Sense of Community in an Online Graduate Program

Heidi R. Cornell, Wichita State University, Heidi.Cornell@wichita.edu
Donna Sayman, Wichita State University
Jason Herron, Wichita State University

Abstract. A sense of community among learners is recognized as contributing to positive student outcomes. Synchronous learning opportunities may serve as one way to create a sense of community among online learners. Findings are shared from a mixed-method study that examined the impact of synchronous discussion sessions on students' sense of community, as well as additional factors to consider when creating a sense of community. Cultivating trusting relationships by providing students with multiple opportunities for authentic, spontaneous, supportive discussion with people they know well emerged as central to fostering a sense of community. Implications for online learning in higher education and future research needs are discussed.

Keywords: online learning, sense of community, synchronous learning, higher education

Online learning opportunities have become increasingly prevalent over the past few decades as universities seek unique avenues to expand their student population (Allen & Seaman, 2013; Shackelford & Maxwell, 2012). Distance learning offers a low cost, flexible platform for working adults to earn their degree (Boling et al., 2012). As Leader-Janssen, Nordness, Swain, and Hagaman (2016) affirmed, online courses must contain the same rigor and quality as traditional on-campus courses. In fact, Cummings and Townly (2016) recognized that as online course offerings are growing, students question whether the quality of the course is equivalent to the face-to-face environment. Researchers have discovered that creating and maintaining a sense of community among online learners is a crucial factor for the students' success (Hart, Stewart, & Jimerson, 2011; Shackelford & Maxwell, 2012).

Sense of Community

McMillan and Chavis (1986) define sense of community as "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together" (p. 9). The concept of sense of community is recognized as an essential component to supporting social and intellectual learning goals (Rovai, 2002). Additionally, a sense of community is recognized as an important factor to foster social and teaching presence within the Community of Inquiry (CoI) framework that is commonly used to explain effective online learning (Kim, Kwon & Cho, 2011; Shea et al., 2005). As such, the importance of creating a sense of community is widely recognized as essential to ensure effective online learning programs.

Creating a sense of community is critical because it is associated with a variety of positive student outcomes. For example, a sense of community among online learners has shown to help with student retention (Kuo et al., 2013; Lorenzo, 2015). Broadly, research also continues to show a connection between students' sense of community, learning outcome, and academic achievement (e.g., Akyol & Garrison, 2011; Arbaugh et al., 2008; Wighting & Derrick, 2015). In addition, a sense of community has been found to lead to deeper thinking among students (Hulon, 2013; Larson & Kieper, 2002), as well as increased satisfaction and motivation (Boling et al., 2012; Hart et al., 2011; Lorenzo, 2012). In fact, many students have identified a sense of community as a helpful aspect of their learning experience (Hart, Stewart & Jimerson, 2011; Shackelford & Maxwell, 2012) as it has the potential to minimize feelings of isolation and help students feel better connected to other learners.

Given the important role sense of community has on student outcomes in the online learning environment, some research has attempted to identify general recommendations to promote a sense of community. For example, Shackelford and Maxwell (2012) found that the following have an impact on developing students' sense of community in online learning: introductions, collaborative group projects, contributing personal experiences, entire class online discussions, and exchanging resources. Haythornwaite, Kazmer, Robins, and Shoemaker (2000) suggested the following instructional strategies to promote sense of community: promoting initial bonding, monitoring and supporting interaction and participation, and providing multiple ways of communication. In addition, Palloff and Pratt (2007) suggested that active interaction, collaborative learning, socially constructed meaning, resource sharing, and expressions of support and encouragement would all promote a sense of community in the online environment. Although these general recommendations are useful, very few studies have yet to explore the specific relationship between varied amounts and types of synchronous learning opportunities and students' sense of community.

