MORE CONNECTIONS, LESS CONNECTION: AN EXAMINATION OF THE EFFECTS OF COMPUTER-MEDIATED COMMUNICATION ON RELATIONSHIPS

Joseph McGlynn, B.A.

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APPROVED:

Lori A. Byers, Major Professor
Karen Anderson, Committee Member
Brian K. Richardson, Committee Member
John M. Allison, Chair of the Department of Communication Studies
Sandra L. Terrell, Dean of the Robert B. Toulouse School of Graduate Studies

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The impact of computer-mediated communication (CMC) on relational behavior is a topic of increasing interest to communication scholars (McQuillen, 2003; Tidwell & Walther, 2002). One of the most interesting issues that CMC raises concerns the impact of CMC on relational maintenance and development. Using dialectical theory, social exchange theory, social information processing theory, and the hyperpersonal perspective as theoretical frameworks, this study used quantitative and qualitative analyses to identity potential effects of CMC on relationships. Study 1 (*n*=317) examined the effects of CMC on relational closeness, satisfaction, and social support. Study 2 (*n*=196) explored the reasons individuals provide for privileging computer-mediated forms of communication, and the perceived effects of using CMC in relational communication. Results indicated that quality of CMC predicted increased perceptions of social support and relationship satisfaction. Results further suggested that CMC enabled participants to manage more effectively relational tensions of autonomy-connection and openness-closedness. Specifically, individuals used CMC to retain higher levels of conversational control, and to maintain greater numbers of relationships with decreased levels of investment. This paper concludes with a discussion of implications and directions for future research.

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CHAPTER 1

THE EMERGENCE OF CMC

Computer-mediated communication (CMC) is increasing at an extraordinary rate. Websites designed to allow friends to blog, chat, email, and leave public messages have gained increased popularity in recent years. Myspace.com® Website (www.MySpace.com), for instance, a leader in revolutionizing the potential for online relational maintenance, has an estimated 47 million members, welcomed a nearly 400 percent growth between January and August of 2005, recently sold for 580 million dollars (Kornblum, 2006; Williams, 2005), and was named by Google as the top gaining Website in 2005 (Kornblum, 2006). Facebook™, social utility (Mark Zuckerberg, www.facebook.com), another popular online space for social networking, boasts 11 million members (Atkins, 2006), nearly 8,000 new users a day (Ascavareungchai, 2005) and 3 billion monthly page views from students (PR Newswire US, 2005).

Text messaging recently experienced a meteoric rise in use, more than doubling between the first quarters of 2003 and 2004 from 1.2 billion to 2.6 billion sent messages (Richtel, 2004). In June 2005 alone, users sent 7.3 billion text messages, a 154% increase from the 2.9 billion sent in June 2004 (Dahl, 2006; Lovato, 2006). Pew (2005) stated more than 60% of cell phone users age 18-27 use text messaging on a regular basis. As CMC comes to augment or replace the traditional communication channels (Wilson & Zigurs, 2001), a need emerges to understand how computer-mediated social interactions function to maintain relationships and influence social support. Evolving technologies alter and shape the manners in which we construct interactions with other people. Convenience and mobility now go hand-in-hand with everyday talk.

Researchers have focused extensively on e-mail's primary uses and applications, including its effects on persuasion, communication strategies, and evaluative feedback (Fagan & Desai, 2002/2003; Hebert & Vorauer, 2003; Wilson, 2002; Wilson, 2003). While these studies establish that CMC impacts human activity and communication behavior, and provide a basis for the exploration of scholastic study, they have not thoroughly examined the impact of CMC on relational maintenance and social support. Previous studies also neglect to incorporate text messaging, an increasingly popular medium of communication (Dahl, 2006; Lovato, 2006; Richtel, 2004). Text messaging is akin to a brief email, but with a slightly more synchronous nature; as such, current behavioral patterns mandate the inclusion of text messaging into current CMC research. Similar to e-mail, one-sided messages are sent, and feedback is delayed. Unlike e-mail, however, text messaging potentially allows for more immediate feedback due to its convenience and mobility. Individuals can send and receive text messages from cell phones in a variety of environments, as text messaging does not require a computer or an Internet connection.

CMC offers relational partners a new medium for maintaining personal relationships (Barnes, 2003; Parks & Floyd, 1996). Extant distinctions between CMC and face-to-face communication include the ability to contact multitudes of people rapidly, increase in user convenience, perception of amplified capacity to deliver messages through computer-mediated formats (McGuire, Kiesler, & Siegel, 1987; Sproull & Kiesler, 1986; Sussman & Sproull, 1999), evolving rules regarding the appropriate use of CMC, and the potential for increased social support networks.

CMC allows users to contact a multitude of people quickly, and people enjoy the convenience and flexibility of the asynchronous nature of CMC (Papacharissi & Rubin, 2000). Common CMC applications include communication between supervisors and subordinates (Tan, Wei, Watson, Clapper, & McLean, 1998), organizational peers (Lind & Zmud, 1995), teachers and students (Glater, 2006), and personal messages that function as relational rewards (Taylor & Harper, 2003). The continued increase of e-mail use in organizations (Macklem, 2006) illustrates user perceptions of convenience and efficacy toward computer-mediated forms of communication. Potential effects of the efficiency and mobility of CMC include changes to the manner in which individuals maintain relationships, decreased investment levels required to maintain relationships, and augmented social support networks.

CMC alters the maintenance behaviors of many interpersonal relationships. E-mail, text-messaging, and online social communities, such as Myspace and Facebook, offer novel opportunities for the development and maintenance of relationships, and many people use online social communities to progress or maintain relationships initiated via face-to-face communication. The capabilities of online social communities include the ability to view friends' online journals and digital photo albums, an intercommunity e-mail system, and the ability to post public messages on friends' personal Websites. A number of people utilize online social communities to supplement relationships maintained primarily through face-to-face communication, while other individuals choose to replace face-to-face contact with computer-mediated interaction.

Communication behaviors produce and reproduce relational culture and development. While research has focused on strategies, turning points, rituals, and

everyday talk in the context of relationship maintenance and development (e.g., Baxter & Pittman, 2001; Braithwaite, Baxter, & Harper, 1998; Canary & Stafford, 1992; Duck; 1994; Johnson, Wittenberg, Villagran, Mazur, & Villgran, 2003; Johnson et al., 2004), few studies actively differentiate the types of communicative mediums interpersonal partners select.

Previous research also privileged traditional conceptualizations of maintenance behavior through face-to-face formats. To date, scholars have failed to modernize widely used maintenance scales and research designs in accordance with current communicative trends, including e-mail, text-messaging, and online social communities (e.g. Myspace.com, Facebook.com), producing a lack of diversity in the literature, and tendencies to over-generalize findings across contexts.

Limited research examines how partners maintain their relationships with current technological capabilities. Current studies on relational development fail to capture the essence of current CMC maintenance strategies in the context of various types of interpersonal relationships. Further, current maintenance scales (e.g., Canary & Stafford, 1992) do not adequately measure current computer-mediated communication strategies of relational partners.

The evolution of CMC creates a technological revolution, and alters the ways we enact relationships (Anderson & Wang, 2005). Previous research underscores the importance of understanding CMC's impact on relational communication (e.g., Anderson & Wang, 2005; Baym, 2002; Lea & Spears, 1995; Parks & Floyd, 1996). Parks and Roberts (1998) further argued the Internet technology is fundamentally

social. Some researchers even suggest that information technologies should be named more aptly as *relationship technologies* (Wood & Smith, 2001).

CMC often functions to maintain connection with friends and romantic partners. Interpersonal researchers must account for the substantial role of CMC in relational development, as individuals use email to enrich relationships, maintain desired relational states, and to enlarge social networks (Anderson & Wang, 2005). Fifty-five percent of Internet users said their email exchanges improved connections with family members, while 66% indicated email enhanced their communication with friends (Pew, 2000). Although relational communication is a complex process, CMC has emerged as a particularly important communication medium in modern relationships.

Many relationships are experiencing a conversion from primarily face-to-face to primarily computer-mediated mediums (Merkle & Richardson, 2000), and a host of people now prefer to develop relationships through CMC formats (Baym, 2002). Other researchers, however, proposed CMC acts merely as a temporary stopgap medium until people can communicate face-to-face (e.g., Aylor, 2003; Rabby & Walther, 2003). Previous research, then, asserts that CMC influences the development and maintenance of many relationships. Prior research, however, does not assess whether primary face-to-face relationships benefit from incorporating CMC into the relationship, or the effects of CMC use on partner satisfaction.

Relational talk often serves to create relational reality and to provide a maintenance function in interpersonal relationships (Duck, 1994), as many relational partners engage in daily conversation. Several instances exist, however, where frequent face-to-face dialogue remains closer to a rare occurrence than a relational norm,

including many friendships and long-distance relationships. Further, relational partners now have several options for maintaining relationships. Communicative options, other than direct conversation, include the use of e-mail and text-message to either complement or replace face-to-face and telephone conversations.

As CMC continues to soar in popularity, scholars need to examine extensively the effects of CMC on relational maintenance behaviors and effects of maintenance behaviors on perceptions of relational quality, closeness, and social support. Grounded in social exchange theory (Roloff, 1981; Thibault & Kelley, 1959), social information processing theory (Walther, 1992), the hypersonal perspective (Walther, 1996), and dialectical theory (Baxter & Montgomery, 1996) the goal of the current study is to understand why individuals choose to use CMC, and the perceived effects of CMC of relationships. This study examines the role of CMC as a complementary and substitutive medium for face-to-face communication, including frequency of use, perceived quality of CMC and face-to-face communication, rationale for privileging CMC to face-to-face in situations, and the relationship between computer-mediated and face-to-face communication and perceptions of relational satisfaction, closeness, and social support.

CHAPTER 2

THEORETICAL FOUNDATION AND REVIEW OF LITERATURE

The purpose of the current study is to understand rationale individuals provide for using computer-mediated communication (CMC) in friendship and romantic contexts, and the perceived effects of CMC on relationships. Specifically, this study aspires to examine the relationship between quantity and quality of CMC and face-to-face communication, and the subsequent effects on individuals' perceptions of relational closeness, satisfaction, and social support.

Theory influences how we perceive relational maintenance in CMC environments. Built on the foundations of social exchange theory, social information processing theory, and the hyperpersonal perspective, the current study assumes the transactional and motivated nature of relational exchanges, the ability and willingness of people to modify communication behaviors to meet relational goals in accordance with available social cues, and that computer-mediated interactions allows for increases in selective self-presentation abilities and perceptions of partner idealization.

Social Exchange Theory

Social exchange theory (Roloff, 1981; Thibault & Kelley, 1959) focuses on the mutual exchange of rewards and costs between participants, blending classical economics and behavioristic psychology (Garko, 1990). Whereas economic exchange centers on specific, defined transactions, social exchange concentrates on relational behavior (Emerson, 1981). Social exchange theories assume self-interest, rationality, and control (Garko, 1990), and stress that the mutual transfer of resources remains

potentially both rewarding and costly for involved parties. Through communication, individuals negotiate costs and rewards of social interactions (Floyd & Wasner, 1994; Roloff, 1981). Rewards motivate interactions, while costs discourage exchanges (Garko, 1990). When rewards outweigh costs, individuals maintain the relationship (Myers, Knox, Pawlowski, & Ropog, 1999). The person who has the least interest in continuing the social situation retains control (Homans, 1974).

The process of social exchange involves transactional giving and receiving of resources between relational partners, with regard to information, status, money, goods, services, and affection (Foa & Foa, 1980). Resources may also include job aspects (i.e., title, power, prestige) and work environment factors, such as hours, safe environment, and shared interests (Berg & Wiebe, 1993). The interdependence of individuals with shared interests (Makoba, 1993) mandates the reciprocal nature of available resources between parties (Greenberg, 1980), and desire of successful acclimation to dynamic environments further motivates the relational exchanges of information (Kramer, Roberts Callister, & Turban, 1995).

Social exchange theories deem people to be economic beings: goal driven and desirous of engaging in behavior to obtain rewards and avoid punishments (Tan, Nelson, Dong, & Tan, 1997). Individuals make decisions with regard to a conscious or unconscious tally of rewards versus costs (Homans, 1958). People develop perceptions of actions with regard to past, present, and future rewards and costs (Moreland & Levine, 1982), and evaluate whether the costs justify the expected rewards of an interaction (Koper & Jaasma, 2001). Social exchange theories, then, expect persons to develop perceptions of other individuals' behavior in terms of the potential rewards and

costs, and the likelihood of the realization of said rewards or costs (Berger & Calabrese, 1975).

