

**COLLEGE ROOMMATE SATISFACTION AND COMPUTER MEDIATED
COMMUNICATION**

by

Michele Pino

A thesis submitted to the Faculty of the University of Delaware in partial fulfillment of
the requirements for the degree of Master of Arts in Communication

Summer 2004

Copyright 2004 Michele Pino
All Rights Reserved

ACKNOWLEDGEMENTS

Scott E. Caplan, Ph.D., for his guidance, support, dedication, and for being the only other person I know who checks his e-mail as often as I do. I would not have wanted anyone else to advise this project.

My committee members, Charles Q. Pavitt, Ph.D. & Elizabeth M. Perse, Ph.D. for their guidance, commitment, and advice.

James Tweedy, Ed.D., for his support, enthusiasm, encouragement, kindness, and generous funding.

Matt Lenno and Jeannine Szamreta for their encouragement and empowerment and for helping me to realize my potential.

Staci Weber for putting up with me for the last two years, being there through it all, and mostly for being a true friend.

My parents, Jack and Rita Pino, and my brother, Nick for their constant love and support.

TABLE OF CONTENTS

LIST OF TABLES	viii
LIST OF FIGURES	ix
ABSTRACT.....	x
Chapter	
1 INTRODUCTION.....	1
Research Objective	2
<i>Project Overview</i>	5
Relational Satisfaction	5
<i>Review of Theoretical Definitions</i>	5
<i>Findings on Predicting Roommate Satisfaction</i>	6
<i>Personality Characteristics</i>	7
<i>Personal Behaviors</i>	7
Computer-Mediated Communication	10
<i>CMC Research</i>	10
<i>Synchronous and Asynchronous CMC</i>	12
Proposed Theory	14
<i>Social Presence Theory</i>	15
<i>Face Theory</i>	17
<i>Politeness Theory</i>	17
Application of Theory	18
Hypotheses	21

2	METHOD	22
	Participants.....	22
	Survey	22
	<i>Independent Variables</i>	23
	<i>Behaviors.</i>	23
	<i>Face Sensitivity Measures.</i>	24
	<i>Perceived Face Threat of CMC Behaviors</i>	24
	<i>Dependent Variable</i>	25
	<i>Measuring Relationship Satisfaction</i>	25
	<i>Relational Satisfaction Scales</i>	26
	<i>Hendrick's Relational Assessment Scale</i>	27
	<i>Hudson's Index of Family Relations</i>	29
	<i>Summary of Relational Satisfaction Measures</i>	30
	<i>Satisfaction Measure for Current Study</i>	31
	<i>Revisions Made to Scales for Current Study</i>	31
	Procedures.....	33
	Overview of Analysis	34
3	RESULTS	35
	Descriptive Data.....	35
	<i>Frequency of Online Communication</i>	35
	<i>Participant Behaviors in Presence of Roommate</i>	36
	<i>Participant Behaviors in Absence of Roommate</i>	36
	<i>Roommate Behavior</i>	38
	Hypothesis Tests.....	39
	<i>Hypothesis 1</i>	39
	<i>Hypothesis 2</i>	40
	<i>Hypothesis 3</i>	40
	<i>Hypothesis 4</i>	41

<i>Hypothesis 5</i>	41
<i>Hypothesis 6</i>	42
Summary of Results of Hypothesis Tests	42
Additional Analyses.....	45
4 DISCUSSION	47
Descriptive Data.....	47
Hypotheses.....	50
Additional Analyses.....	55
Limitations and Suggestions for Future Research	57
<i>Sample and Data Collection</i>	57
<i>Suggestions for Future Research</i>	59
Conclusion	60
REFERENCES.....	63
APPENDIX A: ROOMMATE QUESTIONNAIRE SAMPLES.....	73
APPENDIX B: UNIVERSITY OF DELAWARE ROOMMATE CHARACTERISTICS QUESTIONS	75
APPENDIX C: DEMOGRAPHIC INFORMATION.....	77
APPENDIX D: COMMUNICATION USE SCALE.....	79
APPENDIX E: FACE SENSITIVITY SCALE.....	82
APPENDIX F PERCEIVED FACE THREAT SCALE.....	83
APPENDIX G: HENDRICK'S RELATIONSHIP ASSESSMENT SCALE.....	85
APPENDIX H: HUDSON'S INDEX OF FAMILY RELATIONS.....	87
APPENDIX I: ROOMMATE RELATIONSHIP SATISFACTION SCALE	89
APPENDIX J: TABLE OF SCALES.....	91
APPENDIX K: PARTICIPANT INFORMATION FORM.....	92

APPENDIX L: PARTICIPANT DEBRIEFING INFORMAITON	93
APPENDIX M: PARTICIPANT FOLLOW UP LETTER	94
APPENDIX N: ZERO-ORDER PEARSON CORRELATION MATRIX.....	96

LIST OF TABLES

1	Summary Table for Results of Hypotheses	44
2	Other Predictors of Roommate Satisfaction	46

LIST OF FIGURES

1.	Empirical Model	20
----	-----------------------	----

ABSTRACT

The purpose of this study was to explore college students' thoughts, perceptions, and usage of online communication. The research sought to determine if usage and perceptions of different types of CMC would predict college roommate satisfaction. The present study tested hypotheses derived from social presence theory, face theory, and politeness theory.

One hundred and eight dormitory roommate pairs ($n = 216$) responded to questionnaires assessing general face sensitivity awareness, CMC use (both synchronous and asynchronous), non-CMC communication behaviors, perceptions of CMC use, and roommate relational satisfaction. Results indicated that while most students have an overall high level of face sensitivity, they do not perceive synchronous CMC use in the presence of their roommate as face threatening (i.e. rude, impolite, or insensitive). Results also indicated that students' CMC behaviors were not correlated with roommate satisfaction. Although the results did not support the hypotheses, subsequent analyses yielded interesting implications about CMC use and how this popular means of communication is regarded among college students.

Chapter 1

INTRODUCTION

Each September, thousands of students leave home to begin their college experiences. Aside from the anxiety of classes, the fear of being away from friends and family, worries about fitting in, and the challenge of learning their way around, many first-year students who decide to live in the dormitories are faced with another potential stressor: their roommate. At many institutions, incoming students respond to questionnaires prior to roommate assignment as an attempt to match up individuals on the basis of certain personal attributes. Other institutions use computer programs that assign roommates on a random basis. Regardless of the roommate matching procedures at specific institutions, first-year students who go away to school are faced with living in close quarters with a complete stranger for nearly nine months.

If an institution participates in selective roommate matching, the housing assignment services department usually administers roommate interest questionnaires prior to the students' arrival on campus. These questionnaires are generally filled with routine questions. Questions included on the questionnaire often ask about study habits, music preferences, neatness, personality type, smoking behaviors, and even conflict management preferences. Most of the university housing or roommate preference questionnaire items are very basic and require students to check a few boxes that best

describe their living preferences or behavioral patterns (see Appendix A). Others institutions, such as the University of Delaware, administer a more complex and detailed questionnaire that allows for a more in-depth roommate matching process (see Appendix B). One key category of questions that is typically not included on these interest surveys is student online behaviors. It is likely that very few colleges or universities attempt to match up students on the basis of their preferred or actual online communication behaviors. It is the omission of online social behavior based questions along with past research on predictors of roommate satisfaction that made for the starting point of this study.

Research Objective

Cyberspace is a term described as “the imaginary construction of space that is built by combining technological and interpersonal interactions” (Barnes, 2003, p. 33). Cyberspace connects people from across the room to across the world by means of the Internet. Today, many regard cyberspace as a mundane social medium (Parks & Floyd, 1996). Cyberspace allows for computer-mediated communication (CMC), which is “the study of how human behaviors are maintained or altered through exchange of information through machines” (Wood & Smith, 2001, p. 5). Although CMC appeals to many age groups and most socioeconomic classes (Fox & Rainie, 2001), CMC use is particularly prevalent among college students (see Jones, 2002; Morgan & Cotton, 2003). In fact, 42% of college students say they use the Internet primarily for interpersonal communication (Jones, 2002).

The popularity of CMC among college students presents a need for the current research. Students are now spending a great deal of time online communicating with others, and this behavior is affecting students' lives and specifically their personal relationships in some measurable manner. For example, Kubey, Lavin and Barrows (2001) report that increased use of CMC among college students negatively influences students' completion of schoolwork, class absenteeism, sleeping patterns, and academic achievements. With this said, the particular goal of the current study was to explore college students' perceptions and usage of CMC as compared to those of their dormitory roommate.

The current research sought to determine if similarity of thoughts about CMC and CMC behaviors predicts a higher level of reported roommate satisfaction between college roommate dyads. Central to this investigation was an examination of the association between degree of similarity of CMC perceptions and behaviors and college roommate satisfaction. The goal of this research was to develop and test an empirically-based model outlining the cognitive and behavioral processes involved in college students' perceptions of face sensitivity, perceived face threat of CMC behavior, and roommate satisfaction. The variables that made up the model are presented later in this chapter.

Toward this end, the following sections will first examine the association between CMC behaviors and roommate satisfaction. In order to make any sort of predictions, it is important to explore past research on other potential predictors of college roommate satisfaction. The current study also employed the concept of immediacy (Mehrabian, 1969), social presence theory (Short et al., 1976), face theory (Goffman, 1967), and

politeness theory (Brown & Levinson, 1987) to explain the link between the two main variables of interest. This research sought to answer the following question; will roommates with similar CMC perceptions and behaviors express more satisfaction living together?

Another objective of this study was to extend earlier research that has investigated college students' CMC use. The number of households, businesses, and educational institutions that are now equipped with the capabilities of logging on to the Internet shows that the Internet has quickly become a ubiquitous tool for people all over the world. According to one survey, there were almost five hundred million people connected to the Internet in September of 2001 (Nielsen, 2001). A large portion of those folks are college students. By examining the trends in recent years, it is safe to predict that Internet usage for the purpose of interpersonal communication will only continue to grow among college students in years to come.

Prior research suggests a variety of reasons why people, and specifically college students, use the Internet. According to Shaw and Gant (2002), there are three main motives for which people use the Internet; information gathering, entertainment (i.e. listening to music, playing games, viewing pornographic material), and interpersonal communication. Although information gathering and entertainment are prevalent uses, the focus of this study is solely on Internet use for the purpose of interpersonal communication. According to Birnie and Horvath (2002), people will increasingly use the Internet for interpersonal communication. The study of interpersonal communication use is warranted given that most college students use the Internet for socialization

purposes while only 38% of college students use the Internet primarily for educational reasons (Jones, 2002). Even fewer use the Internet primarily for entertainment (Jones, 2002).

Project Overview

The first section of this chapter presents previous research on college roommate satisfaction and college roommate conflict. The second section reviews literature on CMC among the general population and specifically among college students. The following section defines and distinguishes between synchronous and asynchronous CMC. Later sections will employ immediacy theory, social presence theory, face theory, and politeness theory to develop the theoretical model that links perceptions of CMC and CMC behaviors with roommate satisfaction.

Relational Satisfaction

Review of Theoretical Definitions

There is a large body of research on relational satisfaction and researchers have conceptualized and measured the construct in a variety of different ways. The simplest conceptualization of relational satisfaction may be an emotional response to the environment (Hecht, 1978). Further, some researchers have conceptualized satisfaction as a label that can be placed on a certain point of an evaluative scale assessing how people perceive a certain relationship (Koski & Shaver, 1997). Others suggest that relational satisfaction consists of attitudes, feelings and an overall evaluation and assessment of the quality of an interpersonal relationship (Clements, Cordova, Markman, & Laurenceau, 1997; Erbert & Duck, 1997). Similarly, as Hecht (1978) explains, “most

theorists conceptualize satisfaction as an affective response to the fulfillment of an expectation-type standard” (Hecht, 1978, p. 255).

Overall, researchers have not reached agreement on a definition of relational satisfaction (Boland & Follingstad, 1987; Hecht, 1976; Hecht, 1978). Although, many researchers argue that satisfaction is an “important indicator for relational continuance” (Hendrick & Hendrick, 1997, p. 63). For the purposes of the current study, roommate relational satisfaction is defined as the state of contentness, positive perceptions, and overall liking and enjoyment of one’s roommate. The next section will present past research on predictors of roommate satisfaction to reveal the inconsistency across the literature.

Findings on Predicting Roommate Satisfaction

Previous research has examined a variety of variables thought to predict roommate satisfaction. According to Lapidus, Green, and Baruh (1985), researchers typically use four general categories of variables to study college roommate satisfaction in the residence halls: personal values and attitudes toward specific topics, family background, living habits (see Cerny, Zax, & Pierce, 1970), and personality. Additionally, other variables of interest include students’ communication styles and traits (Martin & Anderson, 1995), and quality of interpersonal communication between roommates (Waldo, 1984). A literature review discovered that the variables used to assess roommate satisfaction can all conceptually fit into one of two categories: personality characteristics or personal behaviors

Personality Characteristics. Researchers (e.g. Fuller & Hall, 1996) have examined the role of personality variables as potential predictors of satisfaction. The Myers-Briggs type inventory (MBTI; see Myers & Briggs, 1962), which consists of four dimensions (extroversion/introversion, sensing/intuition, thinking/feeling, and judgment/perception) assesses how people process information and orient themselves to the outside world. The MBTI allows researchers to pair up roommates according to personality dimensions such as extroverted with a sensing, feeling, and judgment orientation (see Myers & Briggs, 1962) which sometimes leads to a decrease in roommate changes (Shroeder, 1980).

Fuller and Hall (1996) paired students with similar MBTI scores to live as roommates and later measured their level of reported conflict. In the same study, the researchers also used a roommate compatibility questionnaire in which the items focused on general living preferences (e.g. preference for keeping the room neat versus sloppy), and living habits/behaviors (e.g. frequency of hanging up clothes). Results showed that matching up roommates on the basis of their preferences for an ideal roommate explained 67.2% of the variation in satisfaction scores, $F(4,33) = 16.695, p = .0001$. However, personality type did not explain any of the variation in conflict levels. Fuller and Hall concluded that MBTI scores are not significant predictor of conflict at all, whereas matching up roommates by preferences for living behaviors was a significant predictor of conflict.

Personal Behaviors. Unlike personality characteristics which are innate and difficult to control, individuals have the choice to participate in certain behaviors that

may or may not influence their relationship with others. A close examination of past research exploring the relationship between certain personal behaviors and roommate satisfaction justifies the main theoretical argument of the current research study.