Synchronous Learning Opportunities

Synchronous learning opportunities facilitate teacher-student social interaction in a virtual classroom space (Szeto & Cheng, 2016). A number of studies have demonstrated the benefits of online synchronous teaching and learning, such as enhanced learning, improved communication and strong group cohesion (Boling et al., 2012; Chatterjee & Juvale, 2015; Croxton, 2014). For example, Wdowik (2014) provided students with an online learning community through the use of Blackboard Collaborate and found that it enhanced student engagement levels and quality of student learning by allowing the instructor to be more accessible and supportive. Additionally, synchronous online learning is recognized as one way to enhance the element of social presence, which is defined as "the ability of learners to project their personal characteristics into the community of inquiry, thereby presenting themselves as 'real people' (Rourke et al., 2001). In other words, it is the feeling of being present with another person (i.e. instructor and/or classmates) in an online learning space. Szeto and Cheng (2016) argue that the flow of interactions that are thought to contribute to a sense of community in a face-to-face classroom can be

similarly created online using videoconferencing technologies. However, very few studies have examined specific strategies and/or methods for how to best use these technologies to create synchronous learning opportunities that promote a sense of community. Moreover, despite the benefits that are starting to emerge, synchronous online learning is an area within the distance education field that is still largely understudied, and it is recognized that additional research is needed (Martin, Ahlgrim-Delzell, & Budhrani, 2017). As such, the current study sought to examine the impact of synchronous learning opportunities on student's sense of community. In addition, this study sought to identify additional factors to consider that might increase sense of community among students enrolled in a special education online graduate program. Specifically, the research questions were:

> **Research Question 1:** Do synchronous discussion sessions increase student's sense of community in an online course as measured by the SCI-2?
> **Research Question 2:** In what ways do students perceive a sense of community was and can be promoted in their online special education graduate degree program?
> **Research Question 3:** How do the qualitative findings contribute to a more comprehensive and nuanced understanding of how sense of community is promoted through the use of synchronous discussion sessions?

Methods

A convergent parallel mixed-methods design was employed to allow qualitative measures to elaborate, enhance, and/or illustrate the results from a quantitative measure (Fetters, Curry, & Creswell, 2013). Consistent with this design approach, both qualitative and quantitative data were collected and analyzed during relatively similar timeframes, with integration occurring after the data collection and analysis process had been completed. Furthermore, the purpose of this design approach was to yield a more nuanced examination of the impact of synchronous discussion sessions, as well as to identify additional strategies or things to consider that might contribute to creating a sense of community within the online learning environment.

Participants & Setting

In the Fall of 2017, the special education programs at one Midwestern university began delivery of their programs completely online. In the past, only a few courses were online and most were taught using a Hybrid format. At the start of the Fall 2017 semester, a total of 22 graduate students in a special education program were recruited to participate in this study during the first week of their advanced level methods course. These students were asked to participate because they would have already completed at least one semester of their online graduate program. During the first learning module, students were asked to watch a short video about the study and if willing to participate, were asked to give consent. A total of 18 students agreed to participate in the study. All students who participated in the study were taking online courses and also working full-time as special education teachers. All but one student was female and self-identified as Caucasian. One student was male and self-identified as Hispanic. It is possible that the participants may have taken previous courses or may work in the same school district.

Delivery of Synchronous Discussion Sessions

In two different graduate advanced methods courses, synchronous discussion sessions were created in order to examine the impact these opportunities had on students' sense of community. Each course was taught by a different instructor. The course instructors were both tenure track faculty members who work closely together to deliver the graduate program online. All students were expected to participate in the online synchronous discussion sessions, regardless of their willingness to participate in the study. Students earned participation points for attending each zoom discussion session. The Zoom platform (https://zoom.us) was used to facilitate all synchronous discussion sessions. During the first learning module in each course, students were asked to sign up for four 30-40 minute mandatory small group sessions (approximately once a month). Each small group session included no more than four students. As such, there were a total of two small groups in one of the graduate courses and four small groups in the other, for a total of 24 small group discussion sessions across both courses. The course instructor participated in each discussion session and told students at the start of the course that the purpose of the synchronous sessions was to reflect on, discuss, and clarify course related content. Moreover, students were asked to complete a pre-meeting worksheet and submit it to their instructor no later than one day prior to their scheduled synchronous discussion session. The pre-meeting worksheet asked students to respond to three questions and included an agenda to be followed in order to best facilitate meaningful discussions in a short amount of time. Discussion sessions were well-attended by all students enrolled in both courses.

