EXPLORING BUSINESS STUDENTS' COMMUNICATIVE NEEDS: SOCIAL PRESENCE IN EFFECTIVE ONLINE INSTRUCTION

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Abstract

Problem: *The trend of offering business courses online is increasing yearly. Therefore, it is becoming increasingly important for online instructors to understand how to convey a strong social presence to their students.* ***Research Questions:*** *What communicative behaviors do business students perceive make an instructor more socially present? What differences exist among demographic variables in students' perceptions of instructor behaviors related to social presence?* ***Data Collection Procedures:*** *Data were collected by administering a qualitative survey to business students who were asked to identify behaviors that their instructors display in the online classroom that enhanced their perceptions of instructors' social presence. First, thematic analysis was used to identify recurring themes in students' qualitative responses. The themes that emerged were then used as a coding scheme for a content analysis of the data. Logistic regression was utilized to determine if the indicators of social presence differed based on gender and college status.* ***Findings:*** *Findings indicated that females rely more on interactive and cohesive messages than males, and undergraduates prefer computer-mediated instructional immediacy more than graduate students.* ***Conclusions/Recommendations:*** *Online educators should use affective, interactive, and cohesive communication; provide a visual reference of themselves to students; and use computer-mediated immediacy cues.*

Introduction

In the past decade, online enrollment in higher education grew substantially faster than traditional on-campus enrollment (Allen & Seaman, 2010). This growth in online course offerings is particularly pronounced among business schools, many of whom offer degree programs exclusively online (Kerr, Proud & Breede, 2007). With the emergence of online education, students are able to

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attend class when it is convenient for their schedule, without the additional burden of commuting to physically attend class (Mayadas, Bourne, & Bacsich, 2009; Robles & Braathen, 2002).

Although online courses can be more convenient, they require students to be more proactive with both their time commitment and communication with the instructor and other students. However, research suggests that student success in the online classroom is more attributable to the instructor's pedagogical strategies and classroom communication than to students' technological aptitude (Mayadas et al., 2009). In online business courses in particular, students rely on their instructors to build a learning community before they will begin to supportively communicate with each other (Conaway, Easton, & Schmidt, 2005). The online instructors' frequent and meaningful communication and interaction with students provides the context for the learning experience. Online class interaction can be supported by various forms of computer-mediated communication (CMC) through tools such as chat, email, discussion boards, video, and/or audio applications (Allen & Seaman, 2007).

How online instructors actually use these tools—both with regard to the quantity and quality of the interaction—determines the instructors' *social presence* or their ability to project their personality and provide a sense that they are physically present and connected directly to their students when interacting electronically (Kehrwald, 2010). As such, social presence plays a key role in creating effective online learning environments (Lear, Isernhagen, LaCost, & King, 2009). The lack of face-to-face communication in online education can cause students to perceive a weak social presence in their instructor, thereby lowering their classroom motivation (Jorgensen, 2002; O'Sullivan, Hunt, & Lippert, 2004). Essentially, students find it difficult to be motivated when they do not perceive that their instructor is a *real person* rather than merely an electronic presence (Richardson & Swan, 2003). Thus, creating a social presence can be a challenge for online educators.

To address this challenge, Garrison, Anderson, and Archer (2000) developed the Community of Inquiry (COI) Model shown in Figure 1 to represent "a process of creating a deep and meaningful (collaborative-constructivist) learning experience through the development of three interdependent elements—social presence, cognitive presence, and teaching presence" (Community of Inquiry, 2011, p. 1). As illustrated in the figure, where these elements overlap, online instructors have an opportunity to enhance the educational experience by selecting appropriate content, setting a conducive climate, and supporting effective discourse.