For example, in one well known study, Cerny et al. (1970) looked at high and low conflict female roommate pairs and examined the difference between the groups on similarity of personal behaviors, general fund of knowledge, and roommate satisfaction. In this study, personal behaviors included studying, smoking, drinking, extracurricular activities, and social activities. The researchers measured general fund of knowledge with an information profile designed specifically for the study. The results of this study revealed that roommates who were more similar in their personal habits, as defined by the researchers, endured less frequent conflict episodes in their roommate relationship ($t = 2.80, df = 18, p < .01$). Further analysis indicated that the two groups were less different in general knowledge ($t = 1.7, df = 18, p < .05$) than they were in personal habits. These results suggest that roommates' general knowledge is a weaker predictor of roommate satisfaction than their personal habits.

In another study, Martin and Anderson (1995) investigated whether similarity in prosocial traits (verbal aggressiveness, willingness to communicate, and interpersonal communication competence) were related to roommates' satisfaction living together. Respondents reported on their own verbal aggressiveness, willingness to communicate, and interpersonal communication competence. The researchers placed each pair ($n = 200$) into a category according to the three independent variables. The researchers measured dyadic satisfaction by combining a communication satisfaction scale and a

social attraction scale. Results indicated that roommate pairs with combined high levels of prosocial traits were significantly more satisfied than pairs with less prosocial traits.

In an earlier study, Waldo (1984) examined the association between students' personal adjustment, quality of communication with their roommate (i.e., listening skills, emotional support, and speaking skills), and quality of their roommate relationship. Results of this study showed that the correlation between the quality of communication with one's roommate and the quality of the roommate relationship is relatively strong ($r = .67$). In other words, roommates who demonstrated a higher level of communication skills reported a higher level of satisfaction of the quality of their roommate relationship.

Although the research reviewed thus far sheds some light on variables that might predict roommate satisfaction, much work remains to be done; further exploration and better predictions are needed. Researchers agree that across studies, frequently tested variables such as demographic background, personal interests, social support, and personality characteristics are not consistently correlated with roommate relationship satisfaction and can thus be deemed as weak predictors of breakup (Jones, McCaa & Martechini, 1980; Lovejoy, Perkins, & Collins, 1995). At the same time, variables that tap personal behaviors, such as those reviewed earlier, have succeeded at predicting roommate satisfaction to some extent.

In addition, the consequences of negative roommate experiences also justified the need for this research study. Lovejoy et al. (1995) maintain that, "unsuccessful roommate arrangements can be disruptive for the student" (p. 594). Further, according to Fuller and Hall (1996), "conflicts between roommates that lead to room changes are an

extra burden on the residence hall staff and may interfere with the students' educational process" (p. 510). Moreover, Pace (1970) demonstrated that lower grade point averages, reduced academic achievement, and a skewed perception of the college campus environment were all potential consequences of dissatisfied roommate pairs.

The negative consequences discussed above have contributed to researchers' interests in finding better predictors of relational satisfaction. Although countless researchers in past years have attempted to predict college roommate satisfaction, the literature still lacks strong predictors based on personal behaviors. Consequently, the current study sought to determine if CMC behaviors (in conjunction with the beliefs and perceptions associated with these behaviors and with face sensitivity) are important variables that are missing from the body of literature on predictors of college roommate satisfaction. The purpose of the current study was not to explore the reasoning behind student's usage of CMC (see Rubin, 1994), but to acknowledge that this behavior exists and to attempt to see if it is related to roommate satisfaction. The next section explores students' use of CMC in more detail in order to highlight some past research and further justify the need for the current research.

Computer-Mediated Communication

CMC Research

One major area of inquiry regarding CMC has been student's motives and goals associated with its usage (see Bonebrake, 2002; Chou, 2001; Odell, Korgen, Schumacher, & Delucchi, 2000; Papacharissi & Rubin, 2000; Suler, 1999). In other words, researchers

have sought to find out why college students are now using this medium as a main method of communicating with others.

Other studies have explored the demographic differences between the students who are more drawn to using the Internet and the students who are not (Morgan & Cotton, 2003; Scherer, 1997). For instance, one study indicated that 73% of college students use the Internet at least once a week and men and women appear to use the Internet with similar frequency (Scherer, 1997). Moreover, no other demographic differences including ethnicity, academic major, year in school, GPA, or marital status were found to influence amount of Internet use (Scherer, 1997).

Finally, another major line of research has examined problematic Internet use (see Kubey, Lavin, & Barrows, 2001; Shaw & Gant, 2002). Kubey et al. (2001) reported an association between Internet use and dependency and explained that frequent Internet use (specifically synchronous communication applications such as chat rooms) is associated with quality of student academic performance. In a different study, Shaw and Gant (2002) presented evidence suggesting that more frequent online usage correlates with decreased loneliness and depression and increased self-esteem and perceived social support.

Although all of these areas of inquiry are important, there is another key area that has received less attention in the literature and needs to be examined. CMC usage by college roommates and its correlation with students' reported roommate satisfaction based on their perceptions of their own and their roommates' use has yet to be explored. The field is lacking this type of research as well as a general understanding of the

correlation between synchronous CMC and roommate satisfaction. Examining the relationship between CMC and satisfaction, the results of this research study may potentially enrich and extend the growing literature of interpersonal communication relationships and online interaction.

According to Kandell (1998), advances that make the Internet simple to operate have contributed to its increased use. As a result, the Internet now plays a large role in the lives of college students all over the world. Further, according to Scherer (1997), college students significantly contribute to the constantly growing demand for the Internet worldwide. Campuses began managing the demand for the Internet by installing direct connections all over campus in places such as libraries, residence halls, and laboratories (Scherer, 1997).

A review of the literature reveals that CMC can be broken down into two classifications: synchronous CMC and asynchronous CMC. The following section will discuss each type of CMC and the necessity of making the distinction between the two types for this research study.

Synchronous and Asynchronous CMC

The major feature distinguishing synchronous CMC from asynchronous CMC is that synchronous CMC occurs in real time. In simpler terms, synchronous implies instantaneous or immediate (see Mehrabian, 1969). Of the two types of CMC, synchronous CMC is most similar to face-to-face (FtF) communication because it involves many of the same communication rules and demands as FtF communication. Examples of synchronous CMC include virtual chatrooms, instant messaging, and

interactive games where participants simultaneously communicate to each other and each participant's move is dependant on the other person's preceding move. Thus, as with FtF interaction, synchronous CMC requires a co presence of participants (Caplan, 2003).

A major distinction between FtF interactions and synchronous CMC interactions is that FtF interactions entail a physical presence of communicators while synchronous CMC interactions entail a virtual presence of communicators. Virtual presence refers to existing in essence and not in actual physical form. Both physical and virtual presence involve the copresence of participants. Further, social presence is the degree to which participants perceive a certain communication medium as conveying the presence of the other participants (Short, Williams, & Christie, 1976). Social presence can be conceptualized as existing on a scale from a strong perception of social presence to a weak perception of social presence.

Asynchronous CMC is similar to synchronous CMC in the sense that messages are transmitted from one person to another via computer, but there exists a larger time lapse between the communication. Examples of asynchronous CMC are e-mail, list serves, and bulletin boards (also known as message boards or discussion forums). Asynchronous CMC allows participants to send a message to another person (e-mail) or groups of people (list serves and bulletin boards) for them to read at their own pleasure and respond at their own will. In other words, with asynchronous CMC, both or all participants need not be simultaneously present for this type of communication interaction to happen. Further, the sender does not expect an immediate response as he or she does with synchronous CMC media. Because of the lack of perceived social

presence in asynchronous CMC, asynchronous communication is less similar to FtF communication than synchronous communication.

The present study regarded synchronous CMC behavior as the main variable of interest because it involves a greater perception of social presence of communicators than asynchronous CMC. Because synchronous CMC occurs in real time, when people engage in synchronous CMC, they must cognitively engage and interact with the other person much like they would in a FtF interaction. This virtual presence is much like physical presence. Further, asynchronous CMC is not as demanding as synchronous CMC because participants can respond at some later time and there is no simultaneous interactivity needed to keep the interaction flowing. There are also basic rules and etiquette that apply to both FtF and synchronous CMC interactions but do not apply to asynchronous CMC interactions (e.g., not interrupting or cutting the other person off while he or she is speaking and not abruptly changing the subject).

Proposed Theory

The argument proposed here is that attitudes about using CMC along with actual synchronous CMC use are overlooked potential predictors of roommate satisfaction. CMC attitudes and behaviors are important because CMC now plays a large role in college student's lives and acts as a "window through which they can communicate" (Chou, 2001, p. 573). In fact, researchers have argued that CMC has become as common as FtF communication as a means to communicate with others (Tidwell & Walther, 2002).

In preparation for the current study, several college students were informally interviewed about their CMC use. Early exploratory interviews with college students provided useful anecdotal evidence for the importance and relevance of the current study. According to one college sophomore, unless he is constantly signed on to instant messenger, he gets left out of certain activities that his friends have planned. According to another student, none of her friends use the telephone anymore. She claims that it is much easier to get in contact with a large number of people by simply typing a certain message into a text box and copying that message as many times as needed to reach everyone the message is intended for.

Social Presence Theory

Social presence (Short et al., 1976), as it is related to the present research interest, involves the level of awareness or impersonality between communicators. Researchers have also defined social presence as people's ability to socially project themselves (Rourke, Anderson, Garrison, & Archer, 1999). According to Short et al., (1976), social presence characterizes the perceived level of closeness, clarity, and richness of interactions.

Compared to FtF encounters, CMC interactions may lack social presence of the participants because the interactions are mediated by computers that lessen the richness or realism of the interaction. With regard to social presence in CMC, the cues filtered out perspective (Culnan & Markus, 1987) asserts that CMC interactions lack the nonverbal cues readily available in FtF interactions. Nonverbal cues are vital in interpersonal interactions in order to accurately define the social situation and to convey emotions

between communicators. Further, the cues filtered out perspective proposes that CMC is more impersonal than FtF communication (Walther, 1996; Walther & Burgoon, 1992; Walther, Anderson, & Park, 1994). The existence of the cues filtered out perspective has led researchers to become interested with the concept of social presence in CMC (Savicki, Kelley, & Oesterreich, 1999).

Social presence is richest in FtF interactions for a variety of reasons, including the availability of nonverbals and other cues (see Rice, 1993). Synchronous CMC is not as socially rich as FtF communication. However, synchronous CMC is more socially rich than asynchronous CMC because it requires participants to actively engage in the conversation. Thus, synchronous CMC is more similar to FtF communication than asynchronous CMC. For this reason, the current research focused primarily on synchronous CMC and applied some of the same theories that also guide FtF interactions.

The telephone, another form of synchronous communication, ranks second in perceived social richness after FtF communication (Rice, 1993). In an extensive study, Rice (1993) measured the level of social presence in seven different media. Among the media were telephone, e-mail, videoconferencing, and face-to-face communication interactions. Although a form of synchronous CMC such as instant messenger or instant chat rooms was not included in the study, results showed that of the seven distinct media, e-mail (asynchronous CMC) ranked absolutely last for its level of perceived social presence (Rice, 1993). Influenced by these findings, the focus of the current study was limited to assessing the relationship between synchronous CMC and roommate satisfaction.

Face Theory

Social presence theory is closely related to face theory. Popularized by Goffman (1967), face “may be defined as the positive social value a person effectively claims for himself by the line others assume he has taken during a particular contact” (Goffman, 1967, p. 5). In addition, according to Cupach and Metts (1994), face is “the conception of self that each person displays in particular interactions with others” (p.3). In other words, face theory asserts that people are inherently motivated to uphold each other’s face and, at the same time, expect others to uphold their face by avoiding certain face-threatening situations.

Facework is a type of communicative behavior that people employ to manage their own and/or other people’s face needs. These strategies (dealing largely with impression management) may support *or* threaten face (Ting-Toomey & Oetzel, 2001). Improper management of face may lead to undesirable face threatening situations and may lead a communicator to respect the other party less, listen less intently to him or her, or minimize the amount of personal viewpoint he or she shares (Ting-Toomey & Oetzel, 2001). Knowledge of facework is important because it is a basic interpersonal social skill that may be necessary for maintaining satisfying relationships.

Politeness Theory

Building off of Goffman’s face theory (1967), Brown and Levinson (1978) claim that people have two basic types of face needs that facilitate their personal identity management. Positive face is the desire to be viewed and regarded as desirable by others

and negative face is the desire to be autonomous, free from imposition by others, and to have ones prerogatives respected.

Politeness theory is an area of research that may also help explain how synchronous CMC use might be related to college roommate satisfaction. Together, face theory and politeness theory systematically connect synchronous CMC and roommate satisfaction. The connection rests in the fact that both roommates must be cognizant of the general rules that guide the theories in order to maintain a successful relationship. Along with politeness, upholding and sustaining face deals with and is rooted in considerateness and respect. Facework involves a mutual cooperation between parties and is regarded as an underlying and taken-for-granted motive in all social encounters (Cupach & Metts, 1994). Thus, people are generally interested in working toward the maintenance of each other's face (Penman, 1990). In fact, according to Metts (2000), most communicators recognize face as a "routine and unnoticed consequence of interaction" (p. 78).

