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Community College Students' Perceptions of Sense of Community and Instructor Presence in the Online Classroom

A dissertation

presented to

the faculty of the Department of Educational Leadership and Policy Analysis

East Tennessee State University

In partial fulfillment
of the requirements for the degree

Doctor of Education in Educational Leadership,
concentration in Higher Education Leadership

by

Marla Cartwright

December 2023

Dr. Don Good, Chair

Dr. James Lampley

Dr. Richard Rhoda

Keywords: community college, sense of community, instructor presence, online classes

ABSTRACT

Community College Students' Perceptions of Sense of Community and Instructor Presence in the Online Classroom

by

Marla Cartwright

The purpose of this non-experimental, comparative, quantitative study was to determine if there were significant differences between the perceptions of male and female community college students about the importance of sense of community (SoC) in online classes and sense of instructor presence (IP) at eight southern, public, community colleges using survey data. It was the intent of the study to determine if there were significant relationships of students' perceptions of the presence of sense of community in online classes among factors of age, race, grade point average, cumulative credit hours, credential type, major area of study, and number of previous online courses completed. In addition, possible significant relationships of students' perceptions of instructor presence in online classes among factors of age, race, grade point average, cumulative credit hours, credential type, major area of study, and number of previous online courses completed were analyzed.

The findings provided evidence that for these community college students, demographic characteristics generally did not impact SoC nor student perception of IP. However, students' open-ended feedback revealed multiple layers of frustration with lack of IP.

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DEDICATION

I would like to dedicate this dissertation to my husband, Melvin Wayne Cartwright, who has been my unwavering partner, best friend, and supporter for the last 35 years, not only on this particular journey, but through all of life's heartaches and celebrations. Thank you for your tireless encouragement, cheerful support, and endless love. I would not have attempted this without you.

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Chapter 1. Introduction

Instructor presence and sense of community are crucial elements to online course delivery in higher education (Albert, 2022; Clark & Mayer, 2008; Gamson, 2015; Ivory, 2021; Royai, 2001, 2002; Wighting et al., 2008). A sense of classroom community must be established, regardless of delivery modality, so that all students feel welcome, comfortable, and capable of success in the learning environment (Rovai, 2002). In the most successful online classrooms, students feel comfortable asking questions, making mistakes, and relying on their peers for information and support (Clark & Mayer, 2008; Gamson, 2015; Ivory, 2021). Also in these successful online classrooms, students have a strong sense of their instructors' presence (IP) due to their active and consistent involvement (both with the class as a whole and one on one with individual students), their providing timely feedback and grading of assignments, and their warm and friendly presence felt in all aspects in the online classroom experience (Delmas, 2017; Dilling et al., 2020; Garrison, 2007). However, to achieve these lofty goals of an encouraging classroom community where students have a strong instructor connection, a baseline of students' current perceptions must first be established. This information is necessary for performing possible gap analysis, on a state-wide basis, of where students' needs in the online classrooms are not being met.

The problem that my study addresses is that the online classroom may not be as positive and supportive a learning environment as needed for student success due to two crucial factors that may be weak or missing: sense of community and sense of instructor presence in the online classroom. By focusing on the students' perspectives, possible inferences can be determined based upon the results of this research which could indicate ways that faculty professional development can be specifically targeted to hone faculty members' skills in two areas: fostering a consistently positive and welcoming online classroom atmosphere and establishing a

consistently strong instructor presence. Therefore, the purpose of this non-experimental, comparative, quantitative study is to determine if there are significant differences in the perceptions of community college students about the importance and presence of sense of community (SoC) and of instructor presence (IP) in online classes at southern public community colleges using survey data. Comparative analysis will be conducted to determine any significant difference between specific student demographic populations: gender, credit hours earned, major, age, ethnic background, cumulative grade point average (GPA), and number of online classes completed. In addition, comparative analysis will be conducted on these community college student findings versus university college student findings.

By focusing on eight unique descriptors of community college students who comprise the sample population, an analysis will be conducted to determine possible relationships between student population characteristics and their perceptions of online class community and online class instructor presence. These eight descriptors are: gender, age, ethnic background, cumulative grade point average (GPA), cumulative credit hours earned, degree type, major of study, and number of online classes completed. The question focused on cumulative credit hours earned is included to determine if a significant relationship exists between those students with experience taking any college classes and their perceptions of classroom community and instructor presence versus students who are newer to taking any college classes. The question focused on age is included to determine if a significant relationship exists between age and their perceptions of classroom community and instructor presence, especially older versus younger students. Also, the question focused on number of online classes completed is included to determine if a significant relationship exists between students who have more experience with online classes, specifically, versus students with little to no online class experience and their perceptions of classroom community and instructor presence.

In addition, students were invited to share feedback on open ended questions focused on online class community and online class instructor presence so that common themes can be collected and identified. My study was conducted on students currently enrolled in eight community colleges within the state of Tennessee, all of which are Tennessee Board of Regents (TBR) public 2-year institutions.

Statement of the Problem

The focus of this non-experimental, comparative, quantitative study is on student attitudes toward online education, specifically those attending southern higher education public community colleges. The research purpose was to determine if there are significant differences between the perceptions among students based on factors of: gender, age, ethnic/racial identity, cumulative grade point average, cumulative credit hours earned, degree type, major of study, and number of online courses completed for the dimensions of both classroom community and instructor presence.

Research Questions

My research addressed the following research questions via the Cartwright Community and Instructor Presence Survey instrument:

Research Question 1: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores between male and female community college students?

Research Question 2: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among community college students in five distinct age groups (18-20; 21-25; 26-30;31-40; 41+)?

Research Question 3: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among community college students in four racial or ethnic categories (White; Black or African American; American Indian/Asian/Native

- Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer)?
- Research Question 4: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0)?
- Research Question 5: Is there a significant difference in the Perceptions of Sense of Community dimension scores among seven categories of community college students' cumulative earned hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56+)?
- Research Question 6: Is there a significant difference in the Perceptions of the Instructor

 Presence dimension scores among four credential types for community college students

 (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied

 Science, A.A.S. degree; Technical Certificate)?
- Research Question 7: Is there a significant difference in the Perceptions of the Instructor

 Presence dimension scores among five major areas of study [Business and Computer

 Science; Health Sciences; Humanities, Math & Science; Social Sciences; Other [fill in the blank])?
- Research Question 8: Is there a significant difference in the Perceptions of the Instructor

 Presence dimension scores among five categories of community college students'

 previous online college course completion (completed 0-2 courses; completed 3-4

 courses; completed 5-6; completed 7-8; completed 9 or more)?
- Research Question 9: Is there a significant difference in the Perceptions of Instructor Presence dimension scores between male and female community college students?
- Research Question 10: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among community college students in five distinct age groups (18-20;

- 21-25; 26-30;31-40; 41+)?
- Research Question 11: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among community college students in four racial or ethnic categories (White; Black or African American; American Indian/Asian/Native Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer)?
- Research Question 12: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0)?
- Research Question 13: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among eight categories of community college students' cumulative earned hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56-66; 67+)?
- Research Question 14: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among four credential types for community college students (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied Science, A.A.S. degree; Technical Certificate)?
- Research Question 15: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among five major areas of study (Business and Computer Science; Health Sciences; Humanities, Math & Science; Social Sciences; Other [fill in the blank])?
- Research Question 16: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among six categories of community college students' previous online college course completion (completed 0-2 courses; completed 3-4 courses; completed 5-6 courses; completed 7-8 courses; completed 9 or more courses)?

Significance of the Study

The significance of the study lies in its focus on students and their perceptions of the online classroom. While this topic holds interest for stakeholders at every level of higher education, it is of particular interest for four specific audiences. First, if community college instructors can gain an increased understanding of how their students perceive the online course experience in terms of online classroom community and instructor presence, this information may better inform faculty teaching practices. Second, if community college department chairs or deans can gain a better understanding of how classroom community and instructor presence impact student retention and persistence, then they may better support training in these areas and regard them as key performance indicators for teaching observations and annual reviews. Third, if community college administrators, typically vice presidents and above, understand how classroom community and instructor presence possibly influence students' classroom performance, then crafting institutional directives would potentially be more supportive of the online classroom, reflecting this support overtly in mission statements, quality enhancement projects, and vision statements. Finally, for the community college faculty professional development teams, understanding the importance of these factors may help refine training offerings, identify gaps between training and practice, and provide a focus area for institutional centers for teaching and learning. For each of these stakeholder groups, analysis and research in this area could help shape future policies and procedures with regard to online classes at community colleges. Indeed, the dual impacts of online educational communities and the practices of instructor presence could provide emergent tools to refine and improve online course offerings, of particular interest during a time of historically record low community college enrollments, specifically a 35% decline nationwide over the last decade (Fischer, 2022).

From a research perspective, previous studies in this area typically focus solely on student experiences from the four-year university setting, with comparisons made between graduate and undergraduate students' perceptions (Bhagat et al., 2016; Dunaway & Kumi, 2021; Kappel, 2022; Kim & Dae-Jin, 2021). With little attention spent on the unique student population of the community college higher educational environment, this current study seeks to fill the research gap by seeking to better understanding community college students and their experiences with online educational environments.

In addition, because students typically display unique regional characteristics, special attention is needed for regional and state-specific research in this area. Also, a body of research exists analyzing pre-COVID online classroom conditions and studies with pre-pandemic findings indicating no statistically significant difference was found to exist in community college students' perception of both social and teaching presence when comparing the brick-and-mortar environment to the online environment (Dilling et al., 2020). However, post-pandemic research into these areas is urgently needed so that comparisons can be studied, and thoughtful changes made, if needed, to how, when, and why instructional design methodologies take place.

Definitions of Terms

This study uses the following terms, which are defined as follows:

Community: A group of humans who share a similar interest, purpose, or goal and who, over time, identify themselves as a collective unit and a key identifier of a community is a sense of trust and respect among its members (Clark, 1937; Firth, 1970).

Community College: A two-year higher educational institution which provides cost-effective educational opportunities to a prescribed service area. These opportunities may result in terminal associate degrees, transfer degrees, technical certificates, or a combination of these for a variety of major areas of study (Homeland Security, 2012).

- Instructor Presence (IP): An intentional pedagogical approach which values establishing and nurturing the instructor and student relationship so that a more open, welcoming, and freer learning atmosphere is created, positively impacting student learning outcomes (Dilling et al., 2020).
- Learning Management System (LMS): An online platform which centrally houses and delivers course content, activities, grades, reading materials and other resources for the exchange of ideas within the online classroom. An instructional designer typically builds an online class within the LMS, working with a faculty member who serves as a subject matter expert (SME). Working together, they fashion the faculty's subject knowledge using industry-accepted standards of course design to include student outcomes, universal design for learning (UDL), ensuring that all activities required of the students relate back to concise learning outcomes, as provided by the institution's curriculum committee or other overseeing entity (Rottmann et al., 2020).
- Online Education: A broad term which can generally encompass course delivery that takes place outside of the typical 20th century model of face to face in a brick-and-mortar building. It refers to learning that takes place when the instructor and students are separated by distance, and which uses the internet as a delivery modality (Mathes, 2020). For fully synchronous classes, the instructor and students meet at a predetermined day and time for live class session. For fully asynchronous classes, the instructor and students do not meet at a predetermined day and time and there are no live (synchronous) components. For the purposes of this study, "online education" will refer to both of these modalities, as well as variations such as hybrid and flex modalities.
- Sense of Community (SoC): A feeling of professional collegiality within the online classroom experienced by students, toward both their fellow classmates as well as toward their

instructor. When students feel that they are in a safe, caring, well-organized, and well-managed environment, they begin to form connections and friendships with their colleagues, bolstering their ability to learn (Rovai, 2002).

Delimitations and Limitations

For this study, participants were delimited to currently enrolled community college students who have completed at least one online class during their time in college and who responded to a survey sent via email. The study was also delimited to eight public, two-year institutions and included participation from students across a range of ages, backgrounds, credit hours completed and areas of study.

This study was delimited to focusing on students' perceptions of sense of community and sense of instructor presence in their online classes. The measurement of sense of community and sense of instructor presence was delimited to an instrument using a Likert scale uniquely created for this research. This scale is a limitation because not all possible perspectives from the participants may have been represented in the options presented.

A limitation of this study is the assumption that participants were a representative sample of community college students who provided thoughtful and honest, non-random responses and that the sample size was sufficient to be representative of the population. Another limitation is that the sample was self-selected because respondents were volunteers. Therefore, results are not necessarily generalizable to other settings.

Overview of the Study

Chapter 1 provides an introduction to the topic of sense of community and instructor presence in online classes and outlines the research gap this study will seek to help fill. Chapter 2 presents the literature review which includes a historical overview of the shifting definition of how community is understood, as well as how these understandings apply specifically to the

online classroom in the higher education setting. This chapter also provides a discussion of the following topics: early definitions of community, development of online community, development of online community in higher education, identification of instructor presence, impact of instructor presence on student success, the impact of "regular and substantive interaction" (RSI). Chapter 3 outlines the method and type of research, including the research questions and null hypotheses, the instrumentation, population and sample, and methods for data collection, and data analysis. Chapter 4 presents the survey results and a presentation of the data and the research findings. Chapter 5 provides a discussion of the findings, summary, conclusions, and recommendations for implementation and further research.

Chapter 2. Review of Literature

This literature review first begins with a discussion of early definitions and understandings of the generalized term of "community," followed by a brief historical overview of the impact of technology on community development, the shift from location dependent communities to the virtual space, creating the development of online communities which necessitated the implementation of various guidelines to form behavioral expectations within online community spaces.

Second, the focus then becomes the genesis of online communities in higher education, the unique characteristics of these online communities, and the role that online classroom instructors play through "instructor presence" (IP). The evolving aspect of IP away from transactional modes to communal expectations within the classroom space is explored, as well as the relationship between strong IP and strong student outcomes. Characteristics of impactful IP are explored as crucial components of a successful online classroom community.

Third, formal definitions of online education from governmental agencies are considered, especially the edict of regular and substantive interaction (RSI) as mandated by the Department of Education. Finally, a theoretical framework is constructed with special emphasis placed on the unmistakable upward trending of student demand for online education on the national, state, and local levels with implications of this increased demand on the need for greater faculty training, generally on construction online classroom communities, and specifically on IP.

Early Definitions of Community

Defining online community begins with a general understanding of the origins and traditional sense of human community. Starting in the 1930s, researchers concluded that community was defined by humans who engaged in social-based interactions and the concept was largely predicated on being tethered to a physical location and time (Clark, 1937). By the

1970s, sociologists were beginning to realize that while a typical definition of community may be dependent upon specificity of space and time, the concept was understood to be more accurately based on human interactions, concluding that shared relationships and activities which focused on a common goal better defined community (Firth, 1970). The idea that community could exist separate from physical location became more solidified as sociologists found that when migrants from small villages moved to urban areas, they still remained connected to established relationships, despite being "spatially and socially dispersed" (Wellman, 1983, p. 169). This important finding demonstrated that the concept of community, based on the strength of the human connections, could survive completely separate from a physical location or a defined time.

The definition of community has become elastic over time, applied not only to people but also to other life forms on earth, including plants, illustrating the importance of connectivity for a variety of living creatures, in a wide array of circumstances. For example, Eugenius Warming (Warming et al., 1909), the founder of the study of ecology, defined a plant community as a group of species which have become interdependent resulting in formations of increased complexity within this natural community. On the 50th anniversary of Warming's work, scientists marked the jubilee by affirming his concept of social plant groups or plant communities and the ancillary concepts of community dynamics, a revolutionary concept that has carried on to the present day because contemporary scientists now affirm that a plant community not only functions as a unit, but it also actively engages in self-directed communication (Goodland, 1975). In old growth forests, in particular, the trees have evolved to "live in cooperative, interdependent relationships, maintained by communication and collective intelligence" thanks to the microscopic fungal filaments of mycorrhizal networks (Grant, 2018, p. 4). Consequently, the concept of community has evolved over time to better describe the

connected interactions of sentient creatures in a variety of circumstances.

Development of Online Community

As experts refined their understanding of how human communities functioned, parallel developments in technology were also taking place. As early as the turn of the last century, researchers began to record how technological innovations were impacting how people interacted with one another, noting that contemporary technological inventions such as "the telegraph, telephone, newspaper and radio [had effectively] dissolved the distances" of human interaction (Park, 1925, p. 14). These early scientists had no idea of how accurate their theories would continue to be, as the trajectory of technological developments reached new heights, particularly with the introduction of the internet.