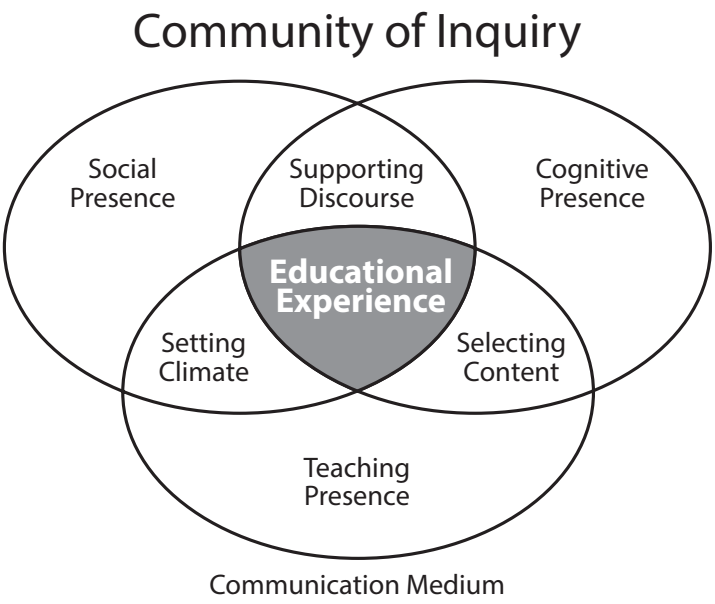

Figure 1. Community of Inquired Model.

Statement of the Problem

Given that the CoI model of social presence has been subject to a variety of criticism (Annand, 2011; Rourke & Kanuka, 2009), it is unclear what behaviors educators who wish to enhance their social presence should utilize. Social presence undoubtedly has a positive impact on student learning in the online classroom (Garrison, Anderson, & Archer, 2000; Kehrwald, 2008; Richardson & Swan, 2003; Swan & Shih, 2005; Zembylas, Theodorou, & Pavlakis, 2008), but recent controversy in the field (Annand, 2011; Rourke & Kanuka, 2009) makes it unclear what the strongest indicators of social presence are, thereby challenging online business instructors to know which of their communicative behaviors to focus on to increase their social presence. Given the increasing enrollment in online courses, the purpose of this study was to identify cues that students perceive attribute to a social presence for their instructor. The following research questions were proposed:

R1: What communicative behaviors do business students perceive make an instructor more socially present?

R2: What differences exist among demographic variables in students' perceptions of instructor behaviors related to social presence?

Review of Literature

When communicating through a mediated channel, traditional nonverbal communicative cues are eliminated, making effective communication a greater challenge than in face-to-face contexts (Walther, 1996; Walther, 2007; Walther & Parks, 2002). One of the greatest challenges and differences associated with computer-mediated communication (CMC) is the primarily asynchronous exchange (Berry, 2011). Experienced users of CMC channels understand which nonverbal cues can be transmitted through a particular channel and therefore choose specific channels for specific purposes (Sallnas, Rassmus-Grohn, & Sjostrom, 2000). This is not the case in the online classroom, which represents an environment that is predetermined by students and instructors who intentionally choose to enroll/teach in this platform. Because social presence is such a vital indicator of success within the online classroom (Richardson & Swan, 2003; Swan & Shih, 2005), it is important that instructors clearly understand the cues that indicate a strong social presence.

Social Presence

Social presence theory was originally defined as "the degree of salience of the other person in the interaction and the consequent salience of the interpersonal relationship" (Short, Williams, & Christie, 1976, p. 65). In the initial phase of developing social presence theory, Short et al. (1976) speculated that the lack of nonverbal CMC cues would affect the success of any communication exchange in this context. However, the original theory of social presence involved traditional media and failed to predict CMC use (Walther & Parks, 2002). The theory was redefined such that social presence is now conceptualized as a product of communicator abilities and effort rather than just channel capacity (Kehrwald, 2008), which produces a sense of being together in a mediated environment (Biocca, Harms, & Burgoon, 2003; Zhao, 2003). Hence, social presence can be understood as a *connection* with others rather than an *awareness* of others (Biocca et al., 2003; Garrison et al., 2000). This connection is not a dichotomous variable denoting presence or absence, but rather exists as a continuum ranging from no social presence to high social presence measured though psychological and behavioral engagement (Kerhwald, 2010).

