Eight participants have attained advanced degrees, five have a four-year degree, and one has some college experience. The age of the participants varied, with two in their mid-20s, seven in the 35–44 range, three over 55, and the other participants choosing not to provide their age.

Ethics of care theory (Noddings, 2008) was used to guide our analysis as the "central core" in theoretical coding (Saldaña, 2015). An a priori code manual was developed that consisted of the four elements of Noddings's theoretical framework and was used to guide the interpretation of the data. Researchers engaged in multi-phase analysis, and this analytical process was used when working toward theme development. First, initial codes (indicators) were generated and grouped under each element by identifying relevant extracts and phrases from the transcripts that enhance and further explain each of Noddings's elements in a way specific to an online course experience (Crabtree & Miller, 1999; Saldaña, 2015). Indicators and corresponding extracts were then combined to develop potential themes. Each theme was then defined in sufficient detail to distinguish them from each other, and all assigned codes and chunks of transcripts were reviewed to confirm whether the themes generated were representative of the voice and experience of participants or whether they needed to be broken down to separate themes or combined.

We used narrative analysis as reflexivity or reflecting critically on the self as researcher (Lincoln & Guba, 1985). Our regular online meetings and member checking sessions provided us with the opportunity to clarify our individual perspectives and to reach inter-coder agreement on any code or theme questioned during the process. We implemented a written reflective component to our analysis as part of developing a rich description of findings (Lincoln & Guba, 1985). This was done in an attempt to approach theory development, and a model for online learning, from a care perspective.

FINDINGS

The results of our analysis indicated the presence of all four elements of Noddings's care model in an online learning environment. The themes that emerged under each element are presented in Table 1.

Modeling

Instructors model care through their actions, behaviors, and design decisions, and our analysis revealed a variety of ways in which participants felt cared for as a result of that. "Instructor presence"

Table 1. Themes developed under each element of Noddings's model

Element	Themes
Modeling	• Instructor presence • Modeling care through course design • Opportunities for synchronous interactions • Student-centered teaching practices • Flexibility
Dialogue	• Multiple purposes and tools for communication • Eliciting student feedback • Responsiveness
Practice	• Faculty readiness for online teaching • Intentional design for group interactions and activities
Confirmation	• Multiple purposes of feedback • Personalized feedback • Timely feedback • Dialogic feedback

emerged as an important indicator of care through modeling, according to our participants. Just being themselves, staying in touch with learners, being engaging and providing encouragement, and being actively involved with the course and students are some of the ways instructors can enhance their presence in an online course. One participant explained:

I think just being involved, making an effort to show up every once in a while on the discussion boards, just showing an active role within the class and not just being gone for most weeks and then showing up again when it's time to grade at the end.

Interestingly, the analysis revealed that supporting a climate of care in an online course begins even prior to the start of the course or any interaction with students. Our participants described a caring instructor as someone who plans ahead and anticipates student needs through course design and forethought. "Modeling care through course design," according to our participants, not only indicates a higher level of care for students but also is beneficial to instructors by reducing the amount of work expected of them as the semester progresses. One participant suggested, "have your content and plan in place, know the sticky points and plan ahead for them, use FAQs, use rubrics to help minimize questions." Another participant noted, "the first thing that a professor could do is to go through the online course within the LMS [Learning Management System] and make sure that all of the instructions and links are current and easy to understand."

Providing "opportunities for synchronous interactions," "student-centered teaching practices," and "flexibility" are different ways in which instructors can demonstrate higher levels of care when teaching online. Participants considered synchronous interactions to be particularly important in online courses, especially at the start, to establish a sense of community and set the tone for the course. One participant shared, "The synchronous classes make all the difference because after this, interactions online via email or announcements feel less 2-dimensional." Making "mid-course corrections" when needed, being responsive to students' individual needs, pushing them to reach their full potential, and taking a personal interest in their work are some examples of "student-centered practices" that our participants described as being an indication of instructor care. One participant said, "I think an instructor cares when they keep pushing you. Just when you think you have it figured out the instructor will introduce a new perspective that you haven't thought of before. That is caring."

Finally, "flexibility," especially in relation to course assignments and assessments, emerged from our analysis as particularly critical in supporting a climate of care in an online learning environment.

It is important to note here that participants clearly and explicitly indicated that being flexible with assignments does not equate to being an "easy grader" or holding their hand; they did not want or expect such treatment and described it as being unsatisfying and frustrating. For them, being flexible was about allowing extensions due to unforeseen circumstances such as illnesses and/or providing them with opportunities to redo assignments based on feedback, which according to them supported deeper learning, enabled them to improve their skills, and increased their confidence in their self and abilities. One participant shared:

I never told the instructor that I tried to drop but I asked for deadline extensions and he was super kind, and also knew I was struggling. I did it. And I made an A. A huge boost to my confidence.