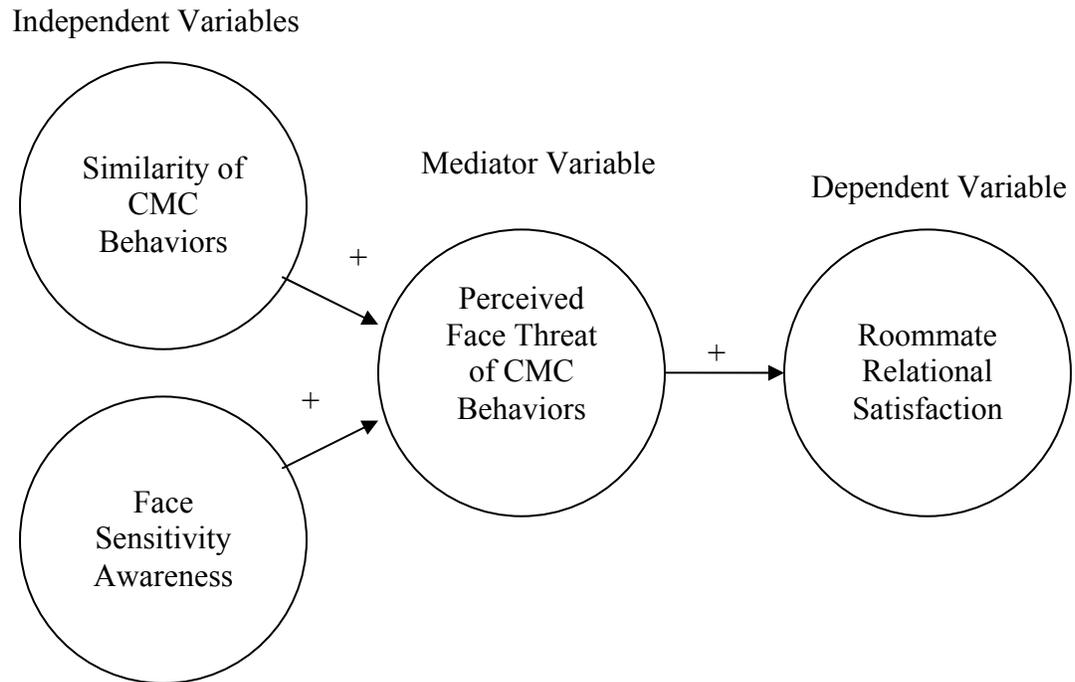
Application of Theory

The relevance of Goffman's face theory in the current research study is that when students engage in synchronous communication with others and in the presence of their roommate, they may be exhibiting low or no concern for the other roommate's face. The engaged student is exhibiting exclusion which is regarded as a non-face supporting tactic of facework (see Lim & Bowers, 1991). Such exclusions become face threatening when the other roommate feels left out or ignored. Frequent disregard for another person's face could potentially lead to that person feeling that the relationship is weakening (Cupach &

Metts, 1994; Goffman, 1967). An increased salience of face issues can cause even mundane relationship processes to become infused with aggressiveness (Metts, 2000). Worse yet, chronic improper face management in interpersonal relationships facilitates the erosion of the relationship (Cupach & Metts, 1994). However, if neither roommate perceives exclusion due to CMC participation as face threatening, then there is no concern about lessened roommate satisfaction due to CMC use. The concern arises when there are incongruent feelings toward the situation (whereas one roommate sees CMC use while in the presence of the other roommate as face threatening and the other does not) leaving one roommate feeling left out and disrespected. The theories and rationals presented above led to the construction of an empirically-based model outlining the cognitive and behavioral processes involved in college students' perceptions of face sensitivity, perceived face threat of CMC behavior, and roommate satisfaction (see Figure 1).

Figure 1

Empirical Model



Based on the literature and theory reviewed above and as illustrated by figure 1, this study sought to answer a number of questions about the correlations between the variables presented earlier. The next section presents the specific hypotheses that were tested in the current study.

Hypotheses

Based on the previous discussion of social presence theory, face theory, and politeness theory, the current study tested the following hypotheses:

H1: The amount of time that a student spends engaged in synchronous CMC in the presence of his or her roommate is associated with the roommate's relational satisfaction which is mediated by the roommate's perceptions of perceived the face threat of that activity.

H2: The more students perceive synchronous CMC usage in the presence of others as face threatening, the less they will engage in this behavior in the presence of their roommate.

H3: The amount of time students spend engaged in synchronous CMC in the presence of their roommate will be negatively related to their general concern for face.

H4: The amount of time students spend engaged in synchronous CMC in the *absence* of their roommate will not be related to their concern for face.

H5: The amount of time students spend engaged in asynchronous CMC in the presence of their roommate will not be related to that student's perception of his or her relational satisfaction.

H6: The degree of similarity in the perceived face threat of synchronous CMC use in the presence of one's roommate positively predicts the level of roommate satisfaction between the dyad.

Chapter 2

METHOD

To test the hypotheses presented in Chapter 1, respondents replied to surveys designed and distributed by the researcher specifically for the study. The following section presents the method and procedures used in the current study.

Participants

The participants ($n = 216$) for this study were undergraduate residence hall roommates, 40% were male ($n = 86$) and 60% were female ($n = 130$). Of the 216 participants, 84% were first-year students, 11% were sophomores, 4% were juniors, and one was a senior. The participants were all same-sex residence hall roommate pairs living on campus beginning at least Fall, 2003 and through the time of the study in early Spring, 2004. All participants were recruited directly from the residence halls during their back-to-school floor meetings facilitated by residence assistants or via door-to-door recruitment by the researcher and all reported having their own personal computer in their dorm room.

Survey

The first section of the survey instrument inquired about students' current living situation (single, double, or triple occupancy room), how acquainted they were with their roommate prior to their cohabitation, and when they actually began living together (see

Appendix C). Students indicated how acquainted they were with their roommate prior to living together, using a 5-point scale adapted from Lovejoy, Perkins, and Collins, (1995, see Appendix C, Question 4). The last section of the questionnaire asked about students' year in school, sex, academic major, grade point average, computer competency, and other basic demographic questions.

Independent Variables

The current study sought to assess associations among relational satisfaction and a number of predictor variables including synchronous and asynchronous CMC use, face sensitivity, and perceived face threat of certain CMC behaviors.

Behaviors. At the time of the data collection, there were no scales tapping both online and FtF communication behaviors. Therefore, the researcher developed a scale specifically for the current study in order to make this assessment (see Appendix D). To assess CMC use, a number of questions were designed to indicate how often participants engage in specific CMC behaviors. Participants indicated how frequently they engaged in each behavior on an 8-point scale ranging from 1 (never) to 8 (constantly).

The questionnaire contained seven questions regarding respondents' CMC behaviors while in the presence of their roommate, seven questions regarding respondents' CMC behaviors in the absence of their roommate, and seven questions assessing the respondents' perception of their roommate's communication behaviors when they are both in the room. In each section, three questions asked about synchronous CMC use (instant messenger, interactive games, virtual chatrooms), two

questions asked about asynchronous CMC use (e-mail, message boards), and two questions asked about non-CMC behaviors (having friends over, talking on the phone).

Face Sensitivity Measures. To assess general perceptions about face sensitivity and face maintenance, participants rated the extent to which they agreed or disagree with six statements dealing with potentially face sensitive situations (see Appendix E). The researcher constructed the 6-item instrument in order to tap perceived face threat based on the conceptualizations of face and face theory by primary researchers in the field (see Brown & Levinson, 1987; Goffman, 1967). Participants rated the extent of their agreement with each statement on an 8-point scale ranging from 1 (definitely disagree) to 8 (definitely agree). For example, one item read, “It is impolite to put others in awkward situations.” Another read, “It is rude to hurt other people’s feelings.” Scores on each were averaged to obtain one score which became the respondents’ face sensitivity score ($\alpha = .89$).

Perceived Face Threat of CMC Behaviors. Currently, the literature lacks a strong scale measuring perceived face threat of, or face sensitivity associated with, specific communication behaviors. In one study, Caplan and Samter (1999) measured degree of positive-face sensitivity and negative-face sensitivity by asking participants to rate the extent to which a specific message made them feel good about themselves. Although their questions were based on previous research, researchers only used three items to assess message quality. Of the three questions, only two questions specifically assessed face sensitivity. Caplan and Samter’s scale would have been stronger if they had used more questions to assess face sensitivity.

Because the current literature lacks a strong face sensitivity measure, it was necessary to devise an instrument of this sort specifically for the current study. The researcher devised an instrument consisting of 12 items assessing perceptions of the face threatening nature of synchronous CMC ($\alpha = .88$), asynchronous CMC ($\alpha = .98$) and non-CMC behaviors ($\alpha = .83$). Four of the items assessed each type of communication and respondents rated the extent to which they agreed or disagreed with the statements (see Appendix F for a collective list of the items).

Dependent Variable

Measuring Relationship Satisfaction. The dependent variable in the current study was college dormitory roommate satisfaction. A review revealed that the current literature on relational satisfaction is limited because it lacked both conceptual and operational clarity and consistency (Boland & Follingstad, 1987; Hecht, 1976, 1978). The lack of operational consistency among researchers is evident by the sheer number of available satisfaction scales. Further, researchers often use the term satisfaction synonymously with other terms such as adjustment, success, well-being, and quality (Erbert & Duck, 1997). To develop a new measure of relational satisfaction, it was first necessary to carefully review how others have operationalized the construct.

Despite the wide variety of different types of interpersonal relationships, an overwhelming majority of the research on relational satisfaction specifically deals with marital satisfaction (Feeney, 1994; Kelley & Burgoon, 1991) and romantic relationship satisfaction (Cramer, 2002; Flora & Segrin, 2000; Franiuk, Cohen, & Pomerantz, 2002; Lamke, Sollie, Durbin, & Fitzpatrick, 1994; Rusbult et al., 1986). To a lesser extent,

researchers have also examined sibling relational satisfaction (Teven, Martin, & Neupauer, 1998), friend relational satisfaction (Cole & Bradac, 1996; Mendelson & Aboud, 1999), and college roommate relational satisfaction (Berg, 1984; Lovejoy et al., 1995).

Many researchers have developed instruments to assess satisfaction in interpersonal relationships. However, according to Boland and Follingstad (1987), these scales vary in terms of reliability, validity, scope of coverage, and ease of administration (i.e. Berg, 1984). Other scales are also problematic because they do not maintain consistent definitions of satisfaction (e.g. Lovejoy, Perkins, & Collins, 1995; Resbult, Johnson & Morrow, 1986).

Relational Satisfaction Scales. Berg (1984) investigated the development of friendship between previously unacquainted college roommates. To assess roommate satisfaction, Berg asked participants one question about their happiness and satisfaction with their living arrangements. Participants responded to the question on a 7-point scale ranging from 1 (very dissatisfied) to 7 (very satisfied). Because Berg only used one question to assess the dependent variable in the study, the validity of Berg's scale is very low, making it easy to deem as not useful for other studies.

Lovejoy et al. (1995) used a Social Satisfaction Questionnaire (SSQ) and a Shared Activities Scale (dealing with how often roommates participate in certain activities like eating and studying together) to test if these activities help with the prediction of subsequent roommate breakups. Combined, the SSQ and the Shared Activities Scale had adequate internal consistency ($\alpha = .89$). Results of this study showed that the prediction

of roommate breakups provided by the hybrid measure was superior to other variables such as demographic variables. Although this study yielded noteworthy findings, a major problem exists in the fact that the researchers defined satisfaction as shared activities, which is inconsistent from the way other studies have defined the construct.

Other researchers have taken different approaches to assessing relational satisfaction. For example, Rusbult et al. (1986) attempted to predict satisfaction in romantic relationships by employing the investment model that asserts that relationship satisfaction should be greater to the extent that the relationship contains greater rewards than costs. The researchers measured satisfaction with three questions: “In general, to what extent [are] you attracted to your partner?”; “In general, how [does] your relationship compare to other people’s?” and “All things considered, how satisfied [are] you with your relationship?” The relationship satisfaction scale demonstrated adequate reliability ($\alpha = .78$) and results showed that greater reward value in relationships correlates with greater satisfaction of the relationship and greater cost value is associated with reduced satisfaction. The scale used in the Rusbult et al. study regards satisfaction as the difference between the amount of rewards versus costs in the relationship, which is inconsistent to the ways other studies measure satisfaction.

Hendrick’s Relational Assessment Scale. Although other scales have been useful in the assessment of relational satisfaction, one scale may be regarded as superior to most others because of its high predictive power (Corcoran & Fischer, 1994), conciseness, and universal use. According to Hendrick et al. (1998), a number of researchers have employed the Hendrick relationship assessment scale in their research (see Cramer, 2002;

Flora & Segrin, 2000; Lamke et al., 1994). Originally designed to measure marital satisfaction, the instrument is also appropriate for and easily applicable to assess a broad array of partnered relationships including dating couples, gay couples, and friendships (Hendrick, 1988; Hendrick et al, 1998).

The relationship assessment scale (Hendrick, 1988; Hendrick et al, 1998) is a 7-item measure of marital satisfaction (see Appendix G). Some of the questions on the instrument deal with participants' perception of their relationship as compared to others, the number of problems in the relationship, and how much the relationship has met the subject's original expectations. Hendrick's relationship assessment scale demonstrated high reliability and internal consistency ($\alpha = .86$),

Others have successfully adapted Hendrick's (1988) relationship assessment scale to their research. For example, Lamke et al. (1994) employed the relationship satisfaction scale to study the linkages between masculinity/femininity and expressive/instrumental competence in dating relationships. The results of the study indicated that participants' expressive competence and perceptions of their partner (male or female) as feminine positively correlated with their relationship satisfaction.

More recently, Flora and Segrin (2000) also used Hendrick's scale to study dating couples. The goal of their study was to examine the associations among relational development, relational satisfaction, and loneliness. The researchers used Hendrick's satisfaction scale because they felt that the scale items were general enough to apply to romantic dyads and highly correlated with measures of marital satisfaction. Results

showed that various relational development assessments such as faster and broader relational development trajectories were positively associated with relational satisfaction.

In another study, Cramer (2002) sought to determine if four specific features of conflict resolution (avoidance, negative handling, no resolution, and outcome dissatisfaction) were associated with satisfaction in romantic relationships. They acknowledged that certain aspects of conflict resolution most likely correlate with satisfaction in romantic relationships, but they sought to uncover which association had the most strength. To measure satisfaction, Cramer used Hendrick's relationship satisfaction scale. Of the four features of conflict management, the no resolution and outcome dissatisfaction features were most strongly negatively correlated with relationship satisfaction. The results also suggested that the prime determinant of relationship dissatisfaction was lack of conflict resolution.

To review, Hendrick's (1988) scale was originally designed for use with married couples, but as shown, a number of researchers have successfully adapted the scale to assess satisfaction in other types of close relationships. The scale's adaptability to a broad range of partnered relationships shows its usefulness in studying college roommate relationships, which was the focus of the current study.

Hudson's Index of Family Relations. Another strong measure of relational satisfaction in the current literature is Hudson's index of Family Relations (1982). Hudson developed a 25-item scale designed to measure the extent and magnitude of relationship problems among family members (see Appendix H). The scale assesses intrafamilial stress and was designed to be used with a minimum of two family members

(Corcoran & Fischer, 1987). This scale allows respondents to rate each item along a 5-item Likert scale. As reported by Corcoran and Fischer (1987), Hudson's scale has excellent internal consistency and excellent low Standard Error of Measurement. Further, with slight adjustment in the wording of the questions, the scale can easily adapt to fit the interests of similar studies assessing relational satisfaction. For these reasons, Hudson's scale was also useful for the current study.

