Undergraduate Students' Perceptions and Preferences of Computer-mediated Communication with Faculty

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This study explores undergraduate students' perceptions of virtual office hours (VOHs). Using a phenomenological research design, this study focuses on the following research questions: (1) "What are undergraduate students' perceptions of virtual office hours?" and (2) "What is undergraduate students' preferred type of computer-mediated communication with their professor?" Participants in this study offered interesting suggestions regarding technology-based communication with their professors.

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Most faculty/student interactions are limited to formal environments such as before, during, and after the classroom lecture (Pascarella, 1980; Jasma & Kopper, 1999; Nadler & Nadler, 2000). Traditional office hours are usually the only opportunity that undergraduate students have to communicate with their professors outside of the classroom. These traditional office hours are commonly used to enhance student learning and for academic advising (Wang & Beasley, 2006). These face-to-face office hours are usually held during a specific time, and restricted to a specific location (Wallace & Wallace, 2001). Traditional office hours may work with professor's schedules, but these office hours not work with the students' commute times, work schedules, or student organization activities. Despite their busy schedules, some students do manage to visit professors during their office hours. However, most of these students who visit the professor during their office hours are not the students who need the most help. Students who require a large amount of help are less likely to come to professors' office hours ("Office Hours in a Different Format," 2006).

Research indicates students who utilize office hours are more likely to be academically successful. Through their study, Dougherty, Bowen, Berger, Rees, Mellon, and Pulliam (1995) concluded that increased retention and better student performance are evident in students who choose to attend office hours. Steinhaus (2001) reported that faculty advising resulted in both students and faculty participating in a positive, active approach to learning.

Virtual office hours (VOHs) may make office hours more convenient for undergraduate students and may result in student success. Atamian and DeMoville (1998) discovered students are more likely to use technology such as e-mail to communicate with their professors rather than visit their professor's office during the professor's specified office hours. Many professors use e-mail or content management systems (i.e. – blackboard.com, angellearning.com) to communicate with their students. However, some undergraduate students prefer to use instant messaging software to communicate with other individuals online. In their study on college students' use of instant messenger to maintain personal relationships, Kindred and Roper (2004) indicated that college students use IM to maintain contact with college peers and friends from home. Many of the college students in their study relied on instant messenger to engage in informal interactions with others. These informal interactions are usually at the core of many friendships and relationships. As a result, professors might want to consider using instant messenger to communicate with their students. In a recent assessment of the current state of higher education technology, CDW Government found that students desired an increased level of regular and immediate communication with faculty and that the students rated online chat as the most desired feature (CDW Government, 2008). Chat between professors and students can be sustained through instant messaging programs. Most instant messaging programs are free to use (i.e. - Yahoo Instant Messenger, Trillian, AOL Instant Messenger, and MSN Messenger).

Purpose of the Study and Research Questions
Few research studies (Wang & Beasley, 2006) have employed the usage of instant messaging systems to remedy the problems of traditional office hours in the college setting. One

research study (Kindred and Roper, 2004) indicated, "Future research should explore the potential of using IM as a way to maintain "virtual" office hours, and perceptions and acceptance of its use among students and faculty." Through this study, I explore the perceptions and acceptance of VOHs among students enrolled in three sections of an introductory communication course and one section of an upper-level communication course taught in the Fall 2008 semester.

The purpose of my study is to discover undergraduate students' perceptions of communicating with their professor during VOHs through instant messaging software. Two research questions were studied: (1) "What are undergraduate students' perceptions of virtual office hours?" and (2) "What is undergraduate students' preferred type of computer-mediated communication with their professor?"

Methodology

I utilized a phenomenological research design to identify and compare the undergraduate students' perceptions of virtual office hours to communicate with their professor (through instant messaging software). The participants in my study included 75 undergraduate students from a mid-sized institution in central Texas.

Lichtman (1996) defined phenomenology as a method that looks at the actual experiences of people who have experienced a certain phenomenon, while Gall, Gall, and Borg (2006) wrote that phenomenology is "the study of the world as it appears to individuals when they place themselves in a state of consciousness that reflects an effort to be free of everyday biases and beliefs" (p. 600). Therefore, phenomenology functions both as a philosophy and as a method. I approached this study from a phenomenological perspective and remained open-minded to the undergraduate students' experiences.

Context

Results were gathered from students attending a mid-sized institution in central Texas. This institution has slightly over 6,500 students and is located in a rural town outside of a major metropolitan area. The student population (in terms of ethnicity) for the 2005-2006 academic year was 83.4% Caucasian American, 7.5% Hispanic American, 6.3% African American, 1% Native American, and .9% Asian American. Over 21.3% of students enrolled in this institution are enrolled part-time and 35.8% receive Federal Pell Grant funds. This university is classified as a Carnegie Master's Large institution (Educational Trust, 2007). On average, there are 25 or less students in each classroom at this university.

