

5-2010

A Grounded theory approach to faculty's perspective and patterns of online social presence

Rebecca A. Cox-Davenport
University of Nevada Las Vegas

Follow this and additional works at: <https://digitalscholarship.unlv.edu/thesesdissertations>



Part of the [Higher Education and Teaching Commons](#), and the [Nursing Commons](#)

Repository Citation

Cox-Davenport, Rebecca A., "A Grounded theory approach to faculty's perspective and patterns of online social presence" (2010). *UNLV Theses, Dissertations, Professional Papers, and Capstones*. 312.
<http://dx.doi.org/10.34917/1536877>

This Thesis is protected by copyright and/or related rights. It has been brought to you by Digital Scholarship@UNLV with permission from the rights-holder(s). You are free to use this Thesis in any way that is permitted by the copyright and related rights legislation that applies to your use. For other uses you need to obtain permission from the rights-holder(s) directly, unless additional rights are indicated by a Creative Commons license in the record and/or on the work itself.

This Thesis has been accepted for inclusion in UNLV Theses, Dissertations, Professional Papers, and Capstones by an authorized administrator of Digital Scholarship@UNLV. For more information, please contact digitalscholarship@unlv.edu.

A GROUNDED THEORY APPROACH TO FACULTY'S PERSPECTIVE AND
PATTERNS OF ONLINE SOCIAL PRESENCE

by

Rebecca A. Cox-Davenport

Diploma of Nursing
Lancaster General Hospital School of Nursing, Pennsylvania
1996

Bachelor of Science in Nursing
University of Pittsburgh, Pennsylvania
1998

Master of Science in Nursing Education
Waynesburg University, Pennsylvania
2005

A dissertation submitted in partial fulfillment of
the requirements for the

**Doctor of Philosophy in Nursing
School of Nursing
School of Allied Health Sciences
Division of Health Science**

**Graduate College
University of Nevada, Las Vegas
May 2010**

Copyright by Rebecca Anne Cox-Davenport 2010
All Rights Reserved



THE GRADUATE COLLEGE

We recommend the dissertation prepared under our supervision by

Rebecca A. Cox-Davenport

entitled

**A Grounded Theory Approach to Faculty's Perspective and Patterns of
Online Social Presence**

be accepted in partial fulfillment of the requirements for the degree of

Doctor of Philosophy in Nursing

School of Nursing

Lori Candella, Committee Chair

Cheryl Bowles, Committee Member

Michelle Clark, Committee Member

Carolee Dodge-Francis, Graduate Faculty Representative

Ronald Smith, Ph. D., Vice President for Research and Graduate Studies
and Dean of the Graduate College

May 2010

ABSTRACT

A Grounded Theory Approach to Faculty's Perspective and Patterns of Online Social Presence

by

Rebecca A. Cox-Davenport

Dr. Lori Candela, Examination Committee Chair

Professor of Nursing

University of Nevada, Las Vegas

The purpose of this research study was to generate a grounded theory regarding the patterns and perceptions of nursing faculty in the formation of social processes in an online course. Employing a grounded theory approach, this researcher built upon the theoretical concepts of the Community of Inquiry (CoI) model (Garrison, Anderson, & Archer, 2000). The CoI model illustrates the inner workings of the educational experience. The model consists of three main components: social presence, teaching presence, and cognitive presence. These three elements overlap to demonstrate how each factor influences the other forms of presence. This study sought to better understand the overlap of social presence and teaching presence that the model authors distinguished as climate factors.

To explore the underpinnings of climate factors, this researcher interviewed online master's level nurse educators, observed their online courses, and examined their course syllabi for creation of social presence. From the data emerged a substantive theory: humanizing was found to be the climate factor central to establishing social presence. Humanizing the course climate leads each member of the community to see the other members as real, thus enabling the establishment of online social presence.

With the establishment of the core climate factor humanizing, there emerged theoretical concepts describing the patterns and perceptions of faculty initiating and maintaining online social presence. These theoretical concepts included faculty patterns: cyber role modeling, maintenance, and awareness. The faculty perceptions included: meaningful socialization, facilitate connections, and student control. Lastly, the faculty described a combination of pattern and perception, lifelines, to help students stay attached to the learning community.

These findings suggest that faculty found value in creating a climate where the individual was acknowledged and made a prominent center-point of the course. Implications of this research resonate with the CoI model. By having a greater understanding of this area within the model, researchers can begin to quantify the level of humanizing within a course and establish best practices of climate creation for an online course.

ACKNOWLEDGEMENTS

This work could not have been completed with the help of many people. I would like to first acknowledge my husband Kevin. To describe him as a support does not do justice to everything he has meant throughout this process. He has been my companion, cheerleader, crutch, and refuge in this journey. I am very lucky to have such an amazing partner.

Dr. Lori Candela, my dissertation chair and advisor, has given me steadfast support throughout my dissertation experience. She did not allow me to give up on myself, and guided me in finding a topic and a method that would spark professional and personal growth. Not very many advisors would wind their way through rural South Carolina to visit their graduate student. I appreciate all the ways you have supported me. I would also like to thank the members of my doctoral committee: Dr. Bowles, Dr. Clark, and Dr. Dodge-Francis, your questions challenged me to go deeper in my understanding of grounded theory and online social presence. Your guidance and support made this challenging process also a wonderful one.

To my family and friends, thank you for all of your love and support. It is easy to believe in yourself when someone first believes in you. Thank you for calling to check in and lending me encouragement. With the completion of this work, I am officially “back on the planet”. To my dear nieces Ashley and Katie, you can do anything if you put your mind to it. I can’t wait to see what you become!

My last thank you goes to my 2006 PhD cohort. You are the original cast in my mind’s eye of how social presence is done right. You helped me along at every level and were my online family. I love each of you.

I would like to dedicate this work in honor of my late mother, Dorothy, an amazing mother and friend. She saw me through every first day of school from grade to graduate school, but was taken from us too early from ALS in December 2006. I love and miss you Mum.

TABLE OF CONTENTS

ABSTRACT.....	iii
ACKNOWLEDGEMENTS.....	v
LIST OF TABLES.....	ix
CHAPTER 1 INTRODUCTION.....	1
Aim of the study.....	1
Introduction to the Phenomenon.....	2
Focus Specific Context of Phenomenon.....	4
Study Purpose.....	6
Specific Aims.....	7
Summary.....	8
CHAPTER 2 EVOLUTION OF THE STUDY.....	9
Introduction.....	9
Theoretical Model.....	9
Conceptual Model.....	11
Historical Context: Literature Review.....	26
Research Method.....	28
Relevance of this Study to Nursing.....	30
Experiential Context: Background of the Researcher.....	31
Summary.....	32
CHAPTER 3 METHOD OF INQUIRY: GENERAL.....	33
Introduction.....	33
Description of Research Method.....	33
Important Aspects and Concepts.....	36
Rationale for Choice of Method.....	40
Method of Data Analysis.....	42
Methodological Rigor.....	46
Summary.....	48
CHAPTER 4 METHOD OF INQUIRY: APPLIED.....	49
Introduction.....	49
Population Sample.....	49
Data Collection Setting.....	52
Human Subjects Considerations and Protection.....	53
Data Collection Procedures.....	56
Data Analysis.....	58
Specific Aspects of Methodological Rigor.....	60
Strengths and Limitations.....	62
Summary.....	63

CHAPTER 5 RESULTS.....	64
Introduction	64
Description of Study Participants.....	64
Data Collection Procedure	66
Method of Data Analysis and Process	69
Conceptual Category Development.....	74
Results of Theoretical Coding.....	81
Negative Case.....	98
Model Metaphor	99
Summary.....	101
 CHAPTER 6 DISCUSSION, IMPLICATIONS, AND RECOMENDATIONS.....	 103
Introduction.....	103
Interpretations of Results	103
Review of Literature in Relation to the Findings.....	105
Implications for Nursing Education.....	114
Limitations	116
Recommendations for Future Research.....	118
Summary.....	119
 APPENDIX A PERMISSION NLN SUMMIT BULLETIN BOARD POSTING.....	 120
 APPENDIX B BULLETIN BOARD NOTICE.....	 121
 APPENDIX C IRB APPROVAL.....	 122
 APPENDIX D INFORMED CONSENT FOR PARTICIPANTS.....	 123
 APPENDIX E TRANSCRIBER CONFIDENTIALITY AGREEMENT.....	 124
 APPENDIX F SEMI-STRUCTURED INTERVIEW QUESTIONS	 125
 APPENDIX G EXAMPLE OF GRID.....	 126
 APPENDIX H EXAMPLE OF MEMO	 128
 APPENDIX I EXAMPLE OF SYLLABUS GRID	 131
 BIBLIOGRAPHY	 132
 VITA	 140

LIST OF TABLES

Table 1	Supporting Data Categories for Meaningful Socialization Perception.....	84
Table 2	Supporting Data Categories for Facilitate Connections Perception	86
Table 3	Supporting Data Categories for Student Control Perception	88
Table 4	Supporting Data Categories for Cyber Role Model Pattern.....	90
Table 5	Supporting Data Categories for Maintain Pattern	92
Table 6	Supporting Data Categories for Awareness Pattern	94
Table 7	Supporting Data Categories for Lifelines Pattern/Perception.....	96

CHAPTER 1

INTRODUCTION: AIM OF THE STUDY

The intent of this chapter is to introduce the main concepts related to faculty creation and implementation of online course climate through the establishment of online social presence. Colleges and universities have expanded many courses to include an online format that had been thought could only be presented through traditional face-to-face means. An online course is not merely an extension of the face-to-face classroom environment, rather it is a living entity where learning and social exchanges take place in a virtual space. How students utilize that virtual space is largely influenced by the course faculty.

Palloff and Pratt (2007) described social presence as the student feeling that he or she is not only known as an individual, but also feels like a part of a community. Garrison, Anderson, and Archer's (2000) Community of Inquiry (CoI) conceptual model of the online educational experience connects the course faculty to social presence in an online course. The authors described this connection as climate setting. In an update to their model, Garrison and Arbaugh (2007) wrote about the need to expand research of social presence to the other areas of the model:

Although focusing on social presence may have been an appropriate and important place to begin the study of online learning considering its asynchronous nature, nearly all of this research has been done without considering its relationship to cognitive and teaching presence (p. 159).

This research sought to expand understanding about the area of overlap between social and teaching presence: climate setting.

As a topic, the impact of climate setting on social presence is timely and important one to nursing education because an increasing number of nursing degrees and certificates are offered online. Bachelor's and master's degrees as well as nursing certifications, such as forensic nursing, are available in online formats. The design and execution of the educational environment is critical to student learning (Garrison, et al., 2000; Palloff & Pratt, 2007; Shea, 2006). Although support exists advocating that online education is equivalent to face-to-face classroom learning (Russell, 1999; Shachar & Neumann, 2003; Steinweg, Davis, & Thomson, 2005; Zhang, 2005), there is a paucity of literature regarding the impact of how nurse educators use climate factors in the creation and maintenance of online social presence.

Introduction to the Phenomenon

According to the Sloan Consortium Online Learning Survey, nearly 3.5 million students took at least one online course in the fall of 2006 (Allen & Seaman, 2007). The survey also reported that in 2006 as many as 686,337 students were enrolled in at least one master's level online course and that number was expected to rise 19.6% annually. Thus, assisting students to be successful in an online environment is a concern of educators and administrators. Allen and Seaman reported in the Sloan Survey that a major barrier to adopting more online education at the college and university level was student retention in an online learning environment.

Engagement and retention of students has been linked to the student's relationship to peers and to the faculty member (Garrison, Anderson, & Archer, 2000; Gunawardena & Zittle, 1997; Han & Hill, 2007; Richardson & Swan, 2003; Richards & Tangney, 2008; Wisker, Robinson & Shacham, 2007). Aspects of engagement and retention have been

described as social presence, faculty immediacy, and teaching presence (Mandernach, Gonzales, & Garrett, 2006). Many articles and books have been written to guide faculty in building online courses; however a gap exists with regard to a theoretical model to guide faculty's creation of online communities.

Through Garrison and Cleveland-Innes's (2004) work with the CoI model, the authors have determined that online learning issues are most likely associated with social and cognitive interaction problems, such as students giving superficial postings to class questions, and not engaging in deeper, more meaningful class discussion. The authors reported that a condition for quality interaction is the student's sense of social presence in the course. Garrison and Cleveland-Innes contend that faculty can lend its support by structuring the online environment to promote students' engagement in the social and cognitive processes needed to provide quality interaction.

The National League for Nursing (NLN) designates one hallmark of nursing education excellence as an educational experience that encourages students and faculty to have an open collegial dialogue that fosters creativity and professional values (National League for Nursing, 2004). In an online course, the nurse educator must create, operate, and maintain the educational experience by using this concept of open dialogue. Online education relies heavily upon activities that require group collaboration. Groups not only work together, they aid in course satisfaction and student retention. Han and Hill (2007) found the genesis of a community environment are the group processes in an asynchronous online environment. The authors also described the CoI as containing collaborative learning opportunities made up of a social process. The social process of the group adds to a collective effort to master the course content through a unified effort.

Focus Specific Context of the Phenomenon

Garrison, Anderson, and Archer (2000) created the CoI model to provide a framework for understanding the factors that contribute to greater cognitive learning in the text-based environment of an online course. The CoI model consists of the online community in three overlapping aspects: social presence, teaching presence and cognitive presence. Arbaugh (2007) stated that a relationship exists between feeling like an individual in a course and course success. The author stated that within the CoI model's dimensions of social, teaching, and cognitive presence there has to be a demonstration of the community's awareness of the individual.

The term presence is defined as "current existence or occurrence" (American Heritage Dictionary, 2000). Presence in this model refers to transactions within the educational process that enrich the learning environment and create deeper levels of learning (Garrison et al., 2000). The CoI must include a milieu that supports social bonds and educational outcomes. Shea (2006) described a well-structured CoI student community as having connected members that rely on each other to meet educational as well as personal needs.

The phenomenon of social presence is most often demonstrated between students, but student social presence is affected by the tone set by faculty. Garrison et al. (2000) assert that students demonstrate social presence by expressing emotion, maintaining an open course dialogue, and forming a team approach to coursework. The authors described the students as an interconnected group able to express thoughts and emotions freely in a risk-free environment. The online student's perception of social presence, social-ability, and connectiveness is a phenomenon that happens among students as well as between

faculty and students.

Teaching presence extends beyond checking assignments and assigning grades. Shea (2006) described online teaching and learning as directed facilitation by the faculty rather than direct instruction. For facilitation to occur, the author stated that the faculty must create carefully crafted and well structured ways for students to learn and integrate new ideas. This is done through setting a climate that enriches learning. Garrison and Cleveland-Ines (2005) identified that faculty's course structure and leadership create a space in which learning is possible.

Garrison et al. (2000) defined teaching presence as the creation of a structure "to support cognitive and social processes for the purpose of realizing educational outcomes" (p.90). In the CoI model, the faculty member is responsible for the design of the student's educational experience. The faculty member is responsible for enriching the CoI by facilitation of climate factors that effect social presence. Climate setting is difficult because it is achieved through facilitation in a text-based environment.

Operational Definitions

Climate factors. The overlap of teaching and social presence in the CoI model. The factors consist of faculty influences of students' communication, cohesion, and self-expression in the online course (Garrison et al., 2000).

Cognitive presence. The amount of knowledge constructed by the participants in the online community. The cognitive presence is the knowledge learned and how the learning is constructed through communication among group members (Garrison et al., 2000).

Hybrid course. A course that is partially taught in a traditional format and partially

in an alternative design such as an online format (Lim, Kim, Chen, & Ryder, 2008).

Teaching presence. The creation of a structure to assist students' cognitive and social processes in an online course. Teaching presence can be felt by students as direct instruction or as the role of a facilitator of learning (Garrison et al., 2000).

Social presence. Relates to the students' ability to feel appreciated by the community as a real person. Students reflect their social presence by projecting their emotions, thoughts, and public personas using a text-based medium (Garrison et al., 2000).

Text based environment. An online course relies on an environment in which communication is dependent upon writing or text-based contact. It lacks communication-enriching supplementation such as nonverbal cues, voice tone, and inflection (Garrison et al., 2000).

Face-to-face classroom. Considered a traditional classroom environment or an oral based communicative environment. In these meetings, communication patterns are more spontaneous and consist of a fast-paced flow of ideas between faculty and students (Garrison et al, 2000).

Study Purpose

The purpose of this research study was to generate a grounded theory regarding the understanding and practice of nursing faculty related to their use of climate factors in establishing social presence in an online course. It is important to gain a theoretical perspective of nursing faculty's understanding and perceptions about social presence as these become the basis for developing social communication among students (Burns & Grove, 2005). In order to gain a broader understanding of social presence and teaching

presence of the CoI model, researchers must garner knowledge of how these components interact in the area of climate factors.

With the use of a grounded theory approach, this researcher has built on the theoretical concepts of the CoI model to explain faculty's cultivation of social presence through the use of climate factors. How educators establish the overlapping area of teaching presence and social presence known as climate factors is not well understood, and this researcher sought to understand how faculty facilitate of social presence factors. Cognitive presence, the third area of the CoI model, was not be explored in this study. Considerable research exists to support the relationship between course outcomes and social presence factors. This study specifically explored faculty's perceptions and patterns of social presence creation using climate factors.

Specific Aims

- 1) To explore faculty's perceptions of climate factors in the creation of social presence in an online course.

Rationale. To develop an explanation of the process, this researcher will first assess faculty perceptions of online social presence. The author will focus on the faculty's thoughts and feelings about the creation of a course climate and their perceived effect on its creation.

- 2) Describe online climate factors used by faculty to establish social presence in an online course.

Rationale. This research seeks to explore the underpinnings of climate factors in an online course. The research seeks to discover how to recognize climate factors used by faculty to create social presence. It also seeks to understand faculty's intentions behind

their choices of climate factors.

- 3) Examine faculty's patterns of developing climate factors to establish presence in an online course.

Rationale. Understanding the methods associated with setting the course climate will allow this researcher to develop a model associated with the complex nature of social presence creation by faculty.

- 4) Describe the process involved in maintenance of climate factors after social presence has been established.

Rationale: Faculty set climate factors to create online social presence at the beginning of the semester; however, it is important to understand how these climate factors are maintained during the course of the semester to advance social presence.

- 5) Generate a grounded theory related to faculty patterns in creating and maintaining online social presence.

Rationale: The generation of a grounded theory will lead to an understanding of the establishment and promotion of social presence. This could prompt further research into best practices of online nurse educators.

Summary

There is a lack of knowledge about the way in which faculty establish social presence in an online course. This chapter presented the components of the CoI model and explained the need for research in the area of climate factors within the model. This chapter also described the purpose of this study as wanting to develop a grounded theory that will describe and explain how faculty perceive their role in setting course climate and explore faculty's understanding of their role in the creation of social presence.

CHAPTER 2
EVOLUTION OF THE STUDY

Introduction

This chapter reviews the literature of several major concepts that relate to faculty patterns in the creation of online social presence and reviews current research on the Community of Inquiry model as a basis for the current study. This chapter also provides a discussion of theoretical constructs of social learning. These constructs form the analytical framework of the current study.

The concepts for the current study are drawn from the CoI, which have been quantitatively as well as qualitatively supported since these concepts were introduced in 2000 (Arbaugh, 2007; Garrison & Cleveland-Innes, 2004; Garrison, 2007; Garrison, Anderson, & Archer, 2000; Lin, Lin, & Laffey, 2008; Mykota, & Duncan, 2007; Shea, Sau Li, & Pickett, 2006). The current study examines the organic manner in which an educator sets up and maintains the climate within an online course. Climate factors consist of both the instructor's presence and the social factors of the course. For the purpose of this literature review, aspects of social and teaching presence will be discussed.

Theoretical Model

The need for a learning community contains a theoretical base. Social constructivist theorists support the creation of a learning community to allow for knowledge development. From the constructivist vantage, learning takes place as a result of the interactions between not only student and faculty, but also between students.

A major focus of the social constructivist is to uncover the ways in which individuals and groups participate in the creation of their perceived social reality. Maypole and Gray (2001) described the social constructivist viewpoint of student learning as students using past knowledge and applying this knowledge when presented with new concepts. Social constructivists believe that learning can also be passed from one student to another when students share experiences and knowledge. Two theorists, Lev Vygotsky and John Dewey, believed that cognitive development necessitated social interaction.

Lev Vygotsky, a Russian child psychologist and a constructivist educational theorist, emphasized socio-cultural forces in the creation of learning and theorized the Zone of Proximal Development (ZPD) for learning. He theorized that, although a learner can do tasks alone, the learner could perform a greater number of tasks when done in collaboration with another learner (Moll, 1990). Vygotsky's ZPD approaches the collaborative efforts of a more competent person assisting a less competent person to learn and then become more independent performing the task. Social interaction can be used as a tool for learning enhancement.

In order for learners to have full understanding, Vygotsky believed that learners must have social interaction. Social interaction would become part of students' psychological tools for more effective task achievement (Kozulin, Gindis, Ageyev, & Miller, 2003). Psychological tools assist students in internalizing learning. In online learning, students may struggle because psychological tools, such as language and gestures regularly use in the face-to face-classroom are absent from the online course. However, even in the online course, the more advanced learner still has influence over

other learners through the sharing of knowledge. Social interaction in a learning environment is facilitated by each learner getting to know and trust the others in the group (Harris & Daley, 2008). Students are also more receptive to online group interaction as they begin to sense the benefit from the contact. Faculty can give students highly social activities to facilitate rapport that is linked to the ZPD.

John Dewey has also had great pedagogical influence on modern educational systems. Dewey believed that learning was social in nature, and in *My Pedagogic Creed* (1897), described education as a social process. He believed that education was an extension of the community, and that the social aspect of learning could not be separated from the psychological side. To Dewey, the educational process resulted from the interaction a student has with his or her environment. In order for a real learning experience to occur, Dewey believed that a connection must occur between the student and the learning community (Dewey, 1897).

Dewey's educational vantage also emphasized the importance of the connection between student, instructor, and school. Dewey described connection and interaction as principles inherent in all human institutions (Dewey, 1897), and believed that an instructor should present course content in a way that challenges a student to reflect. The instructor should also create an atmosphere that encourages greater inquiry of a subject (Dewey, 1916).

Conceptual Model

Garrison, Anderson, and Archer (2000) developed the CoI model to explain the inter-related and overlapping elements of the educational experiences of online learning. Teachers and students are viewed as interacting participants in an educational process.

Central to the model is the educational experience, which consists of three factors: cognitive presence, social presence, and teaching presence.



Figure 1. Garrison, Anderson, and Archer (2000), Community of Inquiry Model

Social Presence

Online social presence is described as a student's perception of being recognized as a person within the learning community (Palloff & Pratt, 2007). Within the CoI model, students are assisted by faculty to develop themselves as real people in an environment that lacks the physical immediacy of the face-to-face classroom (Garrison et al., 2000). Absent is the face-to-face connection that allows students to form social bonds. There are no class breaks; nor does there exist social time prior to class meetings where students would have the opportunity to get to know and understand each other. Garrison and Arbaugh (2007) explained that in order to achieve social presence students relationships

must transform from superficial relationships to purposeful ones. The authors believed that at that deeper level becomes functional for education. Educators create an online learning community; the student becomes part of a network of other students. All of which takes place in a primarily text-based format upon which students rely to interact on both a personal and an academic level.

The model's authors described social presence as a member of the community presenting themselves (Garrison et al., 2000), and noted that social presence in a educational experience is significant: it leads to a student's feeling socially secure and creating an environment that is safe to express new ideas. The expression of new ideas leads to a critical inquiry of information (Garrison et al., 2000). Aspects of social presence include open communication and group cohesion, but the authors explained that in order for group cohesion to occur students must have similar educational goals and interests (Garrison & Arbaugh, 2007).

Community. A manifestation of students' social presence is the emergence of an online community. This community, although abstract, is the result of student interaction and learning. Palloff and Pratt (2007) listed the following indicators that a community has formed in an online class:

- Active interaction involving both course content and personal communication
- Collaborative learning evidenced by comments directed primarily student-to-student versus student-to-instructor.
- Socially constructed meanings evidenced by agreements or questioning with the intent to achieve agreement on issues of meaning.
- Sharing of resources among students.