Community of Inquiry

Garrison et al. (2000) proposed the Community of Inquiry (CoI) for understanding the development of various types of online presence in online courses, including social presence, teacher presence, and cognitive presence,

which overlap to create a more holistic online educational experience. Within this model they argued that social presence is a key element in the success of the online educational experience. Social presence is hypothesized as a second order unidimensional construct consisting of *affective, interactive, and cohesive* communication as indicators (Caples, 2006; Garrison et al., 2000; Rourke, Anderson, Garrison, & Archer, 1999).

Affective. Affective communication involves responses that express emotion, self-disclosure, and/or attempts to display computer-mediated paralinguistics. Expressions of emotion include statements concerning the communicator's own emotion and use of humor (Garrison et al., 2000; Swan, 2002). Self-disclosure involves revealing feelings, attitudes, and interests that create an environment where others reciprocate (Garrison et al., 2000; Swan, 2002). The management of affective communication is vital to maintaining social presence (Swan, 2002). This sharing of affective communication allows message receivers to better identify the message sender's perspective when utilizing CMC (Kerwald, 2010).

Interactive. Interactive communication refers to open communication responses or signs to which the other (in the case of the classroom, the instructor would be the other) is attending (Caples, 2006; Garrison et al., 2000). Open communication is defined as the reciprocal and respectful exchanges that encourage others to maintain communication (Garrison et al., 2000; Rourke et al., 1999). Attending responses involve replying to specific communications, quoting others in communication, and asking others to participate in answering questions (Swan & Shih, 2005). Behaviors that demonstrate knowledge of other individuals' communicative needs and encourage more communication are considered interactive responses.

Cohesive. Cohesive communication is indicated by vocatives and phatics, which are indicators that create, promote, and or maintain group cohesion (Caples, 2006; Garrison et al., 2000; Rourke et al., 1999). Vocatives include the use of inclusive pronouns such as *we*, *our*, or *us,* and the use of other communicators' names. Vocatives help establish and maintain cohesion (Caples, 2006; Rourke et al., 1999), whereas phatic communication promotes sociability (Rourke, et al., 1999). Examples of phatic communication include comments about insignificant matters such as asking the others about their day or comments on the weather (Garrison et al., 2000). Phatics and vocatives promote a sense of organizational culture and belonging to a group. Cohesion is also built and sustained by activities that support group commitment (Garrison et al., 2000). Because the feeling of belongingness is an important aspect of understanding personal meanings, focused collaborative communication builds participation and empathy (Garrison et al., 2000). This focused participation allows senders and receivers to understand each other's perspectives.

Within the context of an online educational experience, the cited research suggests that instructors who integrate affective, interactive, and cohesive

communication with students are more likely to generate a positive social presence with their students. This enhanced presence creates an effective online learning environment in which students feel connected to their instructor and their fellow students. To further explore business students' communicative needs, this study gathered students' perceptions of how their online instructors could enhance their social presence. The following sections describe the methodology and findings of this study.

Methodology

This section outlines the subjects and procedures utilized in a two-part data analysis to understand the communicative needs of business students in online educational environments.

Subjects

The sample included 341 business students enrolled in online classes at three medium-sized universities. These universities were located in the Midwest (27% of the sample), Southeast (50% of the sample), and Southwest (23% of the sample) areas of the United States. Students from multiple universities in separate regions of the country were asked to participate to enhance the representativeness and generalizability of the sample. Undergraduates composed 31% of the sample with the other 69% consisting of graduate students. On average, subjects were 38 ($SD = 9.63$) years old.

Additionally, 33% were female and 67% were male. Ethnicity in the sample was represented as follows: 77% White, 6% Black, 4% Asian, 3% Latino, 2% Native American, and 8% other.

Procedures

Online education coordinators, who were neither academic advisors nor instructors, at participating universities solicited student participation by emailing all students enrolled in online courses once during the final four weeks of the fall 2010 semester. Therefore, the sample was inclusive of multiple courses and instructional styles. The email message included a hyperlink that directed students to an online cover letter that described the goal of the study, a consent form, and a questionnaire, which was created with MR Interview. The questionnaire included 90 items that contained ten measures, all irrelevant to the present study, and demographic items in addition to an open-ended question that addressed social presence. The questionnaire required approximately 15 to 20 minutes to complete. No incentive was offered for participation.