Summary of Relational Satisfaction Measures

Reviewing other researcher's scales and measurement tools for satisfaction was relevant and necessary prior to the start of this research. The above review demonstrates that researchers have measured relational satisfaction in numerous different ways. This inconsistency across research poses challenges for researchers seeking to compare findings and duplicate studies.

Most of the relational satisfaction scales used in past research were originally designed to measure marital satisfaction specifically, but can be easily adapted to the needs of the current research. A few examples of easily adaptable items from Rusbult et al's. (1986) investment scale were: "In general, to what extent [are] you attracted to your partner?"; "In general, how [does] your relationship compare to other people's?"; and "All things considered, how satisfied [are] you with your relationship?"

Hendrick's (1988) relational assessment scale also contains some questions that could measure roommate relational satisfaction without being changed. Examples of those questions were, "How good is your relationship compared to most?" and "To what extent has your relationship met your original expectations?" The above questions all

refer to the other person (partner) and the situation (the relationship) broadly enough that, in the context of a roommate relational satisfaction instrument, respondents would be able to answer the questions appropriately and accurately about their dormitory roommate and their current living situation. The next section describes how a combination of two strong relational satisfaction scales made for an ideal scale for the current study.

Satisfaction Measure for Current Study

After assessing a number of relational satisfaction scales, Hendrick's relationship assessment scale and Hudson's index of family relations seemed to be the optimal scales for the present research study. The review above demonstrated that the majority of the previous literature on relationship assessment used Hendrick's (1988) scale. Hudson's scale is also easily adaptable to fit the needs of the current study. To be consistent with past research and to allow for the results of the current study to be compared with past studies, this study combined both Hendrick's (1988) relationship assessment scale and Hudson's (1982) index of family relations. The two scales were combined to form a 30-item hybrid measure of relational satisfaction (see Appendix I). The original scales were revised slightly to fit the needs of this study and the next section explains these revisions in greater detail.

Revisions Made to Scales for Current Study. The original items in Hendrick's scale are presented as questions. In the current study, the questions were changed to statements in order for participants to be able to rate their agreement with each scale. Next, the word "roommate" was substituted for the word "partner." Finally, the question,

“how much do you love your partner?” on the original scale was eliminated because the roommate relationships under investigation consisted of individuals who did not know one another prior to their cohabitation and a question about love would have been inappropriate.

Further, a few changes also had to be made to Hudson’s scale to fit the needs of the current research. Hudson’s scale was revised so that the word “roommate” was substituted for the word “family.” In addition, the statement, “There is a lot of love in my family” from the original measurement instrument was eliminated for the same reason why the item addressing love was eliminated from Hendrick’s scale.

To eliminate the chances of obtaining an abundance of neutral scores, the original Hendrick scale was changed from a 7-point scale to an 8-point scale ranging from 1 (definitely disagree) to 8 (definitely agree). To maintain consistency, the original Hudson scale was also changed from its original 5-point scale to the same 8-point scale. The decision to alter the original scales was an attempt to maximize variability and eliminate respondents from indicating all neutral responses.

A preliminary reliability test on the 30-item hybrid scale revealed that a number of items weakened the scale’s internal consistency and thus had to be removed from the analysis. In addition, an exploratory factor analysis assessed the dimensions of satisfaction captured by the scale. The factor analysis produced a 2-factor solution with the first factor representing satisfaction and the second factor representing dissatisfaction. For the purpose of the current study, six items that loaded highly on the satisfaction factor were used to create an index of satisfaction ($\alpha = .92$). The six items were “I think my

roommate is terrific” (factor loading = .94), “My roommate is a great joy to me” (factor loading = .89), “I really enjoy my roommate” (factor loading = .88), “My roommate meets my needs” ($\alpha = .80$), “In general, I am satisfied with my roommate relationship” (factor loading = .67), and “My roommate is a real source of comfort to me” (factor loading = .85). Scores on these six items were averaged to create an overall satisfaction score ($M = 6.8$, $SD = 1.29$). See Appendix J for a table of descriptive statistics and reliability estimates for the scales presented above.

Procedures

To test the hypotheses presented earlier, the researcher distributed questionnaires to participants early in the Spring semester, 2004. To reduce the risk of question-ordering effects, three versions of the questionnaire were created, all of which contained the exact same questions, but in different orders. The three versions were randomly distributed to participants. All demographic questions remained in exactly the same order on all three forms.

To participate in this study, both roommates had to be present to fill out the questionnaires at the time of distribution. Participants were told that the surveys would take no longer than 20 minutes to complete and that they should not converse with their roommate or anyone else about the survey until the researcher collected it back from them. To ensure that participants were actually dormitory roommates, participants’ names were checked against an all-campus room assignment roster provided by housing assignment services. All of the participating students read a participant information and consent form prior to beginning the questionnaires (see Appendix K). Immediately after

participants returned the survey to the researcher, each participant received a debriefing document (see Appendix L). Finally, a more thorough debriefing statement was emailed to all students living in residence halls where data was collected (see Appendix M).

Overview of Analysis

Assuming an effect size of $r = .2$, the power for testing the null hypotheses (H4 and H5) was .91, suggesting a very low chance of a Type 2 error influencing the analysis. The following chapter presents the results of analyses that tested the current study's hypotheses.

Chapter 3

RESULTS

The current study sought to examine the relationship between usage and perceptions of CMC, face sensitivity, and college roommate satisfaction. The following sections report results of analyses of participants' behaviors in the presence of their roommate, participants' behaviors in the absence of their roommate, and perceived roommate behaviors. In addition, this chapter presents the results on the analyses performed to test the six hypotheses posed for the study.

An inspection of the distribution scores of the original data revealed that some of the behaviors under investigation were highly infrequent, regardless of the presence or absence of the participant's roommate. Consequently, the items assessing these behaviors were eliminated from further analysis.

Descriptive Data

Frequency of Online Communication

A frequency analysis presented participants' self report of how much time they spend communicating with others online on an average day. Results revealed that 68% of the students spend two or more hours per day communicating online. Further, 12% of the students reported that they spend five or more hours a day communicating online ($M = 2.94$ hours, $SD = 2.65$).

Participant Behaviors in Presence of Roommate

Analysis of the data revealed that 74% of respondents talk on instant messenger (a form of synchronous CMC) very frequently ($M = 5.71$, $SD = 1.71$) in the presence of their roommate. On the other hand, 93% of respondents reported that they rarely or never chat in online virtual chatrooms ($M = 1.35$, $SD = 1.18$) and most respondents (62%) reported that they rarely or never play interactive games on the Internet ($M = 2.64$, $SD = 2.09$). Given the infrequency of chatroom use or online gaming in the sample, both items were omitted from further analysis.

The two items assessing asynchronous CMC dealt with sending/receiving e-mail and reading/posting messages on online message boards. Most of the respondents reported using e-mail a good part of the time or more ($M = 5.41$, $SD = 1.91$) when their roommate is in the room. On the other hand, 72% of respondents reported that they rarely or never read/post messages on online message boards ($M = 2.44$, $SD = 2.25$) in the presence of their roommate, so this item was eliminated from further analysis.

The two items assessing non-CMC behaviors dealt with having friends over and talking on the telephone. Most respondents reported having friends over ($M = 4.64$, $SD = 1.73$) when their roommate was present. Finally, 70% of respondents reported talking on the phone frequently in the presence of their roommate ($M = 4.32$, $SD = 1.66$).

Participant Behaviors in Absence of Roommate

Analysis of the data assessing respondents' CMC behaviors in the absence of their roommate provided similar results to the analysis of respondents' CMC behaviors in the presence of their roommate. As a result, the same items were removed from the analysis.

For example, 50% of the respondents reported that they talk on instant messenger most of the time, almost always, or constantly ($M = 5.68$, $SD = 1.70$) in the absence of their roommate, making this item useful for analysis. Further, 66% of respondents reported that they rarely or never play interactive games on the Internet ($M = 2.57$, $SD = 2.10$) when their roommate is not present, so this item was also eliminated from the data. Finally, only 3% of respondents reported that they chat in online virtual chatrooms most of the time, almost always, or constantly ($M = 1.38$, $SD = 1.22$) when their roommate is not in the room, so this item was also eliminated from further analysis.

With regard to asynchronous CMC behaviors, 44% of respondents reported that they send e-mail most of the time, almost always, or constantly ($M = 5.21$, $SD = 1.95$), so this item remained useful for analysis. Inspection of the data also revealed that students do not partake in online message boards in the absence of their roommate. Specifically, 84% of the respondents reported that they read/post messages on online message boards some of the time, a little, rarely, or never ($M = 2.32$, $SD = 2.11$), so we eliminated this item from further analysis.

Finally, analysis of non-CMC behavior revealed that 83% of respondents have friends over most of the time, almost always, or constantly when their roommate is not in the room ($M = 4.64$, $SD = 1.73$). Further, 82% of the respondents reported that they talk on the phone most of the time, almost always, or constantly when their roommates is not in the room ($M = 4.51$, $SD = 1.75$). Both of these items remained useful for analysis.

Roommate Behavior

In addition to measuring participants behaviors, the survey also included questions about the participants' roommate's behaviors. An overwhelming majority of respondents reported that their roommate talks on instant messenger regularly when they are both present in their room ($M = 5.57, SD = 1.73$). In fact, only 10% reported that their roommate uses instant messenger a little, rarely, or never. Most respondents (88%) reported that their roommate rarely or never chats in online virtual chatrooms ($M = 1.60, SD = 1.47$). Similarly, most of the respondents (75%) reported that their roommate rarely or never plays interactive games on the Internet ($M = 2.56, SD = 2.10$). Thus, these two items were eliminated from further analysis.

The majority of respondents (59%) reported that their roommate usually participates in sending and receiving e-mails when they are both in their room ($M = 4.82, SD = 1.72$). On the other hand, 77% of the participants reported that their roommate reads/posts messages on online message boards a little, rarely, or never ($M = 2.35, SD = 2.12$), so this item was eliminated from further analysis.

Respondents reported that their roommate often participates in non-CMC behaviors when they were both in their room. For example, most respondents (54%) reported that their roommate frequently has friends over while they are both in their room ($M = 4.27, SD = 1.75$). Further, most respondents (66%) reported that their roommate talks on the phone some of the time, a good part of the time, or most of the ($M = 4.35, SD = 1.70$).

In sum, the analysis of students' common communication behaviors revealed that they do not engage in certain CMC behaviors regardless of the presence or absence of their roommate. Further, participants reported that their roommates do not typically participate in those behaviors either. Although participants reported that they often use instant messenger, send and receive e-mail, have friends over, and talk on the phone, they also reported that they do not chat in online virtual chatrooms, play interactive games on the Internet, or use online message boards. Another researcher found similar results regarding college students' online chat room use. Recchiuti (2003) found that, of 446 college students surveyed, only 93 students (21%) reported that they participate in online chat rooms. These findings made it necessary to eliminate certain items from the analysis. The following section reports the results of the analyses performed to test the six hypotheses of the study.

Hypothesis Tests

Hypothesis 1

Hypothesis 1 predicted that the amount of time a student spends engaged in synchronous CMC in the presence of his or her roommate is associated with the roommate's relational satisfaction which is mediated by the roommate's perceptions of perceived the face threat of that activity. To test Hypothesis 1, we performed a regression analysis where roommates' level of satisfaction was treated as a dependent variable and students' use of synchronous CMC and perceptions of the face threat involved in CMC were predictors. This hypothesis was not supported. Results showed that there was no significant relationship between the amount of time students spend

engaged in synchronous CMC in the presence of their roommate and their overall level of roommate satisfaction ($f = 2.965$, $df = 2,106$, $p = .056$). More specifically, neither students' use, ($\beta = .138$, $p = .162$), nor the roommates' perception of the face threat of synchronous CMC use, ($\beta = -.160$, $p = .105$), were significant predictors of satisfaction.

Hypothesis 2

Hypothesis 2 predicted that the more students perceive synchronous CMC usage in the presence of others as face threatening, the less they will engage in this behavior in the presence of their roommate. Results of a zero-order Pearson correlation analysis showed that there was no significant relationship between students perceiving synchronous CMC usage in the presence of others as face threatening and the amount of time students chose to engage in this behavior in the presence of their roommate, ($r = -.060$, $p = .367$, all relevant correlations are presented in Appendix N). Early frequency analyses revealed little to no variability in the scores for online virtual chatroom participation. Given the lack of variability of this key measure, subsequent tests did not assess any correlation. More specifically, results showed that 84% of the respondents felt strongly that synchronous CMC usage in the presence of others was definitely *not* face threatening ($M = 1.2$, $SD = .60$) and 88% of respondents felt strongly that asynchronous CMC in the presence of others was definitely not face threatening ($M = 1.1$, $SD = .57$). Thus, Hypothesis 2 was not supported.

Hypothesis 3

Hypothesis 3 predicted that the amount of time students spend engaged in synchronous CMC in the presence of their roommate would be negatively related to their

general concern for face. The face sensitivity scale used in this study revealed that, overall, participants had a high level of face sensitivity ($M = 6.6$, $SD = 1.35$). A correlation analysis showed that there was no significant relationship between the amount of time that students spend engaged in synchronous CMC in the presence of their roommate and their concern for face, ($r = .096$, $p = .148$). Thus, Hypothesis 3 was not supported.

Hypothesis 4

Hypothesis 4 predicted that the amount of time students spend engaged in synchronous CMC in the *absence* of their roommate would not be related to their concern for face. A correlation analysis revealed that there was no significant relationship between the amount of time students spent engaged in synchronous CMC in the absence of their roommate and their concern for face, ($r = .122$, $p = .065$). Thus, Hypothesis 4 was supported.

Hypothesis 5

Hypothesis 5 predicted that the amount of time students spend engaged in asynchronous CMC in the presence of their roommate would not be related to that student's roommate satisfaction; although the null hypothesis cannot technically be tested, this prediction was based on previous research on the difference between synchronous and asynchronous CMC. A correlation analysis between the amount of time spend sending and receiving e-mail in the presence of one's roommate and students' roommate satisfaction revealed that there was no significant relationship between the amount of time a student spends engaged in asynchronous CMC in the presence of their

roommate and his or her roommate's satisfaction, ($r = .05, p = .46$). Therefore, Hypothesis 5 was supported.