- Expressions of support and encouragement exchanged between students as well as a willingness to critically evaluate the work of others.

Chapman, Ramondt and Smiley (2005) explored the correlation between being in an online student community and learning outcomes among its members. The student communities were a part of the National College of School Leadership, and community membership consisted of formal and informal leadership training groups. The authors used a qualitative approach to examine evidence of the strengths of online communities. Chapman et al. used validated indicators to analyze six discussions from two different online courses. The authors found that those students who expressed a feeling of community ownership also had strong indicators of learning within the postings. Students who expressed a sense of strong community also created more new ideas and challenged each other to develop new insights into learning. The discussion thread analysis revealed that students gave feedback and comments to aid in the new learning. Although this was done with faculty guidance, much of the learning was done by peer-to-peer contact. The authors suggested that an online educator should assist students in building trust and a sense of commonality in order to produce the best learning outcomes.

When a student feels connected to a learning community, social processes are enhanced (Chapman et al., 2005; Garrison et al., 2000; Lock, 2002). Lock described in a literature review of the online community, that it was as a fluid process highly influenced by relationships and the degree of engagement of the community's members. The author advocated for faculty to cultivate the growth and development of a learning community. The educator has the ability to provide students with a common purpose that allows members to take their interactions from a purely social level to that of a learning

community. Faculty can foster the transition to a deeper social relationship by assigning students collaborative projects and encouraging group interaction (Garrison & Arbaugh, 2007).

Motivation. According to the model's authors, students must be motivated in order to be a part of an online community; motivation to participate is influenced by social bonds. Cheung, Hew, and Ling (2008) studied the reasons why students participate in asynchronous discussion boards. The author used a case study approach with a class of 15 teachers returning to college for a certificate in special education. Although this was a small sample, the authors' approached the data collection in a comprehensive manner. The authors evaluated students' reflection logs and online postings, collected questionnaire data, and conducted student interviews. The questionnaire asked all students about the reason they chose to contribute or not contribute to online postings. The authors then randomly chose six students to be interviewed. These interviews revealed a further explanation about the reasons for course involvement. To further validate the data, the authors used a constant-comparative approach between the interview responses and the tangible data from the questionnaires and student logs. Cheung et al. found that 93% of the students reported that the relationship they had with another student directly influenced their decision to post on a discussion. The authors saw this reflected in the students' postings and reflection logs. Most often, the motivating relationship was described by students as a friendship, but was also described as a collaborative relationship.

Computer experience was a less obvious motivator in student's contributing to an online course. Computer experience can add to a student's self-efficacy in an online

course and increase a student's participation and engagement (Cheung et al., 2008; Mykota & Duncan, 2007). Mykota and Duncan studied the factors that add social presence in an online course. The authors surveyed 73 post-secondary education majors in one of four online courses in an online certificate program. They used the validated computer-mediated communication questionnaire (CMCQ) tool to measure the online social presence of students. The authors also confirmed the internal consistency of the CMCQ tool with a Cronbach alpha core of 0.89. The results supported that social presence is greater in students who had prior online course experience and in students who rated themselves as "high proficiency" users of computers. The authors suggested that, by designing a more user-friendly and uncomplicated engaging, online environment, faculty could exert a beneficial influence in an online course.

Learning outcomes and satisfaction. Student interaction and social presence have been associated with greater student perceptions of learning and higher course satisfaction (Gunawardena & Zittle, 1997; Han & Hill, 2007; Mykota & Duncan, 2007; Richardson & Swan, 2003; Sahin, 2007). In the online environment, interactivity consists of the communication, the collaboration, and the support a student senses within the course structure. Students can interact by giving feedback to other students and collaborating on projects and assignments. Student interaction is a significant predictor of satisfaction with an online class (Picciano, 2002; Jung et al., 2002).

Jung et al., (2002) conducted a study of student interaction, course satisfaction, and learning outcomes. One hundred and twenty four undergraduate students registered in one of three courses. Each course allowed a different level of interaction either academic, collaborative or social. Student satisfaction and engagement in the course was

measured with a validated tool and the revisions to the tool were done with expert advisors. To add to the strength of the tool, the authors also computed a Cronbach alpha of 0.91. Jung et al. discovered that students demonstrated higher learning achievement in those groups that had more frequent peer-to-peer interaction. Each group reported satisfaction with their online learning, but the group with the most collaboration among members reported the greatest satisfaction. The authors suggested that instructors communicate expectations for student participation and monitor with feedback in student discussions.

Teaching Presence

Teaching presence is the CoI model's second aspect of the educational experience. Model creators described teaching presence as the way the educator designs and facilitates student processes to orchestrate significant outcomes both personally and educationally for the student (Garrison & Arbaugh, 2007). In this model, components of teaching presence in the model include course design and organization, discourse facilitation, and direct instruction. In the face-to-face classroom, students and faculty can have direct and indirect cues related to course learning. Student expressions and subtle nonverbal cues can alert faculty members to topics or aspects of the material that students do not understand. However, in an online course these cues are missing.

The teaching presence in an online course guides students in understanding course direction. Garrison and Arbaugh (2007) suggested that a direct teaching presence promotes the processes that assist students in achieving learning goals. Garrison and Cleveland-Innes (2005) studied the intersections of cognitive, teaching, and social presence of the CoI model. The researchers used a questionnaire to evaluate the way in

which graduate students manage course content in the online environment. By evaluating student navigation and learning strategies, the researchers assessed how students sought ways to gain a deeper understanding of course material. The research revealed that a faculty's teaching style and course management affected the ways in which students approached coursework. The authors tested multiple teaching styles and found that faculty could cause a deeper connection to course knowledge if the instructor used approaches designed to encourage students to develop deep and meaningful discussions (Garrison & Cleveland-Innes, 2005). The authors suggested that the quality of student interaction and faculty facilitation brings about a greater quality in online cognitive presence.

Instructor immediacy. Faculty can initiate behaviors that cause a student to feel connected to a course. Immediacy behaviors are described as ways in which participants can connect on a personal level with other students in a text based forum (Arbaugh, 2001). Immediacy behaviors go beyond internet etiquette. In an online course, the instructor can use verbal-like immediacy approaches (Baker, 2004), such as text-based messages and postings, which have been found to have many equivalent effects to verbal interaction.

Arbaugh (2001) described online immediacy behaviors as using humor, emoticons, audio/video clips, calling a student by name, faculty encouragement, and the use of personal examples. In his study, Arbaugh used surveys to evaluate master's level student course satisfaction and instructor immediacy behaviors. The sample included 25 web-based class sections of master's in business administration (MBA) students taught by 14 different faculty. The authors reported a 77% response rate to the survey. The surveys

consisted of a validated tool measuring student learning and the second tool was an author generated instrument to examine course quality and likelihood of taking future internet courses. The study determined that faculty had higher satisfaction scores if the students rated the instructor as having higher immediacy behaviors. Additionally, the surveys revealed that students also perceived that they learned more from those instructors who had higher ratings of immediacy behaviors.

The desire to do coursework and feel connected to course content is also influenced by instructor immediacy behaviors. Baker (2004) considered the role of online immediacy behaviors of faculty. The researcher surveyed 145 graduate students from many disciplines about their instructor's immediacy behaviors and course satisfaction. This study solicited students from multiple institutions using listservs, newsgroups, and forwarded invitations from instructors. This type of sampling strengthened the study because it increased the chances of a more random sample of students. The author constructed the survey from three statistically validated scales. Baker found a positive correlation between immediacy and cognitive learning. Students reported that instructor immediacy behaviors impacted their feelings toward the course. The author gave the example of an instructor using humor, talking about themselves, and using inclusive words such as "we" or "our" to help increase immediacy. Baker also reported that perceived immediacy also caused the student to remain enrolled in the course thus reducing course attrition.

Learning and satisfaction outcomes. Teaching presence is a source of increased learning outcomes and group cohesion (Garrison et al., 2000). Factors such as course design and leadership have a direct impact on learning. Teaching presence in an online

course is very different than that in the face-to-face classroom. Collison, Elbaum, Haavind, and Tinker (2000) described the online educator as a facilitator who exerts influence in order to direct students to develop their full potential. The authors suggested using probing questions and promoting dialogue to engage students in the learning process. This dialogue takes the form of text, but also allows students to use their own critical thinking skills to seek answers and meet learning outcomes (Collison et al., 2000).

Students may find it difficult in online learning to transition from direct instruction and interaction to a more self-directed form of study. Faculty should construct a course to guide students to understand the new learning constructs. Shea, Li, and Pickett (2006) studied a faculty's influence in the online environment by surveying 1067 graduate and undergraduate students from 32 different colleges and universities. The authors used the Rovai's Classroom Community Index, to measure the perception of teaching presence including: instructional design, organization, facilitation of discourse, and direct instruction. The authors did note that this index had been used only in the measurement of a small number of online students in previous studies. However, the authors noted a high internal consistency Cronbach alpha measurement of greater than 0.9 in the index's scales and subscales. The research yielded a direct correlation between a student's positive perceptions of the online environment and the way in which faculty facilitated the design of the course. Shea et al. also noted that students who rated greater trust, collaboration, and support also reported greater learning outcomes.

Soong, Chan, Chua, and Loh (2000) used a qualitative case study approach to describe factors that influenced students to use online resources such as the discussion board. The authors interviewed three faculty: two MBA and one undergraduate English

faculty. The authors also surveyed their students, and completed an analysis of discussion boards and email requests for technical support. The authors did not note the total number of students involved in the survey portion of the study. The student survey included questions regarding human factors of the online course, technical competency of the student, the student's learning mindset, and the student's use of collaboration. This tool was manufactured by the authors, but included many relevant subscales of online social presence. The authors discovered that faculty who used motivational techniques to increase involvement influenced students to use more of the online learning resources. These motivational skills included using emotions, urging discussion, and assigning grades for discussion participation. The authors also noted that human factors such as instructor motivation, encouragement, and contributing actively with students greatly impacted the student's perception of learning.

Studies of online teaching presence support that students perceive better learning outcomes when they feel greater teaching presence (Arbaugh, 2001; Han & Hill, 2007; Richardson & Swan, 2003; Wisker, Robinson, & Shacham, 2007). Tagg and Dickinson (1995) used a mixed methods approach to evaluate the effect of teaching presence in a text-based learning environment. Four groups of online students with ranging involvement from the group's instructor were evaluated for student participation and interaction. The study was further strengthened by the researcher's interviewing the students and tutors to assess their motivation for posting on the website. The groups receiving greater instructor encouragement were found to have higher participation. The authors described encouragement as the instructor's acknowledgment of a student's input on a topic and the instructor's immediate feedback (Tagg & Dickinson, 1995). The

researchers noted that it was not enough for faculty to encourage participation by simply stating “well done”. Successful patterns of tutor interactions included a prompt response to student messages, tutor response routinely throughout a discussion thread, and messaging with added feeling and social cues.

Perceived learning, not just a course grade, is a factor that makes the student feel that the educational experience was rich and rewarding (Palloff & Pratt, 2007). Richardson and Swan (2003) examined the relationship among students’ perceptions of social presence, perceived learning, and satisfaction with the instructor in an online course. The authors sent an end of the semester survey to all online program students. The actual number of students surveyed was not disclosed; however, 97 students responded to the survey. The survey was described as a modification of a validated online social presence tool. The authors did not state the indicators of validity of the modified tool. The survey revealed that students with higher perceived social presence scores also felt that they had learned more than students with low social presence scores. Moreover, students with high-perceived social presence also reported feeling that they had learned more from faculty.

Research supports faculty involvement in course discussions. Dennen (2005) studied the effect of faculty presence in asynchronous online discussion board messages. The study sampled students from eight different online classes and faculty from different universities. Dennen conducted pre and post-course interviews of the faculty teaching the courses, and used pre- and post-course student surveys. Student surveys focused on student reflections and opinions about course activities. The author constructed the survey, but did not discuss validation prior to administering the tool. The student surveys

had a low response rate, especially the post-course surveys, which could limit the validity of the student response. Dennen also monitored the courses weekly for student discussion board activity. The results of the discussion board analysis established that too much faculty moderation on a discussion board caused students to stop communicating with each other and concentrate on communication with faculty. Conversely, the researcher found that too little faculty moderation caused students to have less quality in their postings. Student surveys showed that students responded favorably to and welcomed instructor feedback.

Climate Setting

Within the CoI model, the area within the overlapping circles of teaching presence and social presence was described as “setting climate” by Garrison et. al. (2000). The model’s authors have not directly addressed specific factors that make up setting the online climate. Climate factors have been discussed as ways in which the educator forms open communication, that are essential for deeper learning to take place (Garrison & Arbaugh, 2007). Although climate factors create ways for essential processes to occur, there is a lack of research into the best practices for environment creation.

Differences have been noted between student and faculty opinions of course delivery and an effective learning environment. Tung (2007) studied the perceptions of community college online teaching faculty compared to the perceptions the faculty’s students regarding online course environment. The author used a validated survey questionnaire to measure subjects’ perceptions of course effectiveness in online courses. Two hundred and eighty one faculty completed the survey, and then were asked to invite their students by email to participate. The survey was anonymous and there was no link

between responding to the survey and the course. The author noted that 176 students responded to the survey. The questionnaire was distributed using survey monkey, and consisted of 112 questions. The number of questions may account for the low student response rate compared to the amount of faculty. Results indicated that both students and faculty positively perceived that the online course was an effective learning environment. The research also identified that faculty perceived their online course as a more effective learning environment than their students did. Tung suggested further study into online instructional course design to better understand course effectiveness.

In the text-based environment, some researchers have examined student perception of online course climate. Motteram and Forrester (2005) completed a qualitative study appraising student experiences in an online course. The study evaluated online course message boards and surveyed 27 first-time M.Ed. online students. The sample also included an equivalent group of 20 M.Ed. face-to-face classroom students for comparison. Researchers concluded that online students often expressed a need for human connection that the face-to-students did not express. The authors suggested that faculty design a course that supports a virtual community. To guide behavior, the instructor should establish guidelines for expected student interaction and procedures for how the class will be run (Motteram & Forrester, 2005). These factors would ease the transition to a text-based environment and help students form better relationships.

The climate that faculty choose for their course directs and facilitates the other areas of the CoI model including the cognitive and social processes within the course (Garrison, Arbaugh, Cleveland-Innes, Diaz, Ice, Richardson, Shea, & Swan, 2008). In an update to the CoI model, Garrison and Arbaugh (2007) acknowledged that although

much of the research to date has been on the social presence of online learning, little has been done in the way of teaching presence. Garrison and Arbaugh also noted that this paucity includes the way in which faculty create social presence in an online course.

Cognitive Presence

The third factor of the CoI model is cognitive presence. Cognitive presence is not a major focus of this study and it will only be described as it relates to social and teaching presence. Cognitive presence is often expressed as exchanges of information between students and course faculty. This includes creating new knowledge by examining, structuring, and then validating the data. This is done in a collaborative effort with members of the online community (Garrison, 2007).

A manifestation of cognitive presence is the student's ability to think critically about information learned in the course. In an online course, students do not interact physically with peers. Instead, written thoughts are the sole representation of his or her presence in an online course. A student's social self is linked to how the student expresses their depth of knowledge. Palmer, Holt and Bray (2008) studied student participation on a course discussion board. The author used qualitative and quantitative methods to evaluate the postings of 86 students enrolled in a course. The authors found that those students who contributed new postings to discussion boards had better course outcomes. Posting new topic threads required greater depth of knowledge about subject matter, and required the student to invest time in preparing the topics. The authors also compared preparing initial postings to simply reading other student's posts, and found that the greatest impact on student grades were with those students who posted the most initial postings.

In another study of postings and cognitive outcomes, authors found that reading other students' postings enhanced student grades. Hamann, Pollock, and Wilson (2009) studied the relationship between a student's course grades and the amount of online postings a student read. The authors first piloted a small sample of students from two online classes to strengthen their indicators of student discussion behavior. The authors then examined the online postings of a larger sample of 279 students from 8 different online classes. The authors found that course grades correlated positively with higher numbers of postings read. Course postings were found to be a significant influence in course grades even as the researchers controlled for student grade point average, major, class standing, race, gender, and instructor. Hamann et al. suggest collaboration and reflection are ways of connecting and applying new ideas within the online course. As students post and read the thoughts of others, they begin to assimilate course knowledge.

Historical Context: Review of the Literature

Online education offers students the ability to attend schools and access majors that were once unobtainable because of geography or time constraints. At one time an online course, or an online degree, was considered to be a sub-par educational option because of issues related to quality and satisfaction (Russell, 1999). The quality of online education, now well supported in the literature, is comparable in rigor and quality to that of a traditional college degree (Russell, 1999; Shachar & Neumann, 2003; Steinweg, Davis, & Thomson, 2005; Zhang, 2005).

Online education still has challenges different from those of face-to-face classes. Issues of student dissatisfaction are often related to expectations, workload, and issues of communication (Clay, Rowland, & Packard, 2009; Lim, Kim, Chen, & Ryder, 2008;

Picciano, 2002; Reisetter, Lapointe, & Korcuska, 2007; Summers, Waigandt, & Whittaker, 2005). Student expectations of online learning and amount of course work can at times not match the reality of the actual structured workload.

Picciano (2002) surveyed online graduate education students about course satisfaction. The study was made up of a small sample size of 23 students, compared to the 125 graduate students enrolled in the program. The survey was loosely based on a previously validated instrument. The author made alterations to the tool to better fit his data needs, but did not provide internal consistency statistics or other validation methods for the modified tool. The data revealed that online students indicated overall satisfaction with the online class. Students reported an initial need for adjustment from a familiar face-to-face classroom to an online environment. Students also reported an increased understanding of course material as they participated more in course discussions.

Summers et al. (2005) surveyed two groups of general education students taking either online or face-to-face technology courses. Thirty-eight students were enrolled in the study. Seventeen took the online course and 21 students chose to take the face-to-face undergraduate statistics course. The authors compared course grades and course satisfaction scores between the two groups. Satisfaction was measured using a validated tool and the authors added measurements for instructor's language and student's use of technology. The authors found that although student learning outcomes did not differ between course types, online students had lower course satisfaction scores.

Lim et al. (2008) also examined differences between undergraduate wellness course students in face-to-face, online, and hybrid courses. The authors sampled a total of 153 students for their perceptions of learning and course satisfaction. The authors piloted a

new survey tool for this study. Although using a new survey tool was a limitation of the study, tool validity was supported by the test-retest reliability coefficient of $r=0.93$ and the Cronbach alpha coefficient of 0.91. The authors reported no difference between the three groups in learning outcomes and class achievement scores. However, the authors did find that course satisfaction was highest among students of the hybrid group and lowest in the completely online group.

Attrition from online courses is also of concern to universities. Carr (2000) reported there was a 20% attrition rate for undergraduate online courses. However a more recent study reported that online undergraduate students have a 5% greater attrition rate when compared to similar undergraduate students taking face-to-face classes (Frydenberg, 2007). The University of West Georgia also reported that its online undergraduate general education courses experienced a 50% or higher online course withdrawal rate (Clay, Rowland, & Packard, 2009). The University additionally reported that those same online courses had double the withdrawal rate when compared to those courses offered on campus. In a survey of online students, Clay et al. found that the most common reason for student withdrawal from an online course was an overwhelming workload. The student survey led to changes in the way West Georgia University orientated and communicated with online students. The University's changes to the environment of the online courses lead to increased satisfaction and retention of online students.

Research Method

Overview of Grounded Theory

Munhall (2007) described grounded theory as a way to understand “social process in a social context” (p. 244). The goal of the grounded approach is to produce a theory

that explains and predicts concepts derived from data. Many research methods are employed to verify established theories. However, generating new theory is the goal of grounded theory research (Glaser & Strauss, 1967).

There are many benefits to the grounded approach. First, the methodology used in generating a grounded theory produces a theory that is relevant to present-day practice. This gives grounded theory a practical application in the theory's discipline. Another benefit of grounded theory is the production of an accurate theory that can be tested rigorously (Glaser & Strauss, 1967). Concepts within grounded theory are validated as the researcher gleans from the next source of data. Grounded theory uses a systematic process of data collection. Strauss (1987) wrote that information needed to be "grounded" by the data in order to produce an effective theory. Grounded theory data is extracted from a sundry of sources in order to provide a rich context that can be applied to the new theory.

The third benefit is that the theory can be confirmed and validated through future research (Glaser & Strauss, 1967). Grounded theory allows members of the discipline to immediately recognize the extent to which the theory fits their practice. This fit validates the grounded theory to the data and to underlying concepts. In addition, because a grounded theory is clearly delineated from its data, key concepts can be directly researched and validated (Glaser & Strauss 1967).

Grounded theory approach can be used to further develop an existing theory. Strauss (1987) noted that a researcher could use previous research in the quest for new knowledge. Researchers can use older theory or data to provide direction regarding the needs of new research. The new theory can be comprised of a more expanded

understanding of the phenomenon. The purpose of this study was to use a grounded approach to broaden the CoI model's understanding of climate factors. The study explored the overlap between faculty and social presence in order to create a theory regarding faculty patterns of climate creation.

Relevance of this Study to Nursing Education

Online education is increasing in popularity and in the range of nursing classes available online. Online degrees in nursing include associate and diploma degree completion as well as masters and doctorate level programs. According to the website AllNursingSchools.com (2009, February 5), any nurse who has access to the internet has access to a form of higher education.

The traditional brick-and-mortar nursing school and the educational milieu within the school are transitioning to a new online format. The faculty must also adjust to this new form of nursing education. Palloff and Pratt (2007) suggest that faculty choose teaching strategies for the online course different from strategies used in face-to-face classrooms because these practices are not always transferable. Students and accreditation bodies will take online nursing faculty to task on issues of quality, attrition, and satisfaction.

The NLN Research for Nursing Education has also identified priorities to guide nursing education research. A relevant priority to the current study includes "Innovations in Nursing Education: Creating Reform" (National League for Nursing, 2003). This initiative directs researchers to explore technology in nursing education. The current research applies to the NLN's priority because it addresses the ways in which educators form the social climate in an online course. As established in the above sections, social

climate has a strong impact on learning and satisfaction outcomes. For nursing, the online course is an increasing form of instructional technology, especially at the master's level. Exploring the nurse educator's perceptions and formation of social presence could impact future online course evolution.

The current study has also addressed the NLN priority of "Evaluation Research in Nursing Education: Evaluating Reform", specifically student and teacher experiences in schools of nursing. The current study's goal was to explore the educator's impact on social presence. Its approach was to capture the essence of current happenings in the online course and build a substantive theory regarding faculty perception and subsequent effects on the course.

Experiential Context

This researcher conducting this study has been a nursing faculty member for the past seven years. In my experience, social presence plays an important role in a course. Educators in a brick-and-mortar setting are able to perceive subtle differences in each cohort of students and adjust the course accordingly. Social cues and needs can be observed directly and attended to. To help build teamwork, laughter, and bonding in the course, I use games and group activity. If a group is discovered to not be connecting, class activities, which build mutual commonalities, are instituted.

I have also been a consumer of online nursing education courses for four years. Over this time, I have experienced different nursing faculty implementations of instructional styles and creation of online course climates. I have found that even within a cohort of bonded students, different instructors built very different course climates. This experience prompted me to examine the differences between instructors when setting

course climates. Was the difference based on experience, philosophy, or something else that made one online course feel unique? As nursing education expands to include more online education, it will be important to understand the perceptions and practices of nursing faculty regarding social presence. This understanding could drive development of nursing faculty, leading to online education best practices.

Summary

The current study was structured using concepts from Community of Inquiry conceptual model. This chapter reviewed the components of the CoI model, and highlighted areas where further study is needed. Social learning theories were also presented to support the link between social aspects of a course and learning outcomes.