Dialogue

Open, continuous, and intentional dialogue with instructors and peers was an important element of care for our participants when learning online. In previous research, personal versus group communication emerged as an important indication of care in online learning environments, highlighting the need to utilize tools that support both group (e.g., discussion boards) and more personal (e.g., emails) forms of dialogue (Robinson et al., 2020). However, our analysis revealed that when learning online from a care perspective, this dichotomy might be overly simplistic. Our participants discussed the different ways in which online tools such as "(1) general discussion boards, (2) specific assignment and discussion feedback, (3) periodic synchronous class discussions via Adobe Connect or Zoom, (4) 1-on-1 appointments via phone or Adobe Connect, (5) surveys, (6) direct emails" can be integrated to support a variety of communication purposes, for example to address personal concerns and questions, support whole-class and small-group activities and discussions, follow up and provide feedback on projects and assignments, and offer virtual office hours. Another important way to show care for students through dialogue, from a student perspective, is to elicit their feedback and give them opportunities to share their opinions on course-related issues. One participant defined care as follows: "Care is first and foremost about frequent intentional communication," including "periodic formative assessment to bring to the forefront issues not just with the specific student, but with the course delivery in general."

"Responsiveness" was a new theme that emerged from this research. Previous research identified timing as an important indication of care through dialogue, referring to the consistency and time it takes an instructor to respond to student inquiries and questions (Robinson et al., 2020). However, our analysis revealed that timing might not be as reflective of the student experience and perspective on care when learning online, as it emphasizes instructor control and management of the communication process, rather than a reaction triggered by or in response to learner needs. This simple yet critical distinction was made evident in participant responses: "the most important form of care to me was the professor being available for questions and input when needed," one participant said.

Practice

References to indicators of practice in this study were relatively infrequent compared to other elements of Noddings's model. Previous research pointed to one possible explanation for this, attributing the limited opportunities for students to develop their capacity to care for others and practice caring relations in online courses to instructors' limited experience and readiness for online teaching (Robinson et al., 2020). Our current research revealed another factor that is critical in promoting a climate of care in online learning courses through practice, namely "intentional design for group interactions and activities." Participants spoke about some of the difficulties they face when interacting within groups online, attributing them to instructors' lack of effort or competency in supporting such activities properly and intentionally in an online learning environment. One participant highlighted this point: "Overall, the shared learning dynamic should exist just as it should in face-to-face contexts. This last is especially challenging with

online courses and require[s] deliberate effort to succeed." Participants described some instances in which instructors' lack of effort and intentionality in designing group activities and interactions led to negative emotional experiences for them when learning online. One participant shared, "Sometimes the forums can be intimidating or even a turn-off when the same people tend to dominate the discussions…I'm sure there are ways to deal with this, but sometimes it's a hindrance." Another participant explained, "Meeting with students synchronously in smaller groups helps. When the entire class meets as a whole, it is sometimes overwhelming and hard to have a conversation."

While indicators of practice were limited in our analysis based on the experience of students we interviewed, our participants had a clear idea about the types of interventions or strategies needed to support a climate of care and a sense of being cared for in online courses, especially in relation to designing and guiding group activities and interactions. These strategies included setting up a "community of support among students," "providing multiple formats, time, and space for students to feel empowered to interact," "mak[ing] an effort to create a 'community' environment between students in a virtual setting," "meeting with students synchronously in smaller groups," and "class meetings with group activities online."

Confirmation

The analysis revealed strong indications of confirmation through feedback. Participants in our study discussed different purposes and situations in which feedback from the instructor was highly appreciated and needed to support their learning, including opportunities to engage in non-graded quizzes to give both the instructor and the students an idea of where they are in terms of course performance, meeting with groups individually throughout projects to ensure their success, providing specific and individual feedback on assignments, responding to emails from students about confusing course topics, adding to the discussion board so students know they are on the right track, and nudging students if they are not making progress.

Consistency in providing quality feedback was critical for our participants and enhanced their sense of care and trust in an online course. In our interviews, participants described quality feedback as "timely," "personalized," and "dialogic." For them, getting detailed and personalized feedback, as opposed to a simple grade or short and generic answers, was extremely important. Feedback that is actionable and specific—what was done well, what can be improved, and why—not only supports student learning but also signals to them that the instructor truly cares for them as individuals and their personal success. As one participant explained, "Because of the asynchronous nature of online courses, instructors need to take positive steps to respond to the uniqueness of how each student learns, and to provide deliberate opportunities for feedback."