Two types of rewards exist: material and nonmaterial (Foa & Foa, 1974; Homans, 1974; Turner, Foa & Foa, 1971). Recipients determine the value of rewards, and repeated rewards lose value over time (Blau, 1968; Emerson, 1981). Content and social rewards continue to be particularly salient and characteristic of voluntary interpersonal relationships (Miller & Steinberg, 1975). Material rewards consist of money, goods, services, and information, while nonmaterial goods include social rewards, such as love, status, and enhanced self-esteem (Foa & Foa, 1974; Homans, 1974; Turner, Foa & Foa, 1971; Koper & Jaasma, 2001). Buss (1983) distinguished two types of social rewards: process rewards and content rewards. Process rewards indicate elements intrinsic to social contact, and include presence, attention, responsivity, and initiation of social interaction. Content rewards, on the other hand, include deference of status, praise, sympathy, and affection, and refer to the type of social responses offered between persons.

Social exchange theory maintains at least three assumptions, including: (1) individuals maintain self-interested motivations in social interactions, (2) people make choices based on a calculation of rewards against costs, and (3) degrees of power and control inhibit individuals' choices of interactive cost and reward scenarios (Garko, 1990). Since most real world relationships are asymmetrical, individuals often consider issues of power and authority before making decisions (Tan et al., 1997).

Social exchange has received criticism for theoretical assumptions as well. Bochner (1984) argued three flaws of social exchange theories, including: (1)

reward/cost principles are tautological (incapable of falsification due to ambiguity of rewards and costs), (2) reward/cost principles attempt to reduce interpersonal processes to individual processes (social exchange theories focus on individual parts while ignoring the dynamic processes and effects of the whole system on interaction), and (3) reward/cost principles oversimplify complex developmental processes (social exchange theories view interaction as mechanical, and ignore the complexity of decision-making and cycles of relationships).

Despite these criticisms, social exchange theory fits the current research design favorably. Canary and Zelley (2000) argued social exchange theory acts as a primary explanatory mechanism for the process of relational maintenance, and previous research supports the notion that relational partners find maintenance behaviors rewarding (Guerrero, Eloy, &Wabnik, 1993). In particular, text messaging has been compared to a relational gift (Taylor & Harper, 2003). Canary and Stafford (1992) posited maintenance behaviors serve as both costs and rewards in equity calculations, with receptions of maintenance behaviors acting as rewards, and the bestowment of maintenance behaviors as costs. Social exchange theories predict that meeting or exceeding individuals' expectations of maintenance behaviors positively influence partner satisfaction (Dindia, Timmerman, Langan, Sahlstein, & Quandt, 2004). As an individual meets or exceeds expectations, perceptions regarding relational and partner satisfaction subsequently rise. Also, CMC is asynchronous, and slightly more mechanical than face-to-face interactions, thereby limiting the relevance of previous criticisms that social exchange theories address communicative processes as mechanical and individualized.

Few theories acknowledge the transactional foundation of human interaction (Koper & Jaasma, 2001). Social exchange theories, however, remain an exception, emphasizing the transfer of resources as the foundation of human interaction, and the desire for gratifications as the key influence on human social choices (Roloff, 1981). Social systems exist because they reward individuals for being members (Hormans, 1974), and social exchange research enhances our understanding of strategy and medium selection in the attempt to earn rewards and minimize costs (Garko, 1990). This remains particularly important when examining user rationales for employing evolving mediums of communication in relational communication.

Social exchange research would benefit, however, from an augmented emphasis on the role of interactive communication processes in the exchange of rewards and costs among interactants (Garko, 1990). Previous studies often fail to view the interactive nature of exchanges, focusing on solely the benefactor or receiver of rewards, but not both parties. The manner and form in which agents elect to communicate their messages remains at the root of any useful attempt to explain the reward/cost process (Garko, 1990). Focusing on the transactional aspect of interactions will allow social exchange scholars to move communication from a fringe role to the focal point of the exchange process (Garko, 1990).

Social Information Processing Theory

Walther (1992) developed the social information processing (SIP) theory of relational communication in CMC as a response to social presence theory. Social presence theory argues a reduction in cue systems (aural, visual, etc.) lessens the

degree of social presence an individual experiences during an interaction (Short, Williams, & Christie, 1976.) This reduction in social presence leads to a decrease in the experience of interpersonal affection by the users of low social presence mediums (Walther, 1992). CMC is considered to be low in social presence due to the lack of nonverbal cues (Walther, Slovacek, & Tidwell, 2001).

Social information processing theory varies from social presence theory in several ways. There are three primary assumptions of SIP not found in social presence theory. These assumptions include: (1) communicators' relationship motives often lead them to develop strong impressions despite the reduction of cue systems in CMC, (2) communicators are able, and willing, to modify communicative attempts to exchange social information successfully, using whatever cues they have available to them to achieve their communicative goals. Available cues include content, linguistic and chronemic variables (Walther & Tidwell, 1995), and typographic cues, such as emoticons (Walther & D'addario, 2001). Finally, SIP assumes (3) CMC relationship processes are slower than face-to-face (FTF) processes (Tidwell & Walther, 2002; Walther, 1996). Thus, CMC relationship development occurs slower than FTF relationship development. In time, however, CMC participants become able to exchange significant levels of information, resulting in the ability to form impressions develop normal interpersonal relationship levels (Walther, 1992; Walther et al., 2001).

Tidwell and Walther (2002) further argued CMC promotes more personal questions and increased self-disclosure than FTF communication. This increase in breadth and depth of self-disclosure can greatly impact relationship development and impression formation. Increased self-disclosure also influences emotional expression in

both primary CMC-based relationships, defined as relationships that spend more time communicating through CMC than FTF, and secondary CMC-based relationships, defined as relationships that spend the large majority of their time communicating FTF, but who also communicate through CMC to a lesser degree.

The Hyperpersonal Communication Perspective

The hyperpersonal communication perspective of CMC argues the editing capabilities, asynchronous temporal characteristics, and lack of nonverbal cues may lead CMC users to involve themselves in selective self-presentation and partner idealization (Tidwell & Walther, 2002; Walther, 1996; Walther et al., 2001). Selective self-presentation results from the increased impression management elements CMC provides. CMC interactions also contain opportunities not offered by FTF interactions, such as asynchronous communication, editable messages, and a lack of accidental information exchange, such as inappropriate or unintended nonverbal expressions and physical cues (Walther et al., 2001). CMC interactions, then, allow users to focus more wholly on the messages and texts provided by message senders. Individuals' attention capabilities are not as limited by external distractions, internal noise, and opposing stimuli that can result in unsatisfactory exchanges, as well as lost messages. As a result, communicators may be better able to modify message content to portray more accurately the impression the sender wishes to depict (Walther et al., 2001).

Partner idealization entails the construction of virtual partners as exaggerated sanguine figures, due to the limited cues offered by CMC. Specifically, partner idealization is the tendency to overattribute personality characteristics, similarities, and

shared norms from the limited information exchanged through CMC (Spears & Lea, 1994; Walther et al., 2001). In short, individuals display a tendency to disproportionately attribute positive characteristics because of the limited social cue sample from which to draw conclusions. Thus, partner idealization maintains important implications for interpersonal interaction. Partner idealization is likely to expedite interpersonal trust, and consequently, enhance levels of self-disclosure and openness. Resultant tendencies to overstate actions and statements may result subsequently in abnormal relationship development patterns and snap decisions. Partner idealization is likely also indicative of the fast-food culture, where individuals desire immediate rewards in their personal and exchange interactions.

The hyperpersonal communication perspective posits that individuals on the receiving end of preconceived notions tend to fulfill sender's expectations of behavior, commonly referred to as self-fulfilling prophecy (Walther et al., 2001). Interpersonal response, then, depends largely on receivers' expectations of response. If the receiver expects high levels of self-disclosure and emotional expression from their computer-mediated partner, then message senders are more likely to reply with high levels of self-disclosure and increased expressions of emotion. Similarly, if a virtual partner conveys fondness of specific values or actions, such as emotional expression, then the relationship is more likely to develop in accordance with the framework of these imparted values and preferences. Relational development also remains due, in part, to individuals' desire to meet expectations, not to disappoint their relational partners, and to manage their self-presentation.

With theoretical foundations and empirical assumptions in place, the following section examines relevant existing research to inform the position and situation of the current study. The current study is located at the intersection of three bodies of research: interpersonal computer-mediated communication, relational maintenance, and social support.

CMC and Relationships

Computer-mediated communication functions in manners both similar and dissimilar from FTF communication. While people use CMC to send efficient messages across organizational networks, and to defray the difficulties of long-distance relationships (Anderson & Wang, 2005), individuals also enjoy the convenience and flexibility of the asynchronous nature of CMC (Papacharissi & Rubin, 2000), greater control over impression management (O'Sullivan, 2000), and increased time and control when creating messages (Walther & Boyd, 2002). In a recent study examining online relational maintenance strategies, Wright (2004) found partners using maintenance behaviors of openness and positivity reported higher quality of communication, and people in primarily Internet-based relationships had greater relational communication and background similarity than people maintaining relationships exclusively through Internet communication. Barnes (2003) noted that shared interests replaced proximity as a primary reason for initiation and development of online relationships, and perceptions of similarity maintain great importance in keeping relational parties' interest in sustaining online relationships (Wood & Smith, 2001).

Several studies focus on CMC's impact on relationship initiation and development. Hancock and Dunham (2001), working under the hyperpersonal perspective, found CMC users form deeper, but not more extensive, impressions of their virtual partners, while other studies noted the impact and perceived importance of anonymity on relationship initiation (Amaral & Monteiro, 2002; Myers, 1987; Riva & Galimberti, 1998). Riva & Galimberti (1998) extended this argument, positing the ability to create a new self is the key feature to online communication. Parks and Roberts (1998) reported that a large majority of CMC users formed ongoing personal relationships through CMC, including friendships and romantic partnerships. Interestingly, almost 84% of relationships formed through CMC were with members of the opposite sex, indicating a possible link to romantic relationship initiation (Parks & Roberts, 1998). While these studies place a large focus on relationships that individuals form through CMC, they do not specifically analyze the use of CMC for relationship maintenance of relationships initially formed face-to-face.

Computer-mediated communication influences relational self-disclosure. Higher levels of self-disclosure occurred in communication-mediated discussions than in face-to-face discussions, as visually anonymous participants disclosed significantly more personal information than non-visually anonymous participants (Joinson, 2001a). Further, self-disclosure in CMC contexts, as in FTF contexts, increased upon mutual participation (Joinson, 2001b). Baker (2002), examining couples who met online, reported partners with the highest rates of success met in places based on common interests, and communicated without much intimacy for long periods of time before meeting offline, both worked through barriers to becoming closer and negotiated conflict

well. These results indicate similarities with traditional face-to-face contexts by suggesting the importance of relational involvement and the inefficacy of avoidance strategies when experiencing relational conflict.

CMC users exhibited a higher level of more direct and intimate uncertainty reduction behaviors than participants' offline counterparts, including increased self-disclosure and intermediate questioning by partners (Tidwell & Walther, 2002). The direct strategies utilized by CMC users resulted in greater conversational effectiveness and attributional confidence. Individuals communicating through CMC also reported negative information with less distortion, greater honesty, increased accuracy, and higher levels of comfort and satisfaction (Sussman & Sproull, 1999).

Much of the research on computer-mediated self-disclosure of emotional expression involves emoticons; keyboard symbols designed to replicate facial expressions. Walther and D'addario (2001) described emoticons as recognized nonverbal substitutes, used to represent facial expressions individuals exhibit during CMC. Riva (2002) provided examples of emoticons that express identity (such as :-Q for a user who smokes), and reported that men adapted emoticons to allow for greater levels of humor, including teasing and sarcasm. Women, on the other hand, expanded emoticons to include illustrations of support and thanksgiving (such as (name of person) for hugging, or :\'-) for tears of happiness). These studies illustrate how CMC users adapt to the limited cues offered by CMC in attempt to express adequately their emotions. These studies, however, do not examine the implicit emotions expressed in CMC through discursive text, nor do they include text messaging or online social communities in their analysis of CMC.

Identity goals influence selection of communication medium and text format. Individuals with high levels of concern for self-image invested greater amounts of time attempting to accurately emphasize key points in their messages (Wilson & Zigurs, 2001). When persuasion acts as the message sender's primary goal, individuals tend to use less custom text patterns, and incorporate fewer images into their messages, allowing the entire focus of the receiver to dwell on the intended message (Wilson & Zigurs). Wilson and Zigurs' findings indicate the relevance of Walther's (1996) argument that characteristics of CMC, such as asynchrony, enhanced editing capabilities, and a lack of nonverbal cues, permit individuals to selectively self-present their identities and to manage effectively receiver impressions in relation to sender goals.

Sending messages in a state of high arousal through computer-mediated mediums resulted in a decrease of verbosity, and an increase in grammatical errors, indicating senders' desire to disassociate themselves from the sent message by not allocating substantial time or effort toward delivery of the message (Wilson & Zigurs, 2001). This finding strengthens Dillard, Segrin, & Hardin's (1989) argument that high-arousal participants, in comparison to low-arousal counterparts, tend to be less positive, and use less logic in their messages. Potential effects of these tendencies include negative message reception by message receivers and harmful effects on relational conditions, as persons with high levels of arousal do not actively undertake the effort required to couch angry or frustrated messages in a manner designed to benefit all involved parties for future interactions.