CHAPTER 3

GENERAL METHOD OF INQUIRY

Introduction

This chapter examines grounded theory research as the methodology employed in the current study. Clark and McCann (2003) proposed seven grounded theory characteristics. These characteristics differentiate grounded theory from other forms of qualitative research, and are described by the authors as (a) theoretical sensitivity, (b) theoretical sampling, (c) constant comparative analysis, (d) coding and categorizing the data, (e) theoretical memos and diagrams, (f) literature as data sources, and (g) theory integration. This chapter reviews these characteristics and the data analysis procedure involved in grounded theory creation, and discusses methods of qualitative rigor.

Description of Research Method

Grounded theory is a qualitative methodology employed in the collection and analysis of data. The goal of grounded theory is new theory generation. Social scientists Barney Glaser and Anselm Strauss (1967) developed and implemented grounded theory in order to assist sociologists in systematically gathering and analyzing data in the process of theory development. Theory development through grounded theory research goes beyond the descriptive phase of qualitative research. Grounded theory interprets broad sources of data and extracts concepts to explain the phenomena. Theory creation acquires data from many different vantages with the goal of finding relationships within a phenomenon. The result is an explanatory theory that expands the knowledge base of a phenomenon by exposing basic characteristics and structures (Corbin & Strauss, 2008).

Glaser and Strauss (1967) emphasized that the fundamental premise of grounded

theory research is to find the basic social processes (BSP) underlying the phenomena of interest. Grounded theory attempts to find the most significant social issues of the sample. The researcher seeks to understand the underlying social patterns that cause a phenomenon to occur (Benoliel, 1996). Through this understanding, grounded theory produces a core category that accounts for what is significant about the population studied (Glaser, 1978). The researcher using grounded theory methodology does not seek to describe the environments of its subjects through participant observation. Rather, the researcher seeks to analyze patterns and connections of a core or central process that transcends time and place.

Grounded theory development requires an in-depth level of data analysis. The researcher must employ a methodology that generates new knowledge. This new knowledge reflects the researcher's thoughts and impressions about the data and is expressed as theoretical concepts (Corbin & Strauss, 2008). Stringing together concepts is a way of grouping varied sources of the data under one representation. Pandit (1996) explained that grounded theory research is a combined effort of data collection, analysis, and theory discovery. Grounded theory begins with the data and, through processing, a theory emerges.

Nurse researchers, employing grounded theory methodology, have contributed to the body of nursing education knowledge. Cheraghi, Salasli, and Ahmadi (2008) used the grounded theory approach to study the clinical preparation of nursing students in Iran. Their study sought to better understand the preparation of nursing students in order to assess strengths and weaknesses in the student experience. The authors theorized that there was a direct relationship between (a) the educational level and the effectiveness of

clinical preparation of students; (b) the behavior of nursing staff as role models and the effectiveness in the clinical preparation of students; and (c) the clinical learning environment climate and the effectiveness of the clinical preparedness of students.

Arhin and Cormier (2008) used grounded theory to assess to what degree African American nursing students were influenced to use contraception while in nursing school. The study began as a qualitative study of contraception, but was broadened in the data analysis to include issues of matriculation and identifying ways in which faculty added to the success of the African American student nurse. From the study, themes emerged about the participants. First, the African American student nurses reported the discovery of pregnancy was distressing to the student, but the student also reported an inconsistent use of contraception methods. The students reported the decision to keep or terminate the pregnancy was a difficult decision, largely influenced by the student's mother. The researchers also found that family and faculty support were central in the students matriculating through to graduation.

A third nurse researcher, Gallagher (2007) employed grounded theory methodology to contribute to the body of nursing education knowledge. Gallagher examined student perceptions of nursing theory as it related to their practice of nursing. Grounded theory allowed the researcher to examine the relationship between the student's life experience, perceptions, and opinions and their introduction to theoretical practice. From the data emerged that students' preconceptions about nursing practice most influenced their value of nursing theory.

Important Aspects and Concepts

Theoretical Sensitivity

Clark and McCann (2003) described theoretical sensitivity as the ability to understand the surroundings and give meaning to the collected data. Theoretical sensitivity allows a researcher to identify important aspects of the data and generate a relevant and workable theory (Glaser, 1978). Systematically examining and relating categories of data into theory is enhanced by the researcher's theoretical sensitivity to the data.

Theoretical sensitivity is created in many ways. The researcher could conduct a literature review to become familiar with terminology and core concepts to the data (Clark & McCann, 2003; Glaser, 1978). The researcher must be cautious: performing a literature review could place the researcher at risk of becoming biased by existing literature. The researcher can also immerse himself or herself in the data in order to gain an understanding of the meaning of data (Glaser, 1978).

Theoretical Sampling

In conventional research processes, the researcher follows a systematic process—first of data collection and then its analysis. This usually occurs in a chronological pattern because researchers perform data collection first and then execute data analysis. However, in grounded theory research the researcher collects, analyzes, and formulates theory simultaneously (Backman & Kyngas, 1999). In grounded theory research, data sampling is purposeful in order to reflect the shift from a traditionally deductive to a newer inductive process of research.

Glaser and Strauss (1967) described the theoretical sampling method as a selective

acquisition of new data. Theoretical sampling offers an advantage for grounded theory research, allowing the researcher to focus on data collection associated with those concepts that emerge from the data. The results of each data analysis are assessed for the best way to proceed with data collection (Glaser & Strauss, 1967; Schreiber, 2001).

Theoretical sampling does not assume that the next course of data collection will be the same as the last. The researcher ascertains what course of data sampling is needed next, based on the concepts that have arisen during data analysis. The researcher is not driven to look for similar data in another place. The emerging data may indicate the need to change interview questions, or the need for a new source of data. Changes in sampling allow the researcher to maximize his or her understanding of emerging concepts (Corbin & Strauss, 2008). The novice researcher must take care not to make rigid decisions about the data as it begins to emerge during the theoretical sampling process. By remaining flexible, the researcher avoids bias and preconceptions that could hinder future data collection choices (Backman & Kyngas, 1999). Theoretical sampling gives the researcher the freedom to reinvent concepts in a fluid approach rather than follow a fixed and static method.

Theoretical sampling allows the researcher to construct well-developed concepts and to determine relationships associated with those concepts (Corbin & Strauss, 2008). It does not employ a random sampling approach, which would prohibit a researcher from examining concepts further. Instead, theoretical sampling allows the researcher to integrate the research as the study develops (Glaser & Strauss, 1967). The researcher then follows up on “theoretical leads” that are relevant to the study. Theoretical sampling, which is performed until saturation occurs (Corbin & Strauss, 2008), is declared saturated

when no new information is found by means of new methods or lines of inquiry.

Pandit (1996) described theoretical sampling as having an interest in cases that test or extend theory. A researcher may select cases to verify a theory that he or she is shaping. The researcher may also experiment with opposite cases, and find the limits of the theory under scrutiny (Pandit, 1996). Backman and Kyngas (1999) reported that if data is not analyzed as it is collected, the researcher risks not knowing in what direction the data is, or should be, headed. The researcher may also find it difficult to determine whether saturation has occurred.

The theory of symbolic interaction is a theoretical underpinning for grounded theory. Symbolic interactions are those social processes present in human interaction. People interact with their environment and with each other based on preconceived understandings (Munhall, 2007). When there is an understanding of symbolic interaction, the researcher is able to grasp the complexities of the people interacting within their environment. When the researcher immerses him or herself in the context of a qualitative study, the researcher must be aware of those symbolic interactions. Corbin and Strauss (2008) suggested employing varied methods of data collection in order to recognize the different aspects of a situation. This would assist the researcher to fully grasp the meaning of the data collected and allow for an examination of the phenomenon from many points of view.

Crooks (2001) describes grounded theory research as a vehicle that allows research participants to influence theory creation, originating from the perspective of the participant themselves. He offers that grounded theory methodology can be employed to evaluate how participants perceive their own actions. Crooks found that, because the data

is embedded in the participant's environment and processes, symbolic interaction from a nursing perspective allows research to be based on the point of view of the participants.

Snow (2001) proposes four principles of symbolic interaction. The first principle, interactive determinism, recognizes that objects have both a literal meaning and meanings outside the literal meaning. By questioning the literal and the unknown meanings, the researcher is able to enrich the data. The second principle states that tangible and intangible objects can take on meanings that elicit emotion and action (Snow, 2001). Here the researcher must try to gain an understanding of the emotional meaning objects possess within the studied phenomenon. The third principle, that of emergence, addresses the surfacing of new information regarding old and studied practices. Human beings interact with their environment continually; the researcher must attempt to discover the new and changing meanings of those interactions. Lastly, the fourth principle, Snow describes human agency as the way in which culture or other structures influence research subjects. Because humans continually develop new courses of action influenced by preset norms, human agency contributes variability to situations.

Each of these principles gives the researcher latitude to look for deeper meanings in both objects and people. Symbolic interaction requires that the researcher remain mindful of human differences, and examine each situation beyond past knowledge in order to unearth a deeper understanding.

Integration of Theory

Grounded theory research can be used to generate different levels of theory. These levels of theory are dependent upon the ways in which the theory can be applied across groups (Charmaz, 2006). Because grounded theories are delineated from the data, they

are relevant to practice. This applicability is also referred to as “fit” (Clark & McCann, 2003; Corbin & Strauss, 2008; Glaser, 1978). Fit characterizes data that is not forced into preconceived categories. Researchers achieve fit by building categories of data within grounded theory that can be applied, first to subjects and sources of data and then to the greater population.

Substantive theory, a theory specific to either a discipline or a situation, is derived from a narrow sample of a population (Glaser & Strauss, 1967). It has a limited scope because it has not been tested outside the population it has been generated to represent. A researcher may begin with substantive theory because it is easier to find relevant concepts in a more congruent group (Glaser & Strauss, 1967) then, after establishing a substantive theory, the researcher can attempt to expand it into a formal theory.

Formal theory is a broader, more generalizable type of theory. It is also more conceptual than substantive theory (Glaser & Strauss, 1967). Formal theory uses more than one population when forming the theory, giving this structure a larger base for the theory to be verified and applied to other populations (Charmaz, 2006). To generate a formal theory, the researcher employs more general or dissimilar groups for comparison and validation of the theory. If the concepts of the theory can be applied to different populations and situations, then the theory’s scope will increase.

Rationale for Choice of Method

Grounded theory methodology captures important aspects of a particular phenomenon and allows researchers to translate this understanding into theory. To date, there have been no comprehensive studies to gain insight into faculty climate setting patterns in the online classroom. A grounded theory approach offers a way to describe

and expand the CoI model's area of overlap between social presence and teaching presence.

For this study, grounded theory was chosen to describe patterns used by faculty to create social presence with and among their students. Grounded theory research was an appropriate choice for several reasons: First, grounded theory is useful when little is known about the subject (Munhall, 2007). The literature reflects a paucity of research on the way in which faculty create an online climate to establish social presence in a online course (Garrison & Arbaugh, 2007). Second, the use of a grounded theory approach describes the relationship that exists between climate establishment and faculty perceptions. Third, the creation of substantive grounded theory assists the researcher in constructing a theory to explain faculty patterns in the establishment and maintenance of social processes in an online course. As stated earlier, the number of nursing programs offering online courses is growing and demands further attention.

Grounded theory methodology was a good fit to explore faculty's perceptions of teaching presence and social presence in the online course. This researcher employed grounded theory to understand the patterns of faculty as they establish social presence in the online course. Grounded theory allowed for conceptualization of these patterns with the use of multiple data sources in order to provide a more comprehensive perspective. Specifically, the formation of the substantive theory could lead to a tool to measure social presence of faculty. This deeper understanding of online social presence from the perspective of faculty may also lead to interventional research into ways in which online social presence can be accelerated.

Method of Data Analysis

Data analysis for grounded theory research is a continual process. Data analysis begins with the initial data collection. The data is then reviewed, initial concepts are derived from the data, and these concepts are compared to other sources of data for validity (Corbin & Strauss, 2008). The grounded researcher does more than review and validate data. The grounded researcher processes the data in search of a deeper understanding.

Memos and Diagrams

Backman and Kyngas (1999) describe the process of analysis as the researcher having a conversation with the data. Notes from the exchanges the researcher has with the data are expressed as memos. Memos and diagrams are the tools of grounded theory research analysis. Memos assist the researcher to better understand the data in a narrative form. As the researcher discovers emergent categories of data, the activity of creating a memo allows the researcher to clarify meanings and develop additional thoughts (Charmaz, 2006). Memos also serve as a record of analysis. Unlike field notes, memos provide an in-depth analysis of the data. They serve as a record of analysis and support the origins of the researcher's thoughts. They also contribute empirical evidence to the data analysis (Corbin & Strauss, 2008).

Diagrams are the visual tools of data analysis, and help create new categories and cluster categories of the data (Corbin & Strauss, 2008). Diagrams also illustrate properties and dimensions of categories and serve to direct the researcher to areas that require additional data collection.

Coding Data

Most qualitative researchers code data, but the grounded researcher does more than review and code data. The grounded researcher processes the data for new understandings and discovery about the subject. Codes are created to categorize and summarize data (Charmaz, 2006). Charmaz describes two phases of coding wherein the grounded researcher initiates evaluation of the data. The goal of coding data is to take data beyond either the written word or data gathered by observation to where the grounded researcher discovers deeper meaning behind the data. Coding allows the researcher to form linkages needed within the data in order to form theory (Charmaz, 2006). Early coding in the research process initiates early detection of the meaning of the data and may actually guide further data collection (Corbin & Strauss, 2008).

With regard to raw data, two levels of coding occur simultaneously: open and axial coding. Grounded theory employs these different levels of concurrent coding and recoding in order to move the data toward theory generation. With open coding the grounded researcher gives certain areas of interest a general code (Corbin & Strauss, 2008). Open coding also allows the grounded researcher to sort data and outline emerging concepts, examining the data line by line, building new codes and reflecting on the way in which new data fits into existing codes (Corbin & Strauss; Munhall, 2007).

Corbin and Strauss (2008) describe open coding as the first level of data conceptualization. The grounded researcher groups data together under one unifying concept. For example, a researcher observes a client mowing the lawn, washing a car, and going grocery shopping on a Saturday. The researcher may then label these activities as elements of the concept of 'preparing'. As more data is accumulated, the researcher can

take these open codes and label similar cases with the same concept (Corbin & Strauss, 2008).

Axial coding. Axial coding is the second level of coding. Corbin and Strauss (2008) describe it as creating more encompassing data categories from smaller categories accrued in the research process. The data's codes are examined for similarities and connections, and are integrated and reduced by this method of coding (Munhall, 2007). To begin axial coding, the researcher asks questions about the data in order to better understand how the data is linked. The author can also begin to think about conditions in which the data occurs, the actions of participants within the phenomena, and the consequences of the actions and interactions of participants (Charmaz, 2006).

During axial coding, the grounded researcher takes the minor level codes and creates categories. An example of this would include concepts that indicate comparable processes (Corbin & Strauss, 2008). Here the researcher would group the concept 'preparing' with others of similar themes, such as 'organization' and 'scheduling', to consolidate the concepts as "supportive activities". These axial codes begin to fold the data together in preparation for theory creation.

Theoretical coding. Theoretical coding is the conclusive analysis of the abstract codes in an attempt to link and collapse the codes in order to establish theories about their relationships (Charmaz, 2006). Delimiting the theory involves the researcher further reducing the data toward theory development. Through this narrowing of data and the stringing of relationships between codes, theory begins to develop based on the narrowing of the data and stringing relationships between codes. Corbin and Strauss (2008) describe this process as integrating categories. Similar to theoretical coding,

during integration the author pulls categories of codes together in order to form core categories. The inductive process of creating core categories assists the researcher in forming theory.

Verification of Theory

As the researcher interprets the data, she or he can also begin to make generalizations about the meaning of the data: how it is related and how it differs. However, this process poses a threat of bias and imposed preconceived ideas about the data. In order to prevent such presumptions, qualitative research, specifically grounded theory, have set forth methods of rigor.

Constant comparative method. In the analysis of grounded theory, the researcher utilizes the constant comparative analysis in studying data. As data is acquired, the researcher assesses for initial concepts derived from the data; these concepts are then compared to other sources of data for verification (Corbin & Strauss, 2008). Because data is simultaneously collected and analyzed, constant comparative analysis occurs throughout the research process.

Comparative analysis assesses for similar issues between research subjects for parallel themes in the data. It is an inductive technique employed to integrate many views into a single idea. As the researcher moves forward in the examination of present data, comparative analysis is also employed to validate concepts that have arisen from previously collected data (Glaser & Strauss, 1967). Comparative analysis seeks to explore variation in the data (Corbin & Strauss, 2008). As the data is analyzed, the researcher evaluates the areas in which general properties of the data can be assigned. As variations of the data are found, they are further explored. This method separates the

variation from the general codes and assists the researcher in identifying areas in which more theoretical sampling is necessary.

To increase internal validity of a theory, Pandit (2006) proposed that researchers employ a literature comparison phase as the final phase in grounded research. In this phase, an emerged theory is compared to the literature for both similar and conflicting findings. This idea of comparing findings to the literature adds to the validity of the theory because it allows the researcher to assess the ways in which the emerged theory resembles other findings. This process helps to support and extend the scope of the theory past its limited data sample.

Methodological Rigor

Lincoln and Guba (1985) offer the qualitative researcher four ways in which study validity can be supported by qualitative rigor: (a) credibility, (b) transferability, (c) dependability, and (d) confirmability. Credibility relates to internal consistency of the study, and is described as the method of inquiry for accurately measuring the phenomena it set out to measure (Lincoln & Guba, 1985). Credibility can be established in several ways; researchers can triangulate sources of data to gain creditability (Lincoln & Guba, 1985; Shenton, 2004). Qualitative triangulation methodology employs multiple sources and approaches to data collection to examine the same research question. This approach is congruent with the grounded theory approach of drawing from varied data sources. The use of the constant comparative method in grounded theory research increases the study's validity because verification of analysis occurs continually throughout the research process (Shenton, 2004).

Credibility can also be supported by employing member checks and peer debriefing

(Lincoln & Guba, 1985). Member checks involve returning to the research subjects and verifying researcher interpretations (Richards, 2005). The member check verification process becomes important as the researcher begins to combine and make assumptions about the data. Peer debriefing involves using a peer outside of the research to help direct emerging data to avoid researcher bias (Lincoln & Guba, 1985). Both processes assist the researcher in eliminating preconceived ideas about the data and building clearer conclusions about the data.

Transferability is the process of establishing external validity or generalizability of the research hypotheses to other situations (Lincoln & Guba, 1985). However, qualitative research establishes generalizability in a different form than does quantitative research. Qualitative research findings cannot always be made generalizable to the greater population because of the small number of individuals in a narrow sample of subjects (Shenton, 2004). For qualitative data to be generalizable, researchers must include a thorough description of the context in which the data was obtained so that others can decide whether the conclusions are applicable to their particular situation (Lincoln & Guba, 1985). Lincoln and Guba describe this process as a thick description. A thick description allows other researchers to understand the data's context and evaluate whether the theory is applicable to their circumstances.

Dependability and confirmability are closely related. Dependability of the research relates to the consistency in which the researcher determines study findings (Lincoln & Guba, 1985). Confirmability is the consistency within the data. If the data has confirmability, then the research can be replicated under similar circumstances and the findings will be the same. A researcher can maintain reliability and validity of data by

keeping a data log (Richards, 2005). Data logs contain memos of each step in the data processing by the researcher, who lists clearly how each idea was conceived and how an assumption about the data is clarified (Richards, 2005).

In addition, the grounded theory researcher keeps field notes about each interaction with the sample participants. The field notes record any observations or thoughts that may pertain to the analysis of the data (Corbin & Strauss, 2008). The researcher may also keep a separate log that illustrates any in changes the research method, with accompanying rationales for these changes (Richards, 2005).

In grounded theory, theoretical sampling can cause changes in the way the interviews or other data collection techniques are implemented. The researcher then records memos in the log about respective changes and the rationale behind those changes (Richards, 2005). The researcher is able to ensure reliability of data coding by verifying coded data for consistency. Richards suggests that researchers recode a past coded document and compare it to the originally coded copy. In this manner, the researcher assesses for inconsistencies of data coded over time.

Summary

This chapter presented the background and methods used in the grounded theory research method. Grounded theory research was presented as compatible with this researcher's goal because the study set out to understand the underlying social patterns of a phenomenon. The current study drew upon the elements of grounded theory research methods in order to gather information about faculty patterns in climate settings and the factors used to develop and maintain social presence. Methods of rigor were also discussed as ways to increase validity of the study.

CHAPTER 4

APPLIED METHOD OF INQUIRY

Introduction

This chapter discusses the process and data collection methods employed in discovering, analyzing, and forming a substantive theory regarding faculty patterns that create and maintain online social presence. Participant recruitment is described, as are the data collection methods using theoretical sampling techniques. Also available is information on the progression of the content analysis using grounded theory methodology, including a discussion of coding process, and creating memos and diagrams in order to form a substantive theory.

Population Sample

The quality of a study's sample is a common concern in both qualitative and quantitative research. Most quantitative researchers strive for a random sampling of study participants, but grounded theory qualitative research selects a sample within a particular social context (Munhall, 2007). Theoretical sampling seeks to explore themes and concepts by choosing sample participants purposefully. In a grounded theory approach, emerging ideas drive the selection of new data sources. Theoretical sampling can prove to be troublesome if the researcher must abide by strict sampling approval guidelines (Munhall, 2007). In such cases, the researcher must attempt to think broadly prior to the study in order to include data sources when constructing a sampling plan.

The sample for this study was comprised of nurse educators who teach online nursing courses at the master's level. The nurse educators must also teach for a Commission on Collegiate Nursing Education (CCNE) or NLN accredited college or

university. The sample size was dependent on the amount of data needed for saturation. Saturation is accepted when no new concepts emerged from new data and variations are explained (Munhall, 2007). Munhall stated that studies with a narrow focus would find saturation with a smaller sample than qualitative research with a broader scope. An adequate sample size for grounded theory research has been reported to be 30 to 50 observations and interviews (Onwuegbuzie & Leech, 2007). This study sample included 10 faculty interviews, 10 course visualizations, and eight syllabi, accounting for a total of 28 separate assessments for online social presence.

Onwuegbuzie and Leech (2007) warn that the novice qualitative researcher may prematurely end research analysis before true saturation occurs. The authors suggested novice researchers go beyond what is felt to be saturation to assure that a topic has been exhausted. The scope of this research was limited to master's in nursing online educators. The sampling of data included participant interviews, classroom observations, and syllabi comparisons. The goal of this researcher was to recruit research participants until data saturation occurred and to continue to recruit after saturation in order to confirm that exploration did not end too early.

Following the University of Nevada, Las Vegas Institutional Review Board (IRB) approval to conduct the research, nurse educators were recruited using a purposeful sampling technique (Munhall, 2007; Onwuegbuzie & Leech, 2007). Purposeful sampling allowed this researcher to select participants in a targeted way to evaluate the phenomenon of climate setting patterns related to online social presence. In grounded theory research, theoretical sampling dictates that the data directs the next sampling choice. For this reason, it was important to choose participants based on the information

that is sought as the theory begins to emerge. At first the emerging theory was based on a small number of participants; however, from that data more participants were chosen to further elaborate and validate data.

Recruitment began by inviting educators who teach in master's programs from a nursing education listserv. A listserv organizes discussion threads sent in through group member emails. The listserv used in this study, NRSINGED Digest, is maintained by the University of Victoria, is released at least twice weekly, and composed of nurse educators from different schools of nursing from around the world. The listserv allows subscribers to contact each other via an email mailing list and is free to all who subscribe. Within the listserv, educators post topics for discussion and respond to questions and other communication pertaining to nursing education.

The second round of subject recruitment occurred at the NLN Educators Summit. The NLN Summit was chosen for a data collection site because, as a national professional conference, it provided the availability of over two thousand nurse educators from around the country who teach at all levels of undergraduate and graduate degrees nursing education. This year, the NLN Summit was held in Philadelphia Pennsylvania. Permission was obtained for subject recruitment to be placed on the bulletin board from NLN summit planners (Appendix A).

Potential participants were recruited by posting a notice on the conference's community bulletin board. The notice invited nurse educators who teach master's level courses to participate in a study about online social presence (Appendix B). Networking during social breaks was also utilized for recruitment during the conference. Potential participants were asked to contact this researcher by cell phone or email if they were

interested in participating in a qualitative study about online social presence. Interested participants were offered an interview at the conference or by phone after the conference.