Our participants also described caring feedback as feedback that is dialogic in nature and shows "any kind of student-to-teacher relationship." One participant commented, "The difference [between] 'Excellent' or just a score versus 'I see where you are going with this idea; perhaps have you thought about this'. They enjoyed reading your comments. More of a back and forth. Comment vs blanket statement."

Analysis of transcripts revealed the negative effect of delayed and unthoughtful feedback on student learning and emotions. One participant said, "Receiving timely and quality feedback on assignments was important. There were a few times that feedback on assignments was not provided in time to make improvements. This left students frustrated." Another participant described how a lack of care in providing feedback impacted their learning and trust in their instructor:

A particular instructor I had did not even take time to review student work but rather had TAs grade and review assignments. Although I did very well in this class, knowing this did not give me the confidence to reach out to the instructor and ask questions.

DISCUSSION

In this study, Noddings's conceptualization of ethics of care was used as a lens to examine students' perceptions of care and how caring relations and connections are formed and sustained when learning online. Consistent with previous research, indications of all four elements of Noddings's model emerged from our analysis of student interviews, confirming the applicability of Noddings's care-centered model and its potential in supporting a climate of care and caring relations in online learning environments (Burke & Larmar, 2020; Kızılcık & Türüdü, 2022; Rabin, 2021; Robinson et al., 2020). The analysis of the data also revealed two major implications worthy of further discussion: (1) "anticipating" as a missing element in the conceptualization of care in online learning settings and (2) the caring online instructor. These two implications will be discussed and expanded on in the following sections.

"Anticipating" as a Missing Element in the Conceptualization of Care in Online Learning Settings

A care ethics approach to education is predicated on meaningful instructor–student relationships built on trust, mutual respect, cooperation, receptivity, and ongoing dialogue. Noddings's conceptualization and framing of care and caring relations in education was proposed within the context of face-to-face education, where the carer and cared-for respond to and interact with each other in real time. In this context, the immediacy of communication and visual cues facilitate the formation of such relationships and enable instructors to convey reciprocity and responsiveness to their students (Al-Freih, 2021; Burke & Larmar, 2020; Deacon, 2012; Rose, 2017; Rose & Adams, 2014). In an online learning environment, in contrast, the student–instructor relationship is constrained by physical distance and mediated by technology, increasing the possibility of emotional, psychological, and communication gaps (Moore, 1993; Rose, 2017; Tang et al., 2021). This complexity was highlighted in the themes emerging from this study as students discussed how thoughtful and purposeful integration of different tools, contexts, and purposes of communication and feedback shape and enhance their perception of care when learning online, highlighting the significant role of forethought and intentional design and planning in establishing a climate of care and maintaining caring relations in an online course.

Research suggests that creating a context of care could be even more urgent in online learning environments compared to face-to-face settings (Burke & Larmar, 2020; Deacon, 2012; Robinson et al., 2020; Rose & Adams, 2014; Tang et al., 2021). However, as Rose & Adams (2014, p. 10) note, enacting ethical care is complex and more demanding in an online learning classroom as it involves not only care for students but also care for the course and its "technological artifacts," highlighting the demanding nature of online teaching and the challenges online learning environments present on the formation of caring relations and encounters in online learning environments.

The findings from this study suggest that anticipating student needs through forethought and deliberate course design that is clearly structured and easy to navigate, setting clear expectations and norms for communication and dialogue, integrating technologies thoughtfully and critically, providing students with weekly to-do lists and FAQs for sticky points, and designing ongoing feedback processes that support students at different points of the course and for different purposes are strategies that have the potential to mitigate some of the challenges associated with the lack of physical proximity in online courses and can reduce the time burden on instructors when teaching online. With a clear structure, plan, and guidelines in place, instructors can devote their time during online courses to nurturing and strengthening their relationships with their students rather than spending time responding to course inquiries and clarifications or dealing with technical issues and glitches (Robinson et al., 2020; Rose & Adams, 2014). Students in this study expressed an appreciation for the time and effort required by instructors to manage an online course; however, they suggested that there is some preparation work that instructors can do to free them up for other teaching and learning tasks once courses start.