Relational Maintenance

In recent decades, an ample amount of research has attempted to capture the essence of relational maintenance behavior trends, and their effect on relational satisfaction and development. Previous relational maintenance research concentrated on relational maintenance strategies, largely ignoring routine behaviors that function to maintain relationships (Dindia et al., 2004; Stafford, Dainton, & Haas, 2000). Current relational maintenance research also overemphasizes intimate relationships (Dindia et al.). Though most relationships maintain a low level of intimacy, the bulk of relational maintenance research focuses on close, personal relationships (Dindia et al.).

The study of relational maintenance behaviors remains essential to understanding the nature of relationships (Aylor & Dainton, 2004). Canary and Stafford (2000) defined maintenance behaviors as "actions and activities used to sustain desired relational definitions" (p. 5). Relational maintenance, then, includes more than keeping a relationship animate; maintenance upholds partners' desired relational features (Stafford, et al., 2000). Relational maintenance involves the employment of both selected strategic maneuvers, and everyday, routine interactions (Duck, 1986). Strategic behaviors are intentional and consciously enacted (Dindia, 1994). Routine behaviors, on the other hand, are less mindful and more habituated than strategic behaviors (Canary & Stafford, 1994), and occur without the specific goal of maintaining the relationship (Dainton & Stafford, 1993; Dindia et al., 2004). Relational maintenance is often an inadvertent by-product of routine behaviors (Canary & Stafford, 1994).

With few exceptions, researchers have focused on the strategies partners use to sustain relationships (Stafford et al., 2000). Canary and Stafford (1992) identified five

relational maintenance strategies, including positivity (being cheerful, optimistic, and pleasant in interactions), openness (discussions on one's feelings and the nature of the relationship), assurances (assuring the partner of a shared future), networks (interacting with, and relying on the support of family and friends), and sharing tasks (performing common responsibilities together, such as household chores and errands). Dindia et al. (2004) noted a series of studies indicated these five maintenance behaviors remain strong predictors of relational characteristics, such as love, liking, satisfaction, control mutuality, and commitment (Canary & Stafford, 1992; Dainton, Stafford, & Canary, 1994). Recently, scholars advanced Canary and Stafford's original identification of relational maintenance behaviors by acknowledging two new factors of relational maintenance, including advice (an individual's expression of opinions to the partner) (Messman, Canary, & Hause, 2000), and conflict management (the use of integrative conflict strategies with relational partners, such as cooperation, apologizing, and forgiveness) (Stafford et al., 2000).

A large majority of the previous relational maintenance research focuses on romantic relationships. Both strategic and routine maintenance behaviors act as important predictors of satisfaction and commitment in relationships (Dainton & Aylor, 2002), as the routine or strategic use of assurances in relationships acted as the best predictor of both satisfaction and commitment (Dainton & Aylor, 2002; Stafford et al., 2000). Positive correlations also exist between relationship length and employment of the routine maintenance behaviors of conflict management, sharing tasks, and sustaining social networks (Dainton & Aylor, 2002). The routine use of positivity also functions as an important predictor of relational length and commitment (Stafford et al.,

2000), indicating the importance of routinely preserving a general atmosphere of happiness and joviality in the context of relational culture. While these findings identify the importance of mundane tasks, other studies highlight the worth of intentionally enacting behaviors in attempt to maintain relationships, and their correlation to relational commitment and satisfaction.

Research on familial relational maintenance behaviors suggests characteristics unique to domestic contexts. Myers el al. (2001) found siblings reported sharing tasks as the most frequently performed maintenance behavior, while openness between siblings was the least frequently reported behavior. Higher levels of liking also correlated positively with levels of positivity, networks, shared tasks, openness, and assurances. However, only frequency of positivity, networks, and shared tasks maintenance behaviors predicted sibling liking. The lack of emphasis on openness and assurances in sibling relationships may result from perceptions that these are maintenance behaviors performed only by members of committed romantic relationships (Dainton, Stafford, & Canary, 1994; Weigel & Ballard-Reisch, 1999a, 1999b). This finding maintains fidelity when considering siblings do not generally need to discuss directly their relationship (openness), or to stress their continued future involvement in the relationship (assurances) due to the nonvoluntary nature and perceived permanence of the sibling affiliation (Myers et al., 2001).

Gender differences exist in the use of relational maintenance behaviors in both romantic and family contexts. Women perform more routine openness in romantic relationships than male counterparts (Aylor & Dainton, 2004), and female siblings enact relational maintenance behaviors at higher levels than male siblings (Myers et al.,

2001). Male siblings, however, reported increases in closeness through the maintenance behaviors of shared activities and time spent together (Floyd, 1996). Married men with high ability to modify their self-presentation tended to use more positivity with their partners, whereas men attentive to social comparison information utilized more openness, network, and task relational maintenance strategies (Ragsdale & Brandau-Brown, 2005). Interestingly, men with great communicative flexibility across a variety of situations are less likely to use the network strategy, perhaps feeling they do not need to enlist the help of others to maintain their relationship (Ragsdale & Brandau-Brown). Married women remain more aware of partner perceptions of marital quality, and adjust their maintenance behaviors according to partner needs at more efficient levels than their husband counterparts (Weigel & Ballard-Reisch, 1999a). Specifically, wives' perceptions of self- satisfaction, partner satisfaction, commitment, and love influenced uses of maintenance behaviors, while men displayed no cross-spouse effects regarding partner perceptions and maintenance behaviors. Only husbands' perceptions of self-satisfaction displayed a consistent relationship to their maintenance behaviors (Weigel & Ballard-Reisch). These findings support Ragsdale's (1996) argument that women tend to perceive relationships as more important than men, and illustrate greater sensitivity and awareness of relationship issues than male partners.

While many studies illustrate differences in maintenance behaviors based on biological sex, recent research suggests psychological gender as a larger component of behavioral differences. Aylor and Dainton (2004) argued routine maintenance behaviors may come more easily for those with feminine gender, resulting from frequent use and consequential differences in the perception and performance of routine versus strategic

behaviors. Femininity positively associated with routine use of advice, conflict management, and openness in romantic relationships (Aylor & Dainton). Further, femininity was not associated with use of strategic maintenance behaviors. Masculinity, on the other hand, positively associated with strategic uses of openness and shared tasks, and was not associated with any routine maintenance behaviors (Aylor & Dainton). These findings suggest a difference in individuals' perceptions of the importance of performing relational maintenance, gendered values of specific maintenance behaviors, and the socialization effect of psychological gender on the performance and perceptions of relational maintenance.

Perceptions of one's current relational state influence performance of relational maintenance behaviors. Partners' discernment of inequity and/or uncertainty in romantic relationships resulted in decreased enactment of maintenance behaviors (Dainton, 2003). Relational uncertainty also predicted relational dissatisfaction (Dainton), highlighting the importance of the maintenance behavior openness (discussing feelings pertaining to the relationship) in helping to produce greater certainty and subsequent satisfaction in romantic relationships.

Frequency of maintenance behaviors does not predict, however, increased closeness or relationship satisfaction. Friendships with increased face-to-face interaction did not report higher levels of relational satisfaction or closeness (Johnson, 2001). While primarily face-to-face friendships did declare larger numbers of joint activities and social network maintenance behaviors, reported performances of assurances and openness behaviors did not differ significantly between face-to-face and long-distance friendships (Johnson). This lack of discrepancy suggests assurances

and openness function as vital behaviors regarding maintenance of closeness and satisfaction in friendships, and indicates the importance of the type and quality of maintenance behavior performed. CMC, then, may serve a peer role to face-to-face interaction, despite lacking traditional nonverbal cues.

Having discussed the existing research on relational maintenance, I will now discuss the impact of relational behaviors on perceptions of social support.

Social Support

Social support refers to "verbal and nonverbal communication between recipients and providers that reduces uncertainty about the situation, the self, the other, or the relationship, and functions to enhance a perception of personal control in one's experience" (Albrecht & Adelman, 1987, p. 19). Albrecht, Burleson, and Sarason (1992) further described social support as "the cornerstone for the quality of human life" (p. 149). Cutrona and Suhr (1994) identified five supratypes of support, which provide a representative and complete description of support types (Braithwaite & Eckstein, 2003). The five types of support include: (1) informational support (providing information or advice), (2) tangible aid (providing or offering needed goods or services), (3) emotional support (communicating love, concern, or empathy), (4), social network support (communicating belonging to a group of people with similar interests or concerns), and (5) esteem support (communicating respect and confidence in abilities).

Social support positively impacts the physical and mental health of individuals (Berkman, Glass, Brissette, & Seeman, 2000). Satisfaction with support groups may lead to positive health outcomes, such as reduced stress and augmented ability to cope

with problems (Sarason, Sarason, & Pierce, 1990). Specifically, previous research argued physical and psychological benefits of social support related to cardiac health (Janevic et al., 2004; Pedersen, van Domburg, & Larsen, 2004), HIV-related stress (Haas, 2002; Kessler et al., 1991; Lesserman et al., 2000), disability (Braithwaite & Eckstein, 2003; Braithwaite, Waldron, & Finn, 1999; Fox, 2000), smoking cessation (Salazar, Becker, & Daugherty, 1994), and cancer (Manne et al., 2003; Shaw, McTavish, Hawkins, Gustafson, & Pingree, 2000; Wright, 2002). Research also positively associates social support with a higher quality of life (Kessler et al., 1991), reduction of anxiety and depression (Hays, Turner, & Coates, 1992), maintaining hope while living with illness (Rabkin, Williams, Neugbauer, Remien, & Goetz, 1990), and as a buffer against stress (Kessler et al.). In sum, previous studies suggest social support can have a direct impact on the psychological state of individuals, and positive effects on the physical state of individuals (Arnold, 2005).

More important than actual received support may be perceptions of received support (Wethington & Kessler, 1986), highlighting the importance of examining which types of supportive behaviors individual's value (Dakof & Taylor, 1990). Individuals' interpretations mediate received support in comparison with other forms of support potentially available to the receiver (Haas, 2002). In particular, Jacobsen (1986) noted the importance of matching the type of support the potential receiver desires with type of received support. For instance, a person in need of information or advice (information support) may not perceive support communicating concern or empathy (emotional support) as valuable or helpful (Haas, 2002).

Persons living with illness most commonly seek romantic partners and close friends in search of social support (Haas, 2002; Powell-Cope, 1995; Powell-Cope, 1996; Wrubel & Folkman, 1997), likely in attempt to reduce uncertainty and to establish familiar norms and routines while experiencing illness. However, needing to request social support, even from partners and close friends, can be burdensome. Rook (1990; 1995) argued individuals benefit more from proactive social support than reactive support, because it helps alleviate concerns of burden and subsequent stress for support receivers. Accordingly, support seekers remain most satisfied when support providers displayed appreciation for the seekers' problem, and minimized the impositions of their advice and suggestions for the seeker (Agne & White, 2004). Support providers, conversely, retained the highest levels of satisfaction when support seekers expressed acclaim toward the provider for their ability to solve the problem, and when the seeker asked for help directly (Agne & White). Other studies further highlighted the importance of individuals reciprocating support in relation to social support satisfaction and relational satisfaction (Haas, 2002; Hays, Chauncey, and Tobey, 1990). Providers of social support, therefore, should engage in dual perspective, attempting to balance desires to provide support with the needs and desires of potential support recipients (Braithwaite & Eckstein, 2003).

Social support is a transactional process within relationships, often enacted through everyday routine talk (Cutrona, Suhr, and MacFarlene, 1990). Haas (2002) further noted the interdependence of social support and relationship maintenance behaviors, including talk. As CMC emerges as a routine daily activity for many individuals, communicative actions likely function to accomplish multiple goals (Miller,

Cody, & McLaughlin, 1994), including relationship maintenance and social support. For example, individuals use self-disclosure in social support to initiate transactional relationships through the expression of concerns and frustrations, to demonstrate coping is possible for the support seeker, and to share reciprocal social companionship relationships (Tichon & Shapiro, 2003).

Though Strauss (1997) found computer-mediated groups exhibited more supportive communication than face-to-face groups, relatively few studies examine social support satisfaction in relation to computer-mediated communication (Wright, 2000a), and no studies to date have investigated the relationship between CMC use and perceptions of social support in friendship and romantic relationship contexts. Despite predictions by communication researchers that use of CMC will increase to supplement changing interpersonal relationship needs (Nussbaum, Pecchioni, Robinson, & Thompson, 2000), current empirical knowledge remains primarily limited to CMC's effects on social support perceptions among online support groups. Specifically, online social support has been positively associated with benefits for older adults (Alexy, 2000; Colvin, Chenowith, Bold, & Harding, 2004; Wright 1999b; 2000a), persons with eating disorders (Winzelberg, 1997), disabled persons (Braithwaite, Waldron, & Finn, 1999; Braithwaite & Eckstein, 2003; Fox, 2000), cancer treatment (Shaw et al., 2000; Wright, 2002), and persons with various other health issues (Barrera, Glasgow, McKay, Boles, & Fei, 2002; Coulson, 2005; Houston, Cooper, & Ford, 2002; Tichon & Shapiro, 2003).