A snowball sampling technique was also used in this study. Participants were asked to refer other potential participants to the study. Participants were asked whether they knew someone who taught online master's courses and who may be interested in the study; the names and email addresses of those potential participants were collected. Those participants were then contacted by email to ask whether they were interested in joining the study. The consent form (Appendix D) was either given in person or emailed, and then explained orally to participants before they gave verbal consent to participate in the study. The participants kept the written copy of the consent form for reference.

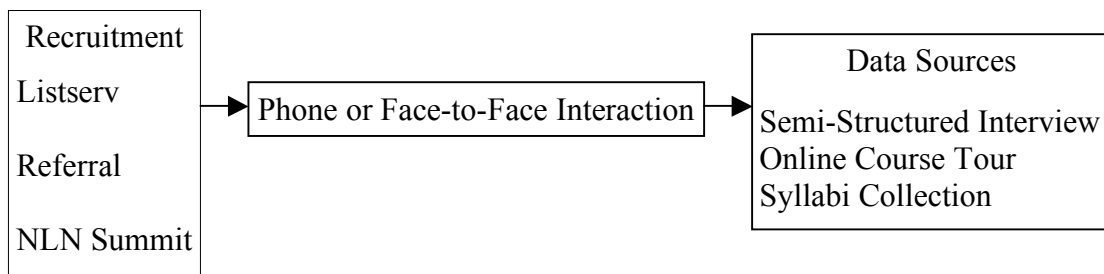


Figure 2. Data Collection Process

Data Collection Setting

Data was collected in the form of interviews, course tours, and syllabi. The interview and course tour portions of the research took place either face-to-face or by phone. All participants were interviewed individually despite the method of interview. One face-to-face interview was done with a participant who lived less than an hour's drive from the interviewer. At that interview, the participant's office provided the setting

for the interview. The participant provided entry and guided this researcher into the online course at the end of the interview through her office computer. The syllabus was also collected at the end of the interview.

Phone interviews of participants recruited from the listserv were conducted at the convenience of the participant. This researcher asked the participant to choose an area that was quiet and free from interruption. The participant was also asked to have access to the internet. This researcher was stationed in her nursing department office during phone interviews to allow for simultaneous internet access and to ensure a confidential setting. At the completion of the interview portion, the participant used Webex® web-conferencing software (to be explained later in this chapter) to guide this researcher into the online course. Each participant was asked to email a course syllabus at the end of the interview.

Human Subjects Considerations and Protection

This research proposal was approved by the University of Nevada, Las Vegas, Biomedical Institutional Review Board (IRB) prior to any recruitment for the study (Appendix C). The principle investigator was named the researcher's dissertation chair, Dr. Lori Candela Associate Nursing Professor, Department of Psychosocial Nursing Chair. This researcher had direct contact with the participants and therefore exceptional care was taken to ensure that the rights of the participants were honored. This researcher used the American Nurses Association (ANA) three domains for protection of human rights as guidance for protection of human subjects (LoBiondo-Wood & Harber, 2006).

The first domain is the participant's right to freedom from intrinsic risk or injury (LoBiondo-Wood & Harber, 2006). Informed consent was obtained from each participant

in the research prior to any part of the interview process (Appendix D). As part of the informed consent, participants were told that they might withdraw from the research at any time during the process without any repercussion. Participants were also made aware of the purpose of the research so that they were able to make informed choices about whether involvement in the study may have affected them. The informed consent also included the study's procedures for data collection and management of all data collected (Munhall, 2007).

The nature of qualitative research is not one that would inflict physical risk to person or property, however, this researcher was aware that the data collection methods utilized allowed for direct contact with research participants. This researcher was also aware of psychological and emotional responses related to the process of data collection. Although it was difficult to foresee the reactions of participants, this researcher took steps to minimize the creation of embarrassment or anxiety that may have arisen during the interview.

This researcher established a nonjudgmental and trusting milieu during interviews. The interview began with establishing rapport by utilizing general conversation (Whiting, 2008). The interview followed a pattern of general, familiar topics leading to more specific questions. Whiting suggested that the researcher start the interview with descriptive information that is more familiar to the participant allowing she or he to relax and get into the flow of the interview. The questions for the semi-structured interview were written as open-ended and non-threatening in nature.

The second ANA domain is the right to privacy and dignity (LoBiondo-Wood & Harber, 2006). The ANA established that a person has the right to control the way in

which private information is made public. For this research, participants had full knowledge of when conversations were being audio recorded during the data collection process. Each participant was given opportunity to review transcripts of her of his interview and course tours. All participants also retained the right to strike or amend any information within the transcripts.

The third domain is the right to anonymity. It is challenging to protect the anonymity of participants in qualitative research (LoBiondo-Wood & Harber, 2006). The research is often presented with direct quotes from participants to support emerging themes and theory. Although all identifiers are removed, this researcher was aware that any remarks may still make the participant vulnerable to exposure.

This researcher strived to preserve the anonymity of the participants, but did describe this risk to participants as part of informed consent. Confidentiality was maintained at all times during the research. Transcriptionists hired to transcribe interviews signed a confidentiality agreement (Appendix E). All personal participant identifiers were removed from written data prior to transcription and participants were assigned with a random number. A master list of identifiers was kept in a locked file cabinet for organization and reference. This number also corresponded to that faculty's course syllabus and course exploration.

All digital research data was also kept secure. Paperwork was kept in a locked cabinet in this researcher's university nursing department office. A password and firewall-protected laptop stored the electronic data and was kept in the locked university office. During all internet connections, the laptop computer utilized a secure mobile broadband network, also to maintain privacy. All audio recordings were kept locked in

the file cabinet during data collection and were then erased after completion of the study. All records from the study will be kept at the University of Nevada, Las Vegas School of Nursing for three years after completion of the study, at which time they will be destroyed.

Data Collection Procedures

Data collection followed qualitative grounded theory methods. The semi-structured interview was used to gain a rich description of the faculty's perception of the phenomenon of social presence. For this research, open-ended questions allowed participants to share various experiences (Charmaz, 2006). The questions also invited participants to reflect and explore their feelings about online social presence leading to a deep and rich exploration of participants (Charmaz, 2006).

Details of the interview served as the substance for deriving concepts and formatting a theory (Appendix F). The first two questions were intended to establish how faculty perceives their interactions with students and how students interact in the course. The next question asked participants to describe the significance of social presence and revealed how they perceive online social presence in their course. The next three questions were directed toward climate setting in the online course. The questions probed into the faculty's construction and maintenance of social presence in the course. This information was particularly important when comparing the perceived ideas about construction and maintenance of the course to the actual face-to-face classroom.

Demographic information was also collected as part of the interview process. Demographic data included educational level, years of teaching experience online, and total years of educational experience. This information assisted this researcher in

describing similarities or differences that occur with education level or experience.

The next piece of data was collected through observations of the participant's online course. This piece was important: it linked what the faculty described as their course's elements of climate to what was revealed in the online course. The participants personally escorted this researcher through their online course. Webex®, web-conferencing software allowed for a simultaneous but still confidential view of the same computer screen during remote interviews. The participant had complete control over what this researcher had access to within the course while using this software. The software was licensed online on a monthly basis for \$69.00 per month.

While in the online course, this researcher explored how the faculty member set up social aspects of the class including the main student page, discussion or forum pages, and communication areas. This researcher asked participants to point out methods used to maintain the social aspect of the course. Course observation was audio recorded; field notes were documented. At no time during the course tour did this researcher have access to confidential student information such as student grades.

The final part of data collection was the participant's course syllabus. This researcher asked the participant to remove all identifiers on the syllabus including faculty name, course number, and university or college affiliation before electronically submitting it to this researcher. The syllabus was identified with the assigned unique participant code. The syllabus was evaluated for written expression of course social presence as well as written constructs that supported or restricted social presence that may be embedded in course doctrine.

The Pulse™ Smartpen and Livescribe desktop technology was utilized for field notes and audio recording during the interview and course tour. The Smartpen has many built in technologies. First, it is an ink pen with a high-speed infrared camera. A camera captures writing as a microphone in the pen records the audio of the interaction. The Smartpen captured field notes written on an infrared technology paper and allowed for easy uploading of the notes into the computer as a document. The infrared camera also remembered the timing of words written by this researcher, and allowed later playback of the exact moment of audio recording as this researcher had written it down. This process allowed this researcher to hear what happened during the interview as she recorded a note. The pen allowed this researcher to take field notes and experience easier management and security of audio material, simultaneously.

All written notes were uploaded into one secure laptop. The Smartpen-recorded audio sessions were downloaded in a MP3 format into a secure computer for dictation purposes. All recordings were erased at the end of the research process. The written data files were transferred on to a jump drive at the end of the research, and will be kept at the University of Nevada, Las Vegas School of Nursing for three years after completion of the study, at which time the drive will be destroyed.

Data Analysis

Data analysis for grounded theory research is a continual process beginning with data collection from the initial faculty recruited. This researcher utilized a grounded theory approach to the coding process. Open coding of initial concepts allowed for detection of the data's meaning and will guide further data collection (Corbin & Strauss, 2008). This researcher used the constant comparative approach to the data by comparing

cases and assessing for emerging themes. Becker (1993) stated that the constant comparison approach allows the researcher to be more sensitive to cues and subtle patterns in the data if the researcher was immersed in the data from the beginning of collection.

In the first phase, the data was transcribed and this researcher then utilized the open coding technique. Open coding took the raw data and designated codes to summarize and/or describe the data. Open coding looks for patterns or events in the data that surface from the data (McCann & Clark, 2003). This process was done manually, using printed copies of the transcribed text from the interviews, syllabi, and the course explorations. Through manually performing open coding, this researcher experienced a greater intimacy with the data from the three sources.

Computer-assisted qualitative data analysis (CAQDA) software like NVivo™ is often used in qualitative research to identify and connect recurring themes. CAQDA software supports coding by breaking down data into themes and assisting the researcher to record the steps taken in the development of concepts (Wickham & Woods, 2005). Other support the use of CAQDA because it adds to the transparency of the data analysis for the reader (Ryan, 2009). Criticisms of the use of CAQDA software include that the software can stray from the original premise of the research thus complicating the analysis process (Wickham & Woods, 2000). Fielding and Lee (2002) described that the researcher is at risk for losing touch with the data when using CAQDA, and that studies best suited for using CAQDA software were large, qualitative studies. Fielding and Lee also described CAQDA as helpful for team based field research because of features such as validity checks between data coders. After the initial open coding, it was planned that

the qualitative data analysis package QSR NVivo 8™ software be used during the conceptual phase of data analysis.

Manual coding continued with next phase of analysis, axial coding. Axial coding takes data beyond the written word or observation and conceptualizes the meaning behind the data. This type of coding creates the structure for future data collection, and forms linkages between data sources needed to form theory (Charmaz, 2006). This researcher kept careful memos to show the process of linking data by way of manual codes, and used peer debriefing to verify themes within the data.

Grounded theory's constant comparative method was used to analyze between openly coded documents. This process allowed this researcher to interrelate the findings of each interview, course tour, and syllabus, and provided this researcher with a rich understanding of developing concepts. The end result of the data analysis was to create a substantive theory. Theoretical coding took the derived concepts and further linked and condensed the ideas toward theory. Substantive theory is a specific theory to a discipline or situation and is derived from a narrow sample of a population (Glaser & Strauss, 1967). The findings for this study are generalizable to master's level nursing faculty and their online courses. With the establishment of a substantive theory of online social presence, this researcher can then attempt to expand it to a more generalizable theory through further research.

Specific Aspects of Methodological Rigor

Systematic and transparent approaches to the data analysis are important to add to the confirmability of results (Lincoln & Guba, 1985). This researcher utilized Lincoln and Guba's ways for the qualitative researcher to establish trustworthiness and increase

rigor in studies. Credibility was established by qualitative triangulation of data. Multiple sources of data including interviews, visualization of the online course, and course syllabi were used to compare findings. The constant comparative method was utilized between participants to verify emerging data. Credibility was established by having participants verify transcripts of interviews and course visualizations to ensure that collected data has been correctly transcribed. Peer debriefings were conducted with the committee chair and methodology expert member of the committee in order to validate this researcher's interpretation of emerging themes from the data.

External validity data will assist others to judge whether the grounded theory is applicable to their situation. Field notes provided rich descriptions of the data as well as the context in which the data was obtained from participants. This added to the transferability of the results by verifying the conditions of data collection between faculty. This researcher also kept detailed memos to support and explain how categories of data unfolded in the research.

Data reliability was established by using the theoretical sampling technique. Participants were selected based on the data needs and validating emerging concepts. Each member was experienced in teaching online master's in nursing courses; in addition, the sample offered knowledge on a broader spectrum of online teaching. Grounded theory research allowed for flexibility with participant selection to produce applicable theories. Each concept was validated against other cases as the concepts emerged.

Variation in the data was also addressed. As data was sorted and coded, any variations in the data was coded and a memo regarding the context of the difference was

made (Charmaz, 2006). As additional sampling and data were completed, this researcher attempted to understand the linkages between this variant data and emerging concepts. New data assisted this researcher in further understanding connections that may not have been apparent. To verify that themes were not overlooked, each past participant's data was reevaluated for the presence of the newly emerged themes.

Strengths and Limitations

Qualitative research allows the researcher to gain an in-depth perspective of an understudied area (Munhall, 2007). The effect of social process on students in the online course has been studied, but a gap in the research existed with regard to how these processes are created and maintained by faculty. This is a unique study that attempted to understand faculty patterns of climate creation while also looking at the way in which social presence was established in an online course. Qualitative research, specifically using a grounded theory approach, strengthens the aim of this study. The essence of grounded theory research is to capture and explain complex social processes (Reed & Runquist, 2007). Educational theory supports that student groups contain complex social processes and that a grounded theory approach allows for a deep level of exploration.

Strength was also added to this study by the triangulation of data collected (Onwuegbuzie & Leech, 2007). Three types of data from each participant was used to explore and validate emerging themes. By using multiple sources of data, this researcher was able to support an emerging theory with a rich and varied data structure. Varied data also makes it more likely that the resulting theory is a true representation of faculty's perception of social presence in an online course.

Limitations to this study include a lack of generalizability. The data was obtained from a small pool of subjects, and the sample was not completely representative of the population of nursing educators. Another limitation was that this researcher is novice to grounded theory research. For this reason, this researcher has asked an expert in the field of grounded theory research to sit on the thesis committee to give guidance and direction on design and analysis of this study.

The feasibility of this study was made possible through the use of technology outlined in the above sections. Subjects were easily targeted from a nursing education listserv and from a professional conference. Web-conferencing software allowed this researcher to view the online course with the participant even when this researcher and the participant were in different locations. The process did not seem overly intrusive. Each interview took approximately one hour including the tour of the online course.

Summary

This chapter presented the methods of grounded theory used in this study. Included in the chapter was the use of grounded theory research methods, such as theoretical sampling and constant comparison method of participants' semi-structured interviews, course visualization and exploration, and the analysis of the course syllabi. Finally, this chapter concluded with data collection methods as well as analysis procedures intended to increase data reliability and validity.

CHAPTER 5

RESULTS OF THE STUDY

Introduction

The qualitative methodology of grounded theory was used to generate a substantive theory regarding the CoI intersection of teaching presence and social presence described by Garrison et al. (2000) as climate factors. Through the final step of theoretical coding, the data revealed a core theoretical category: humanizing. Humanizing was found to be the climate factor central to establishing social presence. This chapter discusses those findings as well as the theoretical concepts regarding faculty's specific patterns and perceptions regarding the establishment and maintenance of social presence in each of their courses.

Description of Study Participants

The current study sample is comprised of ten nursing faculty participants: nine female and one male from colleges and universities around the United States. Participants' length of experience in nursing education ranged from six to 27 years; their years of online teaching experience (including distance education) ranged from one to 12 years. The educational background of the participants ranged from six with a PhD in Nursing, one with an EdD, and three having a master's degree in nursing. All participants have taught both online and traditional nursing courses. The participants have a wide range of experience in teaching nursing education courses at all levels. Participants also have experience teaching online master's level courses; however, three currently teach PhD-level courses and two are teaching an online RN-to-BSN course.

Participant 1 teaches at a four-year public university. She has been teaching for twenty-two years, six of which have been spent teaching online courses. She has her PhD in nursing. The course observed was an RN-to-BSN online nursing theory course.

Participant 2 also teaches at a four-year public university. She has a PhD in educational administration. She has been teaching for twenty-five years, nine of which have been online. The course observed was an online healthcare management course.

Participant 3 teaches at a four-year public university. She has an MSN in nursing education, and has taught online nursing education courses for two years. She has experience teaching an MSN online course, however she currently teaches at the baccalaureate level. The course observed was an online nursing leadership course.

Participant 4 teaches at a public four-year university, and has a PhD in nursing. She has been teaching online for five years, and has teaching experience that extends over a decade. The course observed was an online PhD level advanced quantitative research course.

Participant 5 teaches at a public four-year university, and has a PhD in nursing. She has been teaching online for five years, and teaching in academia for nine years total. The course observed was an online PhD level nursing theory course.

Participant 6 teaches for a rural four-year college. Because of the location of the college, she has had experience with distance education for over 12 years, and has taught nursing education for a total of twenty-seven years. She has a PhD in nursing, and serves as a consultant on teaching distance education. The course observed was an online advanced nursing foundations course.

Participant 7 teaches at a four-year university. She has taught nursing education a total of six years, one of which has been online. She has an MSN in community health nursing. The course observed was an online professional roles and strategies course.

Participant 8 is a retired author and educator, now teaching part-time for a four-year university. She has a PhD in nursing. She has taught nursing at the baccalaureate, master's and doctoral level for over 38 years, and has been teaching online since 1995. This experience does not include teaching distance education courses since 1978. The course observed was an online curriculum development course.

Participant 9 teaches at a four-year university. He has taught nursing for nineteen years, and online nursing education for 13 years. He has a PhD in nursing. The course observed was an online PhD level qualitative nursing course.

Participant 10 teaches for a four-year college. She has taught nursing education for eight years, six of which have been teaching online. She has an MSN as gerontological nurse practitioner. The course observed was an online advanced health assessment course.

Data Collection Procedure

Authorization to perform the current study was granted by the University of Nevada Las Vegas Internal Review Board on August 7, 2009. A theoretical sampling technique was utilized during data collection. Theoretical sampling allowed for purposeful selection of participants and information pertinent to the topic (Glaser & Strauss, 1967). This technique also allowed for richer data collection. Listserv postings, conference recruitment, and word-of-mouth snowball techniques were used to recruit participants.

Interested participants were sent the informed consent form prior to the interview (Appendix D). The consent form was reviewed with each participant, and participants were given the opportunity to ask questions regarding study procedures. A verbal consent was obtained from each participant prior to the start of each interview. One interview was completed in person, and nine interviews were conducted by phone. Phone interviews were completed in the investigator's office to allow for complete privacy during the interview. Each interview was audio taped and professionally transcribed. Participants were advised that the conversation was being audio recorded for the purpose of transcription, and that they could stop the interview at any point during the process. The transcriber used in this study had to first sign a transcriber confidentiality agreement approved by the IRB (Appendix E).

Detailed field notes were kept on each interview. The notes were recorded using the Smartpen and Livescribe™ desktop technology, which allowed for uploading into a secure laptop. The Smartpen has an audio recorder and pen with an infrared recorder to simultaneously record event notes. The Smartpen can then be synced to a computer for storage of both audio and written material. This technology gave this researcher the ability to instantly recall the audio recording of the participant at the exact moment a note was written. This step assisted this researcher in the clarification and confirmation of memos.

Each interview began with this researcher giving a brief introduction to the concept of online social presence. After the collection of demographic data, this researcher began a semi-structured interview, which included a series of open-ended questions constructed to extract the faculty's patterns of and perceptions about online

social presence (Appendix F). This technique allowed for flexibility in the way questions were answered, thus giving each interview a unique pattern to both the series of questions and to the follow-up questions. After the interview portion, each participant, using the Webex™ desktop sharing application software, escorted this researcher into that particular online course. The Webex™ software allowed this researcher to synchronously visualize the desktop of the participant while giving the participant complete control over the course areas visualized. Then both participant and this researcher visualized that participant's own course for social presence factors embedded in the course. The participant and researcher then discussed the appearance of the course for transcription capturing. The course syllabus was also emailed to this researcher by eight of the participants. Two participants were not permitted to share the course syllabus in accordance with their institution's policy on release of syllabi. Each interview lasted from 45 to 90 minutes.

During the interview, field notes were made about each experience. The field notes comprised details that occurred to this researcher during the progression of the interview. The field notes also recorded contexts that may not have translated properly to transcription, such as emotions and laughter. Field notes were taken with the Smartpen to allow for simultaneous recording of sound and infrared capturing of writing. All field notes were then uploaded to the Livescribe™ desktop in this researcher's secure laptop.

Each participant was asked to review his or her interview transcripts for validation of accuracy. One participant requested removal of a transcript section related to her own experiences in an online educational program. This information was then removed;

however, the interview was not compromised because that section had no relevance to the purpose of the current study.

With each of the first seven participants, a follow-up interview was necessary to further investigate emerging themes. The first seven participants consented to a brief second interview that lasted about 20 minutes, and were recorded and transcribed. Transcripts were also sent to the participants for approval. Three additional full-length interviews were conducted after the follow up interviews. These interviews used the original interview questions, which were then integrated with the additional follow-up questions.

Method of Data Analysis and Process

The constant comparative method of grounded theory was used with each set of participant data. In the first read through, approved participant interviews were examined for content; in the second read through, open coding was implemented in order to focus on social processes. The participant's own words often served as the inspiration for the code. To ensure that all potentially important data had been captured, multiple codes were created during the first review of the participant interviews.

Axial coding was then applied to the data and the formed codes, in order to create richer explanations of the phenomena within the data. Similar open codes were grouped and assigned an initial category name. The categories, codes, and the supporting data were then transferred to a grid in a second working document. Supporting participants' statements were also placed in each category and codes in the grid. With each comparison of participant interviews, new codes and categories became apparent; past documents were also reviewed for similar data. Categories were re-color-coded within

each transcript and assigned a corresponding color-code within the grid (Appendix G). For continuity, all combined codes and categories were re-color-coded within past documents.

With each interview, codes about the data were added to the grid, and also with this step memos were written that clarified this process of category development. The memos detailed the process of creating categories and themes from the coded data within the grid. Memos allowed this researcher to make comparisons between participant codes, and to think analytically about forming concepts. The memos provided a careful record of how the codes were compiled and the theoretical categories were constructed, and were used frequently with the development of theoretical concepts (Charmaz, 2006). A process of diagramming the data was also implemented along with the memo process. This exercise assisted this researcher in visualizing the emerging codes and making links within the data. Memos were hand written using the Smartpen which allowed for prompt uploading to the Livescribe™ desktop in this researcher's laptop (Appendix H).

Participants' course syllabi were reviewed for written expressions of social presence. This researcher looked for ways in which faculty documented their expectations of student interaction and behaviors, and how faculty imbedded their syllabus with indications of social presence. Areas that indicated social presence included the ways in which faculty communicated contact information, participation policies, grading rubrics, support services, and course responsibilities. The codes from the analysis included: connection, guidance of activity, guidance for evaluation, responsiveness, and connection to resources. From those codes, the syllabi analysis supported the following theoretical concepts: lifelines, maintain, cyber role model, and awareness. All findings

were color-coded and the data were then transferred to a syllabus grid (Appendix I). In follow up contact with participants regarding their syllabi, no additions or corrections were made in the interpretations of social presence within their syllabus.

After analyzing the seventh interview, this researcher discovered no new emerging categories from the data. The major processes of climate setting by faculty in an online course were represented by eight categories. Theoretical coding was then utilized to examine the relationships between the categories in order to create themes. Memos were written that described each emerging theoretical code. Next to each memo, a clustering technique was implemented in order to assist this researcher in diagramming relationships between categories and theoretical codes. The theoretical codes were examined and similar themes were condensed. From the data, four faculty perceptions and five faculty patterns became apparent. To further test and validate the emerging perceptions and patterns, this researcher re-interviewed the first seven participants. Data from the second set of interviews was used to support, clarify, and further integrate theoretical codes.