In studies examining students' perception of care when learning online, instructor preparedness and intentional course design were aligned with the element of modeling in Noddings's framework (Kızılcık & Türüdü, 2022; Robinson et al., 2020). However, given the unique affordances and limitations of online learning in terms of student–instructor interaction and communication, as well as the significance of instructor preparedness and thoughtful planning from a care perspective, we posit that "anticipating" is needed as a distinct element in Noddings's care-centered model when applied to online learning. This element, when applied to the online learning context, refers to instructors' and designers' intentionality in their course design in terms of anticipating student needs, questions, struggles, and confusion points and incorporating that into course and learning design before the start of the course and throughout the learning experience. Anticipating in this context does not simply refer to being vigilant and aware but is rather action-oriented, implying "taking action about or responding emotionally to something before it happens" (Merriam-Webster, n.d.), in the form of pedagogical and design choices guided by critical thinking, empathy, and moral judgment (Tang et al., 2021).

The Caring Online Instructor

The analysis of student interviews revealed that instructors' skills and competencies in designing, managing, and facilitating collaborative learning opportunities and feedback processes in particular are especially relevant to the enactment of care ethics in online learning environments. In the following section, a discussion of these two pedagogical practices and how they can be approached from a care perspective when teaching online is provided.

Designing and Facilitating Online Cooperative and Collaborative Learning Opportunities

According to Noddings, practice from a care-centered perspective entails allowing students the opportunity to practice care by supporting each other and their community. A clear indication of this element in a learning environment is through the explicit design and implementation of cooperative and collaborative learning opportunities that emphasize the act of helping and supporting peers within these learning groups (Noddings, 2008; Rabin, 2021; Uusiautti et al., 2017). Instructors' ability to design and facilitate meaningful interactions and communication among students and with instructors can be more challenging in online learning environments given the physical distance, multitude of tools available, levels of interactions that need support, and students' comfort levels (Robinson et al., 2017; Uusiautti et al., 2017; Vlachopoulos & Makri, 2019). Research indicates that effective interaction and communication in online learning environments is multidimensional and requires a combination of knowledge and skills at the intersection of sound instructional design, meaningful technology integration, and effective facilitation strategies (Robinson et al., 2017; Vlachopoulos & Makri, 2019).

Noddings asserts that from a care ethics perspective, simply allowing opportunities for students to enter into and engage in caring relations, through group work and discussions or peer support for instance, does not facilitate deeper connection and caring relations if it is not carefully designed and monitored: "if group work is to be effective, teachers must continually remind students that they are engaged in this work to help one another—not simply to produce a better product or to surpass another group" (Noddings, 2008, p. 171). Rabin (2021), for instance, found that "transcending aesthetic caring" (p. 47) required explicit structures and framing of opportunities to practice care that celebrates the context of identity through personalized contributions and reflections. Uusiautti et al. (2017) highlighted the important role instructors' caring attitude and abilities play in creating a dynamic community of learners rooted in positive interactions and caring relations. Robinson et al. (2017) identified additional considerations that instructors need to be aware of to support effective group work online compared to face-to-face contexts, such as providing extra support and scaffolding for collaborative and group work, carefully planning for technology integration into collaborative activities and its pedagogical implications, being sensitive to students' comfort levels when working

in groups online, and approaching the design and implementation of collaborative group work with a caring attitude.

As our research indicated, there were limited references to indicators of practice compared to the other elements of Noddings's model. Rather than describing their experiences engaging in caring relations with their peers through group work and collaborative learning, students we interviewed discussed some of the factors they perceived as being a hindrance to such experiences when learning online, including instructors' lack of readiness for online teaching and lack of intentionality in creating a dynamic online learning community grounded in the values of care and compassion for others. This points to a need to explicitly address instructors' knowledge and skills in designing and facilitating online collaborative and cooperative learning activities in teacher preparation and faculty professional development programs in order to support and enhance students' sense of community and improve their learning experiences and outcomes when learning online.

Feedback Literacy

Assessment and evaluation, when viewed from a care ethics perspective, is much more than the simple act of assigning letter grades or ranking and judging student progress. Confirmation is about providing continuous feedback that is encouraging and supportive of students as they acquire skills and develop competencies toward a better self. This requires continuous dialogue, trust, and understanding of students, of their starting point, needs and goals, and of the effort they invest in progressing toward that goal (Noddings, 2008). For our participants, a caring instructor is an instructor who prioritizes their learning and personal development by utilizing multiple tools and modes for feedback that is timely, personalized, and dialogic, and serves a variety of purposes that extend beyond grading.