Computer-mediated discussion groups provide new avenues of social support for individuals (Braithwaite, Waldron, & Finn, 1999; Lamberg, 1997). While people join

online communities for a variety of reasons, the most widely noted reasons include seeking information, empowerment, empathy, emotional support, and encouragement (Hamilton, 1998; Mickelson, 1998; Sharf, 1997; Scheerhorn, Warisse, & McNeilis, 1995). These discussion groups showcase the utility of online communities in expression of social support, and toward the potential maintenance of relationships.

Much of the literature on Internet-based support groups focuses on advantages and disadvantages, their communicative structure, and reasons for the growth of online support groups (Finn, 1996; King & Moreggi, 1998; Weinberg, Schmale, Uken, & Wessel, 1995). Advantages of online social support for older adults include anonymity, asynchrony, ability to personalize use of CMC to individual interests and needs, locating and expanding support networks, gaining understanding, and finding information and solutions to problems (Colvin et al., 2004). Computer resources also offer homebound older adults and informal caregivers the ability to gather valuable information, gain confidence, and receive support electronically (Alexy, 2000), as individuals with diabetes participating in Internet-based social support interventions significantly increased perceptions of social support availability in comparison to people whose computer access remained limited to information about diabetes (Barrera et al., 2002). In short, online support communities offer convenience of location, lack of need to travel, 24-hour availability, and a large interpersonal pool from which individuals can give and receive support (Braithwaite, Waldron, & Finn, 1999; Finn & Lavitt, 1994; Turner, Grube, & Meyers, 2001). Computer-mediated social support removes potential physical or communication-related barriers to participation (Braithwaite et al.), and

allows users to feel the sense of being part of a larger community (Braithwaite, 1996; Braithwaite & Labrecque, 1994).

Mediated settings may enhance certain forms of social support through a variety of features, including asynchrony, which allows individuals time to research and construct responses before replying to requests, augmented anonymity, which provides certain users a protective shield when constructing messages (McGlynn, 2005), and an increase of support networks (Braithwaite et al., 1999). The public nature of computer-mediated support also may enable participants to learn new contexts and methods of providing and receiving social support.

Research findings consistently argue the positive effects of computer-mediated social support for older adults. Implicit themes of computer-mediated social support for older adults in online interactions include promotion of community support, advice disguised as self-disclosure, and shared life events (Wright, 1999b). Explicit participant perceptions of social support themes include a continuum of social support, indicating the ability to emotionally invest heavily or lightly dependent on individual interest and need, use of humor as a way to elevate mood, use of others as a 'sounding board,' and discussing family issues with non-family members (Wright).

Levels of investment in online support groups substantially influence perceptions of relational satisfaction. Factors related to support group network satisfaction and size include the amount of time spent communicating within online support groups, the number of received messages within online networks, and perceptions of source credibility and homophily (Parks & Floyd, 1996; Walther & Burgoon, 1992; Wright, 2000b). In a study involving members of various online support groups

(alcohol/substance abuse, eating-disorder groups, terminal illness groups, etc.), the amount of time invested in online support groups positively related with perceptions of online support group satisfaction (Wright, 1999a). Further, greater involvement with online support communities remained predictive of lower perceptions of life stress for older adults (Wright, 2000a). Older adults who spend substantial time communicating on the Internet per week are more satisfied with their Internet support group than with their non-Internet support group, while individuals who spend less time communicating with their Internet support group were more satisfied with their non-Internet support groups (Wright, 2000b). Turner, Grube, and Meyers (2001) suggested respondents participated more within online communities when they perceived support from the community to be high, and when the depth and support in face-to-face relationships were low. These findings bring to the forefront the importance of investment and familiarity of technology as primary factors when assessing the utility of online support groups for older adults, supporting Walther and Burgoon's (1992) argument that satisfaction with online relationships correlates with frequency of use.

While previous research enterprises provide a basis for the importance of researching computer-mediated social support, and outline potential benefits of various forms of support, prior studies often conceptualized giving and receiving support as a temporary, rather than permanent, need (Braithwaite & Eckstein, 2003). These studies also do not examine the impact of online support of people not currently involved in illness or intervention related support groups. The current study attempts to fill this empirical gap by focusing on the influence of CMC in relation to social support for current friendships and romantic relationships. The growth in popularity of friendship-

based social communities (Asavareungchai, 2005; Marshall & Tong, 2005; Williams, 2005) emphasizes the need to examine social support behaviors in non-intervention specific contexts.

Communication scholars have called for moving beyond individual behaviors, and to begin conceptualizing social support as an interactive process. Burleson, Albrecht, Goldsmith, and Sarason (1994) argued the importance of examining "the *messages* through which people both seek and express support; studying the *interactions* in which supportive messages are produced and interpreted; and studying the *relationships* that are created by and contextualize the supportive interactions in which people engage" (p. xviii, italics added). Goldsmith (1992) argued the importance of "how givers and receivers of support interactively manage communication acts" (p. 265). Previous research argues the notion of support as an interactive process (Braithwaite & Eckstein, 2003; McColl, Lei, & Skinner, 1995), enhancing the credibility of the current research design.

Support is something we give and receive on a day-to-day basis (Barnes & Duck, 1994; Leach & Braithwaite, 1996). In particular, Barnes and Duck discussed the importance of studying social support in everyday contexts, arguing routine interactions form the foundation for support in extreme circumstances. Braithwaite, Waldron, and Finn (1999) argued the importance of researching how individuals enact social support through computer-mediated contexts, with regard to evaluating online support in relation to face-to-face support. The current study attempts to analyze social support in the context of everyday, computer-mediated interaction, and extends understanding of social support in the context of routine relational interaction between friendships and

romantic relationships by examining support in an ongoing, rather than temporary, basis (Braithwaite & Eckstein, 2003). The current project further broadens previous research by exploring the reasons individuals provide for selecting computer-mediated forms of communication, the perceived effects of CMC on relationships, and focusing on the function of CMC in relation to perceptions of social support, relational closeness, and relational satisfaction. Thus, the following research questions and hypotheses are now presented:

> RQ1: What is the predictive influence of an individual's level of CMC and FTF investment on an individual's perceptions of social support, relational closeness, and relationship satisfaction in a specific relationship?
>
> > H1: Individuals reporting higher levels of CMC and FTF investment will report higher levels of social support, relational closeness, and relational satisfaction.

The regression procedures used to explore RQ1 and H1 will examine how CMC and FTF investment work together to influence the dependent variables of social support, relational closeness, and relationship satisfaction.

> RQ2: What are the reasons individuals provide for using CMC in their relationships?
>
> RQ3: What are the perceived effects of CMC on relationships?

CHAPTER 3

METHOD FOR STUDY 1

I employed a mixed method approach for the current study. Quantitative measures were designed to produce generalizability, and to increase ability to make and describe predictions about a population based on the sample. Study 2 used a qualitative research design, intended to provide detailed insight to the description and account of computer-mediated communication's (CMC's) effects on relationships. A mixed method approach attempts to converge findings from distinct data sources in attempt to increase understanding across methods and provide enhanced insight toward the goals of the study (Creswell, 2003).

Participants

Three hundred and forty participants from entry-level communication courses at a large southwestern university were recruited to complete the survey. The participants received partial course credit for their participation. Twenty-three surveys were removed from the data set before analysis because the participants did not complete a portion of the survey. Of the 317 participants included in the analysis, 165 (52.1%) were female, and 152 (47.9%) were male. Average age of the participants was 21.18 years, with a standard deviation of 4.53. Two hundred and twelve participants (66.9%) identified themselves as Caucasian, 44 (13.9%) as African-American, 33 (10.4%) as Hispanic, 14 (4.4%) as Asian, and 8 (2.5%) classified themselves as Other. Ten participants elected to not designate an ethnicity.

Procedures and Materials

Participants completed a multi-section survey. The first section of the survey included the participants' demographic information (age, sex, ethnicity), and asked them to identify a specific relational partner about whom they would complete the remainder of the survey. The following sections of the survey included measures of relational closeness, relational satisfaction, and perceptions of social support.

Measures

Closeness

To measure relational closeness, participants completed Aron, Aron, and Smollan's (1992) Inclusion of Other in the Self (IOS) scale. The IOS is a single-item, pictorial measure of closeness. Respondents select the picture that best describes their relationship. The pictorial figures were designed so that (a) the total area of each figure is constant, and (b) the degree of overlap progresses linearly, thus creating a seven-step, interval-level scale (Aron et al., 1992). The IOS was hypothesized to measure people's *sense* of being interconnected with each other (Aron et al., italics in original). Alpha for Aron et al. (1992) was .93 (subgroups included family = .87, friendship = .92, and romantic relationships = .95). Test-retest reliability (after two weeks) was .83 overall (family = .85, friendship = .86, and romantic =.85).

Relational Satisfaction

Relational satisfaction was measured using Hendrick's (1988) Relational Assessment Scale (RAS). The RAS is a seven-item generic measure of relationship

satisfaction. Specifically, the RAS measures general satisfaction, how well the partners meets one's needs, how favorably the relationship compares to others, regrets of getting into the relationship (reverse-coded item), how well partners have met expectations, level of love for partner, and problems in the relationship (reverse-coded item). Hendrick (1988) reported mean inter-item correlation of .49, and an alpha reliability of .86. Hendrick, Dicke, and Hendrick (1998) reported a test-retest reliability of .85. The RAS correlated significantly with measures of love, sexual attitudes, self-disclosure, investment, and commitment (Hendrick, 1988). Hendrick et al. (1998) argued the RAS is appropriate across a broad array of personal relationships, though most applications have focused on romantic or marital partners. Hendrick (1988) noted the RAS' potential for measuring romantic couples of varying levels of commitment and for measuring friendship with minimal changes. Scoring for the Hendrick RAS ranges from a Likert scale from *1* to *7*. Overall, the measure of relational satisfaction met acceptable levels of reliability in this study (α = .74).

Social Support

To measure perceptions of social support, participants completed Pierce, Sarason, and Sarason's (1991) Quality of Relationships Inventory (QRI). The QRI was developed to measure perceived availability of support in specific relationships, and can be used to assess any relationships in a person's life. Commonly, researchers ask participants to fill out the QRI multiple times, assessing a new relationship with each completed survey (i.e., mother, father, friend, romantic). The QRI attempts to assess perceived availability of support in specific relationships through measurements of

support, conflict, and depth. Internal consistency of the three subscales of the QRI (support, conflict, and depth) was high, with Cronbach's alpha in the .80s and .90s (Pierce, 1994). The current version of the QRI includes 25 items designed to assess the amount of support, conflict, and depth in a broad range of close relationships (Pierce et al., 1991). QRI items are rated on a 4-point scale, ranging from *1* = Not at all, to *4* = Very much. Participant ratings maintained reliability comparable to previous studies (α = .90).

The final portion of the survey asked participants to identify their level of communication with their chosen relational partner through face-to-face and computer-mediated mediums.

Quantity of Investment using Face-to-Face and Computer-Mediated Communication Mediums

This portion of the survey requested participants to identify their comparative investment between face-to-face and computer-mediated communication by denoting a percentile breakdown of their communication patterns with chosen relational partner. Currently, a scale depicting the comparative investment between face-to-face and computer-mediated communication does not exist. Therefore, the researcher created the scale for this study, electing to use a two-row, six-column table. The top row designated types of communication mediums, including face-to-face, telephone, e-mail, text-messaging, and Myspace.com® Website (www.MySpace.com)/ Facebook™, social utility (Mark Zuckerberg, www.facebook.com). The bottom row represented the percentage of the overall communication, and asked respondents to indicate the percentage of time (out of 100%) they spent interacting with their chosen relational

partner in each specified communication medium. While phone conversations are mediated by technology, they do not function in the same way as other CMC modes. Thus, they were eliminated from the analysis.

Quality of Face-to-Face and Computer-Mediated Communication

Participants' reported the quality of face-to-face and computer-mediated communication with their chosen relational partner using a *1-5* Likert scale designed by the researcher for the purposes of the current study. The scale consisted of twelve statements designed to measure quality of communication across face-to-face and computer-mediated mediums. Questions included "my computer-mediated communication in this relationship is valuable," "computer-mediated communication performs an important function in this relationship," "I gain valuable information from computer-mediated communication with this individual," "the computer-mediated communication with this individual is satisfying," "the computer-mediated communication in this relationship is worthwhile," and "computer-mediated communication is not an influential form of communication in this relationship" (reverse-coded item). Questions designed to measure face-to-face communication quality were identical to the previous questions, with the exception of the substitution of computer-mediated communication to face-to-face communication (α CMC quality=.92; α face-to-face quality=.93).