Quantitative Strand: Survey Data

Instrument. The Sense of Community Index-2 (SCI-2; Chavis, Lee, & Acosta, 2008) questionnaire was used to gain information related to the extent to which synchronous teacher-student interaction experiences increased students' sense of community. The SCI-2 questionnaire is a survey that measures sense of community and is frequently used in the social sciences (Chavis et al., 2008). The instrument allows researchers to define the "community" as being "the individuals that are a part of their online learning course experience". The SCI-2 consists of 24 items that are presented on a Likert-type scale: 0 (*not at all*), 1 (*somewhat*), 2 (*mostly*), and 3 (*completely*). The SCI-2 yields four subscale scores (e.g., reinforcement of needs, membership, influence, shared emotional connection) and a Total Sense of Community Index. The subscale '*Reinforcement of Needs'* measures the extent to which "needs are met by the resources received through membership in the group" (McMillan & Chavis', 1986, pg. 9), and is scored by summing questions 1 through 6. The subscale '*Membership'* measures the feeling of belonging or of sharing a sense of personal relatedness" (McMillan & Chavis', 1986, pg. 9), and is scored by summing questions 7 through 12. The subscale '*Influence'* measures the "sense of mattering, of making a difference to a group and of the group mattering to its members" (McMillan & Chavis', 1986, pg. 9), and is scored by summing question 13 through 18. The subscale '*Shared Emotional Connection'* measures "commitment and belief that members have shared and will share history, common places, time together, and similar experiences" (McMillan &

Chavis', 1986, p. 9), and is scored by summing questions 19 through 24. Lastly, the '*Total Sense of Community Index*' is a combination of these subscales and is intended to measure a sense of community as defined by McMillan & Chavis (1986), which states that sense of community is "a feeling that members have of belonging, a feeling that members matter to one another and to the group, and a shared faith that members' needs will be met through their commitment to be together (McMillian & Chavis, 1986, p. 9).The Total Sense of Community Index is scored by summing all items (i.e. questions 1 through 24) together. Among a survey of 1,800 people, the SCI-2 showed to be a very reliable measure (coefficient alpha =.94). The specific subscales also indicated reliability with coefficient alpha scores of .79 to .86 (Chavis et al., 2008).

Data Collection Procedure. The SCI-2 questionnaire was entered into Qualtrics for dissemination. Participants were asked to complete a pre-course and post-course SCI-2 survey. The pre-course survey was administered at the start of the first learning module. Participants were explicitly asked to answer questions as they related to previous courses they had taken in their online special education graduate program. Prior to this study, synchronous discussion activities had not been implemented in courses that were part of this online program. Similarly, a link to the post-course survey was accessible to participants in their last learning module. For the post-survey, participants were explicitly asked to answer questions as they related to their experience in the advanced level methods course they had just completed, which included a series of required synchronous group discussion meetings. All 18 participants completed both the pre and post survey questionnaire.

Data Analysis. Survey data was entered into SPSS statistical software for analysis. A series of repeated measures ANOVA (RMANOVA) were conducted in order to assess the extent to which there were significant mean differences between participant's scores on the dependent variable (sense of community) sub-scores between administrations. This approach was appropriate because data at different administration points are correlated due to within subject factors (Girden, 1992; Lovie, 1981).

Qualitative Strand: Focus Groups

Focus groups were conducted to gain a comprehensive understanding of how synchronous discussion sessions contributed to students' feelings of sense of community and to understand other ways a sense of community could be created in the online special education graduate program. Moreover, the intent of the focus groups was to collect data to complement the quantitative survey data by allowing students to provide contextual elaborations that could enhance, illustrate, and/or confirm survey results.