Three additional interviews were then conducted in order to validate the theoretical saturation. The constant comparative method was also implemented for the data in the final three participant interviews. Data were also examined for new categories, and were compared to the original themes derived from the theoretical codes. The last participant interviewed stated, prior to the interview, that she did not consider social presence to be important in the online classroom. However, the data analysis indeed indicated there were elements of each emerging theoretical category present in the

participant's interview. This participant's interview will be discussed in more detail later in this chapter.

Member checking was also employed to allow all participants the opportunity to provide feedback regarding the refined theoretical codes. Each participant was emailed the emerging theoretical codes, and seven responded to the email. The overall feedback was positive about capturing the participants' experiences teaching online. Participant 9 wrote: "What you have presented seems consistent with my experiences of teaching on line. I think you have captured the patterns well." Their examination did yield questions about the separate categorization of "humanizing" as it seemed to extend into other categories. This feedback led this researcher to a further examination of the coded data, and the modification of theoretical categories.

The last member check was utilized during data analysis. A follow up email was sent to each participant listing those items in their syllabus that could be linked to social presence. The participants were asked to validate these findings and offer any additional items they felt this researcher might have missed. Four participants responded to an email request for verification, and the participant with the highest amount of imbedded social presence syllabus factors agreed to a follow-up phone call in order to verify results. Each participant agreed that this researcher captured the social presence data within their syllabus with no additions or corrections made by any of the participants.

Results of the Audit Trail

Data from the current study was carefully processed and managed throughout the research process. As discussed in the previous chapter, CAQDA software has many pros and cons in its use with qualitative data analysis. Qualitative researchers use NVivo

software to automate the process of sorting, matching, and analyzing of qualitative data. The software can make connections in data and give charted outputs that visually represent links within the data (Davidson & Jacobs, 2008). CAQDA can also make the analysis of the research transparent for the reader in understanding the analysis of the data. However, qualitative researchers must still have a thorough understanding of their data in order to complete the analysis of the software output. There is a risk that the software analysis could stray from the intended meaning of the study (Wickham & Woods, 2000) CAQDA analysis is also criticized for making cumbersome and lengthy outputs which the researcher ultimately has to manually examine (Fielding & Lee, 2002).

Staying true to grounded theory analysis, this researcher analyzed data after each interview, comparing the new data to that of past findings. This author found that a manual indexing, sorting, and classifying of data could be performed thoroughly with each interview. This researcher, the committee chair, and the methodology expert agreed, in a peer debriefing session, that the process utilized was satisfactory in capturing themes within the data, and that the use of NVIVO software was not needed to assist in establishing categories. Rather, the coded data was carefully logged into a grid during the analysis of each interview. The grid allowed this researcher to visualize trends within the data between each interview. Within the grid, the coded data was organized into categories; supporting statements from the interviews were then inserted into corresponding categories. These statements served as a source of clarification regarding the coded data, descriptive categories, and the themes. As categories were added, this researcher also reviewed past interviews for the presence of related data that may have been overlooked. This process for reviewing data required this researcher to reread the

corresponding interview sections of past interviews and conduct keyword searches within the transcripts.

As categories were created, this researcher employed memos both to document the origin of each category and to clarify the properties of each. These memos allowed for the comparison of data, codes, and categories. The memos also served as a record, as the categories became combined, that would allow for auditing the origin of the concepts.

Lincoln and Guba (1985) suggested ways for a qualitative researcher to establish rigor throughout the research process. In the current study, this researcher validated participant data in two ways. First, each participant was allowed the opportunity to review his or her transcripts for accuracy. Secondly, each participant was provided with a draft of emerging theoretical codes and encouraged to provide feedback about the process used to capture their individual patterns and perceptions regarding online social presence. All but two participants responded to the request for feedback. Overall, feedback regarding the capturing of faculty patterns and perceptions about online social presence was both positive and supportive. Collectively, responding participants felt that the theoretical categories were transferable to their online practice.

Conceptual Category Development

Each category was carefully formed to encompass the meaning of the coded data. Each participant had different ways of designing and executing a nursing course, but, collectively, the participants displayed similar characteristics in creating an online climate that fostered social presence.

Category A: Community development. Each participant described developing a course climate in which members got to know each other on a personal level, built

professional relationships, and prevented feelings of isolation. The CoI model described the online community as a result of interaction and learning (Garrison et al., 2000). In this category, participants expressed that their role was to foster the developing community by devising activities and stimulating discussion among members. Participant 1 described this developing community as:

The community starts off with 18-20 students just sitting in front of their computers, it's a little isolated. The beauty of it, to me, is watching that community grow, just like when somebody first moves into a new neighborhood. At first they're kind of isolated in their house but then, as they meet the neighbors and get to know the neighbors, then that community grows. I think that's what happens in an online class.

Faculty set a tone for the community by appearing to be open to creating connections with students and then by connecting personally with each student. For example, a simple connection was made by the participant's referring to a student by name, or by engaging in a conversation over the telephone or voice calls using a computer-to-computer internet program like Skype. Participants stated recurrently that establishing an online community required an investment of time. Participant 4 stated, "at first I didn't realize the extent to which one has to go, and I also didn't realize how really important it was."

Participants described that the community formed with both professional and personal elements. Students enhanced their knowledge by relating their experiences as nurses to course content. Two participants shared these insights:

People describe their own practice situations, and that I think enhances the social presence because they get a sense that they are all members of a single community, the community of nursing (Participant 5).

I believe that we are coming together as a group or community of scholars with purposeful interaction. I teach qualitative research methods, so every week we have a different topic. We come together purposefully and that is a topic. So when someone is not there, then presence is missed. I try to

form a community that I think displays respect for all to use (Participant 9).

Category B: Faculty as facilitator. The course facilitator nurtures social presence by supporting social bonds and emerging relationships. During the interviews, participants acknowledged that students have a need to be part of a smaller peer group within their cohort.

I'm not a teacher, I'm facilitator. It's not only the facilitation of the understanding of the content and the materials and the display of it, or the explication of it, or the writing of it, but it's to help facilitate relationships, better understandings (Participant 4).

Participants assisted with inter-student connections simply by having students introduce themselves or by overtly matching students with like interests for collaborative projects. Not every participant involved himself or herself directly with pairing students. These participants reported that students with like interests often find each other when faculty construct ways for students to get to know each other. Participant 6 stated the following about faculty's role in student connections:

It is a kind of personal responsibility, they connect themselves. If it's a good class and if it is well designed, and if the teacher has really bought into distance education. Those sorts of things happen automatically.

Category C: Socialization. Participants expressed that students need to have guidelines to help them assume their roles as online learners. One such guideline was that participants set minimum participation standards in course syllabi or a posted rubric, making clear faculty's expectations of student interaction within the course. Another socialization guideline was faculty's requirements regarding the quality of a posting topic, thus making students aware of the academic expectations of discussion board

postings. Two participants described the connection between socialization and social presence as:

So it's kind of a meld of not only social presence, but also the academic nature of the course and the purpose of it, it's not all lovey-dovey kinds of things, but you are trying to stimulate their intellectual participation (Participant 8).

Promoting an environment that says you are respected, and your views are appropriate, although they may be challenged, that you feel the freedom to do that, and I think that promotes a sense of presence (Participant 9).

Faculty also encouraged socialization through relevant course assignments and discussions. Peers worked together, sharing insights through engagement in professional learning opportunities. Many participants also described a peer evaluation process that allowed students to assess the participation and contribution of others in the context of group work. Participant 8 described her guidance for group interaction in this way: “I include some kind of information on how to form a group, what the group roles are, that kind of thing, how to establish a working group as opposed to one that is dysfunctional.”

Category D: Responsiveness. Participants described the need for the instructor to be engaged with the students in every aspect of the course. Analysis of the data indicates that the category of responsiveness consists of two main components. First, participants described needing to respond in a way that assisted students in clarifying their thoughts. Faculty questioned students in order to help them discover a deeper understanding of their coursework. Participants also noted that, without the non-verbal cues that face-to-face interaction provides, the risk of misunderstanding and miscommunication are great, and can result in a ripple effect throughout course relationships. Participants expressed the need to be attuned to this possibility and be prepared to help students clarify possible misinterpreted messages. Participant 6 stated:

The potential for misunderstanding is huge. And they're going to have problems. So being up front, letting them know how it is, and letting them know that you're a human being is a critical step.

For the second component, course execution, participants expressed that their own active presence in the course is necessary for the students to feel connected to the course.

Participant 4 described the process as being “diligent and dedicated” to the course. This was reflected in the syllabus of participants. Every participant listed multiple avenues for students to contact the faculty member, and two faculty added to their syllabus the timeframe that students could expect a response from faculty. Participants described that they themselves respond so that students feel that faculty are paying attention, and to help students progress through the coursework. Participant 8 described her process of interaction with students during the course:

In the beginning it is more intensive in responding to almost every entry they make, and then as they mature in the course, so to speak, the entries that really need response related to the content of the course.

Category E: Getting personal. In the interviews, participants expressed a difference between getting to know their students online and getting to know them in a face-to-face classroom. Participants felt that they were better able to get to know their students online. Participant 6 expressed this about getting to know students personally:

I know students in my online classes better than I ever knew my students in the face-to-face class. In a web class that is well designed, no student can sit in the background and keep their mouth shut...I know their personal lives more than I ever knew my face-to-face students.

Throughout the interviews, participants echoed the importance of knowing the student as a human being. Participant 6 also noted, “If the students do not see the individual as another human being interested in education, there is going to be a problem there.”

Participants reported that creating an environment open to ideas and dialogue was

important to this process of sharing personal information. They explained that this was done by role modeling behaviors of interest and respect.

I've had plenty of times when people have asked for prayers for a family member, or shared their own sorrow at the loss of a friend or family member, or shared stressful stuff like going through a divorce. Really it can get to be quite personal (Participant 5).

Category F: Design elements. Participants described course design elements they themselves implemented to encourage and maintain social presence. They described tangible course components that allowed for interaction. These included the discussion board, chat rooms, onsite or telephone first class meetings, and shared/non-academic “water cooler” discussion areas. Participants illustrated these water cooler discussion areas as an avenue that allowed students to bring up non-academic, un-graded issues. Unlike regular discussion board areas, these water cooler areas served as a way for students to post freely. The following participants described design elements they implemented in developing social presence:

The idea is that the course issues area largely for students to interact with each other, as they would in a student lounge if they were in a bricks-and-mortar situation. I don't have any expectations about how many times they should get into the internet cafe, or how often they should go. That's for them (Participant 2).

The question-and-answer area is fantastic. When I fell into that, and it was definitely by accident, it was like a miracle occurred. If a student says, can you tell me more about this project that's due in a week, I'm really not understanding what you're wanting, or something like that. Another student will pipe in and say, oh here's where I found more information about that, and after I read that it made perfect sense. And I didn't have to say a thing (Participant 6).

Design elements that listed course expectations included a welcome message, the course orientation, participation rubrics, and the syllabus. The welcome message often set the tone for interaction within the course. Some faculty maintained a professional tone while

describing themselves and their accomplishments, while other faculty used the welcome letter to reveal personal aspects of their lives.

Category G: Student ownership. Participants expressed that although the online social environment could contain many factors that encouraged social presence, ultimately it was up to the student to engage. Participant 2 described student ownership as “students will meet their own social needs” referring to the student’s own internal need for social interaction. Participants were aware of and acknowledged the fact that students do interact outside the hours and parameters of the course. Participant 5 described student ownership manifesting as social directors. “Usually there will be two to three people in the course that will become the social directors of the course.” Other participants confirmed the concept of social directors by describing students organizing social connections outside those that faculty have mandated. Faculty also employed this rubric to facilitate student ownership of the course. Participants described students being aware that they needed to achieve a certain level of presence in the course in order to achieve higher grade or rubric rankings.

Category H: Stressors. Participants expressed that online education contains inherent risks for stress and isolation. Participant 1 described the link between isolation and social presence as “if you don't have that sense of social presence, you're going to have students who feel alienated, isolated”. Among student stressors, participants named computer inexperience, computer malfunction, variable work schedules, and unexpected life events.

Results of Theoretical Coding

Overview of Core Theoretical Category: Humanizing

The goal of grounded theory research is to identify an explanatory core category that would become substantive theory (Glaser, 1978). As theoretical coding for the current study proceeded, one core theme emerged from the data: Faculty construct a climate that includes ways in which each student can develop a connection to the human element of the course. This core theme, or theoretical category, was designated “humanizing” because, in order to create and facilitate social presence, faculty had to instill their online courses with humanness.

This core theoretical category had origins in the code “comfort”. With each analysis of participant data, there was a pattern of faculty attempting to bridge a virtual-traditional classroom gap. Faculty expressed that students craved to be understood as human beings, and that students could become disillusioned by the online experience without a connection to the course. Within the memo for the code comfort, other descriptive codes materialized. These included decrease anxiety, realness, humanness, human needs, and understanding. Through this memoing process, it became apparent that it was not just comfort that the faculty were offering students, it was a process of humanizing that brought students the comfort.

The process of humanizing the course consisted of many layers, and permeated every conceptual category. It was included in the overall course design, and extended into small faculty nuances. Humanizing was discovered in the way in which faculty viewed student stressors. Faculty were conscious of a human element to the course, and took steps to alleviate or prevent stress through meeting human needs. For example, six out the

ten participants emphasized flexibility in dealing with students. However, each participant expressed that viewing students as social beings with many demands extending beyond school was paramount.

Faculty also designed ways in which course participants could feel real and three-dimensional, in a flat, one-dimensional environment. For the participants, these human connections consisted of influences beyond those of student interaction. They also influenced course learning. Humanizing the online course environment allowed students to share ideas and participate in dialogue openly. Participant 5 described the importance of humanizing in this manner:

I think it's essential for the students who are in the totally online programs to have some sort of school fun, to know each other, get to know their classmates as people, and have that added dimension, which is valuable in and of itself regardless of how it might facilitate the teaching-learning... people become more comfortable with each other, they will become more comfortable in disclosing their questions and their differences, and their insights about the course content.

Humanizing a course ameliorates the disconnect between a text-based environment and the need to feel connected within a course. Participant 4 described this as “connectivity, not just to the course and its modules and its icons, but the connectivity is sensed and felt by the student to the faculty”. Faculty also humanized themselves for students by being responsive to student needs. Faculty buffered or prevented student frustration by establishing a strong online presence, and by responding promptly to student concerns. Participant 2 expressed the following about responding to students: “You can't see the students, but they need to know that the instructor cares about them, and one way to show

that is that you respond”. Participant 1 stated that she wanted students to feel that “faculty are in this with you”.

Humanizing was also captured in the way that faculty facilitated student relationships. Faculty not only attempted to know and understand students on an individual level, but faculty also helped students do the same within the course. Faculty encouraged the formation of an online community. Each faculty expressed that they encouraged students to interact within the course, thereby deepening the human connections. Without human interaction, the online course would be merely a post-and-submit, detached experience. Participant 6 described this as, “Unless there is a social environment it's just that, it's memorization to get through the day.”

There is little in the literature to reference humanizing an online climate. DuCharme-Hansen and Dupin-Bryant (2005) cite humanization as a best practice in online education. Their process for humanizing a course included posting a “how’s it going thread” with instructors providing one-on-one feedback to these posts. The authors also stated that online course participants post a personal story about themselves within an introduction. Hatcher and Craig (1998) cited that distance learning courses should include instructional approaches that “humanized learning” for students. The authors described that humanization of this distance education program included factors of course design, computer technology, and the learning environment. The authors hypothesized that a humanized learning environment in distance education would lead to increased learning and reduced student attrition.

Supporting Theoretical Concepts: Faculty Perceptions

In order to better understand online social presence, this researcher sought descriptions of the ways in which faculty understood social presence within their online course. Three distinct faculty perceptions of social presence—shared professional membership, facilitating connections, and student control—emerged from the data, further supporting the theory of the current study that the over-arching climate factor is to humanize the online course. These perceptions included the ways in which faculty viewed their role in creating online social presence.

Table 1

Supporting Data Categories for Meaningful Socialization Perception

Categories
Community Development Socialization

Meaningful Socialization. The theme of faculty’s belief that social presence is part of the process for professional growth emerged from the data, and was labeled by this researcher as meaningful socialization. The faculty referred to this as a shared professional membership. Faculty emphasized that as students begin to care for each other as members of a shared discipline the human connection extends to professional ties. Participant 5 commented the following regarding professional connections within the course:

They need to know that somebody is there with them, or has been where they are, understands what they are going through, and is interested and cares. I think they need to understand that the teacher cares, and I try to

emphasize that in nursing, as well as all disciplines, it's not a matter of caring for one thing at the expense of another. We care for our discipline and caring for our discipline demands responsibility.

Social presence is a tool that allows students to share personal experiences within the context of professional nursing; faculty perceive that students, through this sharing, build professional ties. Participants described designing substantive and relevant student assignments intended to create a deeper dialogue about professional issues. This process of engendering professional ties through social presence was described by Participant 4 as, "People describe their own practice situations, and that I think enhances the social presence because they get a sense that they are all members of a single community, the community of nursing." This observation was echoed by Participant 4, who stated, "I use stories to help understand and to expand one's own understanding, through the paralleling and sharing of other stories...in the dialogue, I just gave an example of something from my own practice."

This process of meaningful socialization includes students, assimilating course learning and professional practice with the assistance of peer interaction was described by Participant 5 as, "I think they have to apply what they are reading to situations in their own practice, and also having to talk about it out loud, to bounce their ideas off each other, to really bring their understanding home". Participants view meaningful socialization as a tool that allows students to assume a role in advanced practice: "If we don't help them develop some way to connect all of that together, they're right back to memorizing just to get out of the class and they're not developing as a professional (Participant 6)."

Githens (2007) researched student reactions to professional socialization. The study examined qualitatively a professional development course of eight adults working in rehabilitation and disabilities services, and found that the students favored the opportunity for professional growth that interaction with other students afforded. The author described that as part of professional development socialization lead to more confidence in their areas of specialty.

Table 2

Supporting Data Categories for Facilitate Connections Perception

Categories	
Community Development Faculty as a Facilitator	Responsiveness Getting Personal

Facilitating connections. A second faculty perception in online social presence addresses the role faculty plays in facilitating social bonds within the online course. Faculty perceived that students are inherently social beings, and thus provided students ways in which this social side could be expressed. Participant 8 summarized this perception as “A social environment, the behind-the-scenes to learning”. Participants perceived one aspect of their role in nurturing a forming community by emphasizing common interests. This perception manifested in the way faculty directly facilitated emerging relationships. Participant 4 described this perception as facilitator as:

I'm not a teacher, I'm a facilitator. It's not only the facilitation of the understanding of the content and the materials and the display of it, or the explication of it, or the writing of it, but it's to help facilitate relationships, better understandings.

Participants took advantage of students' common nursing interests to create an online learning community. Participant 5 stated the following about this emerging community:

Underneath, they are a community of people with like interests, population or interventions, or topics maybe. Also, I think what happens is there are covert communities that get built, where students find likenesses in each other.

Other participants expressed awareness of smaller, more intimate student communities. Each participant described providing a structure from which smaller informal communities could then be built. Each course observed in this current study provided a virtual meeting space for students, which usually took the form of non-academic discussion board threads. Each participant also provided students the opportunity to introduce themselves thoroughly in order to encourage and facilitate familiarity with one another. Chapman et al. (2005), Garrison et al. (2000), Garrison and Arbaugh (2007) and Lock (2002) noted that faculty need to cultivate the growth of student relationships. As part of the CoI model, Garrison and Arbaugh observed that students will have deeper social relationships when faculty are involved in assigning students to group interaction.

Participants also described an inherent value in helping students connect in a community that is crucial to learning: Student bonds become increasingly personal as a course progresses. Participant 8 stated simply: "People become more comfortable with each other, they will become more comfortable in disclosing their questions and their differences, and their insights about the course content". At a minimum, participants felt that students connected to the community followed up when classmates were absent from the discourse, or offered words of encouragement and support to classmates experiencing

stressors. Participant 4 observed the following about fluid and effective student community interaction:

I think vibrant exchange is when I know the course is really clicking and when I know that the students are engaged, and they are engaged with the community. It's not a back and forth student-to-teacher and teacher-to-student kind of thing. That when their discussion is vibrant, when people are jumping in and maybe not necessarily writing in whole sentences, but there is some excitement about what they are contributing. Excitement that contains substance as well as emotion.

Table 3

Supporting Data Categories for Student Control Perception

Categories	
Community Development Student Ownership	Design Element Responsiveness

Student control. Student control emerged from the data as the third faculty perception. This researcher labeled the perception student control in order to describe faculty's awareness that students needed to be able to regulate their own course activity, and be accountable for their presence in the course. Faculty perceived that, in order for students to learn and to participate within an online community, students need to feel empowered, and students will perform within the course in order to meet desired personal or scholastic expectations. Participant 8 described this perception as student-centered learning: "What I like about online teaching is that it is learner centered. All of the teaching activities that you are doing is to make the learner get into the class, and prompt participation in the class."

Student control was evident in each participant's course. Each participant provided opportunities for self-regulation among groups and within discussions. Participants empowered students by encouraging them to form their own groups, and also to evaluate other group members' interactions and contributions. When asked whether students honestly self-regulated within groups, Participant 2 responded: "They do actually...their peer evaluations is what they fill out". Another way in which students were empowered to have control in the online course was through faculty's use of rubrics. Each participant informed students that the quantity and quality of their participation would earn a certain grade. This facilitated students control of their grades, their postings, and their interactions. Participant 1 summarized this perception as: "I to try to give the students as much control as I can over what they're doing, in their grade and in how they choose to interact".

Students having control of their learning environment also is linked to the literature. Student control was validated by Chapman et al.'s (2005) research into strengths of student communities. The researchers also found that when students had a feeling of community ownership they also had strong indicators of perceived learning outcomes. Yukselturk and Bulut (2007) studied factors that contributed to student success in the online environment. Students having control of their learning online was positively correlated with student success. Boyer (2004) also found that when online instructors created social, self-determined learning activities, students reported that they achieved greater learning.

Supporting Themes: Faculty Patterns

The behaviors described by faculty as social presence evolved in their online courses constituted faculty patterns. Unlike perceptions, faculty patterns were direct actions taken by faculty in order to create social presence in an online course.

Table 4

Supporting Data Categories for Cyber Role Model Pattern

Categories	
Socialization	Stressors
Getting personal	Design Element
Responsiveness	Socialization

Cyber role model. A pattern emerged from the data that described faculty's desire to effect student behavior. At first this researcher labeled this pattern "role model" but this was changed during peer debriefing to "cyber role model" because this role modeling was accomplished in the one-dimensional space of the online environment. Cyber role modeling is the action of faculty in assisting student transition from that of face-to-face student to the role of cyber student.

Giddings, Campbell, and Maclaren (2006) described this process of transitioning to the online environment as first "virtual paralysis", leading then to "engagement", followed by "getting into it". The authors stated that during the first stage of "virtual paralysis" students lack confidence to contribute online. Giddings et al. stated that in order to deal with this stage faculty should have in place processes to teach students how to be actively engaged. Often students choose an online course and neither know what to

expect from the course, nor understand how the course will function (Reisetter, Lapointe, & Korcuska, 2007).

These observations were echoed in interviews of the current study. Participant 9 stated, “the great unknown, not knowing what to expect... it is probably harder, more rigorous than in a live classroom, and for some that might be a barrier”. To assist students in adjusting to online learning, participants delineated clear learning roles. In the syllabus or participation rubric, students were given expectations of the amount and quality of online interaction. Participant 6 stated “I think early on one of their greatest needs is, how is this going to work, and am I going to be able to be successful.”

Faculty also role modeled behaviors in course feedback, emails, and unit discussions. When asked about role modeling in an online course, two participants stated:

I think there are many components, and some of them have to do with professional tone. In my online course, I refer to every student by name in my responses. I draw in other students by picking out a component of one student's post and asking for participation from other class members about one component (Participant 3).