Participants

This study includes 75 undergraduate students from three sections of an introductory communication course and one section of an upper-level communication course. This introductory communication course (Fundamentals of Human Communication) is a part of the university core curriculum and has students from various disciplines. Students in these courses reported their current letter grades and 11.48% of the students had an A average, 57.38% had a B average, 26.22% had a C average and 4.92% had a D average. The upper-level communication course (Interpersonal Communication) is a requirement for communication majors. Students in this course reported their current letter grades and 21.05% of the students had an A average,

42.1% had a B average, 36.84% had a C average. Students from both courses blackboard.com to posted discussion board responses, complete assignments, and to receive speech grades. Most of the participants in this course were comfortable with using online technology through blackboard.

Instrumentation

After gathering research for this study on VOHs, I developed a questionnaire titled "Your Opinion of Virtual Office Hours". Two of the items on this questionnaire focused on undergraduate students' preferred method of communication with their professor via computer-mediated communication and the undergraduate students' perceptions of virtual office hours:

Question 1: What other technology (via the internet) would you prefer to use to communicate with your professor?

Question 2: I wish that more professors would use virtual office hours (i.e. - Yahoo Instant Messenger). *(Answers: (a) strongly agree, (b) agree, (c) neutral, (d) disagree, and (e) strongly disagree).*

The readability of the questionnaire was affirmed by 55 undergraduate students in a prior semester (Spring 2008) and several graduate students. After examining the questionnaire an additional time, I uploaded the questionnaire questions to blackboard.com under the assessment section for each of the four communication courses.

Data Collection and Analysis

Students in each of the four communication courses were required to complete the "Your Opinion of Virtual Office Hours" questionnaire for a grade (whether they used the IM technology or not). In addition, the students were given a two-week time frame to complete the questionnaire on blackboard.com.

Questionnaire item one was analyzed by using the QDA qualitative research software. Questionnaire item two was analyzed using SPSS 16.0 software. Qualitative data analysis involves working with data, organizing them, breaking them into manageable units, synthesizing, searching for patterns, discovering what is important and what is to be learned, and deciding what you will tell others" (Bodgan & Biklen, 1998, p. 157). Following these researchers' recommendations, I sorted, analyzed, organized, and reorganized the data, searching for patterns and themes. Investigator triangulation (Denzin, 1978), which involves multiple researchers in an investigation, was used as a strategy in my study to make sure that the placement of the participants' responses matched the categories that I determined initially. To triangulate my categorizations, one public school teacher and one retired public school psychological associate categorized the same student responses and created categories based on their own perceptions of themes and patterns. After the categorization was complete, all of the categories were compared and they were similar to my original categories.

Results and Discussion

Each participant answered the two questions on the "Virtual Office Hours" questionnaire. The following categories emerged during the course of the study: students' perceptions of VOHs (via Yahoo Instant Messenger) and students' suggestions regarding additional communication technology

Students Who Hope Professors Will Use VOHs

Undergraduate students in this study answered the questionnaire item one, "I wish that more professors would use VOHs (Yahoo Instant Messenger)" using a Likert scale system (1 = strongly agree – 5 = strongly disagree). Nineteen students (25%) selected "strongly agree" and fourteen students (18.42%) selected "agree". Approximately 44 students (52.90%) were neutral. Three students (3.95%) selected "disagree" and one student (1.32%) selected "strongly disagree". Approximately 33 (43.42%) responses emerged in the "strongly agree" and "agree" categories, while only four (5.27%) responses emerged in the "disagree" or "strongly disagree" categories. Based on their responses, it seems that most of the students in this study wish that their future professors will use VOHs to communicate with their students.

Students' Suggestions Regarding Communication Technology

Students offered many comments regarding the question, "What other technology (via the internet) would you prefer to use to communicate with your professor?" Some students offered suggestions ranging from internet technology such as e-mail, text messages, and facebook/myspace. Other students opted for more traditional communication methods such as regular office hours and communicating with the professor after class.

Students Who Preferred E-Mail. There were 31 responses from students who preferred e-mail. One student stated, "The availability of [the professor] was amazing this semester, I liked how she was available to e-mail back so quickly. Another student stated, "I like using e-mail. [E]specially since [the professor] are usually awake and on the computer a[]lot of the time. That way, I know I can get a timely response but not have to worry about having to be at the campus on time to use the computer, I can just go the next morning or between classes and check my e-mail."

Students Who Prefer Text Messaging. Seven students preferred that their professors communicate with them by sending and receiving text messages. One of these students states, "Probably texting although that would get irritating for the professor I'm sure. It'd be easier [I] think b/c [*sic*] I'm use to texting my friends to communicate so why not my professor. Another student stated, "[I] think text messaging would be a great way to communicate because everyone uses it. [H]owever, [I am] not too sure how realistic that idea is."