The advent of the internet underscored the concept of community as no longer tied to location or time elements, making possible the creation of wholly asynchronous human communities, establishing connections that reached across continents and over oceans, and enabling humans to form bonds with others they had not never met, with strangers making connections over a variety of topics. Early researchers defined an "online community" as a virtual space where people formed connections based on support, camaraderie, and empathy (Rheingold, 1993; Hiltz, 1985). One example of an online community powerhouse was iVillage.com which, at one time, boasted unique monthly visits in excess of 14.5 million (Moses, 2014), growing to nearly one million members in less than a year (Reference for Business, n.d.) with a net worth of \$2 billion (Kaufman, 2001). And while this internet village once offered goods and services for sale, the most valuable asset had always been the human connections made in the community. Founder Candice Carpenter noticed that the human connections formed as a by-product of the online conversations typically sparked the most interest because of the interpersonal aspect of sharing about lived experiences; Carpenter went on to leverage this

observation into a successful business (Kaufman, 2001). Early uses of these virtual communities also provided a communal space for professionals across the globe to connect and share information. In the 1990s, an international scientific coalition conducted a series of fully online workshops, ground-breaking at the time, which illustrated the creation of a purposeful and professional (rather than viral) online community (Brown, 1999). Even at this early stage, users across the spectrum sensed that understanding online community relationships would become "even more critical for a community of users" who were exchanging information in a shared online space (Brown, 1999, p. 72), regardless of motivation for these connections. Over time, researchers have validated these connections made in a virtual space where users share life stories and seek support. Rodgers and Chen (2005) studied women diagnosed with breast cancer and noted a positive relationship between well-being and how frequently they contributed to an online discussion board. Therefore, virtual connections made in an online community provided real-world benefits, including improving one's well-being and furthering one's professional research goals.

However, like any large gathering of humans who form a community, a set of common standards became necessary to ensure common safety and future growth in this new frontier. One example of these online community guidelines came from the official iVillage community guidelines focused on "building purposeful, interactive community online spaces" with the core tenets of valuing members and ensuring online safety (iVillage Community Guidebook, 1999, p. 8). These industry-specific practices eventually solidified into three core community design principles: planning for growth, implementing feedback loops, and empowering your users, tenets which have become widely accepted and applicable across industries (Kim, 2000). Later, as the virtual world matured over the next decade, researchers found that interaction and collaboration were the hallmark of Web 2.0 creating "user-generated content in a virtual

community" (Sajithra & Patil, 2013, p. 72). These early forays into crafting purposeful structure in the virtual community set the foundation for modern online communities such as Discord, a platform originally launched for gamers, but which has virally expanded to thousands of topics, currently hosting 140 million monthly active users (Curry, 2023), a testimony to the enduring popularity of online communities. Continuing the tradition of enforcing community standards, Discord's credo touts a community where users can genuinely connect with others in a fun environment, with community guidelines dedicated to creating belonging, echoing the iVillage guidelines from decades earlier (Discord, 2022). Established expectations like these which accompany successful online communities became even more crucial as the educational world and the virtual world soon intersected.

Development of Online Community in Higher Education

Interest in the role of the online classroom environment and its impact on student success has been prevalent for decades. However, the in-classroom dynamics of how the interactive student-faculty contact would actually take place has morphed over time. Early online higher education practitioners were typically not provided with in-depth faculty professional development materials or training opportunities. Instead, instructors only received quick overview materials which emphasized curriculum, rubrics, and plagiarism; no mention was made about how or why to foster student and faculty interaction in order to build the online classroom community (VanDam, personal communication, March 2004). Eventually, some faculty training materials did display a nascent understanding of student and faculty interaction but only in a transactional sense. For example, Kaplan University, a prominent online higher education institution in the early 2000s, provided synchronous faculty training which was provided a week before classes started and offered only one time (VanDam, personal communication, January 2005). Over time, this training shifted emphasis from the technological aspects of teaching

online, such as understanding how to use the tools in the learning management system (LMS) to an emphasis of regular interactions with students. Unfortunately, these were only interactions (via the discussion board, seminars, and grading) usually mimicked the typical lecture heavy, instructor-centered paradigm and did not focus on establishing personal connections with students or fostering student to student connections (VanDam, personal communication, January 2005). On the student side, guidance provided at this time reinforced the transactional nature of the online classroom, informing students that faculty may be unavailable, advising them to continue working on assignments "while you are waiting for a response from your instructor" (Christ & Ganey, 2003, p. 98). However, educational researchers did eventually begin to detect how forms of communication such as message boards, blogs, wikis, chat, and email were contributing to the newly dubbed "computer supported collaborative learning" (CSCL) (Clark & Mayer, 2008, p. 23) and the introduction of multi-modal ways of interacting within the online classroom paved the way for reconsideration of how those interactions would look and feel.

Research over the following years shifted from the transactional model to the community model because findings indicated that interaction did not automatically equate to active learning (Garrison & Cleveland-Innes, 2005). This reinforces Rovai's 2002 findings of a "positive significant relationship between a sense of community and cognitive learning" (p. 328) and provided evidence that faculty-student and student-student interactions in the online classroom were crucial to student success (e.g., Clark & Mayer, 2008; Gamson, 2015; Ivory, 2021). Inversely, lacking this strong sense of classroom community in the online classroom was found to contribute to high dropout rates and low cognitive learning (Alberth, 2022; Rovai, 2002). Classroom community can be defined as predicated on connectedness and commonality: connected personal relationships between members and commonality of a shared learning goal (Rovai, 2001, 2002). In particular, Rovai's extensive research has shown that not only can online

instructors craft classroom community, but that learner to instructor interactions are the key component of this cohesive virtual learning environment. Indeed, the goal of any college professor teaching online should be the establishment and nurturing of a strong learning community (Alberth, 2022).

Based on the work of Rovai (2002), structuring an online classroom community offers students the benefit of a safe, non-judgmental space to expose inadequacies in knowledge and gaps in understanding but "with safety and trust comes the willingness of community members to speak openly" especially in a classroom community (p. 322). This willingness to expose vulnerability is essential in any learning situation so that successful scaffolding and building of knowledge can take place. Additionally, a sense of community is important for every student, regardless of learning modality (Wighting et al., 2008) building upon the understanding that the sense of community is the shared feeling of belonging, commitment, and value. Also essential is the feeling that participants have a "shared faith that members' needs will be met through their commitment to be together" (McMillan & Chavis, 1986, p. 12). This is especially important because interpersonal connections flourish when trust is cultivated but without trust, those connections weaken (Preece & Maloney-Krichmar, 2006). And this concept extends beyond the classroom, shaping how a range of student services are created and delivered, such as advising services where community building guidelines provide these professional staffers with the tools to "ensure that communication is personalized, productive, and engaging" (SCORE, 2022, p. 11). SCORE's work illustrates that the concept of educational communities provides students with not only a comfortable and welcoming learning space, but also with the reassurance of peer support as they strive toward graduation.

The emergence of the community aspect of online learning has prompted some researchers to shift course design from a teacher-centered to learning-centered model where the

instructors' roles are not diminished, but rather continues to provide a positive influence on student learning and classroom connection (Stover et al., 2018) as reflected in typical end of semester course evaluations which typically pose questions around measuring faculty effectiveness in how the interact with students (Centra, 1980). Researchers realized early on that the promise of utilizing the internet to deliver online would necessitate that faculty not only learn how to use technology, but also how to modify their current teaching practices. Among these key teaching practices are techniques that highlight collaboration to build a sense of community because such use allows classes to incorporate both authentic activities and understanding, instead of just lecturing about content (Fetherston, 2001).

Identification of Instructor Presence

The concept of "instructor presence" (IP) has been identified, over time, by various other expressions. For example, the term "visible author" refers to an instructor's shift from a formal and impersonal tone used within the online classroom to a more informal and personable tone, especially in an instructional context (Clark & Mayer, 2008, p. 173). And this use of a visible author style promotes greater deep learning and increased learner motivation (Clark & Mayer, 2008) with the implication that the communication does not originate from the impersonal LMS, but rather from a very real and human instructor.

A second term used to describe IP has been "instructor persona" which focused more on the instructor's role in deliberately incorporating personality into the overall course design (Kelly, 2009, p. 15). Earlier analysis into the effectiveness of online education focused strongly on course design and technological aspects, where student satisfaction and motivation measures were based on learning management system (LMS) characteristics rather than on the elemental human connection of instructor and student (Liaw, 2007). In recent studies, researchers found that students' negative online classroom experiences were most commonly caused by lack of

instructor communication and lack of instructor interactions with students; essentially the classroom lacked the indelible stamp of the instructor's public teaching persona (Beavers, 2009). Therefore, the work of Liaw (2007) and Beavers (2009) demonstrated that the concept of instructor persona marked a progression in the understanding of how IP functions in the online classroom.

A third label used for IP has been "teaching presence" which encompasses both the course design function as well as the course facilitation role with emphasis on social and cognitive interactions aimed at achieving meaningful learning (Delmas, 2017; Dilling et al., 2020). In addition, teaching presence is one of the three key constructs comprising the Community of Inquiry (CoI) framework (Garrison, 2007). Here the emphasis expands beyond structuring the course or just providing instructional text but also describes the repeated instructor behaviors that "promote engagement, guide understanding, build consensus, and create a sense of community" (Dilling et al., 2020, p. 863). Indeed, additional studies go further to clearly delineate teaching presence as being intertwined in the course design process while instructor presence specifically describes the instructor's observable actions and behaviors that typically occur during the synchronous part of the course (Richardson et al., 2015). This is a crucial distinction to make since the continued proliferation of online courses often necessitates the separation of course designer role from actually teaching the class (Richardson et al., 2015). Consequently, teaching presence centers on the act of conveying knowledge to students, typically via course design or pedagogy, while instructor presence refers more to how the faculty member creates interpersonal connections with students (e.g., Delmas, 2017; Dilling et al., 2020; Richardson et al., 2015).

Here we see the evolution of the instructor's role in the online classroom shift from merely providing assessment and materials to actually becoming responsible for encouraging all

the interactions within the online classroom, a recursive activity which occurs all semester long and culminates in the sustained formation of classroom community. Udermann (2009) noted that instructors model positive behavior, with an aspect of that responsibility focused on creating a safe course environment with multiple interactions so students can form connections with each other and with the instructor. Over time, researchers have determined that instructor presence has been perceived to be significantly higher by students in an online class than in the traditional face-to-face (f2f) environment, playing an essential function in online learning persistence, engagement, and satisfaction (Berry, 2019; Bowers & Kumar, 2015; Croxton, 2014; Park & Choi, 2009).

In addition, research conducted to discover the components of an effective online learning community has determined that instructor actions, beyond simple conveyance of curricular information, is crucial to forming strong online classroom communities. These instructor attributes include adeptness with classroom technology, facilitating student to student and student to instructor interactions, making themselves accessible, being flexible to meet students' needs, providing meaningful feedback and making students feel noticed and understood (Boling et al., 2012; Exter, 2009). In fact, non-instructional faculty to student interaction is influential to crafting online community especially those instructors who take purposeful steps to make their presence known through pre-term start communication, video introductions, regular updates through the semester and reminders about upcoming due dates (Udermann, 2009). Instructor behaviors such as developing relationships with students, providing genuine care, being available to listen, and using student names persistently emerge as recurrent positive ways to build online classroom community (Felten & Lambert, 2020; Olson et al., 2022). These behaviors actively construct education that is rich in relationships and connections (Felten & Lambert, 2020). When these behaviors are applied to the online classroom, students and

instructors notice a marked improvement in the overall quality of the learning experience (Felten & Lambert, 2020; Olson et al., 2022).

In fact, measuring for this skill set has become integrated with typical faculty performance evaluation metrics through categories such as evidence of instructor engagement particularly "ease of and emphasis on interaction" (Palloff & Pratt, 2009, p. 50). As institutions implement online distance learning programs, they are faced with two important tasks: training online instructors and evaluating online instructors' performance (Palloff & Pratt, 2009).

Students notice the difference. Commenting on instructor empathy, student research participants clearly indicated that faculty who communicate in a timely and caring manner, were valued because their concern for students' wellbeing was clearly demonstrated (Hartline et al., 2022).

As research has continually indicated, IP has been revealed as valuable to students, especially in the realm of empathy and deep connection (e.g., Hartline et al., 2022; Palloff & Pratt, 2009).

The concept of online community is so powerful that not only is it standard measurement for a typical student classroom, but it is also recognized as a key component of an important faculty to faculty peer network; recommendations for Centers of Teaching and Learning, working with faculty to re-engage when faced with overwhelming circumstances such as the COVID-19 pandemic, included creating community so that colleagues could learn from and check up on each other (Imad et al., 2022). In addition, the concept of communication connections also became a significant aspect of new faculty orientation so that new faculty members can meet and connect with their fellow instructors as well as institutional staff members (Nicolas, 2019). Keynote speakers at prestigious higher education conferences like the National Institute for Staff and Organizational Development (NISOD) routinely emphasize the importance of developing instructor presence through purposeful practice like memorizing and correctly pronouncing their students' names (Darling, 2019). In addition, the Association of

College and University Educators (ACUE, 2021) provides faculty training specifically targeted at honing the IP skillset; a recent faculty member said, "I used to assume that I couldn't get to know students that well online, and so maybe it wasn't that important to know their names" but after training, faculty members report better understanding how and why to grow relationships with students through IP (ACUE, 2021, n.p.).

These trends point to how IP is a subset of the online classroom community and plays a prominent role in the overall construction of a strong online classroom experience. In recognition of the significant role that online classroom community and instructor presence play in successful learning environments, faculty training then becomes pivotal for continuous improvement, to avoid the "risk of limited learner engagement" and to guide faculty through this "role transformation" (Savitzky et al., 2022; Mandernach et al., 2006; Swickard, 2020). One aspect of online teaching where faculty development plays a key role is in training in the use of synchronous web conferencing tools; even when teaching a fully asynchronous course, instructors are encouraged to include synchronous elements because this is a powerful way to "leverage teaching presence" for online learners (Marshall & Kostka, 2020). Indeed, online learning shares some commonality with traditional locality-based learning in that students want to know and be known by their instructors (Felten & Lambert, 2020; Groth, 2007; Olson et al., 2022). "What students still want most is us" (Groth, 2007, p. 40).

Impact of Instructor Presence on Student Success

Recent research has shown that intentional IP can provide social and learning supports to students with by easily implementing practices such as the use of student names and reminders of due dates, increasing the level of instructor presence (Richardson et al., 2015). IP has evolved to now be defined as "the specific actions and behaviors taken by the instructor that project him/herself as a real person" (Richardson et al., 2015, p. 259). Among the most important

instructor behaviors are clarity and frequency in communication, such as course and assignment requirements, and conveying empathy (Sheridan & Kelly, 2010). In fact, significant relationships exist between teaching presence and student satisfaction, as well as on perceived learning, pointing to the crucial role of IP (Akyol & Garrison, 2008). This evidence demonstrates how honing IP skills in the online classroom is an essential professional development topic.

IP also supports student learning because "social interactions serve as the medium for keeping learners motivated and intellectually curious to learn" because of the key role that instructors perform in the classroom by "setting the stage for a positive climate, creating emotional connections, using personalized communication" (Conceição & Howles, 2021, p. 105). "Teaching will always be a deeply relational endeavor" (Spencer, 2022, para. 25).

That deep relationship connection extends to faculty professional development. IP can also "provide a roadmap for the training and support of online instructors as well" (Richardson et al., 2015, p. 275). Strong administrative support of faculty development focused on online teaching best practices, particularly IP, can also equip instructors when combatting new and more invasive forms of technology, such as ChatGPT. This technology is of particular concern because ChatGPT is a free online artificial intelligence (AI) tool which generates unique responses to writing prompts, challenging the ability of plagiarism detectors because of the iterative learning process inherent in AI (Mitchell, 2023).

Launched in November 2022, ChatGPT has already prompted a seismic shift in the technology industry with Microsoft shifting resources, consequently committing a multibillion-dollar investment while simultaneously laying off 10,000 employees (Mitchell, 2023).

Proponents of this next generation AI tool display little concern, such as ChatGPT CEO Sam Altman who says that "We're just in a new world now. Generated text is something we all need to adapt to" (Vincent, 2023, para. 11) and David Rettinger, president emeritus at the International

Center for Academic Integrity who opines that these changes are essentially inevitable (Surovell, 2023). However, higher education experts state that the surest deterrent to wholly computergenerated text is the indispensable role of the human teacher (D'Agostino, 2023).

Currently, some of the strongest deterrents to misuse of ChatGPT in the higher education classroom include better knowing students to help identify genuine engagement, utilizing a scaffolding and multiple draft teaching approach, and providing assessments during class time like presentations, performances, or other creative outputs (Pickell & Doak, 2023; Rudolph et al., 2023). All of these preventative strategies have one common element: an attendant human professor who exercises keen IP.

A strong, consistent, and intentional IP is not only a strong deterrent to new and traditional forms of cheating, but it can also consistently provide that "safe and welcoming space" first established in non-academic environments which are now a necessary component to a greater number of students, as online education demand continues to grow. IP has become a reliable cornerstone of high-quality higher education; According to recent research, instructor presence has been identified as integral to students' online learning success (Rosser-Majors et al., 2022).

First, on a national scale, a survey of Chief Online Officers (COOs) indicated that "student interest in online learning has increased substantially in the past two years" with most predicting a continued upward trend in student preference, so much so that most believed "that meeting the anticipated undergraduate online demand at their institution will require realignment of institutional strategy and priorities" with the strongest disconnect between offerings and student preference shown to be from "online leaders at public two-year schools" who were least likely to forecast this interest (Garrett et al., 2022, p. 4). Additional higher education industry figures point to the increased and persistent need for high quality online courses, as the industry

begins to recover from COVID-19 impacts. According to Lori Williams (2022), past President of NC-SARA, "As of Spring 2022, 76% of community college students stated that they wanted the option to take courses completely online in the future" a need most keenly felt by the "growing number of working adults, parents, part-time students, military-connected learners and other students who need easier access to postsecondary opportunities" (para. 2). As the pool of online students expands, so does the need to provide a welcoming learning environment for all.