I have a list of things I tell students...things like you don't work on a black screen because it comes across as depressing and morbid, and you don't type in all caps because it comes across as screaming. For people who use it all the time, it's common sense, but for people who are not used to it, they don't know that (Participant 6).

Faculty also set the direction and energy of online course learning by demonstrating to students that interaction is a significant component of online learning. Participants in this current study role modeled for students the way in which discourse should look and feel, and described feeling “like a cheerleader” at times during interactions. Participant 8 described this level of interaction:

Initially in the course, when they are making contributions, trying to set a tone and for the others to role model as well. Accepting people's

comments and so on, and being supportive of them, but also trying to give another perspective in order to get intellectual curiosity going, too. So it's kind of a meld of not only social presence, but also the academic nature of the course and the purpose of it.

Table 5

Supporting Data Categories for Maintain Pattern

Categories	
Design Element Responsiveness	Getting Personal Socialization

Maintain. Faculty acted in many ways within a course to reduce student frustration, and from these actions the next pattern was derived. This pattern was labeled “maintain” because it consisted of not just maintenance of course components; it also dealt with how dedicated the instructor was to both the course and the students. Participants described being involved in every aspect of the online course in order to keep it running smoothly and keep students engaged.

To maintain the course, faculty were involved reading and responding to student email and discussion board postings. When asked about the importance of responding to students, Participant 8 stated, “I think psychologically if you don't reply, if I were a student I would think the teacher was not paying any attention. I think it's important to respond.” Dennen (2004) also noted that faculty’s activity influenced the activity of students on a discussion board. Dennen found that too much or too little interaction had negative effects on student postings.

Faculty stated that much more time is spent with the online class than in a face-to-face course. Participant 3 stated, “I am present everyday”, which was a practice that did not appear to be an abnormal for participants. Most admitted to logging in to the classroom daily, with the intention, among other goals, of reducing student anxiety and increasing course satisfaction through presence. The faculty in this current study expressed that they felt their interaction was necessary in order to motivate student interaction. When asked about reduction of course anxiety, Participant 5 stated:

The interpersonal kind of exchanges or interests that is critical to students, I think, having that sense of belonging to the course, having a sense of relationship with the faculty member. So based really on evaluations after the course, the pay off seen in evals.

Faculty maintained the course through overseeing discussion board postings. The nature of online education does not necessarily allow for a complete understanding of the intention behind the written word; and faculty related assisting students to clarify statements they had written on the discussion board. Participant 10 observed:

People could misinterpret what the written word is, but if you have experience, if you misinterpret it, then you send it back to them and say, this is my understanding of what you've written. What is your perception, what did you mean by this? I've had several instances where what they wrote is entirely not what they meant, then by asking them to clarify then it becomes a little more clear.

Faculty also monitored their online courses for issues of incivility. Four faculty from the sample mentioned having to delete rude or uncivil statements made by students.

Table 6

Supporting Data Categories for Awareness Pattern

Categories	
Stressors	Getting Personal
Community Development	Faculty as a Facilitator
Responsiveness	Design Elements

Awareness. Throughout the data, faculty demonstrated behaviors that allowed students to become attuned to course membership and course progression. This researcher labeled this behavior “awareness”. Awareness encompasses faculty’s assessment of student behaviors and the course for growing issues.

Participants described that this assessment was important for them in forming a baseline relationship with students. Faculty described that relationships with students allowed for better communication, and allowed for them to assess changes in a student’s online activity. Some faculty had students post introductions with or without a picture. Others found that synchronous meetings, discussion board postings, and chat sessions were helpful in facilitating course members to establish ties. Participant 3 described how student introductions were utilized throughout the course:

I have students create an introductory post where they can insert a picture if they want, and I posted my bio so the students to be able to see who all is in the class and interesting things about their classmates, then I respond individually to each of those posts so that the students know that I read it and that I refer back to it throughout the semester. Oh, based on your ICU experience, or earlier you spoke about this challenge with your schoolwork, how is that going. Just so that they have that feeling of connection with me.

Almost all of the participants described knowing their online students better than their face-to-face students. Participant 6 stated, “A student’s personal life does not come

up in a traditional classroom.” When asked about how well they knew their online students, two participants responded this way:

I guess I probably don't put the effort in to coming to know the (on ground) students very well who tend to get along okay in the course and seem to be satisfied with minimal personal relationships. But online I feel like I know every one of them, not in the beginning necessarily, but develop over the course of the semester. With the formal things that they do, as well as the informal dialogue, then I engage in a tremendous number of e-mail communications with students (Participant 4).

I get so much more opportunity to interact with them than I do in a 3-hour class. In the 3-hour class, they come in, we do our thing, they leave, and I don't see them for another week unless they have a particular question and they come by my office. This way I'm pretty much interacting with them all week long (Participant 1).

Faculty were also aware of student tone and degree of involvement illustrating responsiveness to student action or inaction. Participants described that subtle changes in student performance could be sensed early and dealt with, with little disruption to the student's progress. One participant described the process of awareness as:

I think you have to have your antennae up all the time and look for issues that might show up in their paperwork, or show up in their e-mails to you. If I start getting e-mail from a student frequently, then I know there is something going on with them, that they are having a hard time, and I will call them and ask what's happening (Participant 7).

Participant 5 stated, “I think I get to know them on a deeper level through online education. They are transparent, they have to be, because they have to write.” Such transparency allows faculty to become aware of course problems early. When asked about being aware of student behaviors, Participant 9 stated:

What I look for is participation. That is usually an indicator. So if there is a student who is less interactive, that is usually some indication to me that something is going on and then I will send them a private email and say I have noticed you don't seem to be participating as much as you had in the past, is everything all right?

Participants did not report any disadvantage to having greater awareness of students. Each participant expressed that getting to know students on a personal level took a great deal of energy. Participants described some difficulty in the online environment after having become acutely aware of a student's personal issues. Participant 4 stated that it was difficult because "You don't have that visual and you don't have the presence pattern, you wouldn't see students coming and going in the hallways, or notice that you hadn't seen someone coming and going". The literature also reflects that it can be difficult to grasp student issues in the online environment. Bambara, Harbour, and Davies (2009) reported that a lack of instructor and student physical interactions could make it difficult to establish a relationship. In their qualitative study of the online student's lived experience, the authors describe that students would slowly withdraw from the online environment without the support and relationship with the instructor. In the current study, faculty had to rely on students being open about experiencing problems during the course. Participant 7 explained:

You really have to care about the students and what's going on with them if you are going to work with them routinely when they are online, I think you tend to get to know their personalities a little bit more because you are reading so much of what they are writing.

Table 7

Supporting Data Categories for Lifelines Pattern/Perception

Categories
Stressors
Design Elements
Community Development

A Binding Theme: Lifelines

Stressors were an identified data category related to students' negative course experiences or social strain while taking a class. From that data about stressors, "lifelines" emerged as a theme of the current study. This researcher used the label lifelines in order to describe ways in which faculty react to the stressors faced by online students. For participants, extending a student a lifeline helped students remain connected to the online course. Many of these lifelines were found in the course syllabi of participants, such as contact information and office hours, and additional helpful links such as library and helpdesk information. Participants often anticipated the stressors of online students and made course adaptations such as conducting introductory tours and including online classroom orientation modules to assist students. These adaptations, lifelines imbedded in the course, served as stressor prevention or facilitated a sort of "equal footing" for students new to online education.

Grander lifelines included intentional outreach to students, within a course, who seemed troubled. Participants felt it was necessary to assess student postings for signs of frustration, and to respond quickly if a student appeared to be distressed. Participant 4 described reading students' discussion board postings as "seeing them through their fingertips." Participants reported that they could often catch student frustration or anger in an early email or discussion board posting, and then offer that student individual assistance. Student silence was also an indicator that a student could be in distress. A student's lack of posting was repeatedly named by participants as an early indicator that something was not right. Participant 10 described her reaction to student silence as:

If I'm not seeing the discussions or the posts, I will private e-mail them; you've gotta give me something, is there a problem at home, is there a

problem I need to know about, are you familiar with Blackboard. Talk to me because, if I continue to see what I see, you are probably going to have a problem throughout the semester. Anything I can do to help?

Participants also used flexibility as a lifeline within the course, and found it was important to be flexible when dealing with adult learners. Participant 4 said it best by stating, “Life happens. It doesn’t stop happening just because you come back to school.”

The Negative Case

Glaser (1978, p. 106) noted that a researcher should find “further conditions” under which variations of a social process can be studied. In this study, the last participant interviewed provided such opportunity. While this particular case is not an extreme example of a faculty shunning all social processes, it does illustrate a teaching style self-described as “not very social”. Throughout the interview, this participant continually rebuffed tools that other participants used to help students connect. For example when asked about her involvement in course discussion postings she stated that she preferred to be less involved stating “I don’t see why we should have to answer every email or every post.” In another example, when asked about what she felt were the important parts of the online environment to help students be connected she responded “I don't know. Are they? Or are they just trying to get through a class?”

When asked about constructing social presence in the online classroom, this participant stated, “I don’t go and do all that stuff”. However, upon analysis, some elements were discovered that confirmed a humanizing climate, especially in the course tour, where students and faculty participated in personal introductions at the beginning of the course. This faculty asked students to introduce themselves using the discussion board in the first module. She also introduced herself to students at this time. During the

first week of class, this faculty also provided students with guidelines, course expectations, and accountability about ways to communicate. This faculty monitored the discussion board and responded often to students, helping them clarify statements that could be misconstrued.

This same faculty also identified and attempted to buffer course stressors. By opening the course prior to the start date in order to assist students find clinical preceptors, and this early start allowed students to begin logging hours with that preceptor earlier, thereby have more time to meet course requirements. In the interview she identified finding and setting up a preceptor as a major stressor, and this action allowed for early and immediate intervention for that stressor.

Although this faculty did not like students working in groups, she appointed one student to lead discussion each week; students were also required to relate clinical experience to the weekly topics selected. Student discussion board statements and email correspondence were assessed for stress, and students were offered assistance in the form of a question: “Anything I can do to help?” This faculty also provided a “The Coffee Shop”, an area within the course where students could to correspond about issues. Although this faculty described their correspondences as superficial, she did state that the students reached out to each other about personal issues and responded to each other with personal messages of encouragement.

The Model’s Metaphor

An online course is like a ship—it is a vessel that transports students to an ultimate destination, that of earning a degree. And, just as a ship needs a captain, an online course needs an instructor to set the course. But a ship, and an online course, also

needs an anchor, which serves as security for the ship, assuring that it will not go adrift in times of calm waters or during storms or rough seas.

Made from heavy steel, an anchor consists of three sections: the central shank, and the right and left arms (Deer & Kemp, 1987). These arms not only provide the anchor with additional weight, they also serve to stabilize the ship and hold it on course. A heavy cable attaches the anchor to the ship. The anchor assists in maintaining the ship's course in unexpected weather; no ship would set sail without a substantial one.



Figure 3. Humanizing: Anchoring Social Presence in a Course

Society also has its anchor. In *The Art of Happiness in a Troubled World* (Dalai Lama & Cutler, 2009), the Dalai Lama explains that human relationships serve as the

anchor for society, stressing that without real connections to its members individuals have no secure attachment to community. In the community, or society, of an online course, social presence—like the human relationships discussed by the Dalai Lama—serves as the anchor. Its shank, humanizing, is the core theme of the current study. Humanizing an online course is essential to creating or establishing its social presence.

The patterns and perceptions, the arms of the anchor, of online course instruction revealed by the current study provide faculty the opportunity for consistent social presence. The left arm consists of the faculty perceptions of meaningful socialization, facilitating connections, and student control. The right arm consists of the faculty patterns of cyber role modeling, maintenance, and awareness.

During troubled times, the ship's anchor can be lowered in order to provide stability. In an online course, if a student shows signs of having lost direction—experiencing either course or life stressors—faculty can use this heavy cable to assist the student in reattaching, or rediscovering, it.

Summary

This chapter detailed a grounded theory analysis to determine online faculty patterns and perceptions of online social presence. A substantive theory that humanizing was the central climate factor to establish social presence was presented. Humanizing the course consisted of faculty bringing in human elements to help a student regulate interaction in the online environment, and then use those connections to maintain involvement throughout the course. The theme of humanizing was validated in each conceptual and theoretical category. The grounded theory analysis also supported the development of three faculty

perceptions and three faculty patterns concerning establishing and maintaining online social presence. Finally, an anchor metaphor presented the relationship of the theoretical concepts of social presence establishment and maintenance to the core climate factor humanizing.

CHAPTER 6

DISCUSSION, IMPLICATIONS, AND RECOMMENDATIONS

Introduction

One specific aim of the current study was to create a substantive theory regarding nursing faculty's patterns and perceptions related to the creation and maintenance of online social presence. Specifically, the current study used grounded theory methodology in the exploration of climate factors: the area of overlap within the CoI model associated with teaching and social presence. Grounded theory methodology includes the use of theoretical sampling and constant comparison method, which allowed this researcher to better understand the social processes of the online course. In the current study, ten nurse educators with a diverse background in nursing education were interviewed. In addition, elements of social presence were examined within their course syllabi and a visualization of their online course. Glaser (1978) stated that grounded theories must have fit and relevance to the subject matter studied. This final chapter discusses the interpretations of the current study and their fit with the literature and CoI model, their implications to nursing education practice, and the limitations of the current study.

Interpretation of Results

Community of Inquiry Model

Garrison, Anderson, and Archer (2000) developed the CoI model to explain the educational interactions of students and instructors in the online environment. The model is made up of three overlapping types of presence: cognitive presence, social presence, and teaching presence. The model authors described the area of the model within the overlap of faculty and social presence as climate factors. In a 2007 update, Garrison, a

CoI model author, acknowledged an insufficient understanding of climate factors.

Between each interview of the current study, a comparative analysis was performed in order to sift through data, ultimately leading to the formation of categories about the data. It was discovered that each category has an apparent recurrent theme: faculty construct a climate that includes ways in which each student feels a connection to the human elements of the course. In short, faculty's goal is to humanize the online course environment. The substantive theory derived from data of the current study represents an early understanding of one core climate factor: humanizing. Findings also include subsequent faculty patterns and perceptions employed in establishing social presence in the online course.

The theory that the foundation of the course climate is to humanize remains within the parameters of what the original authors of the model considered possible. Garrison and Cleveland-Innes (2005) explained that faculty must create an environment and climate where students can exchange information in a deep and meaningful fashion. The authors also observed "social interaction is necessary to establish relationships and to create a secure climate that will provide the foundation for a deep and meaningful educational experience" (Garrison & Cleveland-Innes, 2005, p. 141). Garrison et al. (2000, p. 89) described students and instructors developing into a "real person" as a primary feature in establishing social presence within the model, claiming that as students expressed their personal characteristics within a course they were established as a "real person". The authors also noted that becoming a "real person" was integral in supporting cognitive presence in an online course.

Review of Literature in Relation to the Findings

Substantive Theory: Humanizing

To discover that humanizing was found firmly embedded in the data of the current study, yet had not been well documented in the first review of literature, was unexpected. This author relates this absence to the indirect link between the CoI model and research regarding humanization in the online classroom. Humanization literature has a wide breadth of anecdotal and expert recommendations about personalizing an online environment. There are also studies regarding how to assist students in experiencing human connections within an online course. None of them however, identified humanization as a core quality of an online course.

In the first review of literature, themes were reviewed that related to online students having human contact, a surrounding community, and feeling validated as individuals within a course. Motteram and Forrester (2005) found, in their qualitative study of first-time master's level online students, that online students expressed a need for human connection. This expressed need for human connections was not found in their equivalent group of face-to-face students. The authors suggested that instructors design a virtual community within a course. Palloff and Pratt (2007), in their book about building online communities, also suggest a need for human contact to prevent student isolation. The authors suggested that course introductions and instructor immediacy behaviors be utilized to validate students as authentic people in the online environment.

Tagg and Dickinson (1995) examined humanization via instructor behavior within an online course. The authors assessed qualitative and quantitative measures of student activity and tutor messaging in order to assess student motivation for posting in an online

course. The sample consisted of two groups of 12-15 undergraduate students taking an introduction to occupational psychology course. The authors noted that students demonstrated increased motivation to participate in online discussions if their online tutor personally acknowledged the student and used social and affective cues within their posts. Soong et al. (2000) surveyed students and faculty about the factors of an online course that could increase success in the online environment. The authors evaluated human factors used by faculty, defined as instructor time and efforts as well as instructor motivation skills. From the data, the human factors of instructor time and effort were found to be motivating for students within the online community.

A search of humanizing in education literature yielded a listing of citations from the present day to the 1970's. A 1971 reference by Curtis supported transforming the educational system of the United States to embrace the "humanizing educator", emphasizing teaching methods that create connection and do not depersonalize the student or the learning environment. Curtis felt that a student's human experience was central to shaping and enriching student learning, and those educators should lead students in making their own realizations about content. In the current study, these same themes were also discovered to be essential for faculty in creating social presence in the online classroom.

Muirhead (2009) qualitatively studied interactivity within an online course. The author defined interactivity as human dimension of course activity, including communication, participation, and feedback. Muirhead surveyed graduate students who had taken at least one online course. The author reported a 97.8% resurvey response rate with 91 returned surveys. Results indicated that students reported human interaction

having a positive effect on their online experience. The author described those elements of the online course that contained positive human interaction as group projects and discussion, personal emails, and attentive responses to student needs. Students also described personal introductions at the beginning of the course as helpful in building a reference point for personal and professional relationships. A parallel can be drawn between the findings of the current study and the findings of Muirhead's study. The current study's participants also described humanization of the course through faculty responsiveness to students and by providing group interaction and projects.

Mackie & Gutierrez (2004) studied the effects of posting student pictures appearing with their names on each of their discussion board, chat room, and instant message postings. An overwhelming majority of students felt they knew the other online course students better by having seen their pictures on a regular basis within these forums. Although only one faculty in the current study spoke to having a student post pictures, as a whole faculty did create active student introductions in the beginning of the course. Participant 8 described the introduction process as "vital" to creating an online community.

Weiss (2000) acknowledged the importance of humanizing the online classroom. The article provided best practice guidelines, and, in particular, the author mentioned ways for an educator to humanize their online classrooms. These suggestions correspond to the way in which faculty humanized their courses in the current study. Weiss suggested that faculty and students create biographies as a way of providing opportunities for students to see similarities among class members. The faculty in the current study often took this one step further by actively introducing students or grouping students with

like interests. Weiss also suggested creating a virtual breakroom where students could correspond outside the classroom. Every faculty participant in the current study did this as well. The author proposed that faculty model appropriate interaction. Faculty in the current study also felt this to be an important aspect of their role as course facilitator, and, taking it a step further, also provided students with guidance regarding their interactions and rubrics in order to facilitate student discussions into deeper, more meaningful course dialogue.

DuCharme-Hansen and Dupin-Bryant (2005) also provided guidelines for the educators to adapt courses to meet the needs of the online learner. The authors made mention of course humanization and described people as the central factor of creating an online environment. They advised instructors to include course components such as building a community, making expectations clear, facilitating communication among students, and, most importantly, humanizing the course experience. They defined course humanizing as “A learning environment that will give the learner a sense of self, give everyone an accurate sense of others in the group and exemplify feelings of genuine caring on the part of the professor” (p. 36). Although the authors did not note that humanizing the online classroom experience encompasses all of these components, their statements regarding the importance of the human factor remaining central to the course supports the substantive theory of the current study.

Theoretical Concepts

The substantive theory of the current study also identifies theoretical concepts that describe faculty patterns and perceptions in the creation and maintenance of social presence, including meaningful socialization, facilitate connections, student control,

cyber role model, maintain, awareness, and lifelines. These theoretical concepts are additionally captured by themes in the literature.

Perceptions. The theme of meaningful socialization, or faculty's belief that social presence is part of the process for professional growth, correlates with the research review of the CoI model by Garrison and Arbaugh (2007). The authors asserted that, for group cohesion to occur, students must have the same educational goals. In the current study, participants described their students as having a shared professional membership. Explaining the mutuality of close ties to nursing course content.

The literature also describes the theme of facilitating connections. Facilitating connections was associated with the way in which faculty assisted students in forging relationships. Cheung et al. (2008) discovered that student relationships were an important motivator in participation of course discussion. In a case study of 15 teachers seeking a special education certificate online, the authors discovered that the online students felt motivated to interact on the discussion board based on their relationship with that particular peer. The authors suggested that faculty deliberately create a course strategy that assists students in developing better relationships. Lock (2002) discussed ways in which faculty can best assist students in forming relationships. Just as participants in the current study describe, Lock emphasized that assigning group and collaborative projects provided students with the best opportunity for forging relationships.

Additionally, Wang, Sierra, and Folger (2003) verified the importance of faculty facilitating student connections and providing students with meaningful socialization. The authors studied 21 graduate education students in an online instructional course. The

study's data included transcripts from two chat sessions and a survey of student perceptions of faculty facilitation. Wang et al. found evidence that student participation increased as faculty facilitated greater community presence. Faculty structured the online community by engaging students in active participation, helping them find a shared identity, and in establishing a social network. In the current study, faculty participants also recognized the value in facilitating student connections and using nursing as a common interest through which students could bond. This was done purposefully by designing discussions, pairing students with like interests, or by randomly assigning students to complete group work.

The theme student control is also supported in the literature. Chapman et al. (2005) studied six discussions from two different courses for indicators of learning and community. The authors discovered that those students who expressed a feeling of community ownership also had strong indicators of learning within the postings. Students within the stronger community also created greater new ideas and challenged each other to develop new insights into learning. The participants from the current study also described the process of students using self-regulation among groups and discussions. The faculty expressed that student control was significant for an online course because the students were empowered to take control of their own learning.

Patterns. In the current study, participants describe the instructor as serving as a cyber role model in order to help students adjust to the online environment. Murphy, Mahoney, Chen, Mendoza-Diaz, and Yang (2005) described the importance of online instructors in providing a pattern or framework for students to learn how to be effective online participants in learning. The authors studied one graduate online seminar course

consisting of 21 graduate students. The message characteristics of online discussion board postings were evaluated for characteristics of mentoring, coaching, and facilitation. The authors found that students needed to be coached on how to optimize online learning through online interaction. This was done in part by modeling for students how to best interact in order to optimize online learning. This process of mentoring students through the online course is similar to the process of cyber role modeling.

Muirhead's (1999) qualitative study of graduate student interactivity within online courses also supports the theme of cyber role model. The study's findings included that students looked to faculty to understand what is expected of their participation. Muirhead discovered that students need a process of mentoring and facilitation throughout the online course. Faculty from the current study described their understanding that students do not always come to the online environment with the full understanding of what to expect, how to interact, or how best to learn. This led the current study's faculty to develop ways to role model teaching and learning principles in the online classroom.

Maintain, another theoretical concept in the current study, is also well supported in the literature. Maintain relates to the way in which faculty engage in the course to reduce student frustration and keep students involved. Baker (2004) surveyed 145 graduate students from various academic backgrounds about their experiences with instructor immediacy. Baker associated approaches of faculty immediacy in an online classroom to be equivalent to those of verbal interaction in a face-to-face classroom. Soong et al. (2000) also noted those faculty who displayed greater instructor immediacy behaviors had a significant impact on their students' perceptions of learning. The authors reported that instructor involvement in the course was linked to students experiencing

greater course satisfaction. In the current study, faculty expressed that students needed to feel that their learning needs were being cared for within the course. Faculty demonstrated caring for the course through immediacy behaviors such as logging in daily, reading and responding to the discussion board, and answering student email.

The next theme reflected in the literature was faculty awareness. In the current study, faculty's assessment of student relationships, course mood, and student stress was characterized as awareness, and was described as vigilant for signs of student problems within the course. Yukselturk and Inan (2006) researched factors affecting student attrition online. Implementing both qualitative and quantitative methods, the authors studied the factors that led to online student attrition. Ninety-eight students who dropped out of undergraduate online course were surveyed, and 26 students responded. The authors listed the reasons for student attrition as insufficient time, financial stress, personal issues, and loss of motivation.