Data Collection Procedure. Participants were asked to sign up (via link to Google Doc) for a focus group session during the first learning module in their advanced level methods course. A total of four, 30-45-minute focus group sessions were held the week after the course ended and after the post-survey to ensure that survey results were not influenced by participation in the focus group or expected

course grade. Initially, focus groups were scheduled to have 3-4 participants in each group. However, only seven students participated in the focus group sessions, which resulted in two small focus groups of two and three participants, and two individual interviews. We believe that the lack of participation in this phase of the study was a result of the focus groups being scheduled the week after the course had ended. Despite the lack of participation from all those who had completed the survey, results still yielded important themes to help explain quantitative data and answer the study research questions.

Focus groups (and/or individual interviews) were conducted at the scheduled times virtually through Zoom (https://zoom.us). A semi-structured interview protocol (see Table 1) was followed to guide the focus group session. The questions used also served as prompts in order to obtain more in-depth information from participants as it related to the study research question. The audio and video from each focus group was recorded and saved to a secure study database. Each focus group session was then transcribed by the authors' graduate research assistant and also uploaded to the study database for analysis.

Table 1
Semi-Structured Focus Group/Interview Questions

1. How important is it to you to establish a connection with your peers in class? Why or why not?
2. Did you feel that you could share problems and concerns with other people in this class?
3. To what extent did the collaboration help you to establish a sense of community with the other people in the class?
4. What aspects of the class did you like the best?
5. What aspects did you like the least?
6. Would you recommend this course/program to others?
7. Do you have anything else you would like to share regarding the course, course design, or tools and activities in this course?

Data Analysis. The analysis of focus group data began with the reading and rereading of all transcriptions of recorded focus groups (Stake, 2006). The researchers then separately coded focus group data using a content analysis approach to identify themes from the data relating to study research questions. Qualitative content analysis is defined as method for "the subjective interpretation of the content of text data through the systematic classification process of coding and identifying themes or patterns" (Hsieh & Shannon, 2005, p. 1278). Transcripts were analyzed using line by line analysis, allowing for categories, subcategories and themes to emerge. Both researchers met weekly to discuss discrepancies that emerged from their independent efforts and until they came to full agreement about the coding. The analysis process was iterative and continued until no new information emerged from the data. As a result, several assertions were generated that captured the codes and themes and were supported by the data.

Results

Combining quantitative and qualitative data in a mixed methods study yields a deeper understanding of the issues under analysis (Creswell, 2014). In the following sections, results from the analysis of quantitative and qualitative strands of this study are presented. Consistent with approaches used in publications of other mixed methods studies (i.e., Garwood, Werts, Varghese, & Gosey, 2018; McAuley et al., 2006), quantitative and qualitative strands are integrated and presented through two central themes in the discussion of these results that follow.

Quantitative Strand

A total of five RMANOVA were conducted (e.g., *Reinforcement Needs, Membership, Influence, Shared Emotional Connection, Total SCI Index*). Participant (n = 18) subscale scores were grouped between administrations to facilitate comparisons between pre and post-test. The mean sum scores for the *Reinforcement Needs, Membership, and Influence* subscales, as well as the *Total SCI Index* increased from pre to post survey (see Table 2). However, results indicated that there was only a statistically significant [Wilks Lambda = .784, F (1,17) p = .045, partial eta^2 = .216, power = .532] mean difference between the pre (*M* = 9.444, *SD* = 4.259) and post survey (*M* = 11.556, *SD* = 3.416) sum scores on the *Reinforcement Needs* subscale. As such, analysis indicated that there was a non-significant [Wilks Lambda = .877, F (1,17) 2.377, p = .142, partial eta^2 = .123, power = .307] mean difference between sum scores of the *Total SCI Index* and between administrations of the remaining subscales: *Membership* [Wilks Lambda = .853, F (1,17) p = .105, partial eta^2 = .147, power = .366], *Influence*, [Wilks Lambda = .916, F (1,17) p = .228, partial eta^2 = .084, power = .219], *Shared Emotional Connection* [Wilks Lambda = .999, F (1,17) p = .889, partial eta^2 = .001, power = .052].