First, participants were asked to respond to items that encouraged them to think about the instructional communication they experienced in the online class in which they were currently enrolled. Next, the survey defined social presence for participants as "a feeling of being there and being together (whether face-to-face

or virtually)." Participants were then presented with the following prompt: "In your opinion, from a communication standpoint, what can an instructor do to enhance his/her social presence in an online class?" Qualitative responses were recorded and analyzed.

Findings 1: Thematic Analysis

All data from the qualitative prompt were downloaded into an Excel spreadsheet. The data set was explored independently by two of the researchers who were familiar with the CoI literature. The researchers examined the data to identify recurring themes (Bailey, 2007). After themes were established independently, the researchers compared their findings and discovered that both researchers identified three identical themes that emerged from the data. The themes included (1) CoI communication (affective, interactive, and cohesive communication), (2) computer-mediated instructional immediacy, and (3) visualization.

To ensure the researchers' familiarity with the CoI literature did not subconsciously affect the outcome of the identified themes, additional reviewers were recruited to assess the data. Two undergraduate research assistants with no exposure to the CoI were trained to search the qualitative data for themes. Once the research assistants' qualitative training was complete, they were given the data set for the present study. Prior to completion of their own analysis, the undergraduate research assistants were given no indication as to the themes that the researchers found. The research assistants identified the same themes as the researchers. Therefore, the researchers are confident that their findings were unbiased by prior exposure to the CoI literature.

CoI Communication: Affective, Interactive, & Cohesive

Despite recent controversy in the literature (CoI; Garrison et al., 2000), students identified indicators consistent with the CoI model. Though they did not use affective, interactive, and cohesive communication terminology, students indicated that they wanted the following: their online instructors to humanize themselves through disclosure and humor (affective), frequent contact with their instructor (interactive), and to feel as though the class was "connected" as a group (cohesive). The following statements are examples of how the students' responses reflected the themes:

> *Have a sense of humor.* (affective)

> *I think instructors should personalize their communications with sharing events in their lives. This helps other in the class to share also.* (affective)

> *Be a part of the class by responding to students' posts to discussion questions. My first online instructor was great at this and it generated a great deal of participation with all classmates.* (interactive)

Some online instructors are very "socially present" during the class and some professors are like ghosts. All instructors should respond back on the discussion boards with their comments or additional questions. I like to see when a professor comments on my thread. When they don't, sometimes I don't think they are "listening." (interactive)

An instructor can encourage interaction between classmates on the discussion board or in the student lounge or allow students to work together on projects. He might try to initiate a live chat (time zones permitting). He can allow the students to exchange' papers and correct and critique them prior to them having to be turned in. (cohesive)

Participation in the discussion forums by requiring a certain amount of responses for each student makes it seem more like a normal class. (cohesive)

Computer-mediated Instructional Immediacy

Computer-mediated instructional immediacy (CMII) is represented by any instructional communicative behavior displayed through CMC that makes students feel physically or psychologically closer to their instructors (Fall, Kelly, & Christen, 2011; Kelly & Fall, 2011). CMII is identified by the communication practices of the instructor, which include sending prompt responses to email, making class content relevant, encouraging students to ask questions, sending unprompted messages, reminding students of important dates or with words of encouragement, using informal/friendly/positive language, and/or giving thorough assignment feedback (Fall et al., 2011, Kelly & Fall, 2011). Each of the indicators of CMII were observed within the data multiple times. Examples of student quotes to support CMII as a theme include these:

Quick response to questions (particularly emails for distance learning courses) is the most important thing to me.

Send out emails of encouragement throughout the course and also send personal emails to ask how each student is doing and see if there is anything that the student needs more help with understanding.

Stay engaged beyond simply interpreting the syllabus or assigning work. Provide timely, specific and meaningful feedback, not generalizations.