Bambara, Harbour, and Davies (2009) completed a qualitative study of student experiences in courses that historically reported high student attrition. Thirteen community college students participated in interviews. The authors described the online student as experiencing isolation, loss of motivation, and unforeseen academic challenges while in the course. The authors recommended that faculty assess their students for signs of frustration early on in the course and in an ongoing practice. The faculty in this current study expressed concerns about finding and eliminating student stress. One participant summarized her method for assessing for student issues as "I have my antennae up for student problems".

Lifelines. The theoretical concept of a course having lifelines was also validated by many of the same studies discussed above. Lifelines related to faculty's response to course stressors either as the stressor occurred or through preemptive tools built into the course. Each study described student stressors and situations leading to isolation of the student, and made recommendations for policies and procedures offering support programs to students (Mykota & Duncan, 2007; Yukselturk & Inan, 2006; Bambara et al., 2009). Mykota and Duncan studied students enrolled in an online special education course seeking a post-graduate certificate. The authors distributed a survey that measured perceptions of online social presence within the course to 73 students. The authors found that students suffered from low course self-efficacy if they had little or no computer experience prior to beginning an online course. Mykota and Duncan suggested that faculty anticipate stressors such as computer experience and time management, and encouraged tutorials and help desk contact information to be put in place. Yukselturk and Inan suggested that faculty provide detailed course orientations and also remain active within the course, offering assistance as needed. All faculty in the current study provided an orientation to the course; in addition, some faculty added technology and resource orientations. Faculty also reported reaching out to students experiencing stressors in an attempt to assist students with issues.

Best Practices

In *Teaching in Nursing: A Guide for Faculty*, authors Halstead and Billings (2009) described instructional strategies for the online nurse educator. Many of the authors' descriptions resonated with the findings of this study although using humanization was not directly described. The authors suggested that students in the

online classrooms have similar support service as the face-to-face student complement. They also suggest faculty provide additional resources to acclimate students to both the course and the technology, similarly addressing the need for lifelines.

Halstead and Billings suggested faculty encourage student collaboration on projects and promote student discussions. These practices were significant to this study's theoretical concept facilitating connections. In the concept facilitating connections, the participants of the current study promoted group work as a way to connect students. Halstead and Billings assert that students need assistance in integrating their learning in the online environment. It was suggested that nurse educators be active and diligent to the progress of an online course, and also "establish a collegial learning environment" (p. 379). This also supported the theoretical concepts maintain and cyber role model. The faculty in the current study also expressed the necessity to be actively involved in a course, and that faculty also role modeled behaviors needed for success in the online environment.

Implications for Nursing Education

Numerous books and articles provide online instructors with best practices in the creation of an online classroom. Many research studies have focused on faculty behaviors that impact student satisfaction and prevent attrition. Yet, prior to the current study, little research exists that categorizes the character of an online climate. The current study reveals that humanizing is fundamental to creating an online course climate, and identifies faculty perceptions and actions when establishing social presence in an online course. The current study also validates many of the best practices in online education, and contributes to the understanding of overlap between teaching and social presence of

the CoI model. The theory of humanizing has implications regarding the current practice of online education.

In an era of nursing shortages, one goal should be to increase the rolls of quality nurses graduating from programs of higher education. Therefore, it is important to prevent student attrition and assist students who are struggling to be successful. As described in the first chapters of this work, studies indicate that student attrition is greater in online courses than in face-to-face courses. Studies also support that students who feel connected to a course and its faculty member are less likely to withdraw (Baker, 2004; Arbaugh, 2001; Garrison & Cleveland-Innes, 2005). The theory of humanizing proposed by the current study could serve as a template to enhance human connections within online courses. The theoretical concepts could be implemented to assess and increase social presence in courses. In the current study, three participants validated that student satisfaction increased when measures were instituted to increase social presence in the course. Faculty stated that, once measures supporting social presence were put into place, course satisfaction was more positively reflected in faculty and course evaluations.

The model developed from this study combines the core climate factors of humanizing with the actions and considerations that faculty take to create social presence in an online classroom. The model's anchor shape symbolizes the attachment that social presence creates for students in an online course. The core shaft of the anchor represents the climate factor humanizing. Humanizing is the pervasive action of faculty in creating an online climate where social presence is made possible. The other parts of the model, represented by the anchor's arms and chain, are the faculty perceptions and patterns involved in the formation of social presence in the online course. This core climate factor

suggests that online nursing courses, in addition to ensuring rigor, need to infuse opportunities for students to feel validated as a real person. The faculty in the current study imparted humanization in the course structure, course syllabus, daily interactions, and behind-the-scenes actions. The constructs of the model can also help online faculty better understand their role in the complex process of establishing and maintaining online social presence.

Identifying humanizing as the core climate variable in online course instruction clarifies the intention of faculty in creating an online climate. The CoI model illustrates that all parts of the model are equal and interconnected; if one area is weak, all other areas are affected. By identifying the core variable of humanizing and its supporting theoretical concepts, faculty will experience a better representation of the climate within the CoI model and be able to explore ways that broaden the impact of humanizing within the course.

Integration of the theoretical concepts described in the current study brings both faculty and students closer to a more complete feeling of social presence. The current study may also aid in the use of social presence as a direct influence on students constructing their professional roles. Establishing social presence and becoming fully actualized as a person in a course were often accomplished by the faculty via encouraging an exchange of professional experiences and opinions. Nurse educators should be aware of this integration of social and professional ties.

Limitations of this Study

The theory of humanizing in this current study is a preliminary understanding of online social presence and course climate. Study samples were diverse in faculty

experience, region of the country, and types of courses taught. However, the current study does need to be broadened to include all levels of nursing education. Although the humanizing theory is supported by literature across disciplines, the narrow focus of the current study needs to be expanded to ensure the fit of the theory with other online disciplines (Glaser, 1978). Follow-up studies need to be undertaken to examine the theory and assess the effectiveness of its application outside nursing education. Additional constant comparative analysis will support the fit of the theory and indicate whether the current study can be generalized to include other disciplines.

The current study is also limited in that it takes into account only faculty perceptions of their own course. Student perceptions of course climate were not addressed by this researcher. Without that correlation, it is difficult to know whether students feel the impact of faculty actions. There is the potential that faculty efforts to establish social presence may not translate to students.

A third limitation of the current study is that its author is already immersed in the online learning culture. Despite never having taught an online course, the author is, in fact, a direct consumer of online education as a student herself. During the data collection and analysis of the current study, the author had to be cognizant of personal bias—having been exposed to courses with high degree of social presence as well as the absence of it. Memos regarding the data assisted this researcher in staying true to the meaning of the data from the perspective of the participants. The ability to listen to the participant at any point during an interview also provided this researcher with better understanding of context and tone of statements. This activity helped limit the bias of this researcher in drawing wrong conclusions from the meaning of the data. This researcher also attempted

to safeguard against bias by implementing peer debriefings sessions with the committee chair and methodology expert. In these sessions, the data was reviewed and ideas about the meaning of that data were clarified. The sessions were also helpful in clarifying where more data were needed to better understand a theme; second interviews and participant feedback were other invaluable tools used to clarify emerging concepts.

Recommendations for Future Research

Humanizing the members of a course emerged from the data as the clearest way to understand course climate in the overlap of social and faculty presence within the CoI model. However, further studies are necessary to validate the findings of this grounded theory study in order to better characterize the humanized climate across disciplines.

One area of research would be to compare faculty and student perceptions about the course climate. More information is needed to validate whether the student perceives faculty actions as humanizing, and the ways in which students perceive the theoretical concepts of the current study. Capturing student perceptions would validate the degree of penetration of faculty efforts. It is also necessary to extend this study to all levels of online nursing education as well as to faculty outside the discipline of nursing. The types and amount of humanizing traits then identified should also be compared among ranks of nursing education in order to identify whether one environment is more conducive to humanizing.

Further research is also needed to establish whether a difference exists in faculty job satisfaction and the way in which faculty humanizes an online environment. Future research could determine the extent to which job satisfaction impacts the online course climate.

Summary

The goal of this grounded theory research was to understand how faculty felt and acted toward their role in creating online social presence. In the CoI model, the section climate factors is the scaffold of social presence that faculty create. To gain understanding, data collection focused on online nursing faculty interviews, course tours, and evaluation of course syllabi. A substantive theory of course humanizing was then developed from the data. “Humanizing” was the understanding that faculty construct a climate that includes ways in which each student can be made to feel a connection to the human elements of the course.

The theory of humanizing addressed the ways in which faculty created and maintained social presence in an online course. From the data, three patterns and three perceptions emerged that supported the core theme of humanizing. Faculty patterns included cyber role modeling, maintaining the course, and awareness of course stressors. The perceptions of faculty included students belonging to a shared professional membership, facilitating student connections, and students needing course control. These patterns and perceptions provided an understanding of the process of creating social presence, but a remaining combined pattern and perception also emerged. Lifelines was the theoretical concept that explained the process of keeping a student connected to the course despite internal course and external life stressors.

The current study was able to contribute to a better understanding of the climate factors presented in the CoI model. This understanding could ultimately lead to a greater sense of community within the online course.

APPENDIX A

APPROVAL FOR NLN SUMMIT RECRUITMENT

REPLY: Research study at the Summit

Cindy Rogers [crogers@NLN.ORG] on behalf of NLN Summit [nlm-summit@NLN.ORG]

To help protect your privacy, some content in this message has been blurred. If you are sure that this message is from a trusted sender and you want to re-enable the blocked features, click here.

Sent: Tuesday, April 14, 2009 2:14 PM

To: Rebecca A. Cox-Davenport

Cc: Mike Kristek [rkristek@NLN.ORG]; Lynette Hinds [lhinds@NLN.ORG]

Dear Becky,

The NLN will have a bulletin board located near the registration area for posting information. The bulletin board is the appropriate way to make your information available to Summit attendees.

You also might want to apply for the graduate student discounted Summit registration rate.

I "cc'd" Lynette Hinds, Manager, Professional Development, so that she can forward the appropriate information and forms to you.

Thank you for your continued interest in the NLN, see you in Philadelphia!

Cindy Rogers | Manager, Operations | National League for Nursing | www.nln.org
crogers@NLN.ORG | Phone: 212-812-0302 | Fax: 212-812-0393 | 61 Broadway | New York, NY 10006

From: Rebecca A. Cox-Davenport [mailto:rcoxdavenport@lander.edu]

Sent: Tuesday, April 14, 2009 11:51 AM

To: NLN Summit; NLN Research

Subject: Research study at the summit

To Whom It May Concern:

I am a PhD student at University of Nevada Las Vegas, School of Nursing. For my dissertation I am implementing a qualitative study of nurse educators who teach online. I was hoping to recruit from the community bulletin board at the Philadelphia summit. I did not know if I needed any special permission to post an advertisement for my research. I will have IRB approval from UNLV prior to any recruitment. The research would involve an interview. I would register for the conference as well.

Thanks you for your time on this matter. If I would need to talk to anyone specifically please let me know.

Sincerely,
Becky Cox-Davenport, RN, MSN, BC

Connected to Microsoft Exchange

REPLY: Research study at the Summit - Outlook Web Access Light

<https://exchange.lander.edu/owa/?ae=Item&t=IPM.Note&id=...>

1 of 1 5/8/09 9:09 AM

APPENDIX B

RECRUITMENT BULLETIN BOARD POSTING

Needed: Nurse Educators Teaching Online Master's in Nursing Courses

Online Educators needed for a qualitative study interview about social presence in an online course. This study seeks to understand how you setup, support and maintain social presence in an online course.

Interview should take approximately 1 hour over a cup of coffee at the conference or over the phone when you get home.

Please contact: Rebecca Cox-Davenport, RN, MSN at ***-***-**** or (email address) if you are interested.

APPENDIX C

IRB APPROVAL NOTICE



Biomedical IRB – Expedited Review Approval Notice

NOTICE TO ALL RESEARCHERS:

Please be aware that a protocol violation (e.g., failure to submit a modification for any change) of an IRB approved protocol may result in mandatory remedial education, additional audits, re-consenting subjects, researcher probation suspension of any research protocol at issue, suspension of additional existing research protocols, invalidation of all research conducted under the research protocol at issue, and further appropriate consequences as determined by the IRB and the Institutional Officer.

DATE: August 7, 2009
TO: **Dr. Lori Candela**, Nursing
FROM: Office for the Protection of Research Subjects
RE: Notification of IRB Action by Dr. Charles Rasmussen, Co-Chair
Protocol Title: **A Grounded Theory Approach to Faculty's Perspective and Patterns of Online Social Presence**
Protocol #: 0906-3133

This memorandum is notification that the project referenced above has been reviewed by the UNLV Biomedical Institutional Review Board (IRB) as indicated in regulatory statutes 45 CFR 46. The protocol has been reviewed and approved.

The protocol is approved for a period of one year from the date of IRB approval. The expiration date of this protocol is August 6, 2010. Work on the project may begin as soon as you receive written notification from the Office for the Protection of Research Subjects (OPRS).

PLEASE NOTE:

Attached to this approval notice is the **official Informed Consent/Assent (IC/IA) Form** for this study. The IC/IA contains an official approval stamp. Only copies of this official IC/IA form may be used when obtaining consent. Please keep the original for your records.

Should there be *any* change to the protocol, it will be necessary to submit a **Modification Form** through OPRS. No changes may be made to the existing protocol until modifications have been approved by the IRB.

Should the use of human subjects described in this protocol continue beyond August 6, 2010 it would be necessary to submit a **Continuing Review Request Form** 60 days before the expiration date.

If you have questions or require any assistance, please contact the Office for the Protection of Research Subjects at OPRSHumanSubjects@unlv.edu or call 895-2794.

Office for the Protection of Research Subjects
4505 Maryland Parkway • Box 451047 • Las Vegas, Nevada 89154-1047
(702) 895-2794 • FAX: (702) 895-0805

APPENDIX D
INFORMED CONSENT

RECEIVED
JUL 27 2009



INFORMED CONSENT
School of Nursing

TITLE OF STUDY: A Grounded Theory Approach to Faculty's Perspective and Patterns of Online Social Presence
INVESTIGATOR(S): Lori Candela, RN, EdD and Rebecca Cox-Davenport, RN, MSN, BC
CONTACT PHONE NUMBER: Lori Candela: 702-895-2443

Purpose of the Study

You are invited to participate in a research study. The purpose of this study is to generate a grounded theory concerning master's level nursing faculty's perception and practice related to online course social presence. It is the specific goal of this researcher to understand the patterns of online nursing faculty as they establish online social presence.

Participants

You are being asked to participate in the study because you are a nurse educator who teaches online masters in nursing course(s). Participating nurse educators must be masters prepared and teach for an NLNAC or CCNE accredited institution.

Procedures

If you volunteer to participate in this study, you will be asked to do the following: participate in an audio taped interview, escort the researcher to visualize your online classroom, and submit a copy of your course syllabus to the researcher. After the interview, the researcher will provide a transcript to each participant to ensure correct transcription and interpretation of the interview.

Benefits of Participation

There may not be direct benefits to you as a participant in this study. However, we hope to have a better understanding of the way educators establish and maintain social presence in the online course. The hope is to impact nursing education by establishing best practices for online nursing education.

Risks of Participation

There are risks involved in all research studies. This study may include only minimal risks. You may risk becoming uncomfortable when answering some questions. This study is completely voluntary. If, at any time during the study you feel you would like to stop the process, you may do so. There are no consequences for ending the research study for any reason.

Cost /Compensation

There will not be financial cost to you to participate in this study. The interview and course tour may take up to 1.5 hours of your time. You will not be compensated for your time.

Contact Information

If you have any questions or concerns about the study, you may contact Lori Candela at 702-895-2443. For questions regarding the rights of research subjects, any complaints or comments regarding the manner in which the study is being conducted you may contact the UNLV Office for the Protection of Research Subjects at 702-895-2794.

Voluntary Participation

Your participation in this study is voluntary. You may refuse to participate in this study or in any part of this study. You may withdraw at any time without prejudice to your relations with the university. You are encouraged to ask questions about this study at the beginning or any time during the research study.

Confidentiality

All information gathered in this study will be kept completely confidential. No reference will be made in written or oral materials that could link you to this study. All records will be stored in a locked facility at UNLV for three years after completion of the study. After the storage time, the information gathered will be destroyed.

Participant Consent

I have read the above information. Confirmation of my consent to participate in this study and to be audio taped will be obtained orally at the beginning of the audio taping session. I am at least 18 years of age. A copy of this form has been given to me.

Participant Note: Please do not participate in this study if the Approval Stamp is missing or is expired.

APPENDIX E

TRANSCRIBER CONFIDENTIALITY AGREEMENT

UNIVERSITY OF NEVADA LAS VEGAS

Transcriber's Confidentiality Agreement

TITLE OF STUDY: A Grounded Theory Approach to Faculty's Perspective and Patterns of Online Social Presence

PRINCIPAL INVESTIGATOR: Dr. Lori Candela, RN, EdD School of Nursing

CONTACT PHONE NUMBER: 702-895-2443

As a transcribing typist of this research study, I understand that I will be hearing tapes of *confidential interviews*. The information on these tapes has been revealed by research participants who participated in this project on good faith that their interviews would remain strictly confidential. I understand that I have a responsibility to honor this confidentially agreement.

I hereby agree not to share any information on these tapes with anyone except the principal investigator of this project. Any violation of this agreement would constitute a serious breach of ethical standards, and I pledge not to do so.

This acknowledgement is governed by HIPAA as well as other applicable federal, state, university and local laws, rules and regulations.

Debra J. Madden
Signature of Transcribing Typist

9/3/09
Date

Debra J. Madden
Printed Name of Transcribing Typist

APPENDIX F

SEMI-STRUCTURED INTERVIEW QUESTIONS

Describe your interaction with your students.

Describe how students interact within your course.

What does social presence in your online course mean to you?

How is the social climate developed in your course?

What are the most important components as you set the climate for the online environment?

How is this valuable?

How do you maintain the environment?

How is this valuable?

Follow-up Interview Questions

Humanizing: How do you compare the effort of the online classroom to the face-to-face classroom?

Do you feel there are personal Barriers from going from teaching classroom to online?

How important is making a student feel like a “human being” within the course?

How did does that happen/work for you?

Cyber Role Model: How do you role model in a flat environment?

Is it a different form of role modeling than the face-to-face classroom?

How do you use senses over the internet? Clue them in that the student is falling away?

Awareness: How do you feel you know your students?

An downsides to knowing them online?

Facilitate Connections: Describe what community looks like. Why is community important?

Lifelines: What stressors for students are most commonly encountered?

What parts of the design help students stay connected to the course?

APPENDIX G
SAMPLE OF GRID

Code	Thoughts	Quotes	Pattern or Perception
<p>Design: Lavender</p>	<p>Introductory exercises- 1,2,3,4,5,6,7,8,9,10 Students need "Space" - gathering space outside of course discussion area 1,2,3,5,8,9 Intro: professional level of intro Welcome Letter (1,2,3,4,5,6,8,10) Course Issues area (1,2,3,4,5,6,7,8,9,10) Set ground rules for expectations 1,2,3,4,6,8,9,10 Area to ask questions, network Students help each other work out things A place to support each other (3)</p>	<p>3- "I respond individually just so they have a connection with me" 2- "get to know you better" 3- develop social connection 8- I include some kind of information on how to form a group, what the group roles are, that kind of thing, how to establish a working group as opposed to one that is dysfunctional 5- the idea is that it's largely for students to interact with each other.....as they would in a student lounge if they were in a bricks and mortar situation 10- That first week has to be a lot of accountability so that they know this is serious and this is what is expected 3- keep announcements positive 2- groups self regulate? "they do actually" 1- to evaluate how their group went 9-, I like to create an environment that is easy to use and that's friendly</p>	<p>Pattern: Maintain -Given areas for social interaction -Faculty build into the course ways for reduction of anxiety</p> <p>Humanizing -Faculty show an awareness that there is a human element to the course. -Faculty sense that students need to sense of openness to ideas and dialogue</p> <p>Perception: Lifelines There need to be lifelines for students to connect to such as one on one contact in phone calls and emails</p> <p>Pattern Cyber Role Model -Faculty give students expectations about how the course will progress -Faculty make students aware of their learning roles</p> <p>Perception: Student Control -Students need to feel empowered to learn</p> <p>Pattern: Maintain Faculty build into the course ways for reduction of anxiety</p>

<p>Responding Individual Needs</p>	<p>Synchronous touches- needed at times to reduce stressors Graded and un-graded responses Presence-Role model behavior that is expected by students (1,2,3,4,6,7,8,9) Symbolism with pictures 9 Decrease frustration- based on needs Barrier: Frustration? 1,2,4,5,6,7,8 Calm students: connect Immediate feedback- students feel engaged, 8 Connected Control- keep threads organized easier to engage 5</p>	<p>trying to set a tone and for the others to role model as well. Accepting people's comments and so on, and being supportive of them, but also trying to give another perspective in order to get intellectual curiosity going.</p>	<p>Pattern: Role Model -Faculty make students aware of their learning roles -Faculty will role model learning behaviors through course feedback, graded posts and unit discussions.</p>
<p>Educator to student Course wide Individual based on needs</p>	<p>2- "I learned that somebody cared." 2- Can't see the students, need to feel someone cares..... 4- a connectivity, not just to the course and its modules and its icons, but the connectivity is sensed and felt by the student to the faculty. 5- frustration will come through how they engage in the course 9- promoting an environment that says you are respected, and your views are appropriate, although they may be challenged, that you feel the freedom to do that, and I think that promotes a sense of presence</p>	<p>3- I am present everyday 4- faculty member is physically there via the touch of their fingertips on a regular basis 8- I think psychologically if you don't reply, if I were a student I would think the teacher was not paying any attention. I think it's important to respond. 8-. In the beginning it is more intensive in responding to almost every entry they make, and then as they mature in the course, so to speak, the entries that really need response related to the content of the course.</p>	<p>Humanizing: -Faculty show responsiveness to student activity -Faculty create an environment open to ideas and dialogue Pattern: Maintain -Faculty are diligent to course activity -Faculty act to keep the course running smoothly - Have oversight of posts and communication Pattern: Awareness -Faculty assess tone of course -Faculty are attuned for behaviors of students</p>
<p>Presence- daily</p>	<p>Diligent and dedicated 1,2,3,4,5,7,8,9,10 Get to know students Show students how to interact through progressing interactions</p>	<p>3- I am present everyday 4- faculty member is physically there via the touch of their fingertips on a regular basis 8- I think psychologically if you don't reply, if I were a student I would think the teacher was not paying any attention. I think it's important to respond. 8-. In the beginning it is more intensive in responding to almost every entry they make, and then as they mature in the course, so to speak, the entries that really need response related to the content of the course.</p>	<p>Pattern: Awareness -Faculty know students at an individual level Pattern: Maintain -Faculty are diligent to course activity Pattern: Cyber Role Model -Faculty role model learning behaviors through course feedback, postings and unit discussions.</p>

APPENDIX H
MEMO EXAMPLE

Memo Comfort

Part 1 → Analysis

Faculty member stated that she wanted students to feel that she is in this \bar{c} them. In this context students don't feel alone

Codes: Humanness, \downarrow ANX, Comfort

Properties: Realness
Human being \bar{c} you

She also spoke of this being comforting to students

Consequences: Comfort
Value closeness

Part 2 → Analysis

When asked about the desire to be human to students she described feeling better \bar{c} knowing there is a human element \rightarrow present through humor, calling student ~~personally~~ by name, Admit when wrong

Codes: Humanness, \downarrow ANX, Richness, Comfort

Properties: \downarrow isolation, Comfort, Touch through action, Humanness

(Some touches: Welcome PPT)

Consequences - \downarrow ANX ("stress")

Part 3 → She states she values students as social beings

Consequence: Facilitate Learning, Happier Course

Properties: Online time \oplus , \downarrow stress, Richness

Codes: Comfort, Realness, \downarrow ANX

Part 4 → Sense interaction like "Physically there" leading to "Connectivity" to course \rightarrow \downarrow ANX (Real to students)

"Comfort" \rightarrow Students feel at ease \rightarrow \downarrow ANX

Properties \rightarrow Student Comforted by contact

Consequences: Comfort

Codes
Realness
+ Anx
Comfort

Part 5 → Described Social Comfort as being able to disclose "School Fun" allows them to feel comfortable enough to share.