Second, on a state level, the Office of Research and Education Accountability (OREA) of Tennessee has shown that for Fall 2019, "around 41 percent of students at community colleges enrolled in at least one online course. Following the beginning of the pandemic, this percentage almost doubled, with 80 percent of students enrolling in at least one online course in fall 2020" (Tennessee Comptroller of the Treasury, 2021, p. 2). And while explosive online enrollment growth was expected during the pandemic, rather than recede back to pre-2019 figures, student demand for the online classroom option has remained steady and, in many cases, increased.

Third, demand for online classroom options is also felt on a local level. For example, at Columbia State Community College located in Middle Tennessee and one of 13 community college institutions within the Tennessee Board of Regents system, recent figures indicate that "online enrollment makes up 51% of headcount (HC) and 32% of full-time equivalency (FTE)," meaning that the majority of the college's HC enrollment is derived from online enrollments (CoSCC, 2022, p. 43). Clearly, students are choosing to attend their courses and earn degrees by enrolling in online classes. In addition, a growing number of enrollments for this college are now out of the prescribed county service area where, of the out of service area enrollments, 56% of those are via online modality (CoSCC, 2022, p. 43). According to the Integrated Postsecondary Education Data System (IPEDS) 2022 report, for Columbia State Community College, 87% of all students were enrolled in online courses (minimum of one course) while the comparison

group reported 61% for the same parameters (IPEDS, 2022).

The Impact of Regular and Substantive Interaction (RSI)

As online education emerged as a substantial transformation in the educational landscape, the need to better define online education or "distance education" was recognized by the United States Department of Education. This agency provides an official definition which states, in part, that "Distance education (DE) is education that uses one or more types of technology to deliver instruction to students who are separated from the instructor and to support regular and substantive interaction between the students and the instructor synchronously or asynchronously" (IPEDS, 2023, para. 1). However, while this definition supplies clarity about the technological aspect, the vagueness of the "regular and substantive interaction" (RSI) has become a crucial issue for all institutions, public and private, which provide higher education via online modality.

Currently, the only guidance provided is an outline of what would not be considered RSI, specifically interactions initiated only when the student initiates the request or if the interaction is fully optional (Online Learning Consortium, 2019). Even the most recent publications on RSI from the Department of Education have not provided definitive clarity on how to clearly describe or quantitatively measure RSI in the online classroom.

This lack of direction has become a serious concern for higher education institutions because those found in violation of RSI can potentially lose access to federal financial aid funds, creating a potentially catastrophic ripple effect for students and institutions, alike (D'Agostino, 2022). With so much at stake, especially for the community colleges and their students, understanding how to possibly meet RSI takes on greater urgency.

One way to ensure that institutions can demonstrate good faith in attempting to meet RSI, however vaguely it is defined, is to show that faculty members understand how to utilize their student interactions to increase empathy, infuse warmth, and create a welcoming classroom

atmosphere where students will want to learn. These strategies include posting weekly announcements, calling students by name, and just enacting measures that demonstrate consideration such as checking in with students to see how they are doing (Willis et al., 2021). And faculty can become more aware and practiced in IP pedagogy through professional training, conveying the precepts of this practice so they have a model for optimal online learning practice that is driven by theory (Miller et al., 2014). Suggested training would encompass explicit instruction on both andragogy and teaching presence to create online learning experiences for students in a variety of educational settings (Miller et al., 2014).

Darby (2019) underscored this sentiment saying that, as the instructor, "You set the tone and the example, both at the very beginning of the class and throughout the semester" (p. 52). Darby explained that "Online classes are not meant to be like your favorite slow cooker recipe. They are not 'set and forget'" (p. 58). Indeed, the key ingredient in any successful online classroom, as shown again and again by years of research, is the attentive and present instructor. Faculty need to better understand and embrace the unique teaching opportunities that the online classroom presents. Otherwise, faculty members' absence from online classroom interactions potentially jeopardizes an entire institution. "When you teach in the classroom, you talk; when you teach online, you participate in threaded discussions. If an instructor is not participating in the threaded discussions, the course becomes a correspondence event rather than an online learning experience" (Mandernach et al., 2006, p. 6).

One possibility is to revise the institutional student satisfaction surveys, traditionally administered each semester and expand this feedback to include using the specific metric of teaching presence so that a more objective assessment can be created for a variety of professional such as the instructors themselves, online program administrators, or principle investigators to better measure the effectiveness of students' online educational experiences (Miller et al., 2014).

This approach would be a logical move since experts have labeled the typical course satisfaction survey tools as "relatively shallow and unreliable analysis tools" (Miller et al., 2014. p. 24). Of particular importance when designing faculty professional development would be consideration of how the concept of IP has morphed, over time, from an authoritarian model with responsibility centered on the instructor to the more broad-based idea that IP actually functions to redistribute authority and teaching responsibility (Dempsey & Zhang, 2019).

For community colleges, specifically, a logical starting point would be careful consideration of what constitutes effective teaching for this unique student population.

Authoritative voices on this subject include be past recipients of the National Institute for Staff and Organizational Development (NISOD) community college teaching award which recognizes individuals doing extraordinary work on their campuses (NISOD, 2022). Past NISOD faculty winners overwhelmingly have urged teaching colleagues to make contact with students, routinely memorize and use students' names, and consistently demonstrate care and empathy in order to create a truly student-centered learning experience, regardless of modality (Roueche et al., 2003).

These faculty guidelines for success are underscored by the American Association of Community Colleges (AACC) in their Competencies for Community College Leaders report which includes an entire section devoted to establishing the classroom community with strong communication using consistent messaging, etiquette, and multi-generational engagement so that faculty are more aware of the multiple ways they can successfully launch and implement IP in their classroom communities (AACC, 2018).

Leveraging the expertise of recognized leaders in online education at the community colleges is especially important because of the community colleges' historical legacy and promise; "community college has been traditionally referred to as the people's college, and it is committed to providing access, opportunity, and a full scope of educational options to those who

attend" (Bower & Hardy, 2004, p. 8). To keep community colleges on the path of their original mission, approaches that encompass collaboration and build a sense of community support constructivist learning must be employed.

Theoretical Framework

Various researchers have found that purposeful construction of community within the online learning environment can positively benefit students. Of the components of the educational online community, instructor presence is a crucial pillar of success. Also, the importance of online classroom community is predicated on the social constructivism theory developed by Vygotsky (1978) who felt students needed a shift from acting as passive receptacles of information to receiving the responsibility to construct their own understanding and knowledge. Furthermore, Vygotsky's theory of the zone of proximal development underscores how learners of various achievement levels can gain skills when learning while collaborating with more capable colleagues which is an apt description of an online classroom community.

The crucial role of the classroom community would come to the forefront as Chickering and Gamson (1987, 1989, 2001) developed seven key principles for faculty to follow, the first of which encourages contact between students and faculty. In fact, these researchers accurately predicted that technology would increase faculty members' ability to meet this benchmark, increasing the speed at which back and forth communications can take place (Chickering & Gamson, 2001).

Research that is in the process of making and exploring claims, seeking to craft true and relevant states are typically classified as taking a postpositivist worldview (Creswell & Creswell, 2018). This paradigm relies on developing understanding through careful observation and measurement with special awareness that a crucial aspect of formal inquiry is the ability to

remain objective. As a research paradigm, postpositivist analysis posits that true knowledge is conjectured but shaped through evidence, gained through processes of objective inquiry. In this way, the postpositivist stance respects the long tradition of empirical observation and data gathering, while also remaining sensitive to the nature of human experience.

With roots in the scientific advances made during the Enlightenment, post-positivism originates with positivism, a paradigm that aspires to high benchmarks of reliability and validity with data-informed evidence but, especially as applied to the social sciences, this research model eventually gave rise to the postpositivist worldview because while truth is generally considered to be objective, the human experiences of these objective truths must be subjective and imperfect (Farrow et al., 2020). Typically, postpositivist worldview research utilizes the scientific method of positing a theory, gathering relevant data, and making revisions for additional testing (Creswell & Creswell, 2018). It is this aim for objective truth while understanding the value of experience that have become the hallmark of the postpositivist perspective.

When studying educational topics, the postpositivist approach is a logical choice because professionals in the educational fields work with every aspect of the human process of learning, including communicating ideas, scaffolding understanding, and crafting critical thinking; this occurs both at the classroom level and at the institutional level (Ninnes & Mehta, 2000). Therefore, educational research must also be considerate of these human processes and how they possibly impact findings, results, and conclusions.

Within the broad spectrum of postpositivist research paradigms are various subsets of methods. One example of postpositivist methodology is that of Bourdieu's praxeology (Bourdieu, 1977, as cited in Prasad, 2015) which provides a method of providing context for structural and historical forces beside the social positioning of individual and group strategies. This subgroup of the postpositivist worldview provides important contextualization of objective data and would

provide a pathway for future research in the area of community college students' perceptions of online classroom community and instructor presence by delving specifically into experiences not under consideration with this current project.

A non-experimental, comparative, descriptive quantitative research method was utilized where non-experimental refers to careful observation of phenomena with no manipulation of conditions (McMillan & Schumacher, 2014). Comparative research methods will be used to determine similarities between two or more groups with a descriptive design providing a summary of an existing phenomenon by using quantitative statistics to chronicle the characteristics of groups or individuals within the research sample. By collecting and analyzing characteristics of unique groups, a better understanding may emerge around the implications of the dual impacts of online educational communities and the practices of IP.

From a research perspective, previous studies (Bhagat et al., 2016; Dunaway & Kumi, 2021; Kappel, 2022; Kim & Dae-Jin, 2021) in this area typically focus solely on student experiences from the four-year university setting with comparisons made between graduate and undergraduate students' perceptions. Usually, little attention is spent on the unique student population of the community college higher educational environment. This current study seeks to fill the research gap specific to better understanding community college students and their experiences with online educational environments.

In addition, given that students typically display unique regional characteristics, special attention is needed for regional and state-specific research in this area. Also, a body of research exists analyzing pre-COVID online classroom conditions and studies with pre-pandemic findings indicating no statistically significant difference was found to exist in community college students' perception of both social and teaching presence when comparing the brick and mortar environment to the online environment (Dilling et al., 2020). This could also encourage the

recursive process of teaching and learning because most institutions and professors alike expect that one of their job requirements is to continue the process of learning by adding new skills and honing existing skills (Nicolas, 2019).

Chapter 3. Research Method

This chapter includes the research method, including research questions and null hypothesis, instrumentation, sample and population, data collection, and data analysis methods for this study. The purpose of this non-experimental, comparative, quantitative study is to determine if there are significant differences in the perceptions of community college students about the importance and presence of sense of community and of instructor presence in online classes at southern, public community colleges using survey data. A quantitative method was selected so that a wider range of perspectives can be collected in the data, utilizing a larger number of participants. Typically, the benefit of larger sample sizes is that greater accuracy is provided from the inferences made, based on collected data (Creswell & Creswell, 2018). Comparative research methods were used to determine similarities between two or more groups with a descriptive design providing a summary of an existing phenomenon by using quantitative statics to chronicle the characteristics of groups or individuals within the research sample (McMillan & Schumacher, 2014). The collection and analysis of unique groups and their characteristics provides a better emergent understanding of the implications of online educational communities and the practices of IP.

The purpose of this study was to determine if there are significant differences between the perceptions of community college students and the importance and presence of sense of community in online classes. In this study, I also examined whether there was a significant relationship between sense of community and sense of instructor presence in the online classroom. I also explored online students' perceptions about how sense of instructor presence can be constructed in online classrooms. The problem that this study addressed was that poor or absent faculty professional development on instructor presence can negatively impact students. Teaching instructors how to craft instructor presence in the online classroom is a

necessary factor to build for student success and should be required of all instructors who choose to teach online classes.

The comparative statistical analysis provided insights about how faculty professional development training can be structured, specifically on the topic of instructor presence. The data also provided information about how important and prevalent a sense of instructor presence is for online students and how instructors can deliver their courses to create this feeling of an inclusive, support, and welcoming online learning community. An analysis based on the number of cumulative credit hours completed by the participant, and previous online courses completed was designed to offer perspectives about the level of previous experience in taking classes (both total and online) may have on their perception of instructor presence. In addition, an analysis based on the participant's major of study and credential type was designed to reveal possible relationships between instructor presence for subject areas as well as for types of credential the participant would earn. This data may help researchers and educators build a case for strongly encouraging or requiring that instructors who choose to teach online successfully complete professional development training aimed at honing skills to establish, build, and maintain a strong sense of instructor presence in the classroom. A final open-ended question allowed participants to expand the discussion or to comment on any other points from the survey they felt needed to be addressed.

Research Questions and Null Hypotheses

The following research questions from the Cartwright Community and Instructor Presence Survey and null hypotheses provide a focus for this study:

Research Question 1: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores between male and female community college students?

- H₀1: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores between male and female community college students.
- Research Question 2: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among community college students in five distinct age groups (18-20; 21-25; 26-30;31-40; 41+)?
 - H₀2: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among community college students in five distinct age groups (18-20; 21-25; 26-30;31-40; 41+).
- Research Question 3: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among community college students in four racial or ethnic categories (White; Black or African American; American Indian/Asian/Native Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer)?

 H₀3: There is no significant difference in the Perceptions of the Presence of Sense of
 - Community dimension scores among community college students in eight racial/ethnic categories (White; Black or African American; American Indian/Asian/Native Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer).
- Research Question 4: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0)?
 - H₀4: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0).

- Research Question 5: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among seven categories of community college students' cumulative earned credit hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56+)?

 H₀5: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among seven categories of community college students' cumulative earned credit hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56+).
- Research Question 6: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among four credential types for community college students (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied Science, A.A.S. degree; Technical Certificate)?

H₀6: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among four credential types for community college students (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied Science, A.A.S. degree; Technical Certificate).

- Research Question 7: Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five major areas of study [Business and Computer Science; Health Sciences; Humanities, Math & Science; Social Sciences; Other (fill in the blank)]?
 - H₀7: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among seven major areas of study [Business and Computer Science; Health Sciences; Humanities, Math & Science; Social Sciences; Other (fill in the blank)].
- Research Question 8: Is there a significant difference in Perceptions of the Presence of Sense of Community dimension scores among five categories of community college students'

previous online college course completion (completed 0-2 courses; completed 3-4 courses; completed 5-6; completed 7-8; completed 9 or more)?

H₀8: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five categories of community college students' previous online college course completion (completed 0-2 courses; completed 3-4 courses; completed 5-6; completed 7-8; completed 9 or more).

Research Question 9: Is there a significant difference in the Perceptions of Instructor Presence dimension scores between male and female community college students?

H₀9: There is no significant difference in the Perceptions of Instructor Presence dimension score between male and female community college students.

Research Question 10: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among community college students in five distinct age groups (18-20; 21-25; 26-30; 31-40; 41+)?

 H_010 : There is no significant difference in the Perceptions of Instructor Presence dimension scores among community college students in five distinct age groups (18-20; 21-25; 26-30; 31-40; 41+).

Research Question 11: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among community college students in four racial or ethnic categories (White; Black or African American; American Indian/Asian/Native Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer)?

H₀11: There is no significant difference in the Perceptions of Instructor Presence dimension scores among community college students in four racial/ethnic categories (White; Black or African American; American Indian/Asian/Native Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer).

- Research Question 12: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0)?
 - H_012 : There is no significant difference in the Perceptions of Instructor Presence dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0).
- Research Question 13: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among eight categories of community college students' cumulative earned credit hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56-66; 67+)?

 H₀13: There is no significant difference in the Perceptions of Instructor Presence dimension scores among eight categories of community college students' cumulative earned credit hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56-66; 67+).
- Research Question 14: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among four credential types for community college students (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied Science, A.A.S. degree; Technical Certificate)?
 - H₀14: There is no significant difference in the Perceptions of Instructor Presence dimension scores among four credential types for community college students (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied Science, A.A.S. degree; Technical Certificate).
- Research Question 15: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among five major areas of study [Business and Computer Science;

Health Sciences; Humanities, Math & Science; Social Sciences; Other (fill in the blank)]?

H₀15: There is no significant difference in the Perceptions of Instructor Presence
dimension scores among seven major areas of study (Business and Computer Science;
Health Sciences; Humanities, Math & Science; Social Sciences; Other [fill in the blank)).

Research Question 16: Is there a significant difference in the Perceptions of Instructor Presence dimension scores among five categories of community college students' previous online college course completion (completed 0-2 courses; completed 3-4 courses; completed 5-6; completed 7-8; completed 9 or more)?

H₀16: There is no significant difference in the Perceptions of Instructor Presence dimension scores among five categories of community college students' previous online college course completion (completed 0-2 courses; completed 3-4 courses; completed 5-6; completed 7-8; completed 9 or more).