Hypothesis 6

Analysis of the data collected in this research took place at two different levels for the purposes of exploring Hypothesis 6. For the previous five hypotheses, the individual student was the unit of analysis. For this hypothesis, the unit of analysis changed from the individual to the dyad and the data were reconfigured into a new data set to permit comparisons of roommates' scores. In the new data set, each case represented one dyad and included the difference values between each of the roommates scores. To calculate the difference values, the absolute values of one roommates' score on a particular item (i.e. face sensitivity) were subtracted it from the other roommate's score on the same item. The result was a difference score representing the dyad.

Hypothesis 6 predicted that the degree of similarity in the perceived face threat of synchronous CMC use in the presence of one's roommate positively predicts the level of roommate satisfaction between the dyad. A regression analysis where the mean of the satisfaction scores of each roommate pair was treated as the dependent variable and the difference between roommate's feelings toward instant messaging was the predictor tested Hypothesis 6. This hypothesis was not supported. Results showed no relationship between the variables, ($\beta = -.152, p = .119$).

Summary of Results of Hypothesis Tests

Overall, the data provided relatively little support for most of the hypotheses. Hypothesis 4, which predicted that the amount of time students spend engaged in

synchronous CMC in the *absence* of their roommate would not be related to their concern for face and Hypothesis 5, which predicted that the amount of time a student spends engaged in asynchronous CMC in the presence of his or her roommate would not be related to that student's perception of his or her relational satisfaction, were supported. However, because these hypotheses predicted the null, the findings did not offer much knowledge or understanding to the study. The other 4 hypotheses were not supported (see Table 1 for a summary).

In general, the participants reported a high level of face sensitivity awareness. In contrast to what was expected, students did not perceive synchronous CMC use as face threatening or impolite when executed in the presence of their roommate. On the other hand, results suggest that students regard online communication as an ordinary social activity that does not play a role in their personal relationship with their roommate. Students may regard CMC as an ordinary social activity because they engage in the activity on a routine basis.

In sum, results of the current study demonstrated that synchronous CMC use does not affect relational satisfaction between roommate pairs because students' perceptions of its use do not align with their perceptions of face threatening behavior in FtF interactions.

Table 1

Summary Table for Results of Hypotheses

Hypothesis	Result
<p>Hypothesis 1: The amount of time that a student spends engaged in synchronous CMC in the presence of his or her roommate is associated with the roommate's relational satisfaction which is mediated by the roommate's perceptions of perceived the face threat of that activity.</p>	<p>Not supported: There was no significant relationship between the amount of time students spend engaged in synchronous CMC in the presence of their roommate and their overall level of roommate satisfaction. Neither students use, $\beta = .138, p = .162$, nor the roommates' perception of the face threat of synchronous CMC use, $\beta = -.160, p = .105$, were significant predictors of satisfaction.</p>
<p>Hypothesis 2: The more students perceive synchronous CMC usage in the presence of others as face threatening, the less they will engage in this behavior in the presence of their roommate.</p>	<p>Not supported: There was no significant relationship between students perceiving synchronous CMC usage in the presence of others as face threatening and the amount of time students chose to engage in this behavior in the presence of their roommate, $r = -.060, p = .367$.</p>
<p>Hypothesis 3: The amount of time students spend engaged in synchronous CMC in the presence of their dormitory roommate will be negatively related to their general concern for face.</p>	<p>Not supported: There was no significant relationship between the amount of time that students spend engaged in synchronous CMC in the presence of their roommate and their concern for face, $r = .096, p = .148$.</p>
<p>Hypothesis 4: The amount of time students spend engaged in synchronous CMC in the <i>absence</i> of their roommate will not be related to their concern for face.</p>	<p>Supported: There was no significant relationship between the amount of time students spent engaged in synchronous CMC in the absence of their roommate and their concern for face, $r = .122, p = .065$.</p>
<p>Hypothesis 5: The amount of time a student spends engaged in asynchronous CMC in the presence of their roommate will not be related to that student's perception of the dyad's relational satisfaction.</p>	<p>Supported: There was no significant relationship between the amount of time a student spends engaged in asynchronous CMC in the presence of their roommate and roommate satisfaction, $r = .05, p = .46$.</p>
<p>Hypothesis 6: The degree of similarity in the perceived face threat of synchronous CMC use in the presence of one's roommate positively predicts the level of roommate satisfaction between the dyad.</p>	<p>Not supported: The degree of similarity in the perceived face threat of synchronous CMC use in the presence of one's roommate did not predict the level of roommate satisfaction between the dyad, $\beta = -.152, p = .119$.</p>

Additional Analyses

Although the variables put forth in the hypotheses did not predict roommate satisfaction, further analyses revealed three significant predictors of roommate satisfaction (see Table 2). To determine the predictive strength of other independent variables, we performed a regression analysis with general face sensitivity, sex, perceptions of non-CMC behaviors in presence of roommate, perceptions of synchronous CMC behaviors in the presence of roommate, and perceptions of asynchronous CMC behaviors in the presence of roommate, as predictors of satisfaction. Together, these variables accounted for 30% of the variability in satisfaction scores ($R^2 = .30, f = 19.63, df = 5,227, p < .000$). The three variables that best predicted roommate satisfaction were perceptions of non-CMC behaviors (having friends over and talking on the phone), general face sensitivity, and sex.

The following chapter will present more detailed explanations of the findings and will discuss implications of the results. The following chapter will also further discuss some of the implications of the unanticipated findings, present limitations to the study, and propose suggestions for future research.

Table 2

Other Predictors of Roommate Satisfaction

Predictors	Std. β	<i>t</i>	<i>p</i>
Perceptions of non-CMC behaviors in presence of roommate	-.305	-4.965	.000
General face sensitivity	.249	3.921	.000
*Sex	.232	3.704	.000
Perceptions of asynchronous CMC behaviors in presence of roommate	-.133	-1.330	.185
Perceptions of synchronous CMC behaviors in presence of roommate	-.068	-.681	.496

* For this analysis, males were coded 1 and females were coded 2.

Chapter 4

DISCUSSION

This study examined the associations among students' views toward the face-threatening nature of engaging in online communication while in the presence of their dormitory roommate and roommate satisfaction. None of the hypotheses, with the exception of Hypothesis 4 and 5, were supported. The analyses reported in the previous chapter did not yield any significant findings associated with the hypotheses, however, further analyses revealed some unanticipated findings worth presenting and discussing.

This chapter begins by offering both methodological and theoretical explanations about why the majority of the study's expectations were not supported and then presents some of the unanticipated findings and discuss their implications. The last section of this chapter discusses some of the limitations of the study and offers suggestions for future research.

Descriptive Data

Results revealed that students simply did not engage in certain CMC behaviors (i.e., chat in virtual chatrooms, read/post messages on online message boards, or play interactive games in the Internet) regardless of the presence or absence of their roommate. However, students reported regular use of instant messenger and e-mail. Both instant messenger and e-mail allow college students to keep in touch with friends and family, as well as meet and interact with strangers. These results are similar to those

reported by Recchiuti (2003), who found that one of the primary reasons why college students use e-mail and instant messenger is to keep in touch with friends and relatives who live far away. Recchiuti (2003) also found that fewer students reported using e-mail and instant messenger to communicate with strangers. Since 84% of the sample in the current study consisted of first-year students, the findings of the present study concerning usage are not surprising. College students (especially first-year students) who are away from home may find comfort in keeping in touch with old friends and family members in order to better adjust to their new environment. Students may choose to communicate in real time (instant messenger) or they may choose to carry out e-mail conversations over a more extended period of time. During the first year of college, it is imperative that students recognize “social stability in times of change” (Tinto, 1988, p. 440).

According to Tinto (1988) students undergo three distinct stages or passages as they transition from high school to college: separation, transition, and incorporation. The first stage, the “stage of separation,” requires students to separate (disassociate) themselves from their membership in past communities (e.g. high school) in order to successfully make the transition from high school to college. However, this separation is very difficult and stressful for most students. So, in an attempt to ease this separation, it seems that students rely on their instant messaging and e-mail conversations with old friends. With that said, it is understandable that the participants of the current study reported engaging in this type of communication on a regular basis.

As opposed to instant messenger, which is mainly used to communicate with friends and acquaintances, virtual chatrooms allow users to communicate with strangers.

It makes sense that students did not report frequent participation in virtual chatrooms, because conversation with strangers would not align with stage one of Tinto's (1988) stages of student departure. Specifically, conversations with strangers would not help students recognize membership in past communities while easing their transition into their new community(ies) as would conversations with past friends and family members.

Tinto's (1988) second stage, transition, "is a period of passage between the old and the new" (p. 444). The transition stage is when many students feel torn between their past associations and their developing associations in their new communities. Students recognize their new memberships, but still remain attached to their old memberships.

Students reported that they often have friends over and talk on the phone regardless of the presence or absence of their roommate, which can be explained with Tinto's (1988) third stage of transition, "incorporation in college." This third stage deals with students finally becoming integrated into their new community and feeling comfortable with their new social membership(s). According Tinto (1988), "social interactions are the primary vehicle through which such integrative associations arise" (p. 446). Thus, it is no wonder why students reported regularly having friends over and talking on the phone, since these are both ways for them to effectively pass through the third stage of their transition into college life.

As explained above, college students regularly use e-mail, instant messenger, have friends over, and talk on the telephone in their dorm rooms, as their primary means of social interaction. The next section will discuss the study's hypotheses in more detail and suggests some implications of the findings. After carefully reviewing the

hypotheses, a subsequent section will discuss some implications with regard to face theory and social presence theory.

Hypotheses

Hypothesis 1 was not supported in that the amount of time that a student spends engaged in synchronous CMC in the presence of his or her roommate did not correlate with the roommate's relational satisfaction mediated by the roommate's perceptions of perceived face threat of this activity. This hypothesis was guided by theoretical explanations about the potential face-threatening nature of synchronous CMC behaviors, because of its similarity to FtF interactions.

The popularity and normality of online communication among college students may explain these findings. College students do not find online communication to be face threatening because it is a behavior that is now part of their daily routine, similar to watching television, studying, and sleeping. Moreover, students may feel comfortable with this activity because they conduct it in the comfort of their own dorm room. Students may not think about their social behaviors while they are in their own room in terms of the influence that it may have on their roommate's perception of them, because they regard their room as a neutral safe place that belongs to them just as much as it belongs to their roommate. Students may feel that when they engage in CMC behaviors, they are not disrupting their roommate or prohibiting their roommate from engaging in studying, reading, or other behaviors. Instead, the roommate participating in CMC minds his or her own business and goes about his or her routine as he or she would regardless if the other roommate was present. Thus, the roommate participating in CMC may not

think twice of his or her participation because he or she does not view it as being rude or disrespectful. These findings also suggest that as opposed to the study's original predictions, students may perceive CMC as having less social presence than FtF communication. If students perceived CMC as high in social presence, they might not have regarded it as acceptable in the presence of their roommate.

Hypothesis 2 predicted that the more students perceive synchronous CMC usage in the presence of others as face threatening, the less they will engage in this behavior in the presence of their roommate. Since students did not see face threat involved in CMC behaviors at all, they did not hesitate to participate in these behaviors when their roommate was also in the room. Respondents reported that they frequently participate in instant messaging when their roommate is in the room, which is no different from when their roommate is not in the room. As noted earlier, politeness theory deals with upholding and sustaining face and it is rooted in considerateness, respect, and a mutual cooperation between parties. Since most students did not view instant messenger usage in the presence of others as disrespectful or impolite, one possible explanation for the findings is that students felt like they still maintained a level of mutual cooperation with their roommate and their roommate did not develop negative feelings toward them for engaging in instant messaging.

Hypothesis 3 was not supported in that the amount of time students spent engaged in synchronous CMC in the presence of their dormitory roommate was not related to their general concern for face. Although the face sensitivity scale used in this study revealed that the participants had an overall high level of general face sensitivity, the results

revealed no significant correlation between students' general level of face sensitivity and the perceived face threat involved in using synchronous CMC in the presence of their roommate. In other words, students did not regard synchronous CMC use similar to the way in which they regarded general face threatening behaviors such as embarrassing others, putting others in awkward situations, or ignoring others.

One explanation for the findings may be that the original theoretical assumptions about the level of social presence involved in synchronous CMC were incorrect. Although theoretically the social presence that exists in synchronous CMC is very similar to that of FtF communication, perhaps the participants did not perceive of synchronous CMC that way.

Another possible explanation of these findings is that CMC interactions allow users to multi-task (engage in more than one activity at the same time). When students multi-task, they can focus part of their attention to their online conversation and part of their attention to what is going on in their room. So, students can talk with old friends over instant messenger and at the same time, carry on a conversation with their roommate, if they choose. The option of multi-tasking might make students feel no sense of ignoring or disrespecting their roommate because they may feel that they can actively participate in both activities at the same time if needed or desired.

Hypothesis 4 predicted no relationship between the amount of time students spend engaged in synchronous CMC in the *absence* of their roommate and their concern for face. This hypothesis was supported and as explained above, results revealed that students have an overall high level of general face sensitivity. Students reported using

instant messaging in the presence of their roommate just as much as they did in the absence of their roommate. Once again, this can be explained by the fact that students did not perceive this type of communication as face threatening when taken place in the presence of another person. In general, students felt comfortable talking on instant messenger regardless of the fact that results also revealed most students have high regard for face sensitivity. Students' comfort using instant messaging around their roommate might be explained by the fact that students did not recognize a social or rule-based conceptual similarity between the two means of communication.

Hypothesis 5 predicted that the amount of time a student spends engaged in asynchronous CMC in the presence of his or her roommate would not be related to that student's perception of the dyad's relational satisfaction. Hypothesis 5 was supported in that the amount of time a student spends engaged in asynchronous CMC in the presence of his or her roommate had no relationship with the student's perception of relational satisfaction. The prediction put forth for this hypothesis was based on the idea that the level of face threat involved in asynchronous CMC is much lower than that of synchronous CMC because it is less engaging, less socially rich, and less similar to FtF communication than synchronous CMC.

Similar to earlier explanations, students did not perceive any difference between the face threatening nature of synchronous CMC and the face threatening nature of asynchronous CMC. In turn, dyads did not report an overall different (higher or lower) level of relational satisfaction based on asynchronous CMC usage in the presence of their roommate. One logical explanation for this finding is that the model presented earlier

was inaccurate. Although the basic theories guiding this research (social presence theory, face theory, and politeness theory) hold true for FtF communication interactions, the results of this research reveal that the theories apparently do not apply to CMC. Results also suggest that, as opposed to original speculations, CMC simply contains a lot less social presence than FtF communication despite their presumed similarities in terms of rules social norms. Moreover, researchers originally applied the empirical findings that helped them to derive at their conclusions about social presence theory and face theory only to FtF social interactions, so applying these theories to CMC interactions proved to be unbecoming.