Table 2

ANOVA Tables – Sense of Community Subscales

Subscale	Pretest *M* (SD)	Posttest *M* (SD)	*F*[a]	*p*	partial η^2
Reinforcement needs	9.444 (*4.259*)	11.555 (3.416)	4.674	.045*	.216
Membership	7.833 (3.959)	9.444 (4.003)	2.939	.105	.147
Influence	9.833 (3.601)	11.000 (4.256)	1.563	.228	.219
Shared emotional connection	8.6111 (4.717)	8.500 (3.944)	.999	.889	.001
Total SCI Index	35.722 (14.96)	40.500 (12.39)	.877	.142	.123

Note: [a]*F* Wilks Lambda multivariate tests used for all subscales
* The mean difference is significant at the .05 level.

Qualitative Strand

A total of five themes were identified that relate to ways students perceive a sense of community was and can be promoted in their online classes: (a) makes people "real", (b) authentic, spontaneous discussion, (c) shared experiences, (d) shared learning, and (e) trusting relationships.

Make People "Real". All students reported that a sense of community can be created by making people real. They found this was done in the current course with the use of synchronous discussion sessions. For example, one student stated that she *"enjoyed being able to see [her] classmates".* Another student stated, "*the meetings helped to make my classmates more "real" to me by being able to interact and hear their voices and their comments."* Similarly, one student stated, *"The best ways I've felt a sense of community is when I can simply see another person's face."* The synchronous discussion sessions made people real because their classmates were no longer just a name. For example, one student stated, "*I was just going to say I really like putting a face to a name because after fourteen, fifteen weeks you really do get to notice those names. But when it's all online you don't put a face to it."* Another student made a similar point by stating, *"I like putting a face with a name. I guess when we use all of our senses, it means more"*

Authentic, Spontaneous Discussion. The majority of students also felt that creating opportunities for authentic, spontaneous discussion contributed to improved sense of community. Students felt that the synchronous discussion sessions were more authentic than other asynchronous discussion forum activities because they weren't forced to reply or discuss specific topics. For example, one student stated,

> *[The synchronous discussion sessions] helped with the contribution of a sense of community way more than our message board posts. To be honest, I hate responding to 3 of my peers every week. I don't particularly always have something to say about what others have written, so I find myself making up something I don't really feel deeply about. On the other hand, when we do the meetings, I am constantly engaged with my peers. I'd even go so far to say that I look forward to them.*

Students also reported that these more authentic, less forced discussions allowed for the opportunity to have more spontaneous discussions that were less structured. Students found these authentic, spontaneous discussions to be beneficial. For example, one student stated,

> *[I] enjoyed the impromptu, less structured conversations that could happen in this format. By meeting in this way, I was better able to understand what types of settings others were teaching in and know who might be a good resource for certain questions that I had.*

With this said, one student diverged slightly from the views of others by saying that she valued authentic, spontaneous discussion, but didn't feel it helped her improve her sense of community. She felt she benefited just as much, if not more, from

asynchronous interactions (i.e. blogs, journals, and discussion forums) with other students in the online classroom environment and in some instances preferred them more than the synchronous discussions. For example, she stated,

> *I felt there was a sense of community and I think that helps. I really enjoyed the blogs and the journals. I enjoy that aspect of online class….. I liked the zoom meetings too- I just had a little trouble getting on and then I always feel like I want to talk over people and so I feel like I have a little of trouble with the zoom meetings because I keep wanting to jump in. I have a little trouble waiting my turn.*