Instrumentation

A 21-item survey entitled the Cartwright Community and Instructor Presence Survey was adapted from an earlier work (Kappel, 2022) which focused exclusively on university students. The Cartwright Community and Instructor Presence Survey was comprised of eight items specific to measuring sense of community, as well as eight additional items targeting the measure of instructor presence; the overall structure was modified from a previous survey instrument with the author's written permission (Appendix C). Significant demographic question changes to the survey instrument include questions specific to the community college student including degree type and major area of study. Additional emphasis was placed specifically on the dynamic of instructor presence (IP) for questions nine through 16. The survey included demographic information about the participant's gender, age, race or ethnicity, current grade point average, cumulative credit hours earned, credential type, major area of study, and

previous online courses completed.

To respond to items about their online class experience, participants were given the following instructions: "For the following items, consider your online class experience in general if you have taken multiple online classes. If you have completed only one online class, use that course as a reference for your responses." A Likert-type scale from 1 - 5 was used with categories of strongly disagree, disagree, neither agree nor disagree, agree, or strongly agree. The survey included 21 items overall. Of those items, 16 were based on the following dimensions: Importance of Sense of Community and Importance of Instructor Presence.

The first dimension of the Importance of Sense of Community was based on the following survey items which focus on students' perception of classroom community:

- It is important for students to interact with each other in online classes
- Collaborative learning is important for me in my online classes.
- I prefer to be an independent learner. (This question was reverse scored.)
- It is important for me to feel like I am part of a learning group.
- I want to know my classmates in online classes.
- I value a sense of community in online classes.
- I always felt embarrassed asking questions during my online class. (This question was reverse scored.)
- I felt comfortable asking questions in my online classroom.

For these items, a new variable labeled "Community" was created from the average of these eight scores for each participant.

The second dimension of the Importance of Sense of Instructor Presence was based on the following unique survey items which focus on students' perception of instructor presence:

• My online instructor(s) consistently posted a weekly announcement in my online classes.

- My online instructor(s) consistently provided helpful feedback on graded assignments.
- My online instructor(s) consistently graded and returned assignments in a timely fashion (less than 5 days).
- I prefer not to know much about my online instructor(s). (This question was reverse scored.)
- I usually have a good sense of my online instructor's personality.
- I believe that if I met my online instructor(s) face to face, I would immediately recognize them.
- My online instructor(s) made me feel at ease asking questions.
- It was difficult to contact my online instructor. (This question will be reverse scored.)
- I felt comfortable contacting my online instructors because I knew they would be responsive.
- My online instructor(s) shared pictures or stories that made them feel like real people to me.
- At the end of my online class(es), I was not sure of my online instructor(s)' name(s).
 (This question is reverse scored.)

For these items, a new variable labeled "Instructor Presence" was created by averaging these eight scores for each participant.

Population and Sample

This study was conducted with students currently enrolled in eight community colleges within the state of Tennessee, all of which are Tennessee Board of Regents (TBR) public 2-year institutions. By focusing the sample and the instrumentation exclusively on TBR public 2-year community college institutions, new insights can be gained from this unique population which is of particular importance given recent community college enrollment declines over the last

several years. The sampling method was a nonprobability convenience sample based on which respondents were available and willing to complete the survey.

Data Collection

First, permission to conduct this study was requested and obtained from my dissertation chair and committee and from the East Tennessee State University Institutional Review Board (IRB). Then, an email was sent by the institutional research offices of the community colleges to students on the respective campuses during the Fall 2023 term. The email included a link to the survey conducted using the Qualtrics platform. A reminder email was sent one week after the survey launched.

Data Analysis

Data were analyzed using IBM-SPSS. The following statistical tests were run using an alpha level of .05:

An independent samples t test was used for Research Question 1 to evaluate the association between gender and their perception of presence of sense of community. An independent samples t test was also used for Research Question 9 to evaluate the association between gender and their perception of instructor presence. A series of one-way ANOVAs was conducted for Research Questions 2, 3, 4, 5, 6, 7, and 8 to determine if there were any significant differences in perceptions of sense of community among the five age groups, the four race and ethnic categories, the five grade point average categories, the eight cumulative credit hours categories, the four credential type categories, the five major areas of study categories, and the five categories of previous online courses completed.

For Research Questions 10, 11, 12, 13, 14, 15, and 16, a series of one-way ANOVAs was conducted to compare participants' perception of sense of instructor presence among the five age groups, the four race and ethnic categories, the five grade point average categories, the

eight cumulative credit hours categories, the four credential type categories, the five major areas of study categories, and the five categories of previous online courses completed.

Participants in the survey were also invited to provide any additional comments, and those responses were analyzed by identifying the common themes which could provide further insights on the topics of sense of community and instructor presence.

Chapter Summary

This chapter provided an explanation of the research methodology, a review of the purpose statement, an outline of the research questions and null hypotheses, a description of the instruction, a description of the population and sample, and details about the data collection and analysis processes. A quantitative research method allowed for a large number of responses on questions about the importance and presence of sense of community and sense of instructor presence in the online classroom and their ideas about class activities that may create a sense of instructor presence in the online classroom.

Chapter 4. Results

This chapter provides results of the statistical analysis of the data from the Cartwright Community and Instructor Presence Survey which was completed by community college students at eight community colleges during the Fall semester 2023. The criteria for completing the survey were that participants must be at least 18 years old, physically reside in the United States, be a current community college student, and have completed at least one online class. The survey was conducted online using the Qualtrics platform, and respondents were invited to participate via an email sent to their university account. The complete survey is included in the Appendix.

The Cartwright Community and Instructor Presence Survey was conducted during the Fall 2023 semester at eight community colleges within the Tennessee Board of Regents system.

The number of respondents who completed the survey totaled 478.

Research Question 1

Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores between male and female community college students?

H₀1: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores between male and female community college students.

An independent samples t test was conducted to evaluate whether there was a significant difference in the mean scores of the Perceptions of Presence of Sense of Community between male and female students. The Perceptions of Presence of Sense of Community score was the test variable, and the grouping variable was students' gender identification as either female or male. The test was not significant t(452) = 1.296, p = .196. Therefore, the null hypothesis was retained. Male students reported a higher, but not significantly higher, mean score on the sense of community in online classes (M = 3.243, SD = .916) compared to female students (M = 2.110,

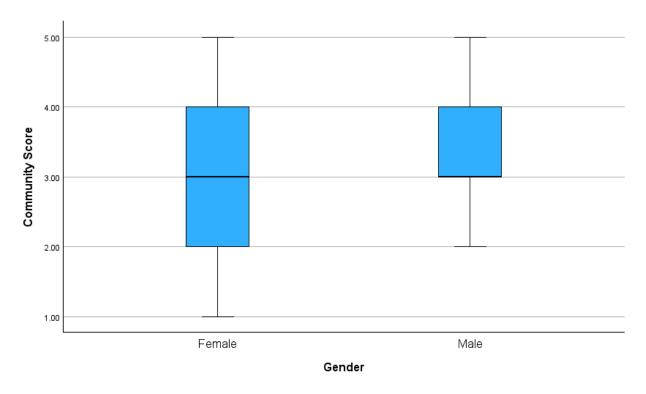
SD = .942). The 95% confidence interval for the difference in means was -.356 to .073. The effect size using Cohen's d was .141, indicating a small effect size. There was not a significant difference in the scores on the sense of community dimension in online classes between female and male students. Table 1 provides the presence of sense of community by gender. Figure 1 shows the community scores of the two gender groups.

Table 1Means and Standard Deviations of Gender and SoC

Gender	N	M	SD
Female	343	3.11	0.94
Male	111	3.24	0.92

Figure 1

Presence of SoC Score by Gender



Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among community college students in five distinct age groups (18-20; 21-25;26-30; 31-40; 41+)?

 H_02 : There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among community college students in five distinct age groups (18-20; 21-25; 26-30; 31-40; 41+).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Community Cartwright Survey scores among five different age groups. The factor variable included those five levels of age categories. The dependent variable was the score on the community dimension of the Cartwright Survey. The ANOVA was not significant, F(4, 468) =

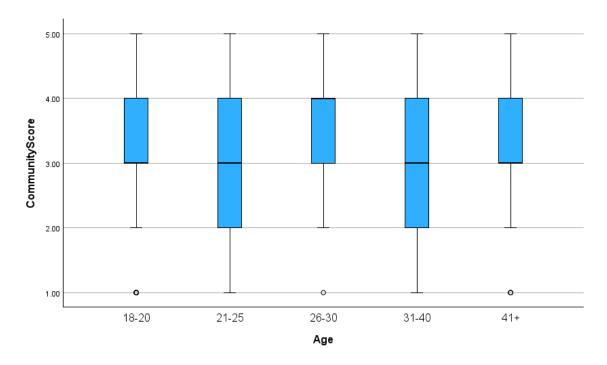
.875, p = .479. Therefore, the null hypothesis was retained. The strength of the relationship between perception of community scores and age categories, as assessed by η^2 , was small (.007). There were no significant differences in the sense of community dimension among the age groups. The descriptive statistics for presence of sense of community by age categories is reported in Table 2. Figure 2 reports the presence of sense of community scores by age categories.

Table 2Means and Standard Deviations of Age and SoC

Age	N	M	SD	
18-20	218	3.17	0.89	
21-25	70	3.03	0.96	
26-30	49	3.35	0.83	
31-40	73	3.04	0.95	
41-50	56	3.32	0.88	
Total	466	3.17	0.91	

Figure 2

Presence of SoC Score by Age



Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among community college students in four racial or ethnic categories (White; Black or African American; American Indian/Asian/Native Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer)?

H₀3: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among community college students in four racial or ethnic categories (White; Black or African American; American Indian/Asian/Native Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer).

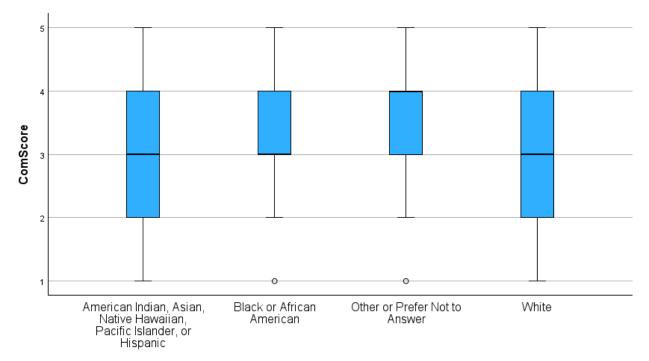
A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Community Cartwright Survey scores among four different racial or ethnic groups. The factor variable included those four racial or ethnic groups. The dependent variable was the score on the community dimension of the Cartwright Survey. The ANOVA was not significant, F(3, 468) = 1.811, p = .144. Therefore, the null hypothesis was retained. The strength of the relationship between perception of community scores and racial or ethnic groups, as assessed by η^2 , was small (.011). There were no significant differences in the sense of community dimension among the racial or ethnic groups. Table 3 indicates the presence of sense of community by race. Figure 3 displays the presence of sense of community score by race.

Table 3Sense of Means and Standard Deviation of Age and SoC

Race	N	M	SD	
American Indian/Asian/Native	39	2.90	1.05	
Hawaiian/Pacific Islander/Hispanic	;			
Black or African American	49	3.18	0.83	
Other or Prefer Not to Answer	28	3.43	1.00	
White	356	3.13	0.93	
Total	472	3.13	0.94	

Figure 3

Presence of SoC Score by Race Categories



Race

Research Question 4

Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0)?

 H_04 : There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Community Cartwright Survey scores among five different GPA categories. The factor variable included those five GPA groups. The dependent variable was the score on the community dimension of the Cartwright Survey. The ANOVA was not significant, F(4, 455) =

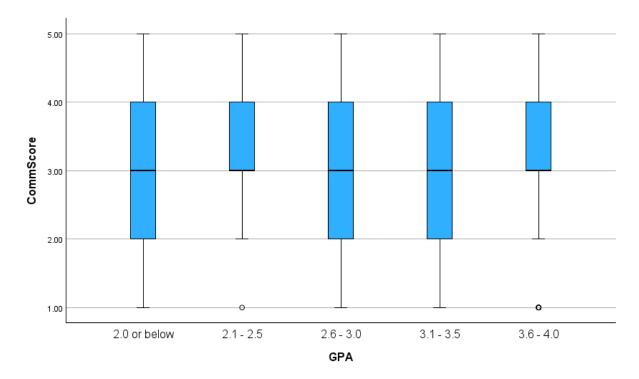
.758, p = .553. Therefore, the null hypothesis was retained. The strength of the relationship between perception of community scores and racial or ethnic groups, as assessed by η^2 , was small (.007). There were no significant differences in the sense of community dimension among GPA groups. Table 4 indicates the presence of sense of community by GPA. Figure 4 shows the presence of sense of community score by GPA.

Table 4Means and Standard Deviations of GPA and SoC

GPA	N	M	SD	
2.0 or below	26	3.15	1.08	
2.1 - 2.5	38	3.29	0.87	
2.6 - 3.0	86	3.09	1.00	
3.1 - 3.5	112	3.04	0.90	
3.6 - 4.0	198	3.19	0.90	
Total	460	3.14	0.94	

Figure 4

Presence of SoC Score by GPA



Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among seven categories of community college students' cumulative earned credit hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56+)?

H₀5: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among seven categories of community college students' cumulative earned credit hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56+).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Community Cartwright Survey scores among seven unique categories of cumulative earned credits hours. The factor variable included those seven groups. The dependent variable was the score on the community dimension of the Cartwright Survey. The ANOVA was not

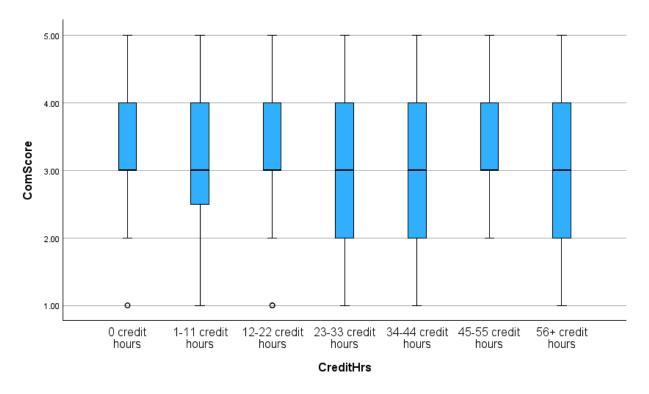
significant, F(7, 462) = .617, p = .742. Therefore, the null hypothesis was retained. The strength of the relationship between perception of community scores and racial or ethnic groups, as assessed by η^2 , was small (.009). There were no significant differences in the sense of community dimension among the cumulative credit hour groups. Table 5 shows the presence of sense of community by cumulative earned credit hours. Figure 5 indicates the presence of sense of community score by cumulative earned credit hours.

Table 5Means and Standard Deviations of Cumulative Hours and SoC

Credit Hours	N	M	SD	
0	54	3.28	1.02	
1-11	100	3.14	0.97	
12-22	83	3.17	0.91	
23-33	57	3.00	1.02	
34-44	54	3.04	0.87	
45-55	42	3.24	0.76	
56+	80	3.07	0.95	
Total	470	3.13	0.94	

Figure 5

Presence of SoC Score by Cumulative Hours



Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among four credential types for community college students (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied Science, A.A.S. degree; Technical Certificate)?

H₀6: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among four credential types for community college students (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied Science, A.A.S. degree; Technical Certificate).

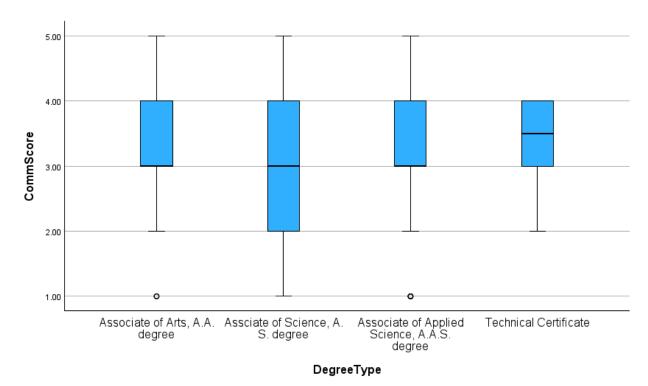
A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Community Cartwright Survey scores among four unique categories of degree types. The factor variable included those four groups. The dependent variable was the score on the community dimension of the Cartwright Survey. The ANOVA was not significant, F(3, 4457) = 2.499, p = .059. Therefore, the null hypothesis was retained. The strength of the relationship between perception of community scores and racial or ethnic groups, as assessed by η^2 , was small (.016). There were no significant differences in the sense of community dimension among degree type groups. Table 6 displays the presence of sense of community by credential type. Figure 6 reports the presence of sense of community score by credential type.

Table 6Means and Standard Deviations of Degree Type and SoC

Degree Type	N	M	SD	
Associate of Arts, A.A.	60	3.35	0.99	
Associate of Science, A.S.	244	3.03	0.91	
Associate of Applied Science, A.A.S.	143	3.20	0.95	
Technical Certificate	14	3.29	0.83	
Total	461	3.13	0.94	

Figure 6

Presence of SoC Score by Credential Type



Is there a significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five major areas of study (Business and Computer Science; Health Sciences; Humanities, Math & Science; Social Sciences; Other [fill in the blank])?