The meaning and purposes of feedback within teaching and learning have evolved and expanded in recent decades (Chan & Luo, 2022; Henderson et al., 2019a). The role of quality feedback in supporting student learning and emotional well-being has been well documented in the literature (Robinson et al., 2023; Shields, 2015). The role of effective and continuous feedback is even more significant in online learning contexts due to the physical separation between instructor and students and the need for additional support and scaffolding to assist and facilitate students' self-directed learning (Kormos & Julio, 2020). In this study, participants placed great emphasis on feedback as a pedagogical practice to support their learning journey and on the establishment of trust and care in online courses, and they discussed various situations in which feedback from instructors not only contributed to their sense of being valued, respected, and cared for but also supported their learning and engagement in the course.

This is consistent with recent research that conceptualizes feedback as a situated process influenced by multiple factors including time, space, technology, instructors' perceptions of feedback, and the student–instructor relationship (Chan & Luo, 2022; Henderson et al., 2019a; Robinson et al., 2023). For instance, Chan and Luo (2022) contend that while there is a tendency in educational research to investigate the characteristics of effective feedback, in actual practice it is difficult to satisfy all these characteristics and features in every feedback provision. Instead, they argue for the need to explicitly acknowledge the multiple purposes of feedback and develop instructors' feedback literacy accordingly. Similarly, Henderson et al. (2019a) assert that feedback is a core component of the learning process that requires intentional design and is influenced by contextual factors that impact its successful implementation, such as educators' capacity to navigate the complex web of design and implementation decisions related to feedback including the appropriate selection of technology tools to support immediate, distributed, and rich feedback.

Overall, findings from this study point to the critical role that thoughtful feedback practices play in supporting both the cognitive and affective dimensions of learning (Rabin, 2021; Robinson et al., 2023; Singh, 2017). However, feedback as a core pedagogical process is complex and challenging (Henderson et al., 2019b), highlighting the importance of supporting instructors as they develop their feedback literacy and awareness of the variety of feedback purposes, strategies, and tools as well

as their skills in designing and managing comprehensive feedback plans that are aligned with task purposes and the varying needs of students (Chan & Luo, 2022; Robinson et al., 2023).

CONCLUSION

Through the lens of Noddings's care-centered education model, this study identified certain behaviors, competencies, and design elements that contribute to the enhancement of a climate of care in online courses, which ultimately supports students' deeper learning, knowledge co-creation, and engagement in online courses (Kızılcık & Türüdü., 2022; Singh, 2017; Tang et al., 2021). The themes emerging from this inquiry are consistent with other studies on care in online learning environments and point to common aspects related to course design and pedagogical practices, with the potential to support and enhance caring relationships and community connections in online courses. In particular, this study highlights the positive impact of instructors' ability to design, manage, and facilitate collaborative learning opportunities and feedback processes on online students' emotional well-being and learning.

Another important implication of this study that is unique to the online learning environment and is significant to the enactment of care and students' sense of being cared for when learning online is the role of instructor preparation and anticipation of student needs through course and learning activity design. Studies examining students' experiences in online courses through a care-centered lens have identified instructor preparedness through intentional course design prior to the start of the course (e.g., to-do-lists, weekly maps, FAQs, rubrics, updated links and resources, clear course structure, multiple levels and tools for communication, clear guidelines and norms for dialogue and other learning activities, etc.) as an effective approach to reducing some of the challenges and anxieties students experience and enhancing their learning and sense of care when learning online (Deacon, 2012; Kızılcık et al., 2022; Rabin, 2021; Robinson et al., 2020).

Study Limitations and Future Research

The expansion of online teaching and learning opportunities across the globe post-COVID and the variation in how it is being implemented and managed across institutions and countries affects the way in which student care is conceptualized and approached, highlighting the need to look beyond technology tools and explore care from a student perspective (Al-Freih & Bali, 2023). This study adds to the literature by pointing to important strategies and factors that need to be considered in the design and delivery of online courses to cultivate a caring learning environment and support the formation of meaningful relationships through a student lens. That said, this study is not without limitations. Research participants were recruited from North America only, limiting the transferability and generalizability of the findings beyond this study, especially in relation to the influence of sociocultural differences on students' perceptions and conceptualization of care in an online learning environment. To address this limitation, interviews with students from different countries are currently underway, which will help produce a deeper understanding of students' perceptions of care when learning online and the influence of culture and language on such perceptions. While this study uncovered important insights regarding students' experiences of care when learning online, additional data from a more diverse population will allow for a more rigorous exploration into this topic and a deeper investigation into the findings presented in this study.

COMPETING INTERESTS

The authors of this publication declare there are no competing interests.

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