Students Who Prefer Facebook or Myspace. Sixteeen students preferred to communicate with their professor via social networking websites (blackboard and/or myspace). Three students suggested that the professor form a facebook group for the class. One of these students stated, "I think a Facebook group would be more beneficial because everyone checks their facebook!" Another student thinks that facebook or myspace would result in faster responses from professors:

[M]ost of my professor[s] were not as reliable, when needing to get ahold [*sic*] of them I used to [send them e-mails]… I do think that since the "myspace", and "facebook" have become such a big deal throughout age ranges…those sources could be just as effective.

Another student suggested the chat function on social networking websites, "I really like the new facebook chat and I have some other professors that have a facebook." While these students would like to chat with their professor, another student would like to receive assignment reminders from their professor, "I would prefer to use Facebook since I get on it daily and it would be helpful to get a reminder on there about what needs to be done." Another student wants their professor to communicate with students in a familiar online setting, "I check facebook more than I check my school email, and it makes it a more familiar setting instead of always I tell you what to do and you do it."

Students Who Prefer Instant Messaging. Approximately eight responses were centered on instant messaging (VOHs). Two of these students offered the following responses, "Instant [m]essenger is probably the best" and "I like the idea of using Yahoo Messenger." Another student who experience technical problems offered the following comment, "I would have used virtual office hours if I had the ability".

Students Who Prefer Traditional Communication Methods. Seven responses were centered on traditional communication methods when communicating with their students. These communication methods were face-to-face communication and using the telephone. The students who preferred face-to-face communication offered the following comments: "class and office hours", "I like talking to my professor in person", and "just normal in person meetings". One of students who preferred communicating with their professor by telephone offered the following comment, "Maybe a telephone call or something of that fashion."

Conclusions
The purpose of my study was to discover the perceptions of 75 undergraduate college students regarding VOHs. The two research questions studied were: (1) "What are college students' perceptions of virtual office hours?" and (2) "What is undergraduate students' preferred type of computer-mediated communication with the professor?" This section presents the conclusions for research questions one and two.

Research Question One

Research question one, "What are undergraduate students' perceptions of virtual office hours?" was addressed by questionnaire item one, "I wish that more professors would use virtual office hours (Yahoo Instant Messenger)". When the students were asked whether or not they prefer their future professors to offer virtual office hours, 33% of the students selected "strongly agree" or "agree", 52.9% of the students selected "neutral", and 5.27% of the students selected "disagree" or "strongly disagree". It seems more students would like to have the option to use virtual office hours in their future courses than students who would prefer not to have the option. Therefore, one may postulate that undergraduate students like having the option to use communication technology (VOHs) to converse with their professors, but some students experience technological barriers and other students prefer traditional communication methods.

Research Question Two

Questionnaire item two was: "What other technology (via the internet) would you prefer to use to communicate with your professor?" The "blackboard e-mail" category had the highest number of responses (31) and the "facebook/myspace" category had the second highest number of responses (16). Other responses emerged in the following categories: "instant messaging" category (eight responses), the "text messaging" category (seven responses), and the "traditional communication methods (i.e. – face-to-face, telephone)" (seven responses).

A majority of the students in the study indicated a preference towards communicating with their professors through communication technology (blackboard e-mail, facebook/myspace, instant messaging, and text messaging). A small amount of students stated that they would prefer not to use communication technology to communicate with their professor. Most of the students indicated a preference towards blackboard e-mail or facebook/myspace to communicate with their professors. Therefore, professors might want to explore the

It seems that if undergraduate students become familiar with a technology, they are more likely to become comfortable communicating with others through that technology. The students have become comfortable with e-mail and social networking websites (facebook and myspace). Therefore, they indicated a preference towards communicating with their professor through those methods.

Implications

Students in this study offered some interesting suggestions regarding technology-based communication with their professors. Professors may want to explore using facebook or myspace to communicate with their students. Those professors who are uncomfortable with using technology should begin using instant messaging software to communicate with family and friends. Then, they might want to expand their technological knowledge to include their students.

Those who are unsure if their students will adopt the technology should administer an informal questionnaire to their students regarding the students' communication technology preferences. This questionnaire might include the elements in the "Students' Suggestions Regarding Additional Communication Technology" section under the "Results and Discussion" section.

Suggestions for Further Study

This research study focuses on the perceptions of undergraduate students who attend a mid-sized university in central Texas. This study was limited to the perceptions of 75 undergraduate students and employed a qualitative research design. Due to the limited nature of this study, future researchers may want to increase the population size, use a quantitative research design, increasing the population size, focus on upper-level courses, and/or focus on hybrid or online courses.

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