Assignment to Conditions

Participants were given the option to report on a specific relationship with either a

romantic or friendship focus. Of the 317 participants, 147 elected to report on a romantic relationship, and 170 chose to report on a friendship. Survey questions were modified slightly to retain accordance with the type of relationship.

CHAPTER 4

RESULTS FOR STUDY 1

Three independent regression analysis procedures were used to explore the research question and test the hypothesis for this study. H1 specifically proposed that individuals reporting higher levels of computer-mediated communication (CMC) and FTF investment will report higher levels of relational satisfaction, relational closeness, and social support. CMC and face-to-face investment was operationalized as quantity and quality of both face-to-face communication and CMC. Thus, the predictor variables in the three regression procedures included quantity of face-to-face communication, quantity of CMC, quality of face-to-face communication, and quality of CMC. The criterion variables were relational closeness, relational satisfaction, and social support.

The first regression procedure analyzed the influence of the predictor variables on relational closeness, R^2 = .192, p < .001 (see Table 1). Specifically, quality of face-to-face communication was a significant predictor of relational closeness, $\underline{b}$= -.377, t = -6.69, p < .000. Individuals who reported higher levels of face-to-face communication quality also reported higher levels of relational closeness.

In the second regression analysis CMC and face-to-face investment significantly predicted relational satisfaction, R^2 = .200, p < .000 (see Table 2). In particular, quality of face-to-face communication, $\underline{b}$ = -.378, t = -6.74, p < .000, and CMC, $\underline{b}$ = -.192, t = 3.13, p < .002, significantly predicted relational satisfaction. Participants who reported higher levels of face-to-face communication and CMC quality also indicated elevated levels of relational satisfaction.

The third regression procedure indicated CMC and face-to-face investment significantly predicted participants' perceptions of social support, R^2 = .255, p <. 000 (see Table 3). Examination of the standardized coefficients in the regression analysis indicated that individuals reporting higher levels of quality of face-to-face communication, b = -.450, t = -8.31, p < .000 and quality of CMC, b = -.229, t = -3.87, p < =.000 had significantly higher levels of perceived social support. Thus, H1 was partially supported.

Table 1

*Summary of Regression Analysis for Standardized Variables Predicting Relational Closeness (*N=*317)*

Variable	B	SE̤B	b	Semi-partial^2
Face-to-face quantity	-.230	.153	-.103	-.076
CMC quantity	.097	.148	.046	.033
Face-to-face quality	-.163	.137	-.073*	-.061
CMC quality	-.766	.115	-.377	-.340

Note. R^2 = .192 (p < .000)
*p < .001.

Table 2

*Summary of Regression Analysis for Standardized Variables Predicting Relational Satisfaction (*N=*317)*

Variable	B	SE̱B	b	Semi-partial^2
Face-to-face quantity	-.136	.081	-.115	-.085
CMC quantity	.033	.079	.030	.022
Face-to-face quality	-.409	.061	-3.78**	-.341
CMC quality	-.227	.073	-.192*	-.159

Note. R^2 = .200 (p < .000)
*p < .01, **p < .001

Table 3

*Summary of Regression Analysis for Standardized Variables Predicting Perceptions of Social Support (*N=*317)*

Variable	B	SE̱B	b	Semi-partial^2
Face-to-face quantity	-.038	.037	-.069	-.051
CMC quantity	.008	.035	.015	.011
Face-to-face quality	-.227	.027	-.450*	-.406
CMC quality	-.126	.033	-.229*	-.189

Note. R^2 = .255 (p < .000)
*p < .001.

CHAPTER 5

METHOD FOR STUDY 2

Participants

A total of 196 participants provided useable data for this study. Participants were undergraduate students enrolled in an introductory communication studies course at a large public university in the Southwest. One hundred three (52.6%) participants identified themselves as female, and 93 (47.4%) as male. Participants were between the ages of 18 and 46, with a mean age of 20.7 years. One hundred and thirty-three (67.9%) participants identified themselves as Caucasian, 31 (15.8%) as African American, 18 (9.2%) as Hispanic, 7 (3.6%) as Asian. Six participants (3.0%) reported 'other' when indicating their ethnicity, and one respondent elected not to designate an ethnicity. Participation was voluntary, and respondents were assured of the confidentiality of their answers. Participants received a small amount of course credit for their involvement in the study.

Procedure and Measures

Respondents provided data for the current study by answering five open-ended questions regarding their use of computer-mediated communication (CMC) in the context of a specific relation chosen at the beginning of the survey. Questions were purposively imprecise to allow participants to control the direction and trends of their responses, and included "Why do you use computer-mediated communication?," "How does computer-mediated affect your relationship with this individual?," "Are there differences in the types of messages you send through face-to-face and computer-

mediated communication?," "How do you benefit from using computer-mediated communication," "How are relationships (in general) different today than they were five years ago?" Participants were provided ample room to write answers on the survey provided, and were offered additional paper to continue expansion of their response in the event the space provided was unsatisfactory in length. The researcher elected to have participants physically write their answers in attempt to provide respondents an opportunity to formulate their responses without pressure of time or interpersonal presence. There was no time limit placed on the participation of the respondents, though a large majority of participants elected to use approximately 20-25 minutes for completion of the open-ended survey. Theoretical saturation (Creswell, 1998) was achieved after analysis of 125 transcripts. However, I continued to analyze all 196 surveys in order to increase the legitimacy of data interpretation (Braithwaite & Baxter, 2006).

Data Analysis

I employed a qualitative/interpretive methodology in an attempt to identify patterns or themes encapsulating participants' experiences (Creswell, 1998). Interpretive approaches allow researchers to capture participants' perceptions of the experiential meanings in communicative interaction (Putnam, 1983) through the portrayal of individuals as active participants in the selection of behaviors to fulfill goal-oriented or purposive intentions (Lindlof & Taylor, 2002). The goal of interpretive studies is to provide insight to relatively uncultivated constructs (Bochner, 1985; Cissna, Cox, &

Bochner, 1990), aiming to discover, describe, and confer meaning to communicative phenomena in relation to the unique context of interaction (Creswell, 1998).

In the current study, an interpretive approach allowed the researcher to empirically examine participants' experiences in relation to the unique context of computer-mediated communication and relational maintenance, while concurrently maintaining the integrity and intent of participant responses to open-ended questions on the role and effect of CMC in their interpersonal relationships. The researcher attempted to value the totality of the information, while also responding to the need of categorization for thematic purposes (Creswell, 1998).

Analysis of the data occurred over a period of 30 days. Initially, I analyzed the data set in its entirety before assessing individual transcripts. I then attempted to identify broad themes across the transcripts, using a constant comparative method (Strauss & Corbin, 1990) to ensure categorical accuracy. Consistent with the constant-comparative method, the initial round of analysis included open coding of as many categories as possible from the data set. This process allowed the research to break down the data into categories, and compare similarities and differences across participant narratives (Strauss & Corbin, 1990). Following the initial identification of themes, I used axial coding to reshape the categories through examination of connections across categories, the consideration of (embedded) context, and identification of themes across categories (Strauss & Corbin, 1990). Throughout the axial coding process, I remained focused on the accurate portrayal of participants' experiences (Baxter, Braithwaite, Golish, & Olsen, 2002). Finally, I re-analyzed the data with a spotlight toward the current study's

research questions, allowing for a concentrated examination toward the goals of the study.

The researcher then created a codebook (Weston et al., 2001) of the themes in attempt to solidify the documentation of the categories, categorical code names, prototypical examples of categories, and the prevalence of each category in comparison to the entire data set.

CHAPTER 6

RESULTS FOR STUDY 2

The research questions for Study 2 inquired about the reasons people provide for using computer-mediated communication (CMC) in their relationships. The results highlight the utility and challenges of using CMC to maintain relationships in friendship and romantic contexts, and portray the perceived effects and rationale for choosing to communicate through CMC in a given relationship.

Autonomy-Connection Contradiction

The autonomy-connection dialectic surfaced throughout examination of the data (*n*=87, 44%), as respondents avowed that computer-mediated communication (CMC) creates a paradoxical effect on relationships. Respondents suggested while CMC enables relational partners to maintain a greater number of relationships with reduced time and effort, the value of relationships may be declining. As a result of this paradox, partners face the challenge of balancing increased numbers of connections with decreased perceptions of connection.

For some individuals, the value of the label friendship is declining. Nathan discussed the superficial nature of friendships that rely on CMC for relational maintenance, stating:

> Friendships today are different because although you can keep in touch easier, I feel that some closeness or intimacy may be lost through CMC. Some times people write friends because they feel they should, not because they really want to. It also takes less effort to maintain friendships so friends may not be seen as important as they might have been. But CMC can also help friendships grow.

Nathan's response indicates CMC's contradictory effect on relationships. Although individuals are able to maintain relationships more efficiently, the quality or intimacy of these relationships is often lost when partners rely on CMC. At the same time, his response discusses the potential CMC provides with regard to enabling the development of friendships due to the perceived efficiency of computer-mediated mediums.

A number of responses cited the influence of societal expectations on maintenance behaviors. One young adult argued:

> Friendships are different in that you can now have more superficial acquaintances type of friends; but the closeness of a secure bond is not easily built because of the computer-mediated communication and our fast-paced, immediate gratification world. CMC can cut us off from personal interactions that are so important in building trusting, long-term friendships.

This participant, like others in the sample, expressed concern that while CMC creates the possibility of connecting with larger numbers of persons, cultural demands for instant and efficient connection influence individuals to use CMC and consequently result in a lack of attachment and connection enjoyed by relationships who rely on face-to-face communication. One young adult, when discussing the nature of friendships through CMC, mentioned how they "can be maintained easier and you can have more friendships, yet they are not as close or personal because less time is invested." This response specifically cited the importance of the perceived investment and effort a relational partner offers to the sustenance of the relationship, illustrating the notion that certain individuals may not recognize CMC as valuable or noteworthy.

Further commenting on the value of friendships with regard to decreased investment, William noted "I think friendships aren't as deep and don't mean as much as

they did 5 years ago. You don't have to be as personal with friends today." Another respondent stated, "It is much easier to stay in contact with old friend, even if those relationships get more and more superficial." While the responses indicate the ability and potential CMC offers in the maintenance of a growing number of relationships, the participants acknowledged the more impersonal and inconsequential nature of friendships sustained primarily through computer-mediated mediums.

In particular, the 'friendship' format of online social communities such as Myspace.com® Website (www.MySpace.com) and Facebook™, social utility (Mark Zuckerberg, www.facebook.com) appears to influence the nomination and labeling of acquaintances as friends, as they encourage adding and accepting 'friends' through their communities. According to Leslie, the power of labeling has influenced the value and nature of friendships, arguing:

> People have more "popcorn" friendships that are not as intimate as the ones in the past. Also, people feel the need to stock up on these quick friendships so that their "friends list" is longer and they seem popular or important. When, in all actuality, they don't usually speak to these people in public because either they don't recognize them outside of their online pictures, or they don't have the courage to speak to them in "real life."

Leslie's reaction to the evolving nature of friendships, and individuals' desires to collect friendships through online social communities via CMC, illustrates a tendency to regard friendships as a tangible or material possession. Individuals are able to publicly display the number of 'friendships' in their network, thereby affecting their social status and satisfaction.

Using CMC to Increase Connection in Relationships

An overwhelming majority of respondents indicated a desire to increase relational

connection as a reason for using CMC in relationships (*n*=183, 93%). Specifically, responses in this category designated CMC as a driving force behind enhanced relational closeness. Reasons for incorporating CMC into relational communication included perceptions of increased intimacy, augmented social support network, dependence on CMC to maintain relationship existence, and the observation that it is easier to keep in touch and maintain relationships through inclusion of CMC.

CMC provided many relational partners with perceptions of increased closeness. In particular, partners were able to stay in more immediate contact through new communication opportunities created by CMC. These opportunities reduced awareness of physical distance for partners separated geographically, and also allowed partners to avoid feelings of detachment. As one young adult mentioned,

> When I moved from Texas to Kansas text messaging was my main type of communication with her. We sent messages back and forth while we were in classes. It made Kansas feel not so far away. Also, by hearing from her I could fight off the homesick much easier than without her.

This participant noted the importance of CMC in the coping process during a transition period. Text messaging enabled the partner to feel enhanced relational closeness despite geographic distance. This response also described using CMC as a means to avoid feelings of detachment. Another participant echoed this sentiment, declaring "I benefit from CMC because I know what's going on with her life and I don't feel left out." In these cases, CMC symbolically decreases the physical distance between relational partners, thereby enabling individuals to retain a sense of relational connection despite physical separation.