As discussed previously, although the current research begins with the assumption that CMC interactions entail many of the same basic social norms and implicit rules as FtF interactions, the current results call this assumption into question. As opposed to the original expectations of the current study, students regard both synchronous and asynchronous CMC behaviors as having different social rules from FtF interactions.

Another explanation for these findings may be that talking on the phone and FtF conversations (both non-CMC) in the presence of others contain noise, while text-based conversations over the Internet do not. Specifically, when a student participates in a phone or FtF conversation, his or her roommate can potentially hear one or both ends of the conversation. On the contrary, when a student participates in a conversation via the Internet, his or her roommate cannot hear the conversation because it is text-based and must be read from the computer screen.

Finally, Hypothesis 6 dealt with the notion that similarity of perceived face threat of synchronous CMC between roommates predicts the level of satisfaction between the dyad. Once again, results revealed that participants did not perceive synchronous CMC behaviors as face threatening, and thus their usage did not predict the level of satisfaction involved in their dyadic relationship. The scores on this item were very similar because as explained above, students generally did not perceive synchronous CMC as face threatening. Overall, the data indicated no variation, with the majority of the students perceiving CMC similarly.

The results discussed above do not exist without theoretical implications. The one major implication of the current study is that some of the basic theories that guide FtF interactions simply do not apply to CMC interactions, regardless of the similarity of the social presence involved in both forms of interaction. Students did not feel that by engaging in CMC interactions in the presence of another person, they were excluding that other person. If students did recognize this exclusion, then they did not perceive chatting on instant messenger as face threatening. As a result of these findings, further exploration and alternate theories are needed to explain exactly why students regard CMC interactions differently than FtF interactions.

Additional Analyses

In an effort to further explore the data collected in this study, additional analyses tested for other potential predictors of roommate satisfaction. As discussed earlier, the hypothesized predictors of roommate satisfaction did not reveal any significant findings. However, further analyses presented four significant predictors of roommate satisfaction.

Results revealed a negative relationship between students' perceptions of their roommate having friends over or talking on the phone (non-CMC behaviors) and relational satisfaction. Additionally, results revealed a positive relationship between students' general face sensitivity and relational satisfaction. Specifically, perceptions of the face threat involved in non-CMC behaviors proved to be the best predictor of roommate satisfaction. Level of face sensitivity proved to be the second best predictor of roommate satisfaction. Finally, analysis also revealed that females had a higher likelihood of relational satisfaction than males.

Face sensitivity is a general social skill and level of face sensitivity may be a strong predictor of roommate satisfaction because individuals with higher social skills generally have better relationships (Spitzberg, 2003). According to Spitzberg (2003), the more interpersonally skilled a person is, the more he or she will successfully maintain social relationships. Level of interpersonal skill might help to explain the results of the current study which revealed a positive relationship between students' general face sensitivity and relational satisfaction.

Researchers have hypothesized countless potential predictors of college roommate satisfaction. Some predictors prove to be strong and contribute greatly to the literature, while other predictors are very weak and do not contribute to the literature on roommate satisfaction at all. The predictors put forth in the present study failed to positively contribute to the literature on potential predictors of roommate satisfaction. However, additional analyses revealed the other predictors described above that researchers can use

as a starting point for future studies. The next section will present some limitations of the current research and some suggestions for future research.

Limitations and Suggestions for Future Research

Sample and Data Collection

The current study contained some limitations that may have potentially altered the outcome of the study. First, the sample was fairly homogeneous, with all participants attending the same university. The homogeneous sample may have restricted the range of scores on some of the measures. Future studies incorporating a sample drawn from a variety of colleges and universities (e.g., all women's, Ivy league, historically black, private, and technologically disadvantaged) and specialized residence halls (e.g., special interest housing) would allow for more exploration of Internet use and roommate dynamics. Diverse student populations might approach the Internet differently. For example, some universities might not be equipped with the same technology as others that enables both residents to log on to the Internet simultaneously. If students must take turns using the Internet, their individual perceptions of CMC behaviors and roommate satisfaction may differ.

Second, since the data were collected directly from the residence halls and participants were actually roommates already living together, this limited the lack of control for extraneous variables that might have played a role in producing the current results. Specifically, most roommates were initially paired up by housing assignment services as a result of their responses to the roommate matching questionnaires prior to arriving on campus. We can assume that most of the pairs already had a number of

commonalities that led to their pairing. This matching strategy could have contributed to the students' high reports of roommate satisfaction. Although researchers would need to be sensitive to the potential ethics involved in purposefully assigning roommates to live together who may not have otherwise been matched up based on their interest questionnaires, future studies might want to ensure true randomness of roommate assignments.

Next, participants for this study were recruited from resident assistant floor and building meetings and from door-to-door spontaneous recruitment. In order to track the surveys and analyze them in sets of two, both roommates needed to be present at the time of survey distribution in order to participate. The necessity of having both roommates present at the time of data collection resulted in a lower likelihood of surveying roommates who were not satisfied living together. We can speculate that roommates who generally do not care for one another would minimize their time together. So, dissatisfied pairs would be more likely to be somewhere away from their roommate like the library, study lounge, or in a friend's room. At the same time, the roommates who were either both at their floor meetings together or both in their room together at the time of survey distribution obviously cared to be around one another, so the likelihood of them reporting high satisfaction was greater to start.

Another potential concern with the data collection was that because surveys were distributed to both roommates simultaneously and often in the students' dorm rooms, there were many times when the students were in close enough proximity to their roommate to have to worry about their roommate seeing their responses. This could have

caused participants to respond differently than they would if they were not in a position where their roommate could see their responses (i.e. a social desirability effect). In turn, the responses to the questions regarding roommate behavior and roommate satisfaction may have been skewed, especially if the pair did not necessarily care for one another but needed to try to stick to their current room situation.

Next, the use of self-report measures may have introduced error into the data. Questionnaires assessing attitudes and beliefs are always problematic because researchers must assume that respondents are answering truthfully and not just in a socially desirable manner. It is possible that the students completing the surveys responded in ways that they thought would be socially acceptable, rather than accurately. This possibility may have been particularly true in the sections that asked participants to report on their usage of certain methods of CMC. For example, some types of Internet activities, such as online chat rooms, may not be regarded very highly by society, so respondents might have responded in a socially desirable manner (that they do not partake in online chat rooms) in fear of not being like the majority. The desire to be like the majority may have also played out in the section of the survey that asked about the participants' opinions toward "common social situations." Instead of reporting on their feelings toward the statements, participants may have felt that in order to answer "correctly," they had to answer according to what they felt was more socially desirable.

Suggestions for Future Research

There is a growing interest in CMC research (see Birnie & Horvath, 2002; Caplan, 2003; Leung, 2002, Walther, 1996). The current literature on CMC primarily

focuses on text-based media (any type of CMC that entails typing as a means of communicating). However, given recent advances in CMC technology, social communication over the Internet can also take place in the form of video conferencing where participants can actually see other participants with a mini-camera (known as a webcam) that is connected to their computer. The nature of video conferencing changes the dynamic of these social interactions for a few reasons. First, video conferencing enriches the communication interaction and allows participants to see each other's non-verbal cues. In addition, video conferencing is conceivably a much richer communication channel than text based CMC in the sense that it carries more information than text. Richer interactions may mean stronger perceptions of the interaction being similar to FtF communication. Future researchers may want to explore social presence theory, face theory, and politeness theory in terms of videoconferencing.

Finally, future researchers might also choose to investigate *why* students perceive that CMC does not follow the same implicit social rules as FtF communication in terms of maintaining face. Researchers might want to inquire about students' perspectives on how CMC differs from FtF communication. The suggestions put forth in Chapter 4 make for a good starting place for this investigation, however most of the suggestions are based off of speculation and not from actual empirical data.

Conclusion

The purpose of the current research project was to examine the relationship between usage and perceptions of CMC, face sensitivity, and college roommate satisfaction. The inquiry stemmed from a review of some of the leading communication

theories on social presence, face threat, and politeness and the believed similarity of CMC to FtF interactions. A thorough literature review of primary interpersonal communication theories, the increased popularity of online communication, and the dynamics of college roommate relationships led to the primary suggestion of the research; if college roommates have a high level of general face sensitivity along with the perception of certain types of CMC as being rude or face threatening while in the presence of another person (specifically, their dormitory roommate), then those students will alter their online chatting behavior in their dorm room in an attempt to respect and uphold face with that other person.

Tests of the hypotheses put forth in Chapter 1 failed to support the predicted outcomes. At the same time, other unanticipated findings suggested some important implications about the perceptions that students have about online communication. For example, results suggested that students regard CMC as an everyday activity that does not carry the same social expectations as FtF interactions. Since online communication is now a habitual activity in most college students' daily routines, students do not perceive of this behavior as face threatening when performed in the presence of others. On the other hand, students regard online communication as they would any other daily activity that they execute in their dorm room.

Overall, the results of this study suggest that CMC behaviors have little to do with roommate satisfaction. Results also suggest that future researchers need to conduct further research in the area of CMC in order to fully understand how it differs from FtF communication and why students perceive of the two types of communication as being different.

REFERENCES

- Barnes, S. B. (2003). *Computer-mediated communication*. Boston: Allyn and Bacon.
- Berg, J. H. (1984). Development of friendship between roommates. *Journal of Personality and Social Psychology*, *46*, 346-356.
- Birnie, S. A., & Horvath, P. (2002). Psychological predictors of Internet social Communication [Electronic version]. *Journal of Computer Mediated Communication*, *7*. Retrieved 11/4/03 from <http://www.ascusc.org/jcmc/vol4/issue4/birnie.html>
- Boland, J. P., & Follingstad, D. R. (1987). The relationship between communication and marital satisfaction: A review. *Journal of Sex & Marital Therapy*, *13*, 286-313.
- Bonebrake, K. (2002). College students' Internet use, relationship formation, and personality correlates. *Cybepsychology & Behavior* *5*, 551-557.
- Bowers, J. W., & Courtright, J. A. (1984). *Communication research methods*. Glenview, Ill.: Scott Foresman and Company.
- Brown, P., & Levinson, S. (1987). *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Caplan, S. E. (2003). Preference for Online social interaction: A theory of problematic Internet use and psychosocial well-being. *Communication Research*, *30*, 625-648.

- Caplan, S. E., & Samter, W. (1999). Younger and older adults' evaluations of supportive messages: The role of facework in evaluations of social support messages. *Communication Quarterly, 47*, 245-265.
- Cerny, S. M., Zax, M., & Pierce, R. A. (1970). Roommate compatibility in freshmen women. *The Journal of the American College Health Association, 19*, 108-110.
- Chou, C. (2001). Internet heavy use and addiction among Taiwanese college students: An online interview study. *Cyberpsychology & Behavior, 4*, 573-585.
- Clements, M. L., Cordova, A. D., Markman, H. J., & Laurenceau, J. (1997). The erosion of marital satisfaction over time and how to prevent it. In R. J. Sternberg, & M. Hojjat (Eds.). *Satisfaction in Close Relationships* (pp. 190-216). New York, NY: Guilford Press.
- Cole, T., & Bradac, J. J. (1996). A lay theory of relational satisfaction with best friends. *Journal of Social & Personal Relationships, 13*, 57-83.
- Corcoran, K., & Fischer, J. (1987). *Measures for clinical practice: A sourcebook*. New York, NY: Free Press.
- Corcoran, K., & Fischer, J. (1994). *Measures for clinical practice: A sourcebook* (2nd ed.). New York, NY: Free Press.
- Cramer, D. (2002). Linking conflict management behaviours and relational satisfaction: The intervening role of conflict outcome satisfaction. *Journal of Social & Personal Relationships, 19*, 425-432.

- Culnan, M. J., & Markus, M. L., (1987). Information technologies. In F. M. Jablin, L. L. Putnam, K. H. Roberts, & L. W. Porter (Eds.). *Handbook of organizational communication: An interdisciplinary perspective* (pp. 420-443). Newbury Park, CA: Sage.
- Cupach, W. R., & Metts, S. (1994). *Facework*. Thousand Oaks, California: Sage.
- Erbert, L. A., & Duck, S. W. (1997). Rethinking satisfaction in personal relationships from a dialectal perspective. In R. J. Sternberg & M. Hojjat (Eds.). *Satisfaction in close relationships* (pp. 190-216). New York, NY: Guilford Press.
- Feeney, J. A. (1994). Attachment style, communication patterns, and satisfaction across the life cycle of marriage. *Personal Relationships, 1*, 336-348.
- Flora, J., & Segrin, C. (2000). Relationship development in dating couples: Implications for relational satisfaction and loneliness. *Journal of Social & Personal Relationships, 17*, 811-825.
- Fox, S., & Rainie, L. (2001). *Time online: Why some people use the Internet more than before and why some use it less*. Pew Internet and American Life Project. [Online] Available:
http://www.pewinternet.org/reports/pdfs/PIP_Time_spent_online.pdf
- Franiuk, R., Cohen D., & Pomerantz, E. M. (2002). Implicit theories of relationships: Implications for relationship satisfaction and longevity. *Personal Relationships, 9*(4), 345-367.

- Fuller, B., & Hall, F.J. (1996). Differences in personality type and roommate compatibility as predictors of roommate conflict. *Journal of College Student Development, 37* (5), 510-518.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. Garden City, NY: Anchor & Doubleday.
- Hecht, M. J. (1976). Measures of communication satisfaction. *Human Communication Research, 4*, 351-367.
- Hecht, M. J. (1978). The conceptualization and measurement of interpersonal communication satisfaction. *Human Communication Research, 4*, 253-264.
- Hendrick, S. S. (1988). A generic measure of satisfaction. *Journal of Marriage & the family, 50*, 93-98.
- Hendrick, S. S., Dicke, A., & Hendrick, C. (1998). The relationship assessment scale. *Journal of Social & Personal Relationships, 15*, 137-142.
- Hendrick, S. S., & Hendrick, C. (1997). Love and satisfaction. In R. J. Sternberg & M. Hojjat (Eds.). *Satisfaction in close relationships* (pp. 190-216). New York, NY: Guilford Press.
- Hoyle, R. H. (1995). The structural equation modeling approach: Basic concepts and fundamental issues. In R. H. Hoyle (Ed.), *Structural equation modeling: Concepts, issues, and applications* (pp. 1-15). Thousand Oaks, CA: Sage.
- Hudson, W. W. (1982). *The clinical measurement package: A field manual*. Chicago: Dorsey Press.