Visualization

The final theme that emerged involved visualization, which entails seeing the instructor's face. Students requested that instructors include a photograph

or communicate via video, thus allowing students to visualize their instructor as a specific person rather than as a vague online identity. The following quotes support this theme:

> *Occasional video clip of the instructor speaking to the class will enhance the presence and we can put picture to the actual face of the instructor that we have been communicating.*
>
> *Posting pictures (like Facebook)*
>
> *Webcam*

Students who use social media networking sites such as Facebook and LinkedIn are used to associate online personalities with photos. It is common practice to include pictures on social networking sites and other online environments (Subrahmanyam, Waechter, Espinoza, & Reich, 2008). Students who enroll in online classes may expect the same level of "face time." Therefore, the use of visuals by instructors could help students perceive their instructors as *real people* rather than merely an electronic persona, thus enhancing instructors' social presence.

Findings 2: Content Analysis

After the themes were identified, the researchers conducted a content analysis using the three themes as a coding scheme to identify the frequency to which each theme emerged. Initially, 10% of the responses were coded. The coders compared their analysis to evaluate the coding scheme. The inter-coder reliability was calculated using Cohen's kappa ($k = .998$). Coders then analyzed the remaining content separately.

Demographic Predictors of Social Presence Perceptions

A logistic regression was run for each indicator to identify which social presence variables were most salient, if any, among the respondents, differentiating with regard to gender and class status (e.g., undergraduate or graduate). First, a logistic regression analysis was used to identify whether the demographic variables predicted the affective theme indicators. As shown in Table 1, none served as a significant indicator of a preference for affective communication.

Table 1.
Affective Logistic Regression

Variable	B	SE	Wald Statistic	Odds Ratio
Gender	−0.08	0.40	0.04	0.92
Class Status	0.43	0.40	1.20	1.50
Constant*	−2.90	1.10	7.70	0.05

*$p < .05$

Second, a logistic regression was used to identify whether the two demographic variables predicted the interactive indicators. Table 2 indicates that gender was the only statistically significant predictor [$X^2(4) = 14.71$, $p < .05$, Cox & Snell $R^2 = .03$]. The analysis suggests that females rely more on interactive communication than males.

Table 2.
Interactive Logistic Regression

Variable	B	SE	Wald Statistic	Odds Ratio
Gender*		0.63	8.34	1.87
Class Status	−0.13	0.21	0.40	0.88
Constant*	−0.97	0.56	2.97	0.38

*$p < .05$

Third, a logistic regression assessed whether the demographic variables predicted the cohesive indicators. Again, gender was the only statistically significant predictor [$X^2(4) = 3.62$, $p > .05$, Cox & Snell $R^2 = .01$], as seen in Table 3. Findings indicated that females rely more on cohesive messages than males.

Table 3.
Cohesive Logistic Regression

Variable	B	SE	Wald Statistic	Odds Ratio
Gender*		0.92	0.53	2.50
Class Status	−0.440	0.50	0.77	0.65
Constant*	−0.365	1.38	6.99	0.03

*$p < .01$

Fourth, a logistic regression was used to identify whether the demographic variables predicted the CMII indicators. Table 4 demonstrates that class status was

a significant predictor [$X^2(4) = 8.82$, $p > .05$, Cox & Snell $R^2 = .03$]. These data suggest that undergraduates prefer computer-mediated instructional immediacy more than graduate students.

Table 4.
Computer-Mediated Instructional Immediacy Logistic Regression

Variable	B	SE	Wald Statistic	Odds Ratio
Gender		0.06	0.26	1.06
Class Status*	−0.46	0.25	3.93	0.63
Constant	−0.16	0.66	0.06	0.85

*p < .05

Finally, a fifth logistic regression was used to identify whether the demographic variables predicted the visualization indicators. Table 5 identified gender as the only statistically significant predictor [$X^2(4) = 6.69$, $p > .05$, Cox & Snell $R^2 = .03$]. These data suggest that females prefer visualization more than males.