Shared Experiences. The majority of students also shared that having opportunities to share similar experiences contribute to improved sense of community as it *"brings people together".* They expressed comfort in hearing that there *"were other special education teachers that were struggling too."* Students shared that they have opportunities to share experiences through asynchronous discussion forums, Blogs, and Journal assignments, but the authentic, spontaneous discussion that occurs during the synchronous discussion session provides the best opportunity for sharing similar experiences. For example, one student stated,

> *I think so, I think the zoom meetings especially like when we would be talking about stuff even with the people that I didn't work with in my USD, district or anything. It was nice to see that a lot of us had the same questions or issues. Even in some of the larger groups and we would be like well we have a behavior team, well we don't have that but you guys are going through the same stuff but we just don't have a team. That was really nice. It was like even though we are all very different in areas we all kind of dealing with the same issues.*

Another student stated,

> *I like meeting new people, and talking about our crazy jobs together. It is hard to find many people to vent to about hard days because one simply cannot convey what this job looks like until you are actually living it!*

Shared Learning. Several students indicated that a sense of community could be created by having opportunities to engage in shared learning activities where students could work together to create a common goal or task. For example, students expressed that a sense of community could be promoted through collaborative group activities and their desire to engage in shared learning, such that one student stated,

> *Well I guess I'm kind of the older generation but I thought that was part of learning- you learn with others- that's what makes the classroom different than… personally I think I learn from other people a lot more and I know this kind of setting is quite different – we get to see each other like we are doing right now for a short period of time. We don't have the time- It's a high priority for me because I think learn a lot from others.*

Trusting Relationships. Many students shared the need to build trusting relationships with their classmates to facilitate deeper discussion that would lead to

a stronger sense of community. They stated that it is important to get to know their classmates and that this can be done by interacting with the same students across multiple activities and classes. Although the synchronous discussion sessions afforded some students an opportunity to get to know their classmate better, some still felt they didn't get to know their classmates well enough because each discussion session had different students, which resulted in their reluctance to fully participate in the discussion and feel connected to others. For example, one student stated,

> *[You] have to continue with that's who you are meeting with- zoom meetings….I don't think I really saw the same people every zoom meeting I had…. you know that way there is a connection. You know that is one way that I thought you were putting us in a group so that we could see each other at our zoom meetings. That way we could see each other- who we are and you know it was never that way.*

Another student stated,

> *not really because I didn't really feel secure or that I knew the people [in my group] enough to say we are going to keep it together or that we are going to keep it within our family. You know I see kids all the time and I deal with kids all the time and they aren't going to tell you what's on their minds until they feel comfortable and they trust you.*

Discussion

The importance of creating and sustaining a sense of community in online learning programs is widely recognized (Hart et al., 2011; Kuo et al., 2013; Lorenzo, 2015; Shackelford et al., 2012). As online course offerings continue to grow (Allen & Seaman, 2013; Cummings & Townly, 2016), identifying specific methods and strategies online instructors can use to target improvements in students' sense of community is critical. As such, the purpose of this study was twofold: to examine the impact of synchronous discussion sessions on students' sense of community, as well as identify additional methods or strategies that might increase sense of community among students enrolled in an online graduate program. Qualitative findings contributed to a more comprehensive and nuanced understanding of how sense of community was and can be promoted through the use of synchronous discussion session.

Synchronous Online Discussion Sessions as a Way to Increase Students' Sense of Community