The immediate gratification of many forms of CMC allowed for greater feelings of connection for many participants. As one respondent stated, "With CMC, I have more

friends that I feel closer to. I can stay up-to-date on what's happening in their lives and never feel like I'm drifting apart from them." The perceived ease of maintaining relationships through CMC permitted individuals to sense increased relational proximity with a larger number of relationships. Further, the immediate nature of CMC provides relevant information and updates, enabling relational partners an enhanced sense of connection.

The creation of new communication opportunities created by computer-mediated forms of communication allow for more effortless relational maintenance communication. As Colin noted, "I am able to keep in touch with everyone so much more easily. Somehow everyone seems closer. CMC helps because we are able to talk more and it lets us feel closer." Another individual observed, "Even if it is slight, even if it is meaningless to some, it provides us just a little bit more time together." In these instances, and in the cases of many participants in the sample, CMC contributed to increased quantities of communication, thereby leading to higher perceptions of relational connection.

CMC also allows individuals to manage relationships through transitional periods of relational growth. Summarizing the view of several respondents, one participant asserted that CMC "allows us to stay in touch more because I wouldn't call on the phone, but I can send, for example, a Facebook message and it won't be as awkward." This response illustrates the potential for CMC to provide increased comfort and reduced apprehension in the maintenance process for certain individuals. Further, the response hints toward the potential of CMC to act as a gateway for development

throughout nascent relational stages when levels of apprehension may hinder the potential for face-to-face communication.

Increased Autonomy

A large number of the young adults in the sample indicated choosing to privilege CMC over alternative forms of communication because of the increased autonomy provided by CMC (*n*=92, 47%). The participants used CMC to impart a sense of independence from their relational partners and the communicative interaction. As one young adult mentioned, “I can ignore people for a day or more without them knowing it. I can talk to certain people and ignore the rest.” Other respondents echoed similar sentiments, stating “I keep in touch with all of my friends through CMC. And I don’t ever have to see people that annoy me. Just a quick message and it’s done.” These statements reflect individuals’ autonomic goals as a primary motivator of communication medium selection, indicating CMC’s ability to advocate desires to remain distant from certain relational partners in their network.

CMC also functions to alleviate difficulties in the process of relational termination. As one participant stated, “The best thing CMC does is allow for some distance between us which helps the healing process. It is also less intrusive, meaning that if I need to discuss something, i.e., getting off of our lease, I can do so without calling her.” Other participants specifically discussed the benefit of CMC due to the distance it can provide from the relational partner in periods of relational dissolution. As Jeanine stated, “By using CMC I don’t have to deal with the agony of seeing him, which just makes me remember the good times and what we used to have.” In these instances, privileging

computer-mediated forms of communication allowed relational partners to maintain distance in effort to better serve personal interests and needs with regard to a deteriorating relationship.

Certain individuals reported using CMC to conceal emotional expression. As one young adult male iterated,

> It is easier to communicate without emotion through CMC. First, I don't let her see how sad I am; which is helpful to protect myself. Also, I don't have to hear how sad she is and that helps me not be so sad. Also, you can change what you say before you actually say it, which keeps me from saying things I might later regret.

The asynchronous nature and lack of nonverbal cues present in CMC provided this respondent a protective shield, which allowed for greater autonomy from the emotional involvement and distress of communicating in a relationship during the termination process. Further, the participant noted the importance of being able to edit and organize his thoughts, impacting the self-disclosure in a positive manner with respect to future desires and relational aspirations.

Augmented Control of Time

Many respondents reported benefiting from CMC in the form of increased control of their time (*n*=116, 59%). Participants who mentioned the augmented influence of time use discussed manners in which CMC provided augmented temporal flexibility and management over interactions. Specifically, participants mentioned how CMC allowed them to balance relational needs while preserving their time for personal responsibilities. As one young adult mentioned, "It is quicker sometimes when I'm really busy to let him know that I care and am not just *too* busy." Other individuals discussed

their inability to maintain relationships without the temporal flexibility of CMC, stating, “Between work and school it really allows me to quickly keep in touch with the people I care about. I just don’t have the time to sit down for lunch or take an hour or two to talk on the phone so this is my way of letting them know that I care and am thinking about them.” Interestingly, each respondent mentioned the importance of conveying feelings of care and consideration to their relational partners, but how they were unable or unwilling to use their finite face-to-face availability to do so.

Responses in this category also indicated that many individuals approached relational maintenance behaviors as a chore they needed to complete in order to sustain the relationship. As Henry notes, “CMC is a way to stay connected with someone in a way that is almost effortless. I can write an email, or leave a Facebook message in very little time, and it is far easier than a phone call or visit.” Another individual echoed similar sentiments, denoting “CMC has changed my life. Now I can Facebook, Myspace, or text message and officially communicate in less than two minutes.” Interestingly, neither respondent articulated CMC as a superior means of maintenance communication; merely as a more efficient or convenient means of maintenance. The attitude of these statements further indicate how some individuals feel inclined to maintain relationships, but do not wish to invest finite resources, such as face-to-face time, in the process.

At times, this lack of investment may have effects on the long-term assessment of the relationship. As Jennifer observed, “CMC is the easiest way to keep in touch. We both have busy lives and rarely see each other, so it’s easier to text or email. At the same time, we tend to lose ourselves in the computer age and forget how to act in a

relationship." On the one hand, Jennifer noted that CMC allows for greater connection. At the same time, she warns of the increased autonomy resulting from communication through computer-mediated mediums. Despite the perceived convenience of CMC, there appears to be risks inherent in using a medium that requires less investment and effort with regard to partners' relational assessments.

Less Effort, More Relationships

Several participant responses indicated the utility of CMC toward maintaining a greater number of relationships with decreased levels of investment. With less effort required to sustain relationships, individuals reported benefiting from CMC in two primary manners: the ability to keep in touch with former or casual friends, and the perception of enjoying larger social support networks through the advent of CMC.

Numerous participants commented on the utility of CMC regarding contacting and maintaining 'old' friendships. As one young adult noted, "My relationships with people have grown because of computer-mediated communication. Thanks to Facebook, I have been able to get in contact and keep in touch with a lot of old friends." Cindy's response credits online social communities for allowing individuals to rekindle former prominent friendships. David further credits CMC for facilitating relational maintenance, stating "CMC helps me develop a lot more relationships because it's an easy way to keep in touch with people." The perception of decreased effort in computer-mediated mediums of communication promotes increased willingness to maintain a larger number of relationships.

Regarding the decreased investment required to sustain relationships, one participant described the utility of CMC in balancing temporal demands with maintenance desires, stating

> I am able to show him that I am thinking about him at that specific time without having to actually take the time out to hold a real conversation. In fact, if I really wanted to be quick, all I have to say is "just thinking about you!" and he will be happy. There's *NO* way I can say that face-to-face and be able to just walk away without having a long conversation.

In this response, the communication opportunities created by CMC allowed the participant to attain effectively conflicting goals of maintaining partner satisfaction and reserving finite face-to-face and temporal resources. Further discussing the temporal benefits of CMC, a male participant noted "I enjoy CMC because it helps me save money, time, effort, and stress." Interestingly, his response focuses solely on how the personal advantages of CMC use, and does not mention or regard how selecting CMC may act to benefit the relationship.

A number of participants asserted CMC acted not only as a supplement to relational communication, but as a necessity to the maintenance and progression of the relationship. A male participant portrayed an increasingly common reliance on CMC to uphold relationships, observing that "Some relationships are still alive because of CMC. I don't always have the time or means to personally keep all of my friends close, so through CMC I can keep in touch." The flexible nature of CMC promoted increased maintenance behaviors, thereby benefiting individuals by permitting partners to multi-task during relational contact. As another respondent articulated, "CMC allows us to have a relationship. If we could not do other things simultaneously (work, be on the computer), I doubt our relationship would exist." In these instances, CMC creates

means for preserving relationships through novel and convenient communication opportunities.

Openness-Closedness Contradiction

On the one hand, participants of this study reported that CMC enabled them to be more open and forthcoming in communication with their relational partner. Specifically, CMC promoted increased disclosure between relational partners. At the same time, individuals used CMC to avoid lengthy conversations, therefore maintaining a sense of conversational closedness. As one participant stated, “CMC is a quick and easy way to communicate with each other. We can summarize what we have been doing without having to really elaborate in detail.” This response illustrates the utility of CMC toward enabling increased relational communication due to the perceived speed and ease of conversing through computer-mediated mediums. At the same time, the preceding response indicates the efficacy of CMC toward achieving a degree of conversational closedness.

In certain instances, the lack of nonverbal cues present in CMC hindered the ability to communicate, often influencing individuals to forgo the fine points of self-disclosure that enable relational bonds. A male participant summarizes this theme in discussing use of computer-mediated communication with his significant other:

> At times it (CMC) hurts our relationship because it lacks emotion. You don’t know how the other person feels, which hurts it (the relationship) sometimes. But CMC is great for small messages or for task-oriented messages. It allows me to get rid of the small messages and tasks that we do in relationships, and allows me to focus on my girlfriend when we’re together.

On the one hand, the sentiment of this participant illustrates the utility of CMC in relational communication, crediting mediated-communication for promoting concentration on his relational partner when together by using CMC to accomplish task-oriented relational maintenance needs. At the same time, the participant disparages use of this medium because CMC creates emotional ambiguity among relational partners. Another young adult further illustrates the notion of emotional ambiguity through CMC. In this case, however, the participant portrays computer-mediated communication paradoxically, as both more open and more closed, asserting:

> Messages we send through CMC are more general, without emotional and facial feedback. You wouldn't know what their reaction would be. So I think it is less effective. However, it is easier for me to say some things through CMC than face-to-face. I don't have to worry about the outcome. Maybe I would still have to face the outcome later, but not now.

While noting decreased emotional value in CMC, the participant also observes the potential of CMC to increase accurate self-disclosure in relational communication.

Similarly, certain individuals iterated a dichotomy in the nature of self-disclosure through divergent communication mediums. Specifically, participants discussed the willingness to use CMC for trivial discussions designed to maintain contact with their relational partner. At the same time, respondents reported the inappropriateness of using CMC for 'important' communication. The following response illustrates this theme, as one young adult stated, "It (CMC) keeps us in touch with each other's lives. However, when we need to discuss something really important to us, we call on the phone. CMC is more impersonal." A female participant further added,

> I rarely talk about important things through CMC. I think it can get in the way of the relationship. So much communication is lost through CMC because you miss out on all the non-verbal communication. It does make it easier to keep in contact however.

CMC also allows individuals to reduce discomfort in relational communication. In particular, CMC creates opportunities for individuals to more fluidly control conversational flow. As one participant observed, “There is less time spent in an awkward phone or face-to-face conversation. There are some people that you can’t carry lengthy conversations with; CMC solves this.” Another participant noted, “CMC helps our relationship because when we spend too much time talking over the phone, we tend to not have a lot to talk about, and argue over it. Texting takes away blank phone time, and allows you to communicate easier.” These responses indicate individuals’ active choices to use CMC in attempt to effectively manage conversational flow. In these instances, CMC created opportunities for relational communication with decreased anxiety and enhanced control.

CMC Creates Conversational Closedness

While many respondents noted the utility of CMC toward attaining open communication with relational partners, a large number of responses (*n*=136, 69%) noted the difficulty in realizing comparable levels of communication worth in face-to-face and computer-mediated mediums. These responses designated a perceived lack of nonverbal cues and emotional value in CMC. Consequently, participants frequently observed distinct inequalities between face-to-face and computer-mediated communication. These perceptions of decreased emotional value often led to greater closed communication through computer-mediated mediums. As one respondent articulated,

> Whenever I send a text message, I try to make the message as small as possible. It lacks emotion and understanding of how I feel about a given situation. It's like a robot talking for you. There's no underlying message or feeling.

Participant responses also specified the lack of visual representation as a limitation of CMC, therefore creating increased closedness in relational disclosures. As one male respondent noted:

> If I was to send my girlfriend a text message that said "I love you" then she would probably just send me one back saying "I love you too." But if we were standing face-to-face looking into each other's eyes, and said "I love you," the meaning of that is much stronger. When you can see the emotion and true meaning behind the communicated message the impact is much stronger and meaningful to you or your partner.

Though able to portray the textual portion of extant participant emotions through CMC, this quote reflects the perception that CMC does not replicate the emotional value of face-to-face communication. This quote also suggests the inability for some participants to adequately convey accurate sentiments to relational partners through computer-mediated forms of communication.

Other responses further described communicative restrictions of using CMC, observing that "CMC leaves too much open to interpretation, and often the message is misunderstood. I always feel limited with CMC." Another participant added, "Sometimes we can't decipher emotions through CMC. Like, he'll ask what I'm doing, I'll say 'nothing' in a text message and he'll think I'm angry or upset even though I'm not." In this instance, the perceived ambiguity of CMC confuses encoder intentions and confines relational disclosure to task-oriented or emotionally straightforward messages.