↓ Anx
Comfort
Understanding

- intras help
- facilitated by faculty

Proprietes: Students communicate better when comfortable
 Consequences: Students are bonded through coursework

Part 6 → Perceived that students are "Needier" in the beginning. Students are insecure. Their new educ. goals conflict i life. - Under

Human Needs
↓ Anx
Forced?
Comfort
↳ Ed Driver

What is coming out of Data:
 Faculty + student mix i awareness that students are human/social beings + facilitating communication.

- Realness
- Bonded
- Cohesive

Students have lives outside school

- Humanize education
- Connect students

* Educator driven


Part 7 → She spoke of Comfort 1st: In the context that students need each other (forced to interact)
 Consequence of online → students are forced to interact.
 There is inherent anx i this interaction

Caring
Connection
↓ Anx
Support

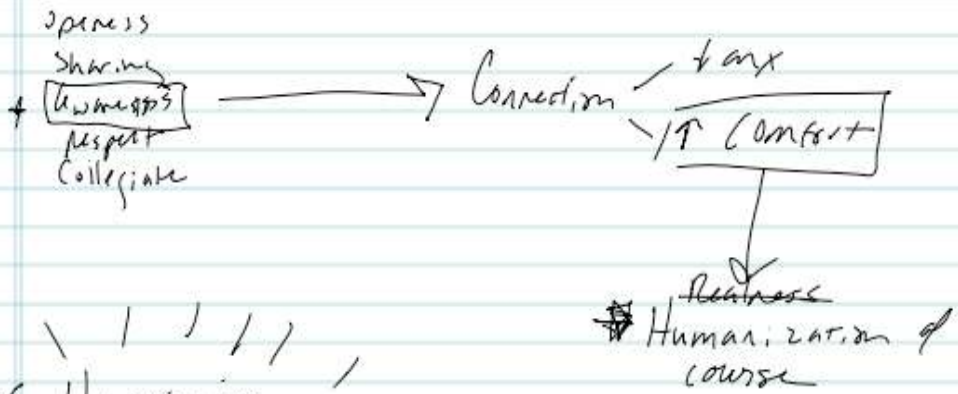
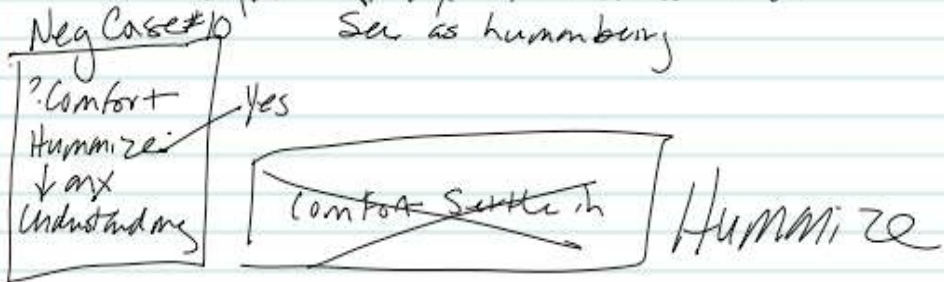
Part 8 → Students need a supportive environment to learn need to come about each other
 Connected students feel Real to each other

* Learner centered *

Consequences - Learning - Proficiency
 Proprietes - Support / Care / Connected

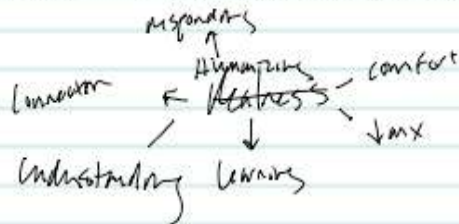
Part 9  - 'Stated -> Students "Come together" in a respectful way. If someone is missing from dialogue they (other students) feel it. Caring community of students - students help each other

Consequence: ↓ anxiety → will contact on own
See as human being



Humanization

Relationship that defines person as more than screen name - Realness (word)



Realness ≠ a word
△ Humanizing

APPENDIX I

SAMPLE OF SYLLABUS GRID

Syllabus Analysis		
#1 Contact: Office hours, phone numbers and email “Official Communication” – email student responsible for all posted emails to university account not just cours Syllabus Analysis e-web. “Attendance Policy”- discussion board Students are to post throughout week, not bunched at the end. Discussion board: rubric for grading discussion board comments.	Connection Guidance of activity Guidance of evaluation	Lifelines Cyber Role Model/Awareness Maintain
#2 Contact information, office hours, phone numbers, email. Instructional strategies: seminar, discussion boards Evaluation: discussion board/participation #3 Not able to submit	Connection Guidance of activity Guidance of evaluation	Lifelines Maintain Maintain
#4 Contact Information, office hours, phone numbers email References “technical support” with names and emails of those people to connect with Participation Policy: students dropped for not participating (3weeks in a row)	Connection Connection Guidance on activity Guidance of activity/ Guidance of evaluation	Lifelines Lifelines Cyber role model/Awareness

BIBLIOGRAPHY

- Allen, I. E., & Seaman, J. (2007). *Online nation: Five years of growth in online learning*. (Babson Survey Research Group). Needham, MA: The Sloan Consortium.
- AllNursingSchools.com (2009). *Online Nursing Education Resource Center*. Retrieved from: <http://www.allnursingschools.com/faqs/online-nursing-degree.php>
- The American Heritage Dictionary of the English Language*, 4th ed. (2000). Boston, MA: Houghton Mifflin Company.
- Arbaugh, J. B. (2001). Instructor immediacy behaviors. *Business Communication Quarterly*, 64(4), 42-54.
- Arbaugh, J. B. (2007). An empirical verification of the community of inquiry framework. *Journal of Asynchronous Learning Networks*, 11(1), 73-85.
- Arhin, A. O., & Cormier, E. (2008). Factors influencing decision-making regarding contraception and pregnancy among nursing students. *Nursing Education Today*, 28, 210-217.
- Backman, K., & Kyngas, H. (1999). Challenges of the grounded theory approach to the novice researcher. *Nursing and Health Science*, 1, 147-153. doi: 10.1046/j.1442-2018.1999.00019.x
- Baker, J. D. (2004). An investigation of relationships among instructor immediacy and affective and cognitive learning in the online classroom. *The Internet and Higher Education*, 7, 1-13. doi: 10.1016/j.iheduc.2003.11.006
- Bambara, C. S., Harbour, C. P., & Davies, T. G. (2009). Delicate engagement: The lived experience of community college students enrolled in high-risk online courses. *Community College Review*, 36(3), 219-238.
- Becker, P. (1993). Common pitfalls in published grounded theory research. *Qualitative Health Research*, 3(2), 254-260.
- Benoiel, J. Q. (1996). Grounded theory and nursing knowledge. *Qualitative Health Research*, 6(3), 406-428.
- Boyer, N. R. (2004). Who's in charge? A system of scaffolds that encourages online learners to take control. Association for Educational Communications and Technology, 27th, Chicago, IL, October 19-23, 2004.
- Burns, N., & Grove, S. (2005). *The practice of nursing research: Conduct, critique, and utilization*. St. Louis, MO: Elsevier Saunders.

- Carr, S. (2000). As distance education comes of age, the challenge is keeping the students. *The Chronicle of Higher Education*, 46(23), A39-A41.
- Chapman, C., Ramondt, L., & Smiley, G. (2005). Strong community, deep learning: Exploring the link. *Innovations in Education and Teaching Interaction*, 42(3), 217-230. doi: 10.1080/01587910500167910
- Charmaz, K. (2006). *Constructing grounded theory*. Thousand Oaks, CA: Sage Publications.
- Cheung, W. S., Hew, K. F., & Ling, C. S. (2008). Toward an understanding of why students contribute in asynchronous online discussions. *Journal of Educational Computing Research*, 38(1), 29-50.
- Cheraghi, M., Salasli, M., & Ahmadi, F. (2008). Factors influencing the clinical preparation of BS nursing student interns in Iran. *International Journal of Nursing Practice*, 14, 26-33. doi: 0.1111/j.1440-172X.2007.00664.x
- Clark, E., & McCann, T. V. (2003). Grounded theory in nursing research: Part 1 - methodology. *Nurse Researcher*, 11(2), 7-18.
- Clay, M., Rowland, S., & Packard, A. (2009). Improving undergraduate online retention through gated advisement and redundant communication. *Journal of College Student Retention*, 10(1), 93-102.
- Collison, G., Elbaum, B., Haavind, S., & Tinker, R. (2000). *Facilitating online learning: effective strategies for moderators*. Madison, WI: Atwood.
- Corbin, J., & Strauss, A. (2008). *Basics of Qualitative Research: Techniques and procedures for developing grounded theory* (3rd ed.). Thousand Oaks, CA: Sage.
- Crooks, D. (2001). The importance of symbolic interaction in grounded theory research on women's health. *Health Care for Women International*, 22, 11-27. doi: 0.1080/073993301300003054
- Curtis, T. E. (1971, February). What is humanizing curriculum. Paper presented at American Association of School Administrators Annual Convention. Atlantic City, New Jersey.
- Dalai Lama XIV & Cutler, H. (2009). *The art of happiness in a troubled world*. New York: Random House.
- Davidson, J., & Jacobs, C. (2008). The implications of qualitative research software for doctoral work. *Qualitative Research Journal*, 8(2), 72-80.

- Dear, I., & Kemp, P. (1987). *The Pocket Oxford Guide to Sailing Terms*. New York, NY: Oxford University Press.
- Dennen, V. P. (2005). From message board postings to learning dialogues: Factors affecting learner participation in asynchronous discussion. *Distance Education*, 26(1), 127-148. doi: 10.1080/01587910500081376
- Dewey, J. (1897). *My pedagogic creed*. New York: The Free Press.
- Dewey, J. (1916). *Democracy and education*. New York: Kellogg & Co.
- DuCharme-Hansen, B. A. & Dupin-Bryant, P. A. (2005) Distance education plans: Course planning for online adult learners. *TechTrends Linking Research and Practice to Improve Learning*, 49(2) 31-39.
- Fielding, N. G., & Lee, R. M. (2002). New patterns in the adoption and use of qualitative software. *Field Methods*, 14(2), 197-217.
- Frydenberg, J. (2007). Persistence in university continuing education online classes. *The International Review of Research in Open and Distance Learning*, 8(3). Retrieved from: <http://www.irrodl.org/index.php/irrodl/article/view/375/934>
- Gallagher, P. (2007). Preconceptions and learning to be a nurse. *Nursing Education Today*, 27(8), 878-884.
- Garrison, D. R. (2007). Online community of inquiry review: Social, cognitive, and teaching presence issues. *Journal of Asynchronous Learning Networks*, 11(1), 61-72.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105.
- Garrison, D. R., & Arbaugh, J. B. (2007). Researching the community of inquiry framework: Reviews, issues and future directions. *Internet and Higher Education*, 10, 157-172. doi: 10.1016/j.iheduc.2007.04.001
- Garrison, R., Arbaugh, B., Cleveland-Innes, M., Diaz, S., Ice, P., Richardson, J., Shea, P., & Swan, K. (2008). Community of inquiry framework: Instrument development, validation and application. Paper presented at the CNIE Conference 2008, Banff, Alberta .
- Garrison, D. R., & Cleveland-Innes, M. (2004). Critical factors in student satisfaction and success: Facilitating student role adjustment in online communities of inquiry. In J. Bourne & J. C. Moore, *Elements of quality online education: Into the mainstream*, 5 ed. (pp. 29–38). Needham, MA: The Sloan Consortium.

- Garrison, D. R., & Cleveland-Innes, M. (2005). Facilitating cognitive presence in online learning: Interaction is not enough. *The American Journal of Distance Education*, 19(3), 133-148. doi: 10.1207/s15389286ajde1903_2
- Giddings, L., Campbell, S., & McLaren, P. (2006). Going online to learn health sciences research methods: The student experience. *Australasian Journal of Educational Technology*, 22(2), 251-267.
- Githens, R.P. (2007). Understanding interpersonal interaction in an online professional development. *Human Resource Development Quarterly*, 18(2), 253-274. doi: 10.1002/hrdq.1202
- Glaser, B. (1978). *Theoretical sensitivity*. Mill Valley, CA: The Sociology Press.
- Glaser, B., & Strauss, A. (1967). *The discovery of grounded theory: Strategies for qualitative research*. Piscataway, NJ: Aldine Transaction.
- Gunawardena, C., & Zittle, F. (1997). Social Presence as a predictor of satisfaction within a computer-mediated conferencing environment. *The American Journal of Distance Education*, 11(3), 8-26.
- Halstead, J. A., & Billings, D. M. (2009). Teaching and learning in online communities. In D. M. Billings & J. A. Halstead (Eds.). *Teaching in nursing: A guide for faculty* (pp. 369-385). St. Louis, MO: Saunders Elsevier.
- Hamann, K., Pollock, P., & Wilson, B. (2009). Learning from “listening” to peers in online political science classes. *Journal of Political Science Education*, 5(1), 1-11.
- Han, S. Y., & Hill, J. R. (2007). Collaborate to learn, learn to collaborate: Examining the roles of context, community, and cognition in asynchronous discussion. *Journal of Educational Computing Research*, 36(1), 89-123.
- Harris, P., & Daley, J. (2008). Exploring the contribution of play to social capital in institutional adult learning settings. *Australian Journal of Adult Learning*, 48(1), 51-70.
- Hatcher, T., & Craig, R. (1998) *Humanizing the technological learning experience: The role of support services as socialization in a human resource development distance education program*. Fayetteville, Arkansas: The University of Arkansas.
- Jung, I., Choi, C., Lim, C., & Leem, J. (2002). Effects of different types of interaction on learning achievement, satisfaction and participation in web-based instruction. *Innovations In Education and Teaching International*, 39(2), 153-162. doi: 10.1080/14703290252934603
- Kozulin, A., Gindis, B., Ageyev, V. S., & Miller, S. M. (2003). *Vygotsky's educational theory in cultural context*. New York: Cambridge University Press.

- Lim, J., Kim, M., Chen, S. S., & Ryder, C. E. (2008). An empirical investigation of student achievement and satisfaction in different learning environments. *Journal of Instructional Psychology, 35*(2), 113-119.
- Lin, Y., Lin, G., & Laffey, J. (2008). Building a social and motivational framework for understanding satisfaction in online learning. *Journal of Educational Computing Research, 38*(1), 1-27.
- Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Beverly Hills: Sage.
- LoBiondo-Wood, G., & Haber, J. (2006). *Nursing research: Methods and critical appraisal for evidence-based practice (6th ed)*. St. Louis, MO: Mosby.
- Lock, J. (2002). Laying the groundwork for the development of learning communities with online courses. *The Quarterly Review of Distance Education, 3*(4), 395-408.
- Mackie, B., & Gutierrez, C. (2004). Using pictures as a vehicle to personalize the collaborative learning environment. *Journal of Educational Technology Systems, 33*(3), 189-204.
- Mandernach, B. J., Gonzales, R. M., & Garrett, A. L. (2006). An examination of online instructor presence via threaded discussion participation. *Journal of Online Learning and Teaching, 2*(4), 248-260.
- Maypole, J., & Gray, T. (2001). Student's perceptions of constructivist learning in a community college American history II survey course. *Community College Review, 29*(2), 54-79.
- McCann, T. V., & Clark, E. (2003). Grounded theory in nursing research: Part 3- Application. *Nurse Researcher, 11*(2), 29-39.
- Moll, L. C. (Ed.). (1990). *Vygotsky and education: Instructional implications and applications of socio-historical psychology*. New York: Cambridge University Press.
- Motteram, G., & Forrester, G. (2005). Becoming an online distance learner: What can be learned from students' experience of induction to distance programmes? *Distance Education, 26*(3) 281-298. doi: 10.1080/01587910500291330
- Muirhead, B. (1999). Attitudes toward interactivity in a graduate distance education program: A qualitative analysis. *Dissertation.com*, retrieved from <http://www.dissertation.com/library/1120710a.htm>
- Munhall, P. (2007). *Nursing research: A qualitative perspective*. Sudbury, MA: Jones and Bartlett.

- Murphy, K., Mahoney, S., Chen, C., Mendoza-Diaz, N., & Yang, X. (2005), *A Constructivist Model of Mentoring, Coaching, and Facilitating Online Discussions. Distance Education, 26* (3), 341-366. doi: 10.1080/01587910500291454
- Mykota, D., & Duncan, R. (2007). Learner characteristics as predictors of online social presence. *Canadian Journal of Education, 30*(1), 157-170.
- National League for Nursing, (2004). *Excellence Initiatives*. Retrieved from: http://www.nln.org/excellence/hallmarks_indicators.htm
- National League for Nursing, (2003). *Innovations in Nursing Education: Creating Reform*. Retrieved from: <http://www.nln.org//Research/priorities.htm>
- Onwuegbuzie, A., & Leech, N. (2007). Sampling designs in qualitative research: Making the sampling process more public. *The Qualitative Report, 12*(2), 238-254.
- Palloff, R. M., & Pratt, K. (2007). *Building online learning communities: Effective strategies for the virtual classroom*. San Francisco, CA: Jossey-Bass.
- Palmer, S., Holt, D., & Bray, S. (2008). Does the discussion help? The impact of a formally assessed online discussion on final student results. *British Journal of Educational Technology, 39*(5), 847-858. doi: 10.1111/j.1467-8535.2007.00780.x
- Pandit, N. R. (1996). The Creation of Theory: A Recent Application of the Grounded Theory Method. *The Qualitative Report, 2*(4). Retrieved from: <http://www.nova.edu/ssss/QR/QR2-4/pandit.html>
- Picciano, A. (2002). Beyond student perceptions: Issues of interaction, presence, and performance in an online course. *Journal of Asynchronous Learning Networks, 6*(1), 21-40.
- QSR International Pty Ltd. (2007). Qualitative Research. Retrieved from: <http://www.qsrinternational.com/what-is-qualitative-research.aspx>
- Reed, P., & Runquist, J. (2007). Reformulation of a methodological concept in Grounded Theory. *Nursing Science Quarterly, 20*(2), 118-122.
- Reisetter, M., Lapointe, L., & Korcuska, J. (2007). The impact of altered realities: Implications of online delivery for learners' interactions, expectations and learning skills. *International Journal on E-Learning, 6*(1), 55-80.
- Richards, D., & Tangney, B. (2008). An informal online learning community for student mental health at university: A preliminary investigation. *British Journal of Guidance & Counseling, 36*(1), 81-97. doi: 10.1080/03069880701715671

- Richards, L. (2005). *Handling qualitative data: A practical guide*. Thousand Oaks, CA: Sage.
- Richardson, J. C., & Swan, K. (2003). Examining social presence in online courses in relation to students' perceived learning and satisfaction. *Journal of Asynchronous Learning Environments*, 7(1), 68-88.
- Russell, T. (1999). *The no significant difference phenomenon*. Chapel Hill, NC: Office of Instructional Telecommunications, University of North Carolina.
- Ryan, M. (2009). Making visible the coding process: Using qualitative data software in a post-structural study. *Issues in Educational Research*, 19(2), 142-161.
- Sahin, I. (2007). Predicting student satisfaction in distance education and learning environments. *Turkish Online Journal of Distance Education*, 8(2), 113-119.
- Schreiber, R. S. (2001). The "how to" of grounded theory: Avoiding the pitfalls. In Schreiber, R. S. & Stern, P. N. (Eds.), *Using grounded theory in nursing* (pp.55-83). New York: Springer Publishing Company.
- Shachar, M., & Neumann, Y. (2003). Differences between traditional and distance education academic performances: A meta-analytic approach. *International Review of Research in Open and Distance Learning*, 4(2), 1-20.
- Shea, P. (2006). A study of students' sense of learning community in online environments. *Asynchronous Learning Networks*, 10(1), 35-44.
- Shea, P., Sau Li, C., & Pickett, A. (2006). A study of teaching presence and student sense of learning community in fully online and web-enhanced college courses. *Internet and Higher Education*, 9, 175-190. doi: 10.1016/j.iheduc.2006.06.005
- Shenton, A. K. (2004). Strategies for ensuring trustworthiness in qualitative research projects. *Education for Information*, 22(2), 63-75.
- Soong, M. H., Chan, H. C., Boon, C. C., & Loh, K. F. (2000). Critical success factors for on-line course resources. *Computers & Education*, 36(2), 101-120.
- Snow, D. (2001). Extending and broadening Blumer's conceptualization of symbolic interactionism. *Symbolic Interaction*, 24, 367-377.
- Steinweg, S. B., Davis, M. L., & Thomson, W. S. (2005). A comparison of traditional and online instruction in an introduction to special education course teacher. *Education and Special Education*, 28(1), 62-73.
- Strauss, A. L. (1987). *Qualitative analysis for social scientists*. New York: Cambridge University Press.

- Summers, J., Waigandt, A., & Whittaker, T. (2005). A comparison of student achievement and satisfaction in an online versus a traditional face-to-face class. *Innovative Higher Education, 29*(3), 233-250. doi: 10.1007/s10755-005-1938
- Tagg, A. C., & Dickinson, J. A. (1995). Tutor messaging and its effectiveness in encouraging student participation on computer conferences. *Journal of Distance Education, 10*(2), 33-35. Retrieved from <http://www.jofde.ca/index.php/jde/article/view/238/599>
- Tung, C. K. (2007). Perceptions of Students and Instructors of Online and Web-enhanced Course Effectiveness in Community Colleges. *Dissertation Abstracts International, 68*(11).
- Wang, M., Sierra, C., & Folger, T. (2003). Building a dynamic online learning community among adult learners. *Educational Media International, 40* (1-2), 49-61.
- Weiss, R. E., Knowlton, D. S., & Speck, B. W. (2000). Principles of effective teaching in the online classroom. *New Directions for Teaching and Learning, 84*, 94.
- Whiting, L. S. (2008). Semi-structured interviews: Guidance for novice researchers. *Nursing Standard, 22*(23), 35-40.
- Wickham, M., & Woods, M. (2005). Reflecting on the strategic use of CAQDAS to manage and report on the qualitative research process. *The Qualitative Report, 10*(4), 687-702.
- Wisker, G., Robinson, G., & Shacham, M. (2007). Postgraduate research success: Communities of practice involving cohorts, guardian supervisors and online communities. *Innovations in Education and Teaching International, 44*(3), 301–320. doi: 10.1080/14703290701486720
- Yukselturk, E., & Bulut, S. (2007). Predictors for student success in an online course. *Educational Technology & Society, 10*(2), 71-83.
- Yukselturk, E., & Inan, F. A. (2006). Examining the factors affecting student dropout in an online learning environment. *The Turkish Online Journal of Distance Education, 7*(2), 76-88.
- Zhang, D. (2005). Interactive multimedia-based e-learning: A study of effectiveness. *American Journal of Distance Education, 19*(3), 149-162. doi: 10.1207/s15389286ajde1903_3

VITA

Graduate College
University of Nevada, Las Vegas

Rebecca A. Cox-Davenport

Cox-Davenport_Rebecca_A_20105_PhDDegrees:

Diploma of Nursing, 1996

Lancaster General Hospital, School of Nursing, Lancaster, Pennsylvania

Bachelor of Science in Nursing, 1998

University of Pittsburgh, Pittsburgh, Pennsylvania

Master of Science in Nursing Education, 2005

Waynesburg University, Waynesburg, Pennsylvania

Special Honors and Awards:

Alumni Scholarship, Lancaster General Institute for Health Education, 2007

Induction into Sigma Theta Tau, Eta Chapter Nursing Honor Society, Sigma
Theta Tau. 1998

Graduation Awards: Leadership in Nursing Award and Adult Health Nursing
Award, Lancaster General Hospital School of Nursing, 1996

Dissertation Title: A Grounded Theory Approach to Faculty's Perspective and Patterns of
Online Social Presence

Dissertation Examination Committee:

Chairperson, Lori Candella, Ed.D.

Committee Member, Cheryl Bowles, Ed.D.

Committee Member, Michelle Clark, Ph.D.

Graduate Faculty Representative, Carolee Dodge-Francis, Ed.D.