- Jones, L., McCaa, B., Jr., & Martecchini, C. A. (1980). Roommate satisfaction as a function of similarity. *Journal of College Student Personnel, 21*, 223-234.
- Jones, S. (2002). *The Internet goes to college: How students are living in the future with today's technology*. [Online]. Washington, D. C.: Pew Internet & American Life Project. Retrieved 10/20/03 from <http://www.pewinternet.org/reports/index.asp>.
- Kandell, J. J. (1998). Internet addiction on campus: The vulnerability of college students. *Cyberpsychology & Behavior, 1*, 11-17.
- Kelley, D. L., & Burgoon, J. K. (1991). Understanding marital satisfaction and couple type as functions of relational expectations. *Human Communication Research, 18*, 40-69.
- Koski, L. R., & Shaver, P. R. (1997). Attachment and relationship satisfaction across the lifespan. In R. J. Sternberg & M. Hojjat (Eds.). *Satisfaction in close relationships* (pp. 190-216). New York, NY: Guilford Press.
- Kubey, R. W., Lavin, M. J., & Barrows, J. R. (2001). Internet use and collegiate academic performance decrements: Early findings. *Journal of Communication, 51*(2), 366-382.
- Lamke, L. K., Sollie, D. L., Durbin, R. G., & Fitzpatrick, J. A. (1994). Masculinity, femininity and relational satisfaction: The mediating role of interpersonal competence. *Journal of Social & Personal Relationships, 11*, 535-554.

- Lapidus, J., Green, S.K., & Baruh, E. (1985). Factors related to roommate compatibility in the residence hall: A review. *Journal of College Student Development, 26*, 420-434.
- Leung, L. (2002). Loneliness, self-disclosure, and ICQ ("I seek you") use. *Cyberpsychology & Behavior, 5*, 241-251.
- Lim, T. S., & Bowers, J. W. (1991). Facework solidarity, approbation, and tact. *Human Communication Research, 17*, 415-450.
- Lovejoy, M. C., Perkins, D. V., & Collins, J. E. (1995). Predicting fall semester breakups in college roommates: A replication using the social satisfaction questionnaire. *Journal of College Student Development, 36*, 594-602.
- Martin, M. M., & Anderson, C.M. (1995). Roommate similarity: Are roommates who are similar in their communication traits more satisfied? *Communication Research Reports, 12*, 46-52.
- Merhrabian, A. (1969). Significance of posture and position in the communication of attitude and status relationships. *Psychological Bulletin, 71*, 359-372.
- Mendelson, M. J., & Aboud, F. E. (1999). Measuring friendship quality in late adolescents and young adults: McGill friendship questionnaires. *Canadian Journal of Behavioural Science, 31*, 130-132.
- Metts, S. (2000). Face and facework: Implications for the study of personal relationships. In K. Dindia & S. Duck (Eds.), *Communication and personal relationships* (pp. 77-93). England: John Wiley & Sons, Ltd.

- Myers, I. B., & Briggs, L. (1962). *The Myers Briggs Type Indicator*. Palo Alto, CA: Consulting Psychologists Press.
- Morgan, C., & Cotton, S. R. (2003). The relationship between Internet activities and depressive symptoms in a sample of college freshmen. *Cyberpsychology & Behavior*, 6, 133-142.
- Nielsen// Netratings reports that nearly 15 million people worldwide gained Internet access in Q3 (2001) [On-line]. Retrieved 10/16/03 from www.nielsen-netratings.com/pr/pr_011206_eratrings.pdf.
- Odell, P. M., Korgen, K. O., Schumacher, P., & Delucchi, M. (2000). Internet use among female and male college students. *Cyberpsychology & Behavior*, 3, 855-862.
- Pace, T. (1970, March). Roommate dissatisfaction in the residence halls. *The Journal of College Student Personnel*, 144-147
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of Internet use. *Journal of Broadcasting & Electronic Media*, 44, 175-196.
- Parks, M. R., & Floyd, K. (1996). Making friends in cyberspace. *Journal of Communication*, 46 (1), 80-97.
- Penman, R. (1990). Facework & politeness: Multiple goals in courtroom discourse. *Journal of Language and Social Psychology*, 9, 15-38.
- Recchiuti, J. K. (2003). College students' uses and motives for e-mail, instant messaging, and online chat rooms. Unpublished master's thesis, University of Delaware.

- Rusbult, C. E., Johnson, D. J., & Morrow, G. D. (1986). Predicting satisfaction and commitment in adult romantic involvements: An assessment of the generalizability of the investment model. *Social Psychology Quarterly*, *49*, 81-89.
- Rice, R. E. (1993). Media appropriateness: Using social presence theory to compare traditional and new organizational media. *Human Communication Research*, *19*, 451-484.
- Rourke, L., Anderson, T., Garrison, D. R., & Archer, W. (2001). Assessing social presence in asynchronous text-based computer conferencing. *Journal of Distance Education*, *14*, 50-71.
- Rubin, A. M. (1994). Media uses and effects: A uses and gratifications perspective. In Bryant, J., & Zillmann, D. (Eds.), *Media effects: Advances in theory and research* (pp. 525-542). Hillsdale, NJ: Erlbaum.
- Savicki, V., Kelley, M., & Oesterreich, E. (1999). Judgments of gender in computer mediated communication. *Computers in Human Behavior*, *15*, 185-194.
- Scherer, K. (1997). College life on-line: Healthy and unhealthy Internet use. *Journal of College Student Development*, *38*, 655-665.
- Schroeder, C. C. (1980). Effects of assignment to living units by personality types on environmental perceptions and student development. *Journal of College Student Personnel*, *21*, 443-449.

- Shaw, L.H., & Gant, L.M. (2002). In defense of the Internet: The relationship between Internet communication and depression, loneliness, self-esteem, and perceived social support. *Cyberpsychology & Behavior*, 5, 157-171.
- Short, J., Williams, E., & Christie, B. (1976). *The social psychology of telecommunications*. London: Wiley.
- Spitzberg, B. H. (2003). Methods of interpersonal skill assessment. In J. O. Greene & B. R. Burleson (Eds.), *Handbook of Communication & Social Interaction Skills* (pp.93-134). Mahwah, NJ: Lawrence Erlbaum Associates, Inc.
- Suler, J. R. (1999). To get what you need: Healthy and pathological use. *Cyberpsychology & Behavior*, 2, 385-393.
- Tabachnick, B. G., & Fidell, L. S. (1996). *Using multivariate statistics* (3rd ed.). New York, NY: Harper Collins.
- Teven, J. J., Martin, M. M, & Neupauer, N. C. (1998). Sibling relationships: Verbally Aggressive messages and their effect on relational satisfaction. *Communication Reports*, 11, 179-186.
- Tidwell, L. C., & Walther, J. B. (2002). Computer mediated communication effects on disclosure, impressions, and interpersonal evaluations. *Human Communication Research*, 28, 317-348.
- Tinto, V. (1988). Stages of student departure. *Journal of Higher Education*, 59, 438-455.
- Waldo, M. (1984). Roommate communication as related to students' personal and social adjustment. *Journal of College Student Personnel*, 25, 39-44.

- Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research, 23*, 3-43.
- Walther, J. B., Anderson, J. F., & Park, D. W. (1994). Interpersonal effects in computer-mediated interaction: A meta-analysis of social and antisocial communication. *Communication Research, 24*, 460-487.
- Walther, J. B., & Burgoon, J. K. (1992). Relational communication in computer mediated interaction. *Human Communication Research, 19*, 50-88.
- Wood, A. F., & Smith, M. J. (2001). *Online Communication; Linking technology, identity, & culture*. New Jersey: Lawrence Erlbaum Associates, Inc.

APPENDIX A

Roommate Questionnaire Samples

University of Alaska Southeast-Juneau, AK

Do you like a designated quiet space? Y ___ N ___
Do you smoke? Y ___ N ___
Do you like your room temperature WARM ___ COOL ___
Do you go to bed Before 11 p.m. ___ After 11:00 p.m. ___
Will you accept an apartment/ room with smokers? Y ___ N ___

Athens State University-Athens, AL

Please check each of the following categories which best describe you and your interests:

Quiet and Studious ___
Orderly Housekeeper ___
Early Bird ___
Non Smoker ___
Sociable and Outgoing ___
Causal Housekeeper ___
Night Owl ___
Smoker ___

Fairleigh Dickenson University- Madison, NJ

Please check the boxes next to ALL statements that apply:

___ I request to live in a 24-hour quiet area
___ I am a morning person
___ I am extroverted
___ I am an international student
___ I am a neat/clean person
___ I am a night person

- I am introverted
- I am an athlete (team) _____
- Being able to study in my room is important
- I can study with the TV or radio on
- I prefer complete quiet when I study

Grand Valley State University-Allendale, MI

- Are you a smoker? Y N
- Would you mind having a roommate that smokes? Y N
- Would you mind having a roommate that drinks? Y N
- When you study, do you prefer: Very Quiet Moderately Quiet
- Do you consider yourself to be: Neat Messy
- Do you consider yourself to be a: Morning Person Night Person

Peninsula College- Port Angeles, WA

Are you: (Circle one for each number)

- 1. Male Female
- 2. Smoker Nonsmoker
- 3. Early Bird Night Owl
- 4. Quiet Loud
- 5. Neat Sloppy
- 6. More Social More Studious

South Carolina State University-Orangeburg, SC

- Are you a member of an Honors Program? Y N
- Do you smoke? Y N
- Do you mind if your roommate smokes? Y N
- Would you prefer a smoke-free room? Y N
- Would you prefer a substance-free room? Y N
- Would you prefer a standard quiet-hour area? Y N
- Would you prefer an international roommate? Y N
- Is your usual bedtime before after midnight?
- As a housekeeper, do you consider yourself as a Neat Average Messy Person?
- Do your music preferences include Rap R&B Gospel Jazz?

*The above housing/roommate questions were all taken from each institution's housing webpage.

APPENDIX B

University of Delaware Roommate Characteristics Questions

- I. How do you feel about your roommate's boyfriend or girlfriend spending time in your room?
 1. I would usually be comfortable in this situation.
 2. I would usually agree if I didn't plan to be there.
 3. Only if my roommate asked and I agreed.
 4. No Way!

- II. How do you feel about groups of people socializing in your room?
 1. This would be fine with me most of the time.
 2. This would be fine occasionally.
 3. It would be okay only if I didn't plan to be there.
 4. I would expect to find privacy in my room most of the time.

- III. Which statement best describes your standards for the condition of your room?
 1. I like my room to be immaculate.
 2. I like my room to be generally neat but am willing to put up with a little bit of clutter from time to time.
 3. It does not bother me if my room is cluttered and disorganized.

- IV. Which statement best describes you?
 1. I am a morning person and prefer to live with a morning person.
 2. I am a morning person but can live with a night person.
 3. I am a night person and prefer to live with a night person.
 4. I am a night person but can live with a morning person.

- V. Which statement best describes your preference of study environment in your room?
 1. I prefer a study environment that is very quiet.
 2. I prefer a study environment with some noise (e.g., music, TV, etc.) in the background.
 3. I can study regardless of the noise level.

- VI. How would you feel about your roommate borrowing/sharing your personal belongings?
1. I would not mind at all.
 2. I would not mind sharing things like computers, TVs, stereos, etc., but would mind sharing personal items like clothing.
 3. I would not mind if I had been asked and had given my permission.
 4. I would not use other people's things and expect others not to use mine.
- VII. If you strongly prefer one of the types of music listed, indicate your preference. If not, leave this question blank.
1. Country
 2. Rap
 3. Heavy metal
 4. Alternative/Progressive
- VIII. Residence halls are composed of a wide variety of individuals from different nationalities, races, sexual orientation and cultural and religious backgrounds. The people living around you have a multitude of characteristics and values. How do you feel about living in this type of situation?
1. It's really exciting!
 2. I like it.
 3. I can tolerate it.
 4. I am not comfortable with it.
- IX. The University prohibits the use of alcohol when in violation of the state law; however your attitude on alcohol use is very important. How would you describe your attitude toward alcohol?
1. Very approving of its use.
 2. Accepting, if it is used occasionally.
 3. Tolerant, if it is not used in my presence.
 4. I do not tolerate its use.

APPENDIX C

Demographic Information

Please answer the following questions about yourself as truthfully and accurately as possible:

1. Do you live in a residence hall on campus? Yes No

2. Current room situation: Single Double Triple

3. Please indicate (by placing an X on the appropriate line) on the following scale how acquainted you were with your roommate prior to living together:

- Did not know my roommate at all
- My roommate was recognizable
- I had previously been introduced to my roommate
- My roommate was a friend
- My roommate was a good friend

4. When did you and your roommate begin living together?

Spring 2004 (the **current** semester) Fall 2003 (**last** semester)

Spring, 2003 Fall, 2002 Before Fall, 2002

5. Sex: Male Female

6. Year in School (Circle your response below)?

First-year
1

Sophomore
2

Junior
3

Senior
4

Grad student/Other
5

7. Academic Major _____

8. Cumulative G.P.A. _____

9. Do you have your own computer in your dorm room? ___Yes ___No

10. How computer competent are you (pick **one**)?

___ I consider myself a computer wiz

___ I am more knowledgeable about computers than most people I know

___ My computer competency is no better or worse than most people I know

___ I am not competent with computers at all

11. How much time to you spend online communicating with others on an average day?

_____ hours **OR** _____ minutes [please fill in only one blank]

APPENDIX D

Communication Use Scale

DIRECTIONS: Please indicate how often ***you*** engage in the following communication behaviors **WHEN YOUR ROOMMATE IS IN THE ROOM.**

		Never	Rarely	A little	Some of the time	A good part of the time	Most of the time	Almost always	Constantly
WHEN MY ROOMMATE <u>IS</u> IN THE ROOM,									
1. I talk on instant messenger.	1	2	3	4	5	6	7	8	
2. I chat in online virtual chatrooms.	1	2	3	4	5	6	7	8	
3. I send and receive e-mail.	1	2	3	4	5	6	7	8	
4. I read/post messages on online message boards.	1	2	3	4	5	6	7	8	
5. I have friends over.	1	2	3	4	5	6	7	8	
6. I play interactive games on the Internet.	1	2	3	4	5	6	7	8	
7. I talk on the phone.	1	2	3	4	5	6	7	8	

DIRECTIONS: Please indicate how often **you** engage in the following communication behaviors **WHEN YOUR ROOMMATE IS NOT IN THE ROOM.**

	Never	Rarely	A little	Some of the time	A good part of the time	Most of the time	Almost always	Constantly
WHEN MY ROOMMATE IS <u>NOT</u> IN THE ROOM,								
1. I talk on instant messenger.	1	2	3	4	5	6	7	8
2. I chat in online virtual chatrooms.	1	2	3	4	5	6	7	8
3. I send and receive e-mail.	1	2	3	4	5	6	7	8
4. I read/post messages on online message boards.	1	2	3	4	5	6	7	8
5. I have friends over.	1	2	3	4	5	6	7	8
6. I play interactive games on the Internet.	1	2	3	4	5	6	7	8
7. I talk on the phone.	1	2	3	4	5	6	7	8

The next questions ask about your roommate's social activities.