Table 5.
Visualization Logistic Regression

Variable	B	SE	Wald Statistic	Odds Ratio
Gender*		0.74	4.23	2.10
Class Status	−0.41	0.38	1.12	1.50
Constant*	−2.81	1.01	7.79	0.60

*p < .05

Discussion

A thematic analysis of the data identified that in order to perceive an online instructor as socially present, business students require frequent communication, personal disclosure, use of inclusive terminology, CMII, and a way to visualize their instructors. Females indicated a preference for interactive and cohesive communicative behaviors more than males. This finding is consistent with research concerning communicative behaviors based upon gender. Women tend to use communicative behaviors to make connections with people and support other communicators (Burleson, Kunkel, Samter, & Working, 1996; Holmstrom, 2009). In addition, women tend to think about supportive communication more than men (Burleson et al., 2009), so it is reasonable that they would also request communicative behaviors that increase feelings of cohesiveness and interactivity

from their professors. In online courses that are dominated by female students, instructors should increase communicative behaviors that are interactive and cohesive in nature. These behaviors are outlined in the section on implications for business educators.

Additionally, undergraduates requested more CMII than graduate students. To reiterate, the computer-mediated instructional immediacy behaviors include instructors responding promptly to student messages, signing messages, demonstrating personality, encouraging questions, and giving thorough responses to those questions (Fall et al., 2011; Kelly & Fall, 2011). Previous research has found that CMII is needed to increase extrinsic motivation for undergraduate students more so than for graduate students (Kelly & Fall, 2011). This link between extrinsic motivation and CMII explains the requests for CMII by undergraduates who need external prompting to become motivated. Instructional examples are provided in the next section.

Implications for Business Educators

Students will mimic the instructional behaviors of their professors once they emerge into the workforce (Ruppert & Green, 2012). As business professionals, they will be expected to skillfully manage their social presence in workplace communication (Berry, 2011; Lam, 2012; Pazos, Chung, & Micari, 2013). As such, displaying effective social presence is not just important for students' class education, but also their life education.

This study underscores the significant role of communication in online classes and the need for instructors to be proactive with their communication practices. Instructors can support student learning by increasing their social presence and demonstrating that they are attending to students' needs in a consistent manner.

Communication: Interactive, Affective, & Cohesive

To enhance their social presence, online educators should disclose information about themselves. Revealing personal information such as feelings, thoughts, and real-life experiences, helps students to perceive their instructors as real people, not merely automated respondents on the other end of their computer monitors (Martinez, 2001; Richardson & Swan, 2003). This personalization associates positive emotions with the instructor (Titsworth, Quinlan, & Mazer, 2010) and encourages students to reciprocate these communicative behaviors, thereby projecting themselves into their online environments (Richardson & Swan, 2003). The enhanced cohesion and sense of community that develops when students perceive their instructors and fellow students as "real" people supports the learning environment by compensating for the lack of face-to-face interaction present in traditional classes.

CMII: Computer-mediated Instructional Immediacy

Instructors should also provide detailed feedback to assignments and regularly provide engaged comments, which are tailored to individual students' material rather than generic feedback such as "good point," in online discussions. Doing so indicates that instructors are engaged with students and that they are concerned about students' *ongoing* progress in the class. To demonstrate open communication via online channels, instructors should decrease the social distance with students, allowing them to develop a sense of cohesion in the online learning community. This cohesion can be accomplished by using informal/friendly language, calling students by name, and encouraging questions.

Visualization

Social distance can also be decreased by simply including a photo of the instructor on the course's learning management system. Another suggestion includes providing opportunities for one-on-one discussions between instructors and students with live video feed or a profile picture. For example, instructors could schedule virtual meetings to discuss students' progress periodically throughout the semester. Various software programs are available for such use, including Skype, Wimba, and GotoMeetings. Instant messaging and chat rooms also provide opportunities for real-time synchronization between faculty and students.

Conclusions

In conclusion, online instructors can create a positive learning environment for their students by enhancing their social presence in three areas. First, and most critically, online instructors must be proactive and frequent communicators with their students both as a group and individually. Communication strategies should be affective, interactive, and cohesive. Second, online instructors need to incorporate CMII behaviors, such as addressing students by name and signing emails so that psychological distance is reduced to a point where students can begin building a personal rapport with the instructor. Finally, online instructors are encouraged to make themselves visible by posting a photo as well as personal information. These strategies used in conjunction with effective teaching methods can help to improve student success in online education.

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