H₀7: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five major areas of study (Business and Computer Science; Health Sciences; Humanities, Math & Science; Social Sciences; Other [fill in the blank]).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Community Cartwright Survey scores among five unique categories of majors. The factor variable included those five groups. The dependent variable was the score on the community dimension of the Cartwright Survey. The ANOVA was not significant, F(4, 466) =

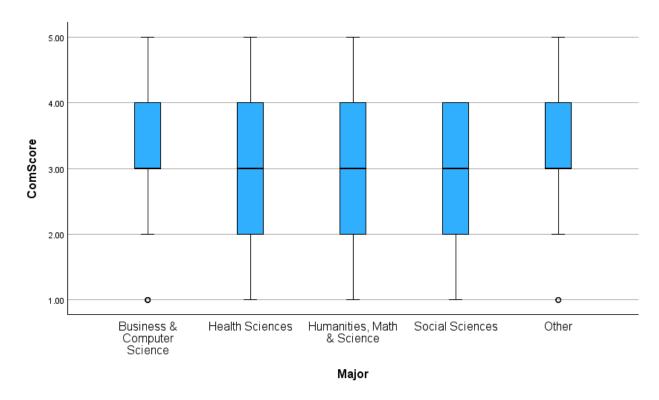
1.174, p = .321. Therefore, the null hypothesis was retained. The strength of the relationship between perception of community scores and categories of majors, as assessed by η^2 , was small (.010). There were no significant differences in the sense of community dimension among the groups of majors. Table 7 indicates the presence of sense of community by major. Figure 7 shows the presence of sense of community score by major.

Table 7 *Means and Standard Deviations of Major and SoC*

Major	N	M	SD	
Business & Computer Science	121	3.24	0.96	
Health Science	116	3.11	0.88	
Humanities, Math & Science	73	3.05	1.08	
Social Sciences	78	2.99	0.83	
Other	83	3.22	0.94	
Total	471	3.13	0.94	

Figure 7

Presence of SoC Score by Major



Is there a significant difference in Perceptions of the Presence of Sense of Community dimension scores among five categories of community college students' previous online college course completion (completed 0-2 courses; completed 3-4 courses; completed 5-6; completed 7-8; completed 9 or more)?

H₀8: There is no significant difference in the Perceptions of the Presence of Sense of Community dimension scores among five categories of community college students' previous online college course completed 0-2 courses; completed 3-4 courses; completed 5-6; completed 7-8; completed 9 or more).

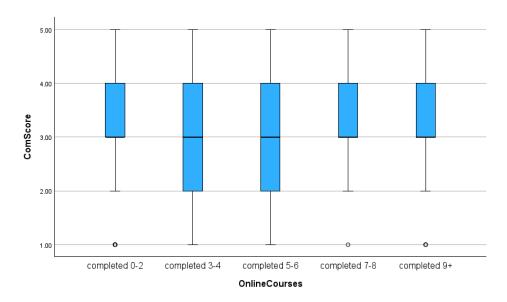
A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Community Cartwright Survey scores among five unique categories of previous online college course completions. The factor variable included those five groups. The dependent variable was the score on the community dimension of the Cartwright Survey. The ANOVA was not significant, F(4, 465) = .268, p = .899. Therefore, the null hypothesis was retained. The strength of the relationship between perception of community scores and categories of majors, as assessed by η^2 , was small (.002). There were no significant differences in the sense of community dimension among the groups of online courses completed. Table 8 reports the presence of sense of community by previous online courses completed. Figure 8 shows the presence of sense of community score by previous online courses completed.

Table 8Means and Standard Deviations of Online Courses Completed and SoC

Online Courses Completed	N	M	SD	
0-2	133	3.13	0.92	
3-4	99	3.09	0.94	
0-2 3-4 5-6 7-8 9+	75	3.09	1.04	
7-8	45	3.24	0.86	
9+	118	3.16	0.92	
Total	470	3.13	0.94	

Figure 8

Presence of SoC Score by Online Courses Completed



Is there a significant difference in the Perceptions of Instructor Presence dimension scores between male and female community college students?

H₀9: There is no significant difference in the Perceptions of Instructor Presence dimension score between male and female community college students.

An independent samples t test was conducted to evaluate whether there was a significant difference in the mean scores of the Perceptions of Instructor Presence between male and female students. The Perceptions of Instructor Presence score was the test variable, and the grouping variable was students' gender identification as either female or male. The test was not significant t(452) = 1.264, p = .207. Therefore, the null hypothesis was retained. Female students reported a higher, but not significantly higher, mean score on the sense of Instructor Presence in online classes (M = 3.42, SD = .560) compared to male students (M = 3.38, SD = .573). The 95% confidence interval for the difference in means was -.076 to .350. The effect size using Cohen's

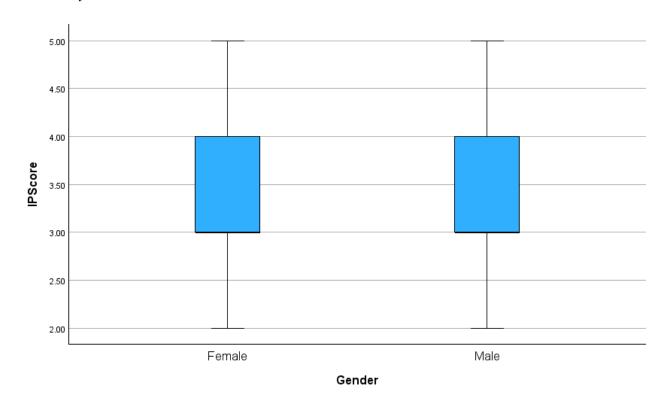
d was small (.137). There was no significant difference in the scores on the sense of Instructor Presence in online classes between female and male students. Table 9 indicates the instructor presence by gender. Figure 9 shows the instructor presence score by gender.

Table 9Means and Standard Deviations of Gender and IP

Gender	N	M	SD	
Female	341	3.42	0.56	
Male	111	3.38	0.57	

Figure 9

IP Score by Gender



Research Question 10

Is there a significant difference in the Perceptions of Instructor Presence dimension scores among community college students in five distinct age groups (18-20; 21-25; 26-30; 31-

40; 41+)?

 H_010 : There is no significant difference in the Perceptions of Instructor Presence dimension scores among community college students in five distinct age groups (18-20; 21-25; 26-30; 31-40; 41+).

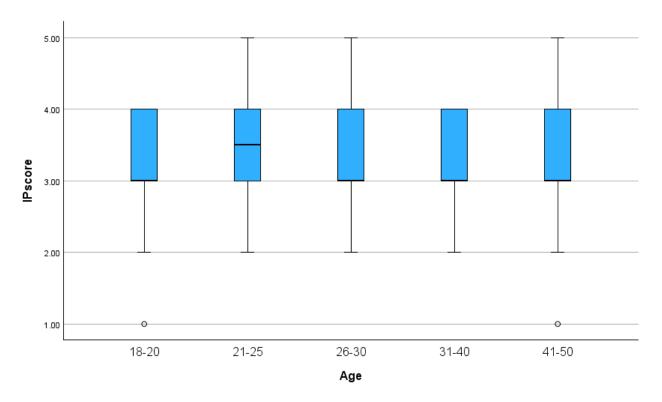
A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Community Cartwright Survey scores among five different age groups. The factor variable included those five levels of age categories. The dependent variable was the score on the community dimension of the Cartwright Survey. The ANOVA was not significant, F(4, 461) = 1.503, p = .200. Therefore, the null hypothesis was retained. The strength of the relationship between perception of community scores and age categories, as assessed by η^2 , was small (.013). There were no significant differences in the scores on the sense of Instructor Presence in online classes among the age groups. Table 10 indicates the instructor presence by age. Figure 10 shows the instructor presence score by age group.

Table 10Means and Standard Deviations of Age and IP

Age	N	M	SD	
18-20	218	3.44	0.57	
21-25	70	3.47	0.61	
26-30	49	3.43	0.58	
31-40	73	3.27	0.56	
41-50	56	3.34	0.64	
Total	466	3.40	0.58	

Figure 10

IP Score by Age



Research Question 11

Is there a significant difference in the Perceptions of Instructor Presence dimension scores among community college students in four racial or ethnic categories (White; Black or African American; American Indian/Asian/Native Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer)?

H₀11: There is no significant difference in the Perceptions of Instructor Presence dimension scores among community college students in four racial or ethnic categories (White; Black or African American; American Indian/Asian/Native Hawaiian/Pacific Islander/Hispanic; Other or Prefer not to answer).

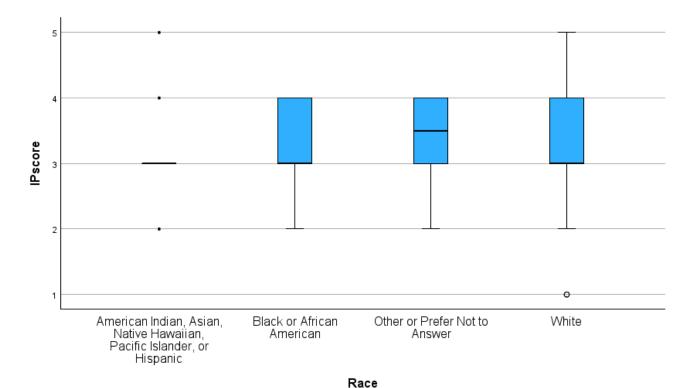
A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Instructor Presence Cartwright Survey scores among four different racial or ethnic groups. The factor variable included those four racial or ethnic groups. The dependent variable was the score on the instructor presence dimension of the Cartwright Survey. The ANOVA was not significant, F(3, 468) = 1.307, p = .271. Therefore, the null hypothesis was retained. The strength of the relationship between perception of instructor presence scores and racial or ethnic groups, as assessed by η^2 , was small (.008). There were no significant differences in the scores on the sense of Instructor Presence in online classes among the racial or ethnic groups. Table 11 reports the instructor presence by race. Figure 11 indicates the instructor presence score by race.

Table 11 *Means and Standard Deviations of Race and IP*

Race	N	M	SD	
American Indian/Asian/Native	39	3.23	0.54	<u>_</u>
Hawaiian/Pacific Islander/Hispanic				
Black or African American	49	3.37	0.60	
Other or Prefer Not to Answer	28	3.46	0.58	
White	356	3.41	0.59	
Total	472	3.40	0.59	

Figure 11

IP Score by Race



Research Question 12

Is there a significant difference in the Perceptions of Instructor Presence dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0)?

H₀12: There is no significant difference in the Perceptions of Instructor Presence dimension scores among five categories of community college students' current cumulative grade point average on a 4.0 scale (2.0 and below; 2.1-2.5; 2.6-3.0; 3.1-3.5; 3.6-4.0).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Instructor Presence Cartwright Survey scores among five different GPA categories. The factor variable included those five GPA groups. The dependent variable was the score on the

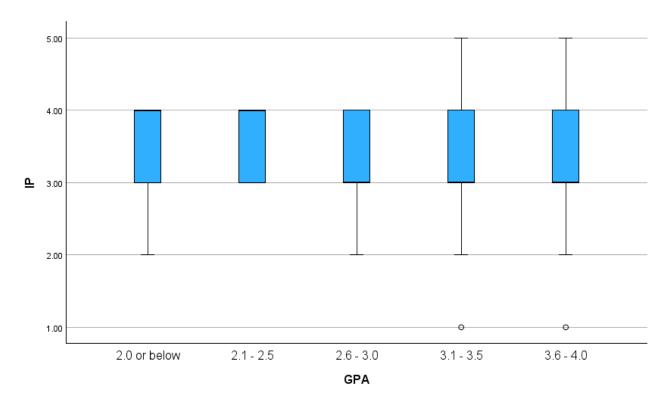
instructor presence dimension of the Cartwright Survey. The ANOVA was not significant, F(4, 455) = .979, p = .419. Therefore, the null hypothesis was retained. The strength of the relationship between perception of instructor presence scores and GPA, as assessed by η^2 , was small (.009). There were no significant differences in the scores on the sense of Instructor Presence in online classes among the GPA groups. Table 12 displays the instructor presence by GPA. Figure 12 reports the instructor presence score by GPA.

Table 12 *Means and Standard Deviations of GPA and IP*

GPA	N	M	SD	
2.0 or below	26	3.46	0.65	
2.1 - 2.5	38	3.55	0.50	
2.6 - 3.0	86	3.36	0.55	
3.1 - 3.5	112	3.36	0.61	
3.6 - 4.0	198	3.39	0.58	
Total	460	3.39	0.58	

Figure 12

IP Score by GPA



Research Question 13

Is there a significant difference in the Perceptions of Instructor Presence dimension scores among eight categories of community college students' cumulative earned credit hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56-66; 67+)?

 H_013 : There is no significant difference in the Perceptions of Instructor Presence dimension scores among eight categories of community college students' cumulative earned credit hours (0; 1-11; 12-22; 23-33; 34-44; 45-55; 56-66; 67+).

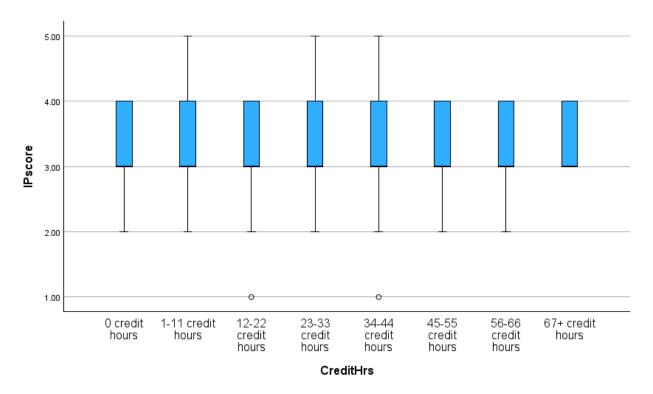
A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Instructor Presence Cartwright Survey scores among eight different cumulative hours earned categories. The factor variable included those eight groups. The dependent variable was the score on the instructor presence dimension of the Cartwright Survey. The ANOVA was not significant, F(7, 462) = .979, p = .249. Therefore, the null hypothesis was retained. The strength of the relationship between perception of instructor presence scores and categories of cumulative hours, as assessed by η^2 , was large (.249). There were no significant differences in the scores on the sense of Instructor Presence in online classes among the cumulative credit hour groups. Table 13 displays the instructor presence by cumulative hours. Figure 13 reports the instructor presence score by cumulative hours.

Table 13Means and Standard Deviations of Cumulative Hours and IP

Credit Hours	N	M	SD	
0	54	3.20	0.53	
1-11	100	3.44	0.61	
12-22	83	3.34	0.59	
23-33	57	3.47	0.57	
34-44	54	3.41	0.66	
45-55	42	3.40	0.59	
56-66	35	3.43	0.56	
67+	45	3.47	0.50	
Total	470	3.39	0.58	

Figure 13

IP Score by Cumulative Hours



Research Question 14

Is there a significant difference in the Perceptions of Instructor Presence dimension scores among four credential types for community college students (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied Science, A.A.S. degree; Technical Certificate)?

H₀14: There is no significant difference in the Perceptions of Instructor Presence dimension scores among four credential types for community college students (Associate of Arts, A.A. degree; Associate of Science, A.S. degree; Associate of Applied Science, A.A.S. degree; Technical Certificate).

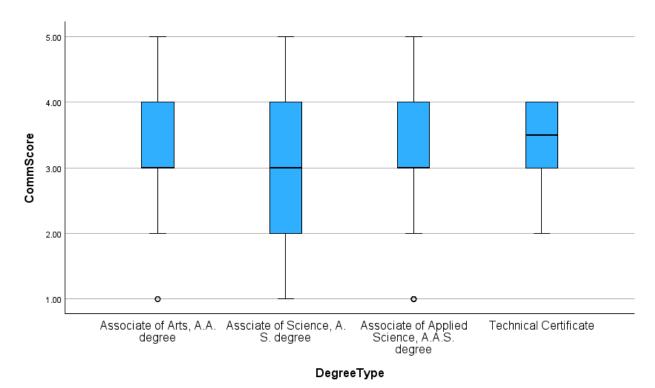
A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Instructor Presence Cartwright Survey scores among four different degree types awarded by community colleges. The factor variable included those four groups of degree types. The dependent variable was the score on the instructor presence dimension of the Cartwright Survey. The ANOVA was not significant, F(3, 457) = .155, p = .926. Therefore, the null hypothesis was retained. The strength of the relationship between perception of instructor presence scores and categories of degree types, as assessed by η^2 , was small (.001). There were no significant differences in the scores on the sense of Instructor Presence in online classes among the age credential type groups. Table 14 shows the instructor presence by credential type. Figure 13 shows the instructor presence score by degree type.

Table 14 *Means and Standard Deviations of Degree Type and IP*

Degree Type	N	M	SD
Associate of Arts, A.A.	60	3.37	0.52
Associate of Science, A.S.	244	3.41	0.56
Associate of Applied Science, A.A.S.	143	3.38	0.65
Technical Certificate	14	3.43	0.65
Total	461	3.39	0.59

Figure 14

IP Score by Credential Type



Research Question 15

Is there a significant difference in the Perceptions of Instructor Presence dimension scores among five major areas of study (Business and Computer Science; Health Sciences; Humanities, Math & Science; Social Sciences; Other [fill in the blank])?