Certain individuals indicated they did not even view communicating emotions through CMC as an option. As one young adult stated, "Because we are apart, we can't share our feelings right now. We just can use e-mail or online messages to tell each

other what happened before." Though the participant indicated using CMC to help uphold existence of relational communication, their response illustrates a perception of inability to communication emotions through computer-mediated forms of communication.

Computer-mediated communication further reflected communicative closedness through a pattern of succinct, direct messages sent through CMC. Preference for abstaining from emotionally laden communication in computer-mediated formats resulted in limited expression and inclinations of frustration for certain individuals. As one participant reported,

> I think when people send a message through CMC the message is always blunt and to the point. This sometimes seems aggressive or rude. Misinterpreting the text has been a problem with people I communicate with using CMC. Without facial expressions to let people know you are joking, people miss the joke and think you are serious. I've pissed people off doing this.

Another participant echoed similar sentiments, noting that

> CMC is short, semi-trivial statements, whereas face-to-face is more genuine and much better. Because the texts are abbreviated and somewhat short, we often have misunderstandings because he misinterpreted what I was trying to relay. It is easier to avoid that problem if I am looking at him.

The lack of nonverbal cues resulted in a tendency to withhold desired disclosures in exchange for abbreviated, laconic responses through CMC. These responses further indicated perceptions of disdain toward using CMC to establish noteworthy shared meaning among relational partners.

Increased Openness

A substantial number of individuals in this study (*n*=130, 66%) reported increased levels of communication with relational partners through opportunities created by CMC.

In many instances, participants reported the ability to communicate with increased frequency as the catalyst for augmented relational openness.

More specifically, the asynchronous nature and lack of nonverbal cues present in CMC led to increased openness through an enhanced focus on disclosure. As one participant remarked, “I actually tend to know people better because of CMC. Questions informing others are asked on computer better than face-to-face, and problems can get solved easier with better wording choices.” In this instance, the textual nature of computer-mediated mediums directed interactions toward increased openness and self-disclosure. Speaking explicitly toward the association of CMC use and relational development, one young adult observed that “Relationships now are more in-depth, and CMC helps the relationship grow. I will now say things through CMC that I wouldn’t face-to-face. We can type what we feel and not have to worry about how the other person will take it.” Or, as one young adult articulated,

> The friendship wouldn’t be as strong if we didn’t communicate this way (through CMC). We knew more of what’s going on in each other’s lives thanks to the computer-mediated communication. Otherwise, we could only catch up on things every now and then. It just wouldn’t be the same.

These responses credit CMC for promoting openness and benefiting relational development.

Respondents also mentioned the importance of using CMC to maintain more regular contact with their partners, noting “People are able to communicate much more often and it (CMC) causes relationships to progress to higher levels more rapidly than without CMC.” Or, as Lindsey expressed, “CMC is more intimate. I have begun sharing my true feelings through CMC, rather than assuming what he or I am feeling about one another.” These responses further underscore the potential for computer-mediated

forms of communication to progress hyperpersonal development of relationships, with particular regard to enhanced self-disclosure.

E-courage

Respondents in this study reported an enhanced ability to express emotions or self-disclose through CMC (*n*=61, 31%). Specifically, participants observed feeling more at ease when articulating disclosure through computer-mediated mediums. In attempt to characterize the essence of participant narratives, this category was entitled E-courage. E-courage credits the protective shield created through CMC as the force responsible for augmented comfort in the conveyance of emotions.

E-courage influenced a wide range of emotional disclosure, including feelings of adulation. As one young adult conveyed, “I feel more at ease expressing my emotions towards him online by telling him I love him or I miss him.” Henry echoed similar sentiments about how CMC influences self-disclosure, stating

> We are braver in CMC messages. We will be wordier and more romantic if we don’t have to look the other in the face.’ In these instances, individuals utilized CMC to reduce apprehension and increase comfort in expression of affirming emotions.

Respondents also illustrated E-courage in by using computer-mediated mediums to effectively articulate sentiments of frustration. As one participant observed, “We tend to be more honest about negative feelings when using CMC.” Or, as another young adult commented, “I am more likely to express my feelings face-to-face when it is good, but when you want to address something that has been bothering you an e-mail may be easier to write.” The protective shield provided by computer-mediated mediums imparted a sense of courage for individuals who desired to honestly relate negative

emotions to their relational partners, but did not desire or feel comfortable expressing said sentiments in a face-to-face format.

Using CMC as a communicative medium allowed certain individuals to feel increased satisfaction in their relational communication due to heightened levels of conversational control and ability to edit messages. As Sandra noted,

> In face-to-face interaction there is a feeling of incompleteness in that I don't feel like I say everything I want to say. We use CMC because it's easy to get out EVERYTHING we feel and to talk about problems…I feel a lot better after our discussions.

John underscored this notion, stating "I think that sometimes I have more courage to speak the truth and say exactly what I want to say using CMC. If I don't want to know someone's reaction right away, I don't have to." In these instances, the protective shield provided by CMC infused a sense of moxie in the participants to accurately express honest desires and comprehensive emotions. This response further indicates a tendency to select communication mediums without regard to establishing quality relational communication. Conversely, individuals select mediums that principally fit personal needs and desires.

The enhanced ability to accurately self-disclose through E-courage also influenced relational conflict and deterioration. Naomi explained this effect, stating:

> During a fight sometimes CMC can help you say things you might be scared to say face-to-face to let them know you really feel. Instant messaging helps me to express things sometimes when I'm upset that I could not say in person 'cause I feel whiney…I benefit because I get nervous talking and do not always get to say what I want face-to-face. With CMC I can say whatever I feel and not forget anything and have time to think about how to word things.

Karl further discussed the advantages of using CMC during periods of relational conflict, specifically citing the ease of disclosure, increased time and control, and aggrandized candor, declaring:

> CMC is by far the best way for us to talk to one another. It is so helpful, especially when there's a problem we need to talk about between us since it's a lot easier for both of us to express ourselves through writing. I think that it definitely helps us communicate better, especially in conflict…It's easier to stand up for my thoughts and feelings when I don't have to face the possibility of someone walking away. Also, it gives me time to think over my response in ways that face-to-face doesn't. I may send a different, probably less honest, message in face-to-face confrontation since I'm in the middle of it, rather than having time to think about how I really feel.

To summarize, participants indicated the utility of CMC toward managing and negotiating relational dialectics of autonomy-connection and openness-closedness. Responses indicated the usefulness of CMC in creating distance, providing autonomy, and creating or maintaining elements of closedness. Responses also illustrated the ability of CMC to increase perceptions of connection, and to facilitate increased relational openness through E-courage. CMC acted as a tool to assist partners in successfully negotiating relational tensions.

CHAPTER 7

DISCUSSION

The principal goal of this study was to extend existing knowledge on the effects of computer-mediated communication on relationships, as previous research focused largely on the benefits and negatives of computer-mediated communication (CMC) use. While this research provided insight into the possibilities and tendencies of CMC, the current study extends these findings by focusing on the effects of CMC on relationships, and offering acumen to individuals' rationales for actively choosing to maintain relationships through CMC. The results highlight the utility and challenges of using CMC to maintain relationships in friendship and romantic contexts, and portray the perceived effects and rationale for choosing to communicate through CMC in a given relationship. Implications of the current study focus on three primary issues, including the dynamic presence of extant dialectical tensions, a preoccupation with time, and CMC use as a reflection of culture.

Relational Dialectics

Autonomy-Connection

Results supported previous research on relational dialectics, indicating autonomy-connection as the most prevalent and central relational tension. Participants of the current study discussed overwhelmingly how they selected computer-mediated forms of communication as a means to balance needs of independence and association. Interestingly, many individuals reported using CMC both to increase

connection and to increase autonomy from relational partners. This finding indicates a contradicting relational tension of autonomy-connection.

Increased Connection

Individuals reported using CMC to reduce perceptions of distance, increase contact with relational partners, and to augment social support networks through more effortless correspondence and frequent contact. CMC acted as a tool individuals used often to maintain greater perceptions of connection with given relational partners. In this sense, CMC enabled individuals to maintain effectively a larger number of interpersonal relationships, supporting the argument that technology often functions to serve relationships (Wood & Smith, 2001). These relationships, however, were described often as less valuable and more superficial due to their reliance of CMC. Though the value of these relationships may be declining, it remains important to assert many participants indicated the relationships existed solely because of the ability to communicate electronically. In this sense, people maintain an enhanced ability to maintain contact with a larger number of individuals through the advent and incorporation of CMC. Consequently, many relationships' communication patterns are experiencing a shift from primarily face-to-face to predominantly computer-mediated mediums (Merkle & Richardson, 2000), and certain individuals prefer to develop relationships through computer-mediated formats (Baym, 2002). Effects of using CMC to increase relational connection include a larger social support network, reduced perceptions of distance, increased perceptions of closeness, and augmented satisfaction in knowing they are able to communicate with numerous persons with

whom they may have otherwise lost contact. These results support the argument that social support is often enacted through everyday talk (Cutrona, Suhr, & MacFarlene, 1990), as the current study focused on ongoing routine interactions of relational partners.

Desire for Autonomy

The desire for autonomy also received substantial attention from participants of the current study. Respondents observed the utility of CMC in preserving a degree of distance with relational partners, and used CMC in a strategic manner to exercise communicative independence from relational partners. CMC allowed participants to sustain contact with individuals, while simultaneously providing a sense of independence from the situation or partner, supporting previous findings that indicated CMC allowed individuals to retain high levels of control during interactions (Papacharissi & Rubin, 2000; O'Sullivan, 2000; Walther, 1996; Walther & Boyd, 2002).

Interestingly, the highlighted features of online social communities seemingly provide greater communicative control for message senders. The rising popularity of online social communities illustrates the increasing desire individuals maintain for interaction control. When communicating through CMC, individuals retain a high level of control over the interaction (Papacharissi & Rubin, 2000), deciding when the communication begins, terminates, and the manner of message conveyance. An important feature of CMC, then, is the imbalance of user control and lack of receiver input, alteration, or interruption of message delivery. With a lack of nonverbal cues, CMC also allows users greater control of impression management (O'Sullivan, 2000),

and may lead to overly positive interpretations of mood, behavior, and attitude of message senders. As a result, many CMC users perceive a lower degree of vulnerability when communicating messages through CMC (McGuire et al., 1987; Sproull & Kiesler, 1986; Sussman & Sproull, 1999).

The convenience of maintaining numerous relationships with minimal face-to-face contact empowers users to spend face-to-face time with select privileged individuals, while maintaining the benefits of a large social support network without exhausting finite interpersonal resources, such as time, energy, and face-to-face opportunities. CMC, then, may provide individuals a means to maintain relationships despite decreased levels of investment and effort.

The lack of nonverbal cues in CMC, coupled with decreased perceptions of investment, allowed individuals to separate themselves from their communicative partner when they desire. One particular instance participants reported using CMC to provide distance was during the process of relational deterioration.

Participants indicated the utility of computer-mediated mediums throughout the process of a deteriorating relationship. Results suggest CMC may have positive effects on relationships during deterioration processes by providing individuals with increased space and independence regarding correspondence with relational partners. Using CMC in these instances presents individuals with augmented communicative options, thereby increasing the ability to effectively satisfy relational and personal communication needs during stages of relational decline.

E-courage

Individuals in this study used CMC to balance the openness-closedness relational dialectic. In certain cases, participants observed the utility of CMC in maintaining conversational closedness, limiting interactions to task-oriented messages with low degree of emotional value. At the same time, individuals noted an increased ability to self-disclose through CMC, crediting the protective shield provided by computer-mediated mediums. E-courage supports prior arguments suggesting that many CMC users perceived decreased levels of vulnerability when interacting through CMC (McGuire et al., 1987; Sproull & Kiesler, 1986; Sussman & Sproull, 1999).

Through E-courage, individuals were able to express ideas, thoughts, and sentiments with increased candor. With the protective shield provided by CMC, participants reported increased comfort in disclosing through mediated communication. Previous research argued self-disclosure benefits relationships through increased satisfaction (Fitzpatrick & Crawford, 2003), increased emotional well being and reduced negative mood (Shaw, Hawkins, McTavish, Pingree, & Gustafson, 2006), and increased perceptions of authenticity regarding communication (Farber, Berano, & Capobianco, 2004). Implications of E-courage, then, cover an extensive array of relationships. Existence of E-courage in relational interactions may influence supervisor-subordinate interactions and teacher-student communication, as a recent NY Times article depicts the frustrations some professors' experience regarding student e-mails, indicating they feel a lack of teacher-student boundaries, and increased informality in student communication through CMC (Glater, 2006). These teacher narratives speak of student perceptions of decreased power distance toward professors, and reflecting the

individualistic nature of many CMC applications. Students with E-courage change the landscape of professor-student communication, initiating potential for perceptions of greater immediacy, but also confusing hierarchy and distances of power.