DIRECTIONS: Please indicate how often **YOUR ROOMMATE** engages in the following behaviors **WHEN YOU ARE BOTH PRESENT IN THE ROOM.**

WHEN WE ARE IN OUR ROOM, MY ROOMMATE,		Never	Rarely	A little	Some of the time	A good part of the time	Most of the time	Almost always	Constantly
1.	talks on instant messenger.	1	2	3	4	5	6	7	8
2.	chats in online virtual chatrooms.	1	2	3	4	5	6	7	8
3.	sends and receives e-mail.	1	2	3	4	5	6	7	8
4.	reads/posts messages on online message boards.	1	2	3	4	5	6	7	8
5.	has friends over.	1	2	3	4	5	6	7	8
6.	plays interactive games on the Internet.	1	2	3	4	5	6	7	8
7.	talks on the phone.	1	2	3	4	5	6	7	8

APPENDIX E

Face Sensitivity Scale

DIRECTIONS: Please rate the extent to which you agree or disagree with the following statements according to their importance in your general social life.

	Definitely Disagree	Mostly Disagree	Somewhat Disagree	Slightly Disagree	Slightly Agree	Somewhat Agree	Mostly Agree	Definitely Agree
1. It is important to avoid embarrassing other people.	1	2	3	4	5	6	7	8
2. It is appropriate to speak up to support others who are in situations where they look foolish.	1	2	3	4	5	6	7	8
3. It is impolite to put others into awkward situations.	1	2	3	4	5	6	7	8
4. It is rude to hurt other people's feelings.	1	2	3	4	5	6	7	8
5. It is ill-mannered to ignore others when they are near by.	1	2	3	4	5	6	7	8
6. It is considerate to look out for others' feelings in social situations.	1	2	3	4	5	6	7	8

APPENDIX F

Perceived Face Threat Scale

DIRECTIONS: Please rate the extent to which you agree or disagree with the following statements.

	Definitely Disagree	Mostly Disagree	Somewhat Disagree	Slightly Disagree	Slightly Agree	Somewhat Agree	Mostly Agree	Definitely Agree
1. I think it is rude when my roommate converses with others over the Internet while we are both in the room.	1	2	3	4	5	6	7	8
2. I think it is impolite when my roommate plays interactive games while we are both in the room.	1	2	3	4	5	6	7	8
3. I think it is inconsiderate when my roommate converses in interactive chatrooms while we are both in the room.	1	2	3	4	5	6	7	8
4. I think it is bad mannered when my roommate engages in instant messaging while we are both in the room.	1	2	3	4	5	6	7	8
5. I think it is rude when my roommate writes e-mails while we are both in the room.	1	2	3	4	5	6	7	8
6. I think it is impolite when my roommate reads e-mail while we are both in the room.	1	2	3	4	5	6	7	8
7. I think it is bad mannered when my roommate posts messages on online discussion forums while we are both in the room.	1	2	3	4	5	6	7	8

8.	I think it is insensitive when my roommate reads online messages boards while we are both in the room.	1	2	3	4	5	6	7	8
9.	I think it is rude when my roommate leaves me out of conversations that occur while we are both in the room.	1	2	3	4	5	6	7	8
10.	I think it is impolite when my roommate talks on the phone while we are both in the room.	1	2	3	4	5	6	7	8
11.	I think it is inconsiderate when my roommate invites friends over and ignores my presence.	1	2	3	4	5	6	7	8
12.	I think it is insensitive when my roommate does not acknowledge my presence while we are in our room.	1	2	3	4	5	6	7	8

APPENDIX G

Hendrick's Relationship Assessment Scale (RAS)

Please mark on the answer sheet the letter for each item which best answers that item for you:

1. How well does your partner meet your needs?

A	B	C	D	E
Poorly		Average		Extremely well

2. In general, how satisfied are you with your relationship?

A	B	C	D	E
Unsatisfied		Average		Extremely satisfied

3. How good is your relationship compared to most?

A	B	C	D	E
Poor		Average		Excellent

4. How often do you wish that you hadn't gotten into this relationship?

A	B	C	D	E
Never		Average		Very often

5. To what extent has your relationship met your original expectations?

A	B	C	D	E
Hardly at all		Average		Completely

6. How much do you love your partner?

A	B	C	D	E
Not much		Average		Very much

7. How many problems are there in your relationship?

A	B	C	D	E
Very few		Average		Very many

APPENDIX H

Hudson's Index of Family Relations (IFR)

This questionnaire is designed to measure the way you feel about your family as a whole. It is not a test, so there are no right or wrong answers. Answer each item as carefully and accurately as you can by placing a number beside each one as follows:

- 1 = Rarely or none of the time
- 2 = A little of the time
- 3 = Some of the time
- 4 = A good part of the time
- 5 = Most or all of the time

1. The members of my family really care about each other.
2. I think my family is terrific.
3. My family gets on my nerves.
4. I really enjoy my family.
5. I can really depend on my family.
6. I really do not care to be around my family.
7. I wish I was not part of this family.
8. I get along well with my family.
9. Members of my family argue too much.
10. There is no sense of closeness in my family.
11. I feel like a stranger in my family.
12. My family does not understand me.
13. There is too much hatred in my family.
14. Members of my family are really good to one another.
15. My family is well respected by those who know us.
16. There seems to be a lot of friction in my family.
17. There is a lot of love in my family.
18. Members of my family get along well together.
19. Life in my family is generally unpleasant.
20. My family is a great joy to me.

20. I feel proud of my family.
21. Other families seem to get along better than ours.
22. My family is a real source of comfort to me.
23. I feel left out of my family.
24. My family is an unhappy one.

APPENDIX I

Roommate Relationship Satisfaction Scale (RRSS)

DIRECTIONS: Please rate the extent to which the following statements are true.

	Definitely Disagree	Mostly Disagree	Somewhat Disagree	Slightly Disagree	Slightly Agree	Somewhat Agree	Mostly Agree	Definitely Agree
1. My roommate meets my needs.	1	2	3	4	5	6	7	8
2. In general, I am satisfied with my roommate relationship.	1	2	3	4	5	6	7	8
3. Compared to most, my roommate and I have a good	1	2	3	4	5	6	7	8
4. I often wish I hadn't gotten into my current roommate situation.	1	2	3	4	5	6	7	8
5. My roommate relationship has met my original expectations.	1	2	3	4	5	6	7	8
6. There are a lot of problems in my roommate relationship.	1	2	3	4	5	6	7	8
7. I really care for my roommate.	1	2	3	4	5	6	7	8
8. I think my roommate is terrific.	1	2	3	4	5	6	7	8
9. My roommate gets on my nerves.	1	2	3	4	5	6	7	8
10. I really enjoy my roommate.	1	2	3	4	5	6	7	8
11. I can really depend on my roommate.	1	2	3	4	5	6	7	8
12. I really do not care to be around my roommate.	1	2	3	4	5	6	7	8

13. I wish I was not part of my current roommate relationship.	1	2	3	4	5	6	7	8
14. I get along well with my roommate.	1	2	3	4	5	6	7	8
15. My roommate and I argue too much.	1	2	3	4	5	6	7	8
16. There is no sense of closeness in my roommate relationship.	1	2	3	4	5	6	7	8
17. I feel like a stranger in my roommate relationship.	1	2	3	4	5	6	7	8
18. My roommate does not understand me.	1	2	3	4	5	6	7	8
19. There is too much hatred in my roommate relationship.	1	2	3	4	5	6	7	8
20. My roommate and I are really good to one another.	1	2	3	4	5	6	7	8
21. My roommate and I are really respected by those who know	1	2	3	4	5	6	7	8
22. There seems to be a lot of friction in my roommate	1	2	3	4	5	6	7	8
23. My roommate and I get along well together.	1	2	3	4	5	6	7	8
24. Life with my roommate is generally unpleasant.	1	2	3	4	5	6	7	8
25. My roommate is a great joy to me.	1	2	3	4	5	6	7	8
26. I feel proud of my roommate.	1	2	3	4	5	6	7	8
27. Other roommates seem to get along a lot better than us.	1	2	3	4	5	6	7	8
28. My roommate is a real source of comfort to me.	1	2	3	4	5	6	7	8
29. I feel left out of my roommate's life.	1	2	3	4	5	6	7	8
30. My roommate situation is an unhappy one.	1	2	3	4	5	6	7	8

Items # 4, 6, 9, 12, 13, 15, 16, 17, 18, 19, 22, 24, 27, 29, 30 are reverse scoring
Items # 1, 2, 8, 10, 25, 28 used in final scale

APPENDIX J

Table of Scales

Scales	Mean	<i>SD</i>	<i>α</i>
Face Sensitivity	6.59	1.36	.89
Perceived face threat of synchronous CMC	1.18	.60	.88
Perceived face threat of asynchronous CMC	1.14	.57	.98
Perceived face threat of non-CMC behaviors	6.8	1.29	.92
Satisfaction	2.42	1.70	.83

APPENDIX K

Department of Communication

Roommate Satisfaction Study

PARTICIPANT INFORMATION FORM

Please note that you must be 18 yrs. old or older to participate in this study. Your participation in this study is voluntary. If you wish to withdraw at any time, you may do so without any penalty.

PURPOSE:

This study is designed to assess students' perceptions about online behaviors, general communication behaviors, and dormitory roommate satisfaction. You will be asked to fill out a questionnaire that will take approximately 20 minutes to complete. The findings that result from this study will be for research purposes only and will have no direct benefits to specific participants. All results will be presented and analyzed quantitatively.

If you have any specific questions about the study, I will be happy to speak with you at the conclusion of your participation.

CONFIDENTIALITY:

All information that you provide will be kept strictly confidential and anonymous. Your name will not be attached in any way to your responses. Results from this study will be presented as statistical summaries, but no information will be presented about individual respondents. You may discontinue participation at any time prior to the completion of the project.

If you have any further questions about this study, you may contact:

Michele Pino – Graduate student
Department of Communication
Pearson Hall
University of Delaware
Mpino@udel.edu
(302) 831- 4423

Dr. Scott Caplan – Asst. Professor
Department of Communication
246 Pearson Hall
University of Delaware
Caplan@udel.edu
(302) 831-2958

APPENDIX L

Department of Communication

Roommate Satisfaction Study

PARTICIPANT DEBRIEFING INFORMATION

Thank you for your participation in this study! In this project the researcher was interested in whether or not perceptions and usage of computer-mediated communication influenced college dormitory roommates' perceptions of their relational satisfaction.

If you have any questions about the study or how the results will be used, or if you desire a copy of the finished study, please feel free to contact the researcher or advisor to the study:

Michele Pino – Graduate student
Department of Communication
Pearson Hall
University of Delaware
Mpino@udel.edu
(302) 831- 4423

Dr. Scott Caplan – Asst. Professor
Department of Communication
246 Pearson Hall
University of Delaware
Caplan@udel.edu
(302) 831-2958

THANK YOU FOR YOUR HELP AND PARTICIPATION!

APPENDIX M

Department of Communication

Roommate Satisfaction Study

PARTICIPANT FOLLOW UP LETTER

Dear Student,

You are receiving this letter because you may have recently participated in a survey dealing with online communication and roommate satisfaction. With recent technological advancements, students all over use the Internet to communicate with friends, family, and strangers. The current technology allows users to communicate instantaneously or in real time with others as if they were physically present.

In this project the researcher was interested in whether or not differences in perceptions and usage of synchronous computer-mediated communication (CMC) influenced college roommate satisfaction. The rationale behind this prediction stemmed from knowledge about the similarity of synchronous CMC to face-to-face communication based on a number of social norms and communication rules that exist during both types of communication interactions.

108 roommate pairs (N = 216) responded to the survey assessing general face sensitivity awareness, CMC use (both synchronous and asynchronous), non-CMC communication behaviors, perceptions of CMC use, and roommate relational satisfaction.

Results of the study indicated that while most students have an overall high level of face sensitivity, they do not perceive synchronous CMC use in the presence of their roommate as face threatening (i.e. rude, impolite, or insensitive). Results also indicated that students' CMC behaviors were not correlated with roommate satisfaction. These

findings imply that students did not feel that by engaging in CMC interactions in the presence of another person, they were excluding or being rude toward that other person.

Thank you again for your participation! If you have any further questions about the study, or if you desire a copy of the finished study, please feel free to contact the researcher or advisor to the study:

Michele Pino – Graduate student
Department of Communication
Pearson Hall
University of Delaware
Mpino@udel.edu
(302) 831- 4423

Dr. Scott Caplan – Asst. Professor
Department of Communication
246 Pearson Hall
University of Delaware
Caplan@udel.edu
(302) 831-2958

APPENDIX N

Zero-Order Pearson Correlation Matrix

	Face Sensitivity	Satisfaction	IM use in Presence of Roommate	Perceptions of Synchronous CMC use in Presence of Roommate	IM use in Absence of Roommate
Face Sensitivity	1				
Satisfaction	.333*	1			
IM use in Presence of Roommate	.096	.149*	1		
Perceptions of Synchronous CMC use in Presence of Roommate	-.132*	-.326**	-.060	1	
IM use in Absence of Roommate	.122	.190**	.883**	-.067	1
E-Mail use in Presence of Roommate	.070	.008	.570**	.019	.495**

* $p < .05$, ** $p < .01$