H₀15: There is no significant difference in the Perceptions of Instructor Presence dimension scores among five major areas of study (Business and Computer Science; Health Sciences; Humanities, Math & Science; Social Sciences; Other [fill in the blank]).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of Sense of Instructor Presence Cartwright Survey scores among five different major types. The factor variable included those five groups. The dependent variable was the score on the instructor

presence dimension of the Cartwright Survey. The ANOVA was significant, F(4, 466) = 3.482, p = .008. Therefore, the null hypothesis was rejected. The strength of the relationship between perception of instructor presence scores and categories of degree types, as assessed by η^2 , was small (.029).

Because the overall F test was significant, post hoc multiple comparisons were conducted to evaluate pairwise differences among the means of the five groups. A Tukey procedure was selected for the multiple comparisons because equal variances were assumed. There was a significant difference in the means between the Health Sciences and Business & Computer Science majors (p = .015), with Health Sciences significantly higher (M = 3.51) than Business & Computer Science (M = 3.28). However, there was not a significant difference between Business & Computer Science and Humanities, Math & Science (p = .981), Business & Computer Science and Social Sciences (p = .071), Business & Computer Science and other (p = .921), Health Sciences and Humanities (p = .189), Health Sciences and Other (p = .259), Humanities, Math & Sciences and Social Sciences (p = .364) nor Humanities, Math & Science and Other (p = .999). The number, means, and standard deviations for the five degree types are reported in Table 15. The 95% confidence intervals for the pairwise differences are reported in Table 16. Figure 15 shows the scores for the perceptions of Instructor Presence based on students' majors.

Table 15 *Means and Standard Deviations of Major and IP*

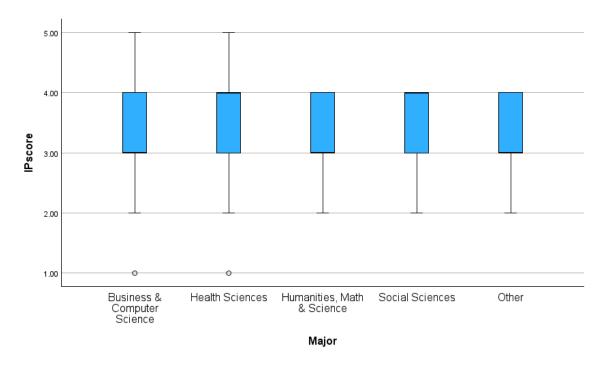
Major	N	M	SD	
Business & Computer Science	121	3.28	0.64	
Health Sciences	116	3.52	0.58	
Humanities, Math & Science	73	3.33	0.50	
Social Sciences	78	3.50	0.53	
Other	83	3.35	0.59	
Total	471	3.39	0.58	

Table 16Pairwise Differences of Majors for IP

	Business & Computer Science	Health Sciences	Humanities, Math & Science	Social Sciences
Health Sciences	422 to030			
Humanities, Math &	282 to .187	048 to .425		
Science				
Social Sciences	449 to .011	214 to .249	429 to .086	
Other	294 to .157	059 to .395	233 to .274	400 to .099

Figure 15

IP Score by Major



Research Question 16

Is there a significant difference in the Perceptions of Instructor Presence dimension scores among six categories of community college students' previous online college course completion (completed 0 courses; completed 1-2 courses; completed 3-4 courses; completed 5-6; completed 7-8; completed 9 or more)?

H₀16: There is no significant difference in the Perceptions of Instructor Presence dimension scores among six categories of community college students' previous online college course completion (completed 0 courses; completed 1-2 courses; completed 3-4 courses; completed 5-6; completed 7-8; completed 9 or more).

A one-way analysis of variance (ANOVA) was conducted to evaluate the relationship of scores on the Perceptions of Instructor Presence dimension of the Cartwright Community and

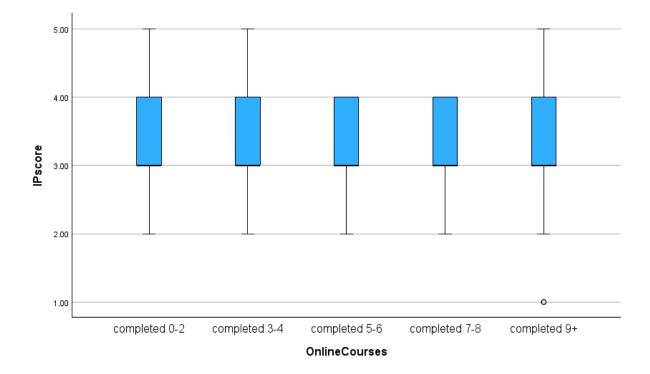
Instructor Presence Survey among the number of completed online courses that community college students completed. The factor variable included those five groups. The dependent variable was the score on the instructor presence dimension of the Cartwright Survey. The ANOVA was not significant, F(4, 465) = .680, p = .606. Therefore, the null hypothesis was retained. The strength of the relationship between perception of instructor presence scores and categories of degree types, as assessed by η^2 , was small (.006). There were no significant differences in Instructor Presence dimension among the groups of completed courses. Table 17 shows the instructor presence by online course completion. Figure 16 shows the instructor presence score by online course completion.

Table 17Means and Standard Deviations of Online Courses Completed and IP

Online Courses Completed	N	M	SD	
0-2	133	3.37	0.56	
0-2 3-4 5-6 7-8	99	3.42	0.59	
5-6	75	3.44	0.55	
7-8	45	3.47	0.55	
9+	118	3.34	0.64	
Total	470	3.39	0.58	

Figure 16

IP Score by Online Course Completed



Summaries of Students' Written Responses

Research Questions 1-16 were also addressed by reporting the responses to the last survey item which invited survey participants to share open-ended feedback about their experiences in online courses, stated as, "Please add any other comments on your experience of sense of community or instructor presence in your online classes." The number of students who included commentary was 71. Emergent themes from students' written feedback include general confusion around online education terminology; inconsistent positive online course experiences; instructor-specific online course experiences; students' practical approach to their online classes; students' rejection of groupwork assignments; students discounting of classroom community value; and majority of students expressed frustration with lack of instructor presence. These themes are illustrated by selected passages from student responses. These selections represent a

snapshot of common responses.

General Confusion Around Online Education Terminology

A key emergent theme is the evident inconsistency of how online courses are described. Several students used terms that were vague or non-standard when describing their online courses, including one student who commented, "The online classroom was a video, not a Zoom call, so there was no community. Just the professor making a video and us watching it, then doing assignments." Here the student perceives the recorded video portion of learning materials as the sum total of the "online classroom" and there is no reference to the learning management system (LMS) which most institutions utilize to house and organize course materials. There also seems to be a murky definition of the role that a synchronous web conferencing tool, such as Zoom, plays in the overall environment of online courses. Another student wrote, "I would love to see more live online classes via video to get a sense of the people in your class as well as networking and to build rapport with one another." The term "live online" seems to refer to synchronous online courses, but the usage of the term "video" is unclear if this means a synchronous video conferencing tool or an asynchronous recorded video. One student commented, "In online classes (with no video chat) I feel comfortable asking questions. When we had an online class with Zoom and we all had to turn on our cameras, I felt uncomfortable about asking questions." Here the student refers to being more comfortable asking questions in the seemingly asynchronous classroom versus the synchronous classroom, although the usage of "video chat" could be confusing since most video conferencing tools include not only synchronous audio and visual capability, but also a chat functionality via written comments. Another student expressed, "I wish more online classes had more of a self-paced learning environment." Here the confusion seems to stem from the term "self-paced" which, in online education refers exclusively to student-driven timelines such as those built into competencybased education courses (CBE). However, to date, no community college course with the TBR system delivers true CBE courses, so the perception of what self-paced means for the study is vague. Another student wrote, "I answered this for online classes, not virtual classes that meet online for sessions." The apparent interchangeable use of the term "online classes" and "sessions" is unclear since any course delivered via the internet, whether synchronous elements are included are not, is by definition, an "online course."

Positive Online Course Experiences are Inconsistent

While several students included positive feedback about their online course experiences, it was typically presented as a counterbalance to previous negative classroom experiences. One student shared, "All but one professor has provided really great feedback, consistent communication, and provided a good learning environment." Another student wrote, "Most of my online class instructors were great. I have had few that were awful and were very unfriendly." Another student commented:

In my very first online dual enrollment class that I took in my junior year of high school, my instructor's presence was a little lacking. This made it difficult to know if our work and our questions were actually of value. My current online instructor I have now is great! She posts weekly news and reminders. I have also emailed her personally and got a quick response! She was very helpful and welcoming. She also gives feedback on every assignment I turn in. This helps so much in my learning experience!

One student shared that:

I have answered these questions based on my overall experience. However, I cannot say that the experience was equal in all online classes. I have discovered that good professors use the discussions very well to provide that sense of belonging to a class without actually meeting in person or virtually. Unfortunately, one or two professors simply

plopped the book in Brightspace, and that was it. All of our reading, quizzes and exams came from the online book, and he was less than available to students.

Another student shared a perspective of their online course experiences over time:

While most of my experiences have been good, I've had online/hybrid class instructors who have been hostile. They refuse to do virtual classes, have a personal vendetta against the internet apparently and just make me feel like they make the online class and experience almost impossible and harder than it needs to be. Other than that, I've had great experiences with online and hybrid classes. They have come so far since I attempted this the first time in 2009.

One student who characterized a negative experience wrote, "Last semester, I didn't enjoy my teacher's teaching style but this semester I'm enjoying the pace and the reminders they have set to help us succeed." This student attributed the negative experience to the instructor's "teaching style" which implies a deliberate set of decisions were made to create that particular classroom environment. Another student shared an overview of multiple online course experiences:

I've enjoyed online education as I like the independence students have when it comes to their education. I've enjoyed the opportunity to learn at my own pace, and to easily fit the curriculum into my own schedule. I even like that I have the opportunity to work ahead if I anticipated an especially hectic week or had plans. Online education is versatile, and I've learned a lot through the 12 online classes I've taken. However, there are some drawbacks. Although a few of the 12 instructors I've had interacted with their classes (either through Zoom or creating lecture videos with themselves in it) most of the time I never see the instructors face or hear much from them the entire semester. There was one professor I had that only spoke once during the first week of the course and never said anything again. The only way I knew that they were still "teaching" was by my updated

grades. For the most part, I don't know much about my professors, but I found that the few who made themselves memorable made the class memorable and enjoyable as well. For these students, and others like them, the online learning experience was a mixed bag of positive and negative experiences. Even when a student mentioned a positive experience, invariably the negative experience was shared in more depth, possibly indicating a longer-term impact of negative repercussions from the lack of community and instructor presence.

Positive Online Course Experiences are Instructor-Specific

Students who shared positive-only feedback invariably linked their experiences to specific professors. One student wrote, "Prof. [name] did a wonderful job teaching me!" Another student shared, "Prof. [name] is an amazing online instructor and should be given more opportunities to provide distance education. He really excels at it." As one student wrote, "Prof. [name] and Dr. [name] are the best at remote learning." Another student shared how an online professor helped make a course more manageable:

Prof. [name] has been nothing but truly wonderful, by taking a course she said was stuffed with extra content and making it more manageable for me as an accelerated student and I couldn't be more grateful. I actually feel like I'm prepared to do well in this course even though it's accelerated.

In addition, one student indicated that only a small number of their online course experiences were positive and supportive:

I have had three exceptions to that [negative experiences] including my current psych Prof. [name] and my previous art history professors, who were all very responsive, interactive, accepting, and professionally personable.

This type of feedback may indicate how the more successful online instructors are incorporating active presence and building community by listening to students' needs and being responsive.

Some Students' Practical Perception of Their Online Classes

While the majority of students expressed dissatisfaction with their online class experiences (58% of respondents who provided written feedback), several did have positive responses that were centered on the practicality aspect that taking classes online offered the student. These responses include a student who indicated a positive response to due to recovering from injuries and wrote, "I feel much better in online classes because I have also time to go to therapy for my vertigo since I have a fractured vertebra" and another student who cited high transportation costs as a positive reason, shared that "I liked online classes simply due to the fact you are not having to waste money on gas especially right now with inflation". For community college students, ancillary costs like gas, car repair, child care and other considerations are important factors when weighing educational options. Another example is how online courses better fit students with specific challenges:

Online courses have been wonderful for me, as someone with ADD who learns by teaching herself. I prefer online courses because I don't retain information through lecture. Online courses that have detailed instructions and even better (modules!) are a God send! I hope you take into account those of us with learning disabilities that thrive in a secluded learning environment such as the comfort of home without so many distractions.

This student praised her online experience as a fit for her specific needs. However, her feedback pertains to the course design, rather than to the quality of any student-to-student or instructor-to-student interactions.

Groupwork Assignments Do Not Equate to Classroom Community

For many students, one particular exercise employed to build classroom community, the group assignment, emerged as a specific concern cited by students. One student wrote:

I do not agree with the idea of doing group-based projects for fully remote (online) courses because it is difficult to collaborate on a group project when everyone works at different times. I also do not like having part of my grade be reliant on the efforts (or lack thereof) of my peers.

In addition to fears of negative grade impacts, group work was also described as a source of negative peer interactions. One student commented, "I don't care for group work, I'm in class to learn not to feel like I need to make friends and get people opinions of me." For this student, the fear expressed around a group work exercise likely indicates the absence of an open and supportive classroom community. One student shared, "I appreciate the independence that online classes allow but I feel as though I can't make an accurate assessment because I don't think I've ever had a collaborative environment." The student's doubtfulness about identifying any collaborative online experiences probably indicates that communal peer activities were not presented in the learning environment, or if they were, clarity about the assignment's purpose was not woven into the learning design.

Some Students' Discounting of Classroom Community Value

Given the overall negative responses some students shared about group work projects, it may not be surprising that the overall concept of classroom community is misunderstood.

Another theme to emerge from students' written feedback was a strong feeling that classroom community was not of value to them nor to their learning process. One student wrote:

I did not like the filler discussions. I feel like instructors used discussions to force students to interact. However, many students utilize online courses because they want less interactions with other students.

Another student wrote:

I'm just going to school to get the degree, not to socialize. That's why I took online

classes-to avoid the social aspect of in-person classes. I don't understand the push to make online classes become exactly like in-person courses.

In addition, another student shared, "I am just here to learn about the subjects in each class. Making friends is nice, but I truly only care about learning as much as possible" while one student wrote, "I enjoy a good introduction post where all classmates share. Aside from that, I enjoy my online education to remain independent. Forced social interaction can get tedious." This student observation indicates that perhaps activities such as start of semester icebreakers, which are typically intended to increase classroom collegiality, can sometimes become counterproductive and seen only as another task to complete in the online classroom.

Another student wrote, "I prefer online classes to on-campus classes because it is more convenient, and I don't need social interaction. I am here to learn, not socialize" which implies a delineation in the student's mindset between learning objectives and seemingly extraneous social interactions. Also, one student shared:

I work my best independently on my schoolwork. I am taking college courses online to balance with work. I have been working for 10+ years prior to coming back to college for a piece of paper to advance further in my career. All of this stuff being taught is common knowledge to me at this point. I have been doing the classwork for years now and don't need to feel a connection with students who are typically younger than I am. I don't feel that a "sense of community" in online classes is important. As long as learning takes place and the instructor response/help is there, I could care less about interacting with others in class. It's just not needed, and for me I do not desire that.

For this student, who may be a non-traditional student focused on specific learning goals, the classroom community is considered as a superfluous aspect that does not enhance their learning. Another student commented, "I chose online classes because I feel like a sense of community in

college isn't really necessary. However, instructor presence needs to be strong regardless of what type of class you take." For this student, the perceived value of the instructor's presence is considered to be essential, while interacting with peers to create community is not.

Majority of Students' Frustration with Lack of Instructor Presence

The most persistent theme revealed in the students' written responses were the overwhelmingly negative responses to lack of instructor presence and engagement in their online classes. These negative responses were the most pervasive of all feedback, both in number of individual responses and in the word count length of these responses. One student who summarized the experience wrote:

rather than memorization and regurgitation. I can only speak for myself; online classes feel more like checking the boxes and getting it done rather than absorbing the material.

One student cited lack of timely feedback as a chief concern, especially when the student shares the challenge of balancing a schedule of working a full-time job, taking classes, and participating as a college athlete:

Online classes have served me no purpose in regard to actually retaining information

Receiving feedback in a timely manner is the chief problem with online courses. It's impossible to know what changes to make or what to avoid when it takes three to six weeks to get a two-page report returned. It's also frustrating to receive work back with a low grade and no insight as to what was wrong with the paper to receive such a low grade. I just received a physics report back with everything in the feedback copy given a check mark BUT the grade of the report was a 73?! I understand being busy, as I work 40+ a week with school at nights and I'm on an athletics team, as well, but no one is being helped if you can't actually put the time in that we, the students, have paid for. The college is essentially allowing the instructors to steal from us by not even doing the bare

minimum requirements to facilitate an education. I also loathe the fact that I take online classes to move through the lessons when I have free time, but my current professor has deadlines, drop boxes, and tests all locked, and you must do them at HIS convenience. That is some ridiculous, gatekeeping bullshit that is causing an amazing amount of stress and hardship for me considering on Mondays I work at 5am then I'm in class from the time I get off until 9-10pm, THEN I have to take a test for the online physics course before midnight because the tests are only open for 24 hours on Mondays exclusively. It's beyond moronic if the teacher had any actual outside of teaching physics experience he would realize he's doing absolutely nothing to help anyone gain an education but he's doing an amazing job at taking people's educations away from them because of his egotistical gatekeeping. It's also interesting that we have rigid deadlines to turn things in but then we won't receive them back for many weeks at a time. Then when they are returned, they have no tangible markup on them to detail what to fix for next time. That wouldn't fly in an in-person class, and I'm uncertain as to why it is acceptable and generally expected in online courses. All around ridiculous.