Integrated analysis suggest that synchronous online discussion sessions are a promising way to increase students' sense of community. For example, there was an increase in the total SCI-2 score and three of the subscale scores (e.g., Reinforcement Needs, Membership, and Influence) from pre to post administration with one of the subscale score increases being statistically significant (e.g., Reinforcement Needs). Participants confirmed these improvements by indicating they indeed felt the synchronous discussion sessions helped create a sense of community. More specifically, participants attributed their improved sense of community to the opportunity they had to share similar experiences in a more

authentic, spontaneous way. It may be that by sharing similar experiences, challenges, priorities, and personal stories, students were able to identify certain values that they shared with their classmates. McMillian & Chavez (1986) share, as part of their sense of community theory, that having shared values is something individuals have who are part of strong communities. Similarly, in a study conducted by Keehn (2015), students felt that sharing personal experiences during synchronous learning encounters was "engaging, enjoyable and integral to their learning". As such, it is likely that the interactions afforded to participants in the current study allowed participants to obtain the reinforcement (i.e., Reinforcement needs) they needed to grow closer together as part of a learning community (McMillian & Chavis, 1986). Given these promising findings, online instructors should consider synchronous learning opportunities where students are given opportunities to receive and offer support through the sharing of similar experiences and challenges.

Additional Strategies for Creating a Sense of Community

Although there was an increase in the mean subscale scores for *Membership* and *Influence*, integrated analysis revealed additional strategies that are likely needed to reach levels of significance. First, it appears to be important for instructors to create ways for students to build trusting relationships with their classmates in order improve the element of membership. McMillian and Chavez (1986) suggest that students who feel as if they are members have been provided with the "emotional safety necessary for needs and feelings to be exposed and for intimacy to develop" (p. 9). Although the majority of participants found the synchronous discussion sessions beneficial, a few expressed that they did not participate much because they did not know their classmates well enough or did not trust them to "*keep things in the family".* This may indicate that not all students felt emotionally safe enough for the level of intimacy to develop that is needed to have complete membership as part of the community. Students offered suggestions on how trusting relationships might be created, such as enrolling students as a cohort, creating partner and/or group assignments, and engaging in discussions with some of their same classmates multiple times, across more than one course. Moreover, synchronous learning opportunities may have the most influence on student's sense of community when they are created across multiple courses within a program with similar classmates.

In terms of *influence,* qualitative analysis revealed that instructors should consider adding opportunities for students to take on leadership roles and engage in collaborative shared learning activities. In addition, instructors may want provide online students with more choice in how their classes are structured to embrace more of a constructive approach to teaching and learning. It appears that doing these things might afford students a way to feel more influential (i.e., *Influence* subscale), which will likely lead to feeling more connected to their learning community (i.e. a better sense of community).

Limitations

Results from this study must be interpreted with caution. First, using a pre/post experimental design, some generalizations can be made to online graduate programs, but generalizability is limited due to a smaller sample size. Another limitation is the small sample size of the focus group. It is not possible to determine why those 7 chose to participate in the focus group following the end of the semester. They could have felt strongly about the course delivery or may have participated to appear to be compliant to the instructor. Despite the minor limits to generalization, findings do have a higher degree of transferability due to the mixed method nature of the study. Regardless, it should be recognized that the experiences of the students in this study might not be reflective of the experiences of students in other programs. Second, the administration of the SCI-2 survey prior to focus group interviews may have influenced group discussion due to an ordering effect (Israel & Taylor, 1990). Lastly, participants may not have been completely honest or forthcoming because they are not used to being asked what they think about course delivery (Messick & Jackson, 1961; Watson, 1992). Although students participated voluntarily and were told that their participation and answers would not affect their grade, there is a chance that they may have felt pressured to give positive responses as not to negatively impact their course grade.

Conclusions

With the increase in online learning, the importance of maintaining a sense of community will continue to become more urgent. Although future research is needed to compare asynchronous and synchronous online instructional strategies, the experiences shared by participants in this study provide insight into the positive impact of synchronous discussion sessions, as well as additional factors instructors may want to consider when creating a sense of community among students in an online program. As such, cultivating trusting relationships by providing students with multiple opportunities for authentic, spontaneous, supportive discussion with people they know well emerged as central to fostering a sense of community among online learners. As online learning continues to grow, we can move forward by continuing to use research based strategies to make informed decisions when designing quality learning experiences.

Conflicts of Interest

The authors declare that there is no conflict of interest regarding the publication of this article.

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