E-courage is likely to also influence romantic relationships, particularly during periods of relational initiation and conflict. Relational partners electing to incorporate CMC in opening stages of relationships may benefit from enhanced ability to disclose intentions or proposals through computer-mediated forms of communication, which decreases perceptions of communication anxiety, thereby allowing certain individuals increased comfort and perceived accuracy in encoding messages.

Partners in conflict may benefit from integration of CMC as results suggested CMC provided individuals with increased ability to accurately and comprehensively portray communicative intent, with CMC's enhanced ability to edit messages and control conversational flow. Consequently, partners may avoid undesired communication through increased emotional regulation, defined as the ability to refrain from inappropriate behavior (Gottman & Katz, 1989). As emotional regulation skills mature, individuals are able to express emotions in increasingly urbane manners, and to inhibit impulsive reactions deemed inappropriate on the consideration of cultural norms (Miller, Robinson, & Moulton, 2004). Future studies should attempt to explore further the positive and negative effects of increased candor through CMC among different relational types and environments.

Relational Closeness, Satisfaction, and Perceived Social Support

Similar to previous studies, quantity of face-to-face and computer-mediated

communication did not predict relational closeness or satisfaction (Johnson, 2001). Perceptions of social support in this study also did not differ based on increased quantity of time invested, contrasting previous research findings (Parks & Floyd, 1996; Walther & Burgoon, 1992; Wright, 2000a; Wright, 2000b). These contradicting results suggest the unique context of social support among distinct age groups, as well as among individuals seeking social support due to health or intervention-related reasons. Further, perceptions of support remain more important than actual received support (Wethington & Kessler, 1986), indicating the importance of quality communication toward achieving goals of providing social support. Overall, the results of Study 1 imply perceived quality of communication encounters for friendship and romantic contexts are more important in relational maintenance than quantity of communication, as indicated by perceptions of relational closeness, relational satisfaction, and social support. When relational partners do maintain high levels of communication quality, perceptions of closeness, satisfaction, and social support increase.

A primary question surrounding the results of Study 1 focuses on why CMC quality predicted relational satisfaction and perceived social support, but did not predict relational closeness. These results suggest an individual can be satisfied with a relationship without feeling close to the relational partner. Partners may use CMC to attempt to achieve high levels of closeness, but do not effectively replicate closeness in the same way they are able to successfully maintain levels of relational satisfaction and perceptions of social support.

Results of this study further imply relational satisfaction increases with quality of computer-mediated communication because use of CMC enables relational partners to

better manage the dialectical tensions of autonomy-connection and openness-closedness. Individuals maintain greater satisfaction with relationships due to increased control of these contradictory tensions, as well as the use of our time in maintaining relationships, supporting social exchange theories articulating the argument we view relationships in cost-benefit scenarios.

Results suggest CMC allows for increased social support opportunities through the creation of new communication opportunities and mediums. CMC enables relational partners to communicate the five currently articulated categories of social support through various means, including informational support, tangible aid, emotional support, social network support, and esteem support.

The increased connection provided by CMC influences the social support and belonging needs of individuals. A key manner in which CMC appeared to greatly influence perceptions of social support was through online social communities such as Myspace.com® Website (www.MySpace.com) and Facebook™, social utility (Mark Zuckerberg, www.facebook.com). Social support increases when individuals perceive they belong to a group, such as an online community. Participants in this study also indicated Myspace and Facebook enabled them to maintain a greater number of friendships with decreased investment, thereby augmenting their pool from which to draw social support. CMC, then, provides additional avenues for seeking and receiving social support in various manners. Future empirical research should explore and flush out distinctions of categorical social support, examining how each category relates to CMC and the manifestation of social support behaviors.

A primary goal of the current study was to explore the reasons individuals provide for using CMC in their relationships. Some participants reported using CMC to increase openness, while many indicated using CMC primarily for task-oriented behaviors. This tendency to use a more closed communication medium for relational maintenance behaviors signifies they are less likely to build relational closeness. While participants reported greater self-disclosure through E-courage, they were more likely to use CMC for briefer interactions, acknowledging communication through CMC is not as rich because of the lack of nonverbal cues. With interactions through CMC containing brief disclosure and less emotionally rich messages, feelings of closeness decrease. The nature of relational closeness as a variable, then, is less likely to be influenced primarily by quality of CMC.

Quantity of time (face-to-face or computer-mediated) was not a significant predictor for any of the examined relational variables. Individuals engage in CMC in order to save time and be strategic with time use, thereby supporting the conclusion that you can still maintain a satisfying, close, supportive relationship using a blend of face-to-face communication and CMC in such a way that minimizes time investment. CMC is a tool individuals use strategically to maintain relationships because of social exchange desires. As long as relational partners maintain high levels of communication quality through CMC, face-to-face time investment becomes less important. Therefore, persons may successfully maintain growing numbers of relationships through communication opportunities created by CMC.

Theoretical Implications

The results suggest a number of theoretical implications worth noting. First, social information processing theory (SIP) was supported throughout the quantitative and qualitative analyses. When partners maintain high levels of communication quality in CMC, they can remain satisfied, close, and have social support if they adapt communicative behaviors to ensure quality communication. Participants also reported using CMC to strategically balance relational tensions. Thus, individuals are using all mediums of communication to their advantage. SIP assumes we will use all available mediums at our disposal to maintain relationships. In the current study, strategic use of CMC enabled partners to more effectively manage relational dialectics and time management in relationships.

The findings of this study reinforce SIP's assumption that individuals are willing and able to adapt to available communication structures to reach interaction goals and desires. Interestingly, CMC allowed participants in the study to achieve a variety of objectives, including goals of maintaining relational closeness, balancing the autonomy-connection dialectic and openness-closedness dialectical tensions, and enhancing control of time and conversational flow during relational interactions. Participants indicated acclimating to the lack of nonverbal cues and asynchronous nature of CMC by using these potential deficiencies to their communicative advantage, resulting in E-courage and increased flexibility regarding the potential to multi-task while maintaining relational maintenance. Future studies should attempt to identify specific strategies individuals employ to cultivate computer-mediated forms of communication, advancing CMC to levels of quality comparable to more traditional communication efforts.

Walther's (1996) hyperpersonal perspective received limited support in the analysis. Many respondents indicated enhanced ability to express their feelings and thoughts through CMC, a phenomenon entitled E-courage. E-courage provides support for the hyperpersonal perspective by functioning to create greater openness among candor among relational partners, generating opportunities for partners to develop increased perceptions of closeness through selective self-disclosure. Results of this study, however, suggest the hyperpersonal perspective is sometimes how CMC functions, but not always. In contrast, the assumptions of SIP appear to portray a more accurate description of behaviors in maintaining relationships on a consistent basis. For the particular type of relationship contexts examined (friendships and romantic), SIP depicted a more descriptive and accurate theoretical model for current friendships and romantic relationships. The current study did not focus on relationships during initiation stages, which may function differently with regard to SIP and the hyperpersonal perspective. Future research should further delineate the differences in the manner these types of relationships function.

In general, the results of this study support social exchange theory. Specifically, respondents remarked how they benefited by maintaining relationships with decreased investment through CMC. The advent of online social communities and text messaging, in conjunction with e-mail, provided individuals with the means to sustain contact while reserving finite face-to-face opportunities for certain privileged relationships or events.

Certain individuals articulated the utility of CMC in coping with the autonomy-connection and openness-closedness dialectics during the deterioration of a romantic relationship. CMC appears to serve a vital role in the management of tensions for

particular individuals, enabling them augmented control and power of relational negotiation throughout various relational stages. Specifically, results of the current study advance dialectical theory by observing its presence in novel communication mediums. Though all dialectical research to date has focused on existence of tensions and subsequent management of tensions in face-to-face formats, the current study extends dialectical theory by illustrating its pertinence in a variety of communication mediums, including mediums mediated electronically.

Preoccupation with Time

One of the more interesting findings was a substantial preoccupation with time. Americans are becoming increasingly concerned with time, and many view time as a resource more valuable than money due to its finite nature (Imperato, 2000). Previous research suggested Americans desire to establish and maintain meaningful relationships in similar fashion to other cultures, but they were more likely to express concern over time devoted to interactions (Kiewitz, Weaver, Brosius, & Weimann, 1997). Results of the current study emphasize an extensive consideration of time when individuals decide the type of communicative medium to employ when attempting to maintain relationships at satisfactory levels. Circumstances and personal needs often led to the selection of CMC as the communicative medium of choice due to decreased requirements of investment, and the perceived flexibility of corresponding through CMC, supporting previous findings that individuals benefit from the convenience and flexibility of CMC's asynchronous nature (Papacharissi & Rubin, 2000).

CMC as a Reflection of Culture

An overt focus on the use of personal time reflects the individualistic culture of the United States described by Hofstede (1980), who argued Americans place a comparatively large focus on individual needs and concerns. It is not surprising, then, that respondents of the current study conveyed one of the benefits of using CMC was an enhanced control over their personal time, and augmented management of communicative interactions. Interestingly, comparatively few participants denoted CMC as a superior means of communication, rather solely as the method most convenient toward achievement of relational and communicative goals. This finding supports the extension of social exchange theory to the context of computer-mediated communication, and displays the individualistic focus of the participants in their relational communication. This finding also supports previous conclusions that individuals may privilege the use of certain communication structures due to their social influences and needs (Lewis and Seibold, 1993), and that time demands often shape the employment of communication activities (Hassard, 1991; McGrath & Rotchford, 1983).

The growing popularity of text-messaging (Dahl, 2006; Lovato, 2006; Richtel, 2004) and online social communities (Asavareungchai, 2005; Marshall & Tong, 2005; Williams, 2005) reflect the largely individualistic culture of the United States (Hofstede, 1980), as unique cultures sustain notions on the appropriate uses of CMC (Watson, et al., 1994). People from cultures emphasizing individual rights and expression, such as the U.S., may view CMC as an opportunity to accurately and frankly self-disclose opinions and needs (Tan et al., 1998).

Individuals often did not perceive CMC as the most effective method of communication, but rather the most convenient method. Participants frequently selected computer-mediated communicative methods for self-focused reasons, as they represent the fastest, most convenient manner for message senders. In this sense, CMC remains void of traditional values of collectivistic cultures, including social harmony over individual expression, great concern for face of others, and encouraged use of instrumental communication behaviors in friendships (Mortenson, 2005). The values attributed to highly individualistic cultures, such as self-expression over social harmony, control, and the de-emphasized importance of face (Mortenson), are exemplified often in computer-mediated interactions.

Results of this study further suggest CMC is carrying a traditional low-context culture into a higher context culture, due to the increased choices of message construction available to individuals with the emergence of CMC (e.g., face-to-face, telephone, e-mail, text-message, instant message, online community). Medium selections also indicate perceptions of appropriate behavior, with particular regard to relational maintenance. The availability and popularity of CMC highlights the importance of communication medium selection in the process of message construction. Message value also becomes increasingly relevant with the existence of increased medium options. While some individuals find it easier to self-disclose through CMC, the same people may perceive computer-mediated disclosures to be less valuable than face-to-face communication. Future research designs should emphasize the impact of medium selection on receiver perceptions of message clarity and value.

Limitations

Despite the contributions of the current study, however, there remain limitations through which the results should be interpreted. The principal qualification to consider is a lack of random sampling techniques. Hindered by limited resources and the scope of the current investigation, a convenience sample was used to amass a sample size suitable for the performance of the statistical and interpretive procedures appropriate for the goals of the study. Though the desired sample sizes were realized, the research forfeited a degree of generalizability in the process. The current sample consisted entirely of undergraduate students enrolled in introductory Communication Studies courses. Though this approach produced a variety of ethnic representation, there remains little variation regarding age diversification. Considering the potential impact of the digital divide, attempts to generalize beyond the targeted demographic group should remain limited. Future research efforts are necessary to assess the impact of unique predispositions, as influenced by age and social patterns.

A second primary limitation to the current study involves a lack of delineation regarding differences in effects of various distinct types of CMC. While different mediums of CMC may function similarly, the potential remains for distinction in the ways text messaging, e-mail, and online social communities function in relationships. Further, researchers should attempt to specify why individuals privilege certain computer-mediated mediums.

Conclusion

The findings of the current study indicate CMC has significant effects on relational satisfaction, perceptions of social support within friendship and relational

contexts, and the performance of maintenance behaviors. When partners maintain high levels of communication quality in CMC, they can remain satisfied, close, and have social support if they adapt communicative behaviors to ensure quality communication. In the current study, strategic use of CMC enabled partners to more effectively manage time demands and the dialectical tensions of autonomy-connection and openness-closedness in relationships. Effects of using CMC to increase relational connection include a larger social support network, reduced perceptions of distance, increased perceptions of closeness, and augmented satisfaction in knowing they are able to communicate with numerous persons with whom they may have otherwise lost contact. The prolific nature of CMC's impact on relational tensions and maintenance behaviors warrant future research efforts examining the role of CMC in the creation, development, and maintenance of interpersonal relationships and relational culture.

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