This student expresses frustration with lack of instructor presence, especially in the form of constructive feedback delivered to students within a useful timeframe. The student characterizes this lack of instructor presence as "stealing" because the perceived convenience of online courses is negated by stringent deadlines and uncommunicative instructors. One student expressed frustration over the instructor's lack of communication, "Word processing 1 instructor is hard to get a hold of here lately. I have been trying to reach my instructor and I cannot." Other students expressed this shared experience:

It feels as though the instructor does nothing more than check the McGraw-Hill [vendor site] for a half hour every evening to be sure that material he didn't personally prepare is

still functioning, so tests he didn't write can still be submitted. I may as well use Wikipedia.

This student's frustration seems to stem from the perception that the faculty member is simply delivering third-party vendor content, rather than teaching their own prepared material. Another student shared an experience where the instructor's presence is not felt: "Just as students can 'phone in' online classes, so can instructors. My current instructor has had 0 class videos or related instruction outside of YouTube videos." Here a pattern emerges where disappointed students feel that instructors lack devotion and care toward students, instilling apathy toward the learning process. Lack of instructor personalization of the course materials was also expressed by other students:

I personally despise online classes. COVID made me realize a lot of things. One of them being that without a school environment, I can't work nearly as effectively. It doesn't help either when they use the same template in all of my classes to introduce themselves. Some of them don't even fill the template out so it'll look like "My name is xxx instructor's name is xxx!" It doesn't feel alive at all. Some links are outdated so when you try to use them they don't work. And some teachers have important info about them in some maze of documents. If you're going to post office hours on a pdf, at least put the pdf link on the first link everyone goes to when starting the class. Then they act surprised when nobody joins the live meeting you hosted every Thursday.

This student's disappointment centers on the impersonal templates that the instructor here has failed to utilize. Other points of contention were broken links as well as disconnected transmission of key class information, such as office hour times and location. Another student expressed concern over poor communication, "I noticed that my online professor did not always take the time to answer questions clearly. Sometimes their responses were very confusing and

did not make sense or fully answer the question." One student also indicated that poor communication was a concern, "I have one teacher who will respond and another teacher hasn't graded or responded back and I think they changed one teacher without me knowing." Here the student refers not only to poor communication from the instructor teaching the course, but apparently poor communication from a new instructor assigned to a course with clear indications of why. One student shared frustration over an instructor's poor communication but still respected their expertise:

I had to rely on help from my peers more than from my instructor because my instructor had a one-hour window that she checked her class. It was frustrating, but I feel that she was still a good instructor. I just wish that she would have been easier to contact and not so short with me when I did ask her questions.

Feedback such as this indicates how the classroom paradigm shifted due to poor instructor presence. Several students mentioned that lack of instructor interaction essentially shifts the learning environment turns their faculty-led courses into "peer teaching" environments (as above) or "self-teaching" environments, shifting expectations:

My teachers just posted assignments and told us to teach ourselves. I have never had a conversation with any students in my online classes. It felt like it was just me taking the course. In addition, the instructors were not helpful at all when they posted a Word document of notes and that's it.

Another student shared how learning environments are shifted by the instructor, despite posted course types, for the perceived convenience of the instructor:

My class was supposed to be in person and online. On the first day, our instructor asked us how we felt about taking the class to online to mean virtual after his explanation. We all agreed but were never provided with a meeting link as promised and instead the

instructor sends an email through eLearn on the day of class to "check in" with us. Our course and course materials are all online through Cengage so the class being online is not an issue. However, the modules in the text refer to files that we are supposed to get from our instructor to use for non-graded practice exercises to which the instructor states he cannot locate, and neither can the previous professor. The professor only provided the hours that the class is in session as his office hours. Therefore, we are in a self-paced learning environment, and it seems an instructor is not necessary at this point. In conversations with students both within my institution as well as in other learning institutions, it is the feeling that the professors are hiding behind online classes in order to make their jobs easier. The general consensus is that college is now proving to be a waste of time and money when students feel they are not given the same commitment and respect to the course by the professors that the professors expect from the students.

This student expressed openness, initially, about the shift from a face-to-face modality to online only because of the use of online third-party vendor materials. However, the instructor had made communication nearly impossible by removing the synchronous component of class and restricting office hours, making the student feel that the implied contract between instructor and students has been negated. Another student shared a similar concern:

Online classes to me thus far have made me wonder why the college bothers to hire a professor. It was not a good experience for me. There was no community and minimal interaction from the professor. The professor didn't seem real.

Here the lack of instructor presence created a vacuum in the classroom structure, likely exacerbating insecurity about learning in the online environment. Another student experiencing these issues expressed how these incidents added up to serious barriers to learning:

I only take online classes, because on-campus evening courses are so few at [college

name]. I'm really struggling with 2 online classes this semester where the assignments are many and there are no live lectures to gain instructions [or] ask questions from. Only YouTube videos and articles. I don't know if I'll be able to graduate at this rate. I'm so overwhelmed w/much anxiety over it, & almost dropped out completely last week.

This example of lack of instructor presence negatively impacting a student's learning experience illustrates the long-term impact, resulting in student's path to completion being stymied and possibly resulting in not only personal student failure but institutional failure with lowered graduation rates.

Summary of Open-Ended Responses

As these students' responses indicate, the community college student experience of online courses encompasses a wide spectrum from those who love their online courses due to specific needs dictated by life circumstances or due to particular instructors who provided a positive learning environment to students who literally despise the online experience because of missing instructor presence. The common themes emerged as a result of many students sharing the same perspectives. These selected responses are not isolated cases but reflect comments and experiences of many students.

Chapter 5: Summary, Conclusion, and Recommendations

Sense of community and of instructor presence can be created through planned and purposeful interactions initiated by the instructor. Sense of instructor presence, in particular, can have a strong impact on students' perceptions of their online courses, especially in terms of instructors providing students with timely feedback on assignments, timely responses to email queries, clear communication of expectations, and a warm and welcoming atmosphere to learn and make mistakes. Sense of community in the online classroom is largely fostered by instructors' intentional building of connections between students so that an organic peer network is formed through the semester. Therefore, sense of community (SoC) and sense of instructor presence (IP) are important areas of research to better understand students' perspectives, especially when current research focused on the community college student experience in online classes is more difficult to locate.

Summary and Conclusions

The purpose of this research was to determine if there are significant differences between the perceptions among community college students based on factors of: gender, age, ethnic/racial identity, cumulative grade point average, cumulative credit hours earned, degree type, major of study, and number of online courses completed for the dimensions of both classroom community and instructor presence. I also sought to explore students' general responses to an open-ended question to share their overall impressions and experiences. This study's findings support earlier research that students experience frustration because of lack of consistent RSI, especially in the area of IP, where previous findings indicated that faculty who communicate in a timely and caring manner were valued because their concern for students' wellbeing (Hartline et al., 2022). IP has been revealed as valuable to students, especially in the realm of empathy and deep connection (e.g., Hartline et al., 2022; Palloff & Pratt, 2009).

This study provides evidence that for perception of sense of community (SoC) (1) There were no significant differences based on gender; (2) There were no significant differences based on age; (3) There were no significant differences based on race; (4) There were no significant differences based on cumulative hours earned; (6) There were no significant differences based on degree type; (7) There were no significant differences based on major; and (8) There were no significant differences based on previous online courses completed.

Furthermore, this study provides evidence that for perception of Sense of Instructor

Presence (IP) (1) There were no significant differences based on gender; (2) There were no
significant differences based on age; (3) There were no significant differences based on race; (4)
There were no significant differences based on GPA; (5) There were no significant differences
based on cumulative hours earned; (6) There were no significant differences based on degree
type; and (7) There were no significant differences based on previous online courses completed.
However, one possible correlation was identified: (8) Health Science majors and Business &
Computer Science majors perceive that Instructor Presence is important to a higher degree than
students in other majors: Humanities, Math & Science, Social Sciences, or Other in pairwise
comparisons by major. (9) Open-ended responses described a range of experiences, the majority
of which were negative.

The demographic data studied reveals that for community college students, there were no significant differences in perception of sense of community (SoC) based on gender, age, race, GPA, cumulative hours earned, degree type, major, or previous online courses completed. The same proved true for sense of instructor presence (IP) based on gender, age, race, GPA, cumulative hours earned, degree type, or previous online courses completed. This could indicate that because there were no pervasive scores below 3.0 that within the online classroom, the

majority of student demographic types do not feel that factors of gender, age, race, GPA, credit hours earned, or degree type contribute to substantial barriers within the online learning environment. Because the median in each demographic category scored near the 3.0 midpoint for both SoC and IP, this likely indicates that students do not feel strongly positive nor strongly negative about the sense of community or instructor presence in their online classroom. Only one marker was below 3.0; for the group consisting of American Indian, Asian, Native Hawaiian, Pacific Islander, and Hispanic, the SoC median was 2.90 the ANOVA did not indicate a significant difference.

The only significant difference proved to be among Health Sciences and Math & Science majors for IP. This could be due to several factors, including the faculty in these areas are perhaps better trained in the importance of IP for online course delivery, or they could provide these students with a more marked experience in positive examples of online course community and instructor interactions. Another factor could be the course content itself better lends itself to stronger IP.

My initial thoughts would be that differences in online courses completed by students would express itself as a difference for both SoC and IP with the assumption that as students gained experience taking and completing online college classes, they would gain skills of navigating through the LMS classroom, understanding how to submit assignments, and responding on the discussion board, resulting in higher SoC and IP scores. However, the survey data indicated that total online courses completed had no significant impact on students' perceptions of SoC or IP. For SoC, students in the 0-2 courses completed category indicated a mean of 3.12 which was very slightly lower than students on the other end of the spectrum, those who completed 9 or more online courses, with a mean score of 3.16. For IP, students who completed 0-2 online courses indicated a 3.36 mean which is slightly higher while students

completing 9 or more online courses indicated a mean of 3.33. One possible explanation could be that for this student population, TBR community college students, many of them may already have strong online college classroom skills through dual enrollment classes, as well as high school classes offered online or as a hybrid. Overall, across all demographic groups, for IP m=3.39 and SoC m=3.14 and for both types of online community interactions, m=3.265. This indicates that a general slight satisfaction on the survey scale from 1 to 5, where 1 = strongly disagree, 2 = disagree, 3 = neither agree nor disagree, 4 = agree and 5 = strongly agree. This average overall mean can be interpreted to mean that students generally do not have a strong response, either positive or negative, to their experiences of SoC and IP in the online classroom. Another consideration could be that students have an unclear idea of what SoC and IP are, how to identify them in their online classes, and how these elements impact their learning.

However, the Cartwright Survey should also be evaluated in light of the students' openended comments in the survey. One of the key findings of this study was the striking difference between the survey questions, which did not indicate any consistent significant differences among demographic categories and the volume, length, and detail of students' written responses.

The number of students who included commentary was 71. The majority of written responses, 58%, were generally negative while only 32% were positive and 10% were ambivalent. The average word count was 52 words, but several responses were much more detailed with the longest at 379 words. The top five longest responses were over 150 words long, with the top three over 250 words long. This dedication to expressing and sharing opinions likely contraindicates the quantitative data which shows that most students, nearly regardless of demographic background, were largely ambivalent about their online course experience, if not slightly positive. In fact, the written feedback reveals an overall perspective

which is in sharp contrast to the quantitative survey scale responses because the top five longest responses were all negative in nature (1,192 words total). Also, the 32% positive written responses averaged 20-30 words, while the 58% negative responses averaged much higher word counts, 50-60 words, double the word count of the positive responses. And many of those positive written responses still contained reports of negative experiences that had been balanced with positive experiences. Because most negative responses were focused on poor IP, student responses could be grouped into three main sub-sets under IP: (1) Lack of regular and substantive interaction (RSI) in terms of grading and feedback; (2) Lack of RSI in terms of instructor responsiveness; (3) Lack of RSI creating frustration for students. Only one theme emerged around SoC and that was (4) students' discounting of classroom community value.

Lack of RSI in Terms of Grading and Feedback

This study provides evidence that online students see the connection between IP and their success in online courses. The individual scores for IP dimension covered the entire range from 1 to 5, with an overall IP mean score for all participants of 3.39. For SoC, the overall mean score was 3.14, indicating that between classroom community and instructor presence, students expressed a preference for IP. The highest IP mean score was within the major category, specifically for healthcare majors where N = 116, M = 3.51. This could be due to the assumed stringency of most health science courses, both in complexity of material presented and expectation of standards to be met by external accrediting bodies. However, when students are not provided consistent feedback and grades on their submitted work, they keenly feel the absence of regular and substantive interaction (RSI) because they're left not knowing what constructive next steps to take to improve their learning. As one student wrote, "There was no insight as to what was wrong with the paper" and another student shared:

It's interesting that we have rigid deadlines to turn things in but then we won't receive

them back for many weeks at a time. Then when they are returned, they have no tangible markup on them to detail what to fix for next time.

In addition, a student also wrote:

Receiving feedback in a timely manner is the chief problem with online courses. It's impossible to know what changes to make or what to avoid when it takes three to six weeks to get a two-page report returned.

Here the student's incredulity seems centered on the brief nature of the assignment (two pages) versus the long turnaround time (three to six weeks). It could be understandable that, at times, an instructor may take longer to return student work due to unforeseen circumstances. However, if this is a routine occurrence, classroom trust and student persistence are likely to be impacted. And most faculty in this situation would consider briefly notifying the entire class, as soon as possible, about the extended grading timeline with a firm deadline of when to expect feedback. Since this apparently did not take place in this instance, the student's sense of fair play is challenged. Important to note that through the lens of RSI, classes taught in this manner, without scheduled and predictable interaction, are in danger of being classified as "correspondence courses" as defined by the United States Department of Education (2022).

Lack of RSI in Terms of Instructor Responsiveness

In addition to not receiving timely grades on assignments, an ancillary concern of students is lack of instructor responsiveness to student-initiated outreach. Again, students are left in a void of uncertainty due to missing RSI from their instructor. One student wrote, "It's very overwhelming when you can't get ahold of your teacher." Another student commented, "I do desire/expect prompt communication from instructors which seems to be lacking in most of the courses I have taken online." One student shared, "I feel as though there was a gap in communication and interpersonal relationships with online classes. With online classes, you

know your classmates and instructors less" which indicates that the student assumes the teaching modality is the root cause of poor instructor responsiveness. Unfortunately, this student will probably carry this incorrect assumption over into future online classes. For students who do experience a responsive instructor, the impact can be immediate, such as this student who wrote, "I have only just started my first online class, but my professor and I have already emailed back and forth. I already feel like he is someone I can trust." It is interesting to note how a seemingly simple action such as replying back to a student's email can positively escalate from a routine communication to the foundation of building trust within a positive classroom learning environment.

Lack of RSI Creating Frustration

When students have instructors who do not respond to either communications or submitted assignments, their responses reflect high levels of frustration. One expression of this frustration is an almost robotic hopelessness about the entire learning process as they describe the lack of meaningful learning taking place in the classroom; one student wrote, "I do not feel like I am personally learning much at the moment. Although this is my first time attending college let alone an online class, I don't feel like it's going great." Another student who characterized the learning process as merely rote shared, "Online classes have served me no purpose in regards to actually retaining information rather than memorization and regurgitation." These students recognize that without significant, persistent, and sincere faculty interaction in the classroom (essentially RSI), there is little chance to deeply understand their classroom material. Several students expressed this frustration in terms of "stealing" and "cheating" such as the student who shared that "The college is essentially allowing the instructors to steal from us by not even doing the bare minimum requirements to facilitate an education." Here the anxiety is evident because the student not only sees a connection between

instructor responsibilities and their own learning success, but they categorize this almost as an "unfair exchange" where a student's time, effort, and money are not enough to garner the "bare minimum" of interactions from the instructor. Another student expressed frustration over the lack of flexibility in the online classroom, which is typically one of the modality's hallmarks. This student wrote, "I also loathe the fact that I take online classes to move through lessons when I have free time, but my current professor has deadlines, drop boxes, and tests all locked." This student clearly has a different set of expectations in terms of how the online class will provide convenience and flexibility versus the reality of how the course is structured, especially regarding deadlines.

Students' Discounting of Classroom Community Value

A final theme that emerged from the students' open-ended responses centered on the value of classroom community, which formed around two assumptions: (1) classroom community is not of value to the learning process and (2) group work does not build classroom community. First, several students equated the online classroom community to virtual "chit chat" where only surface social connections are made that provide no benefit. One student wrote:

I'm just going to school to get the degree, not to socialize. That's why I took online classes-to avoid the social aspect of in-person classes. I don't understand the push to make online classes become exactly like in-person courses.

Another student shared:

I did not like the filler discussions. I feel like instructors used discussions to force students to interact. However, many students utilize online courses because they want less interactions with other students.

And another student commented, "I prefer online classes to on-campus classes because it is

more convenient, and I don't need social interaction. I am here to learn, not socialize." Here the assumption seems to be that classroom socializing is always the equivalent to virtual tail-gating: fun, perhaps, but not an essential step in the learning process. All of these student responses clearly indicate that they have a misguided notion of what classroom community is and how it can serve their learning goals. Typical positive classroom community is built by integrating students' life experiences into the curriculum and inviting students to interact in thoughtful and meaningful ways. The student's description of a "filler discussion" can possibly result from poorly executed learning activities, such as a well-intended early semester icebreaker exercise that leads nowhere, or discussion board prompts that the instructor does not respond to, or if the instructor does not reply back to student posts. It is the online equivalent of instructors turning their backs on students in an on-ground classroom. This sentiment is expressed by a student who wrote:

I don't feel that a "sense of community" in online classes is important. As long as learning takes place and the instructor response/help is there, I could care less about interacting with others in class. It's just not needed, and for me I do not desire that.

This student's response is another example of how some instructors are not doing an effective job of leveraging online classroom community. Many, if not most, future employees will need the soft skills of interacting collegially and professionally in the workplace and the online classroom is the place to begin building these skills. Another example is the student who shared, "I enjoy a good introduction post where all classmates share. Aside from that, I enjoy my online education to remain independent. Forced social interaction can get tedious." This feedback is interesting because the student seemingly contradicts their statement because they confess to finding value in the initial introductory posts. Perhaps the insightful comment of "forced social interactions" can provide a key to students' resistance to engaging with their

classmates.

One possible cause of students' devaluing of classroom community could be due to "forced social interactions" such as the dreaded group work project. Several students made their thoughts about group projects very clear. One student wrote:

I enjoy getting to know my professor and classmates while doing online classes including using discussion board posts. I do not agree with the idea of doing group-based projects for fully remote (online) courses because it is difficult to collaborate on a group project when everyone works at different times. I also do not like to have part of my grade be reliant on the efforts (or lack thereof) of my peers.

Again, a core issue at play is that the student's sense of fair play feels violated because of receiving grades based on a classmate's work. Regarding this, another student shared, "I don't care for group work, I'm in class to learn, not to feel like I need to make friends and get people opinions of me." One suggestion for these instructors would be to create a collaborative exercise which meets the stated course learning outcome, but the assignment is crafted based on suggestions and input from everyone in the class. This demonstrates listening and negotiating skills, as well as helping to ensure students feel more engaged in their coursework. In addition, by building positive experiences with group work, students would soon disassociate negative impressions of group projects, specifically, and peer to peer interactions.

Recommendations for Practice

These findings may be useful to administrators, particularly those who design and deliver faculty professional development training, such as staff members of an institution's Center for Teaching and Learning. Research findings presented here may also support community college administrators as they strive to improve their online course offerings, especially to ensure that federal RSI guidelines are met and federal funding remains intact for

students. Recommendations for practice at the local community college level include the following:

- Offer faculty professional development training focused on the importance of sense of
 community and instructor presence for the online classroom, sharing practical how-to
 suggestions for how to incorporate techniques into the teaching process. These should be
 offered in a variety of modalities: asynchronous online which part-time faculty typically
 utilize as well as synchronous online or face to face training which full time faculty
 usually prefer.
- Institute an institution-wide "reader" such as "Small Teaching Online: Applying Learning Science in Online Classes" by Flower Darby. Meet with participants regularly to share guided discussion topics and share thoughts on Darby's best practices.
- Connect SoC and IP to the faculty evaluation process by including questions targeted to
 these areas on the semester student surveys and sharing these results with individuals,
 departments, and divisions to make better informed data-driven pedagogical decisions.

Finally, on the state-wide system level, recommendations for practice include:

- Because SoC and IP are key components of a successful online classroom, the TBR system office should construct and deploy faculty professional development in this area, much like their successful efforts in state-wide trainings in High Impact Practices (HIPs), Transparency in Learning and Teaching (TILT), and Mindset. This would allow for more consistent training results across the state and encourage gathering metrics to measure effectiveness and support individual colleges in making data-informed decisions about training gaps related to student satisfaction and persistence in their online courses.
- Draft a list of distance learning terminology with definitions and usage examples to help clarify the conversations across campuses and across the state. This list should be derived

after polling all community colleges for the pertinent administrators' input, discussion of the terms, and voting on the first draft of terms, with the understanding that as technology shifts, so the terms we use to describe it should be revised. And as shown in this research, our students and instructors need consistent terminology and nomenclature across the Tennessee Board of Regents community college system when referring to courses delivered via online modality. By streamlining and solidifying the terminology, student, faculty, and administrator communications are improved. And, with an agreed-upon core list of terminology, this would also improve coding within systems, such as Ellucian Banner which all TBR community colleges use to create their semester schedules.

- Utilize United States Department of Education (2022) terminology to better define distance education offerings which they define as: "Education that uses one or more of the technologies . . .to support regular and substantive interaction between the students and the instructor or instructors, either synchronously or asynchronously". Key to clarifying understanding would be the wide-spread adoption and usage of industry standard terms of "synchronous" and "asynchronous" as a starting point for system-wide conversations toward a common nomenclature.
- Ensure that state-level discussions are taking place around RSI and encourage each institution to (1) define RSI for these institutions, (2) craft policies and procedures to clearly support strong RSI, and (3) encourage inclusion of RSI to the institutional framework via mission and vision sStatements, as well as through Quality Enhancement Programs (QEP) as outlined by the Southern Association of Colleges and Schools Commission on Colleges (SACSCOC).
- Institute an ambassador program, much like the HIPs ambassadors, where each of the 13
 TBR community colleges nominate excellent practitioners of IP so that their expertise

can be shared across the system. In this manner, smaller community colleges with little to no CTL staffing would still be able to deliver resources to their faculty members.

Recommendations for Further Research

The findings in my study show that when students are allowed to provide unstructured feedback, they have strong opinions about the importance of instructor presence in their online classrooms, when allowed to provide unstructured feedback. Because of the continued growth in the number of online courses and programs being offered at TBR community colleges, the topics of sense of community and instructor presence merit more study. The following are recommendations for further research:

- Further research should be conducted specifically for Health Science majors and Math &
 Science majors to determine how students in these majors possibly rely on strong instructor presence for success in their online studies.
- Because the richest results from this study were gained from the open-ended questions inviting students to share their feedback, more in-depth study in this area should be done, including focus groups. In addition, a new survey instrument could be constructed with more open-ended questions that include prompts such as "Describe your most positive online classroom experience," or "What characteristics do you think are important for a successful online learning environment?"
- Because the target student group of this study was focused on TBR community college students, statistics gathered by the TBR system office or by IPEDs could be analyzed against the data collected here to form additional understandings of students' impressions of SoC and IP.
- Another factor that should be studied for online classes is the delineation between vendor provided content versus subject matter expert (SME) faculty created content. Does

having a unique set of learning materials, readings, and assessments provide the instructor with more time to devote to building classroom community, responding to student questions, and providing in-depth grading feedback? Or do instructors feel a detachment from content they did not create and, therefore, are more prone to abandon a class if it contains vendor content?

- In addition, the same survey instrument could be delivered, at a later date, to compare baseline results with newer results. Also, one question that was purposefully not included in this survey was demographic information which identified the students' institution. If this question was included, then targeted surveys constructed for specific institutions, refined based on initial findings, could be deployed. A caveat for this further research is the acknowledgement that many institutional representatives were very clear that they did not want their college to be identified in this large 8-college study. It may be doubtful that survey deployment would increase if this identifying question were included.
- A faculty survey constructed around the tenants of strong SoC and IP should also be deployed to TBR community college instructors. It would be helpful to identify full-time faculty and adjunct faculty to determine if there are gaps in 1) identifying what SoC and IP are, 2) understanding why they constitute best practices for online teaching, and 3) learning and implementing active teaching practices that ensure SoC and IP are regular aspects of all online courses, regardless of degree path, instructional content, or instructor type (full-time, part-time, tenured, or not).
- Based on the ANOVA results from RQ 15 which indicated a significant relationship between Instructor Presence and Health Sciences and Math & Science majors for students, several areas for future study are suggested. First, a deeper exploration of the significant difference in the Perceptions of Instructor Presence dimension score between

Health Science majors and Math & Science majors would be warranted. Possible approaches would include surveying students in these majors only, asking more openended questions about their major-specific experiences, and including a detailed list of online instructional tools for students to rank as being "effective" or "ineffective" in terms of their experiences. In addition, a survey instrument could be constructed aimed at instructors who teach in these areas to determine their overall awareness level of Instructor Presence, how they define Instructor Presence, and ways they actively implement strategies in their online courses to foster and strengthen Instructor Presence in a consistent manner. For the instructor-facing instrument, it would be important to include both full-time and part-time/adjunct faculty members in order to identify possible differences in perception and delivery of IP.

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APPENDICES

APPENDIX A: Cartwright Survey Cover Letter

Dear Student,

My name is Marla Cartwright, and I am a doctoral student in the Educational Leadership and Policy Analysis (ELPA) program at East Tennessee State University (ETSU). I invite you to participate in this survey as part of my doctoral research. The purpose of the survey is to understand students' feelings of sense of classroom community and instructor presence in online classes and how those feelings may impact student performance in those classes. I greatly value your participation and your perspectives.

To participate in the survey, you must be 18 years old and a currently enrolled student. You must also have completed at least one online class or be currently enrolled in an online class this semester. You must also be physically present in the United States.

This survey should take approximately 15 minutes to complete. You will respond as an anonymous participant. Your confidentiality will be protected, as best I can. However, no guarantees can be made about the possibility of data being intercepted over the internet by a third party. The survey is being administered using a software program called Qualtrics, which provides security features including high-end firewall systems, regular scan to identify vulnerabilities, Transport Layer Security encryption, and password protection.

The study was approved by the Institutional Review Board (IRB) at ETSU which oversees the rights and protections of research participants. Although your rights and privacy will be maintained, the research records may be viewed by individuals with the legal right to see that information, including the IRB at ETSU, other individuals at the University who are responsible for assuring that the rules related to research are followed, and the federal Office of Human Research Protections (OHRP). The data from this survey will be shared with the institutional

administration but will not include any individually identifying information and will not be connected to individual participants.

Your participation in this study is entirely voluntary. You may discontinue the survey at any time without repercussion. You may also choose to skip any items. There are no direct benefits for participation. Possible indirect benefits include improvements to faculty professional development training related to conducting online courses and other improvements in online education. There are no expected risks for participating in this research.

If you have any questions or concerns about this survey, you may contact me, Marla Cartwright, at cartwrightm@etsu.edu. You may also contact the ETSU IRB at 423-439-6054 or email irb@etsu.edu for any questions you may have about your rights as a research participant. Thank you for considering this request to complete the survey and for your participation and honest response. If you consent to take the survey, please click the "I Agree" link below and you will be directed to the survey.

Thank you,

Marla Cartwright

APPENDIX B: Cartwright Community and Instructor Presence Survey

By cl	icking	the I	AGREE	link	below, I	am	indica	ating	that
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I have read the above information.					
• I agree to volunteer.					
• I am at least 18 years old.					
• I am physically present in the United States.					
• I am currently enrolled at this institution.					
• I have completed at least one online class or am currently enrolled in an online class.					
o I AGREE.					
o I DO NOT AGREE.					
1. Are you at least 18 years old?					
a. Yes					
b. No					
2. Are you a current community college student?					
a. Yes					
b. No					
3. How many online for-credit college classes have you taken, including this semester?					
a. 0					
b. 1-2					
c. 3-4					
d. 5-6					
e. 7-8					
f. 9 or more					

- 4. How many cumulative for-credit college credit hours have you earned?
 - a. 0 credit hours
 - b. 1-11 credit hours
 - c. 12-22 credit hours
 - d. 23-33 credit hours
 - e. 34-44 credit hours
 - f. 45-55 credit hours
 - g. 56-66 credit hours
 - h. 67 or more credit hours
- 5. What credential type are you working toward?
 - a. Associate of Arts, A.A. degree
 - b. Associate of Science, A.S. degree
 - c. Associate of Applied Science, A.A.S. degree
 - d. Technical Certificate
- 6. What is your major study emphasis?
 - a. Business (Accounting, Business Administration, Computer Science, Economics, Finance, Hospitality & Tourism, Marketing)
 - b. Computer Science (Cyber Security, Networking, Programming, Web Design)
 - c. Health Sciences (Anesthesia Technology, Medical Lab, Nursing, Radiology, Respiratory Care, Veterinary Tech)
 - d. Humanities (Art, Communications, English, Foreign Languages, Music,
 Philosophy, Theater)
 - e. Math & Science (Agriculture, Astronomy, Biology, Chemistry, Mathematics, Physics)

		f. Social Sciences (Education, Psychology, Social Work, Sociology)					
		g. Other (fill in the blank)]?					
	7. Wh	gender do you identify as?					
		a. Male					
		b. Female					
		c. Other or prefer not to say					
	8. Wh	at is your age category?					
		a. 18-20					
		b. 21-25					
		c. 26-30					
		d. 31-40					
		e. 41-50					
		f. 51 and older					
	9. Wh	ich category or categories best describe you?					
		a. White					
		b. Black or African American					
		c. Hispanic or Latinx					
		d. American Indian or Alaska Native					
		e. Asian					
		f. Native Hawaiian or Other Pacific Islander					
		g. Other					
		h. Prefer not to answer					
10. What is your current cumulative grade point average on a 4.0 scale?							
		a. 2.0 and below					

- b. 2.1 2.5
- c. 2.6 3.0
- d. 3.1 3.5
- e. 3.6 4.0

For the following items, consider your online class experience in general if you have taken multiple online classes. If you have completed only one online class, use that course as a reference for your responses.

Please respond to the following items using this scale:

Strongly Disagree Disagree Neither Agree nor Disagree Agree Strongly Agree

- 11. It is important for students to interact with each other in online classes.
- 12. Collaborative learning is important for me in my online classes.
- 13. I prefer to be an independent learner.
- 14. It is important for me to feel like I am part of a learning group.
- 15. I want to know my classmates in online classes.
- 16. I value a sense of community in online classes.
- 17. My online instructor(s) consistently posted a weekly announcement in my online classes.
- 18. My online instructor(s) consistently provided helpful feedback on graded assignments.
- 19. My online instructor(s) consistently graded and returned assignments in a timely fashion (less than 5 days).
- 20. I prefer not to know much about my online instructor.
- 21. I usually have a good sense of my online instructor's personality.
- 22. My online instructor(s) made me feel at ease asking questions.
- 23. It was difficult to contact my online instructor.
- 24. I felt comfortable contacting my online instructors because I knew they would be

	responsive.
25.	I always fel

- 25. I always felt embarrassed asking questions during my online class.
- 26. My online instructor(s) shared pictures or stories that made them feel like real people to me.
- 27. At the end of my online class(es), I was not sure of my online instructor(s)' name(s).
- 28. I felt comfortable asking questions in my online classroom.
- 29. I felt that my online classroom was a safe space for learning.
- 30. I felt that I belonged and accepted in my online classroom.
- 31. Please add any other comments on your experience of sense of community or instructor presence in your online classes.

Thank you for taking the Cartwright Community and Instructor Presence Survey.

APPENDIX C: Permission to Use and Modify Survey Instrument

From: Kappel, Laura Lynn Higgs <KAPPEL@mail.etsu.edu>

Sent: Monday, August 29, 2022 9:15 AM

To: Cartwright, Marla J <mcartwright1@Columbiastate.edu>

Subject: Re: [EXTERNAL] Happy Fall!

CAUTION: External Email! Submit suspicious emails using PHISH ALERT tool. Do not click links or open attachments unless the content is known to be safe.

Hi Marla,

Thanks for your message and for your comments about my dissertation. I think you'll really like Dr. Lampley's class. I'm flattered that you chose to review my dissertation. You know there are shorter options out there, right? (ha ha) And yes, of course, you can use and modify my survey. Several of the articles I looked at also included their surveys in the appendix, so you may come across some other ones that might inspire you.

VITA

MARLA CARTWRIGHT

Education: Ed.D. Educational Leadership, East Tennessee

State University, Johnson City, Tennessee, 2023

M.A. English, Middle Tennessee State University, Murfreesboro,

Tennessee, 1994

B.S. English, Middle Tennessee State University, Murfreesboro,

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A.S., Data Processing, Columbia, Tennessee, 1983

Professional Experience: Dean, Academic Engagement & Innovation, Columbia State

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Director, Center for Teaching and Learning, Purdue University

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Chair, Department of Student Success, Purdue University Global,

West Lafayette, Indiana, 2006-2009.

Publications: Cartwright, Marla. (2020). "Planning a Successful Online

Conference." Training Industry Magazine.

Honors and Awards: Nelle Jesse Scholarship, East Tennessee State University, 2023

Grand Slam Award, Columbia State Community College, 2022

Kaplan Way Leadership Award, 2013, 2015