EXPERIMENTAL TESTS OF COGNITIVE BUSYNESS AND EXPECTANCY EFFECTS IN TEXT-BASED VERSUS GRAPHIC-BASED COMMUNICATION

By

HO KYUNG KIM

A THESIS PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF ARTS IN MASS COMMUNICATION

UNIVERSITY OF FLORIDA

2005
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ACKNOWLEDGMENTS

It is with much appreciation that I respectfully acknowledge the outstanding guidance provided by the chair of my committee, Dr. Mary Ann Ferguson. She contributed numerous hours reviewing, critiquing, and providing extraordinary insight into this study. She could not even realize how much I have learned from her. I am really glad that I have come to know Dr. Mary Ann Ferguson in my life.

I would like to thank my other committee members, Dr. Lynda Lee Kaid, Dr. Spiro K. Kiousis, and Dr. Michael A. Mitrook, who monitored my work and took effort in reading and providing me with valuable comments on this thesis. I am also grateful to Dr. Benjamin R. Karney for teaching me the good things that really matter in life.

I feel a deep sense of gratitude for my father and mother who formed part of my vision and gave me a happy memory that still provides a persistent inspiration for my journey in this life. I am appreciative for my brother and sisters, Marie, Hea-Jin, Se-Ok, and Sean, for rendering me the sense and the value of siblings, especially Marie Kim, my oldest sister, who kept an eye on the progress of my work and always was available when I needed her extensive advice.

Robert Wujick, a University of Florida alumnus, has proven himself invaluable. He has been with me every step of the way and provided the encouragement I needed and was someone who somehow knew when I needed it. His kind words and advice helped me get through it.
There are many others that deserve recognition for their important role in assisting me during the completion of this monumental project: Dr. Jun-Su Lim for our discussions and providing me brotherly advice and tips that helped me a lot in staying on the right track, many understanding students and advisees, the many encouraging words provided by my University of Florida colleagues, all 207 students who participated in this study, and good friends David Wiggins, Young-Gi Kim, Judy Chong, and Moon-Jung Kim. I thank them all for having shared many experiences and thoughts with me throughout the last years. Special thanks go to Sung-Eun Kim, whom I have known for more than ten years now and who proved to be a thoughtful, mostly helpful and trustful friend.

Last, but definitely not least, my former teachers Dr. Tai-Young Kang and Dr. Byung-Kil Kim have been with me through my B.S. degree, M.A. degree, and now another M.A. degree. I thank them for being great mentors and role models.
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Theory suggests that when perceivers regard a target person as negative from a few observable characteristics, they form negative expectations about the target and respond to the target negatively based on their prior thoughts. Perceivers tend to confirm their negative expectations when they consider their target as a possible conversational partner, or when cognitively busy perceivers interact with the target in fact-to-face interaction.

This study examines how perceivers with initial negative expectations about their getting-acquainted chat partner develop their final expectations in text-based versus graphic-based settings, and which computer-mediated communication (CMC) environments exhibit higher attributional confidence in these expectations.

Two hundred and seven students were randomly assigned to participate in a 2 (dispositional vs. situational context) × 2 (cognitively non-busy vs. cognitively busy condition) × 2 (text-based vs. graphic-based communication) factorial design experiment.
Results show that when participants attributed the target’s negative behaviors to the situational contexts, they perceived the target’s reactions to new people less negatively, as opposed to those who attributed the target’s negative actions to the target’s inherent dispositions, regardless of their cognitively busy states. On the other hand, participants formed negative expectations regarding the target’s reactions to a new relationship, regardless of what information they received and how distracted they were. There was no significant difference in attributional confidence for CMC by cognitive busyness conditions, but a near significant difference for the participants’ hours in a week using the Internet.

This study demonstrates that forming expectations about the person are moderated by what information perceivers receive and where perceivers obtain these messages. Although users receive visual messages through an avatar-based method, it may not be important to obtain attributional confidence in predicting the target’s personality. Further research using different messages in various environments and a revised cognitive busyness manipulation is encouraged.
CHAPTER 1
INTRODUCTION

Many people are familiar with the religious phrase, “Hate the sin, but love the sinner,” but only a few are able to abide by it, perhaps because it is difficult to think of people apart from their behaviors, since behaviors are the main criteria to judge individuals. For example, if perceivers describe a target person as “insincere” or “greedy” from a few observable negative actions of the target, they form negative expectations about the target, because they believe that the target has negative dispositions. With negative expectations, perceivers worry about the target’s next course of action and try to protect themselves from the potential risk and vulnerability. When perceivers consider their target person as a possible conversational partner, the tendency to form the negative expectations becomes stronger, and the perceivers usually confirm their prior thoughts rather than attempt to develop an accurate impression of the target (Darley, Fleming, Hilton & Swann, 1988).

Harris and Perkins (1995) conducted a study on how cognitive busyness conditions affect people’s responses to an interactive teammate for a cooperative task. They found that when perceivers hold negative expectations about the target and cooperate with this person in order to solve given problems, cognitively busy perceivers responded more negatively than cognitively non-busy perceivers in face-to-face interaction. One possible explanation for this tendency is that cognitively busy perceivers are more likely to spend less effort in evaluating situational information to correct their previous perception of the
target (Gilbert, Pelham, & Krull, 1988; Gilbert & Osborne, 1989; Krull & Erickson, 1995).

There are fewer studies on when perceivers confirm or disconfirm their expectancies about the targets in various conditions (Hilton & Darley, 1991; Miller & Turnbull, 1986; Neuberg, 1989; Snyder, 1992). Currently, more research is needed to predict when perceivers would maintain or develop their negative expectations of a conversational partner, what kind of moderating variables might influence confirmation or disconfirmation of the perceivers’ negative expectations, and how cognitive busyness conditions impinge upon expectancy effects. Such a study can be most effectively performed for online chatting where people can converse freely and conveniently with an unacquainted person.

In this age of the Internet, online chatting has become an excellent medium for meeting and interacting with others in remote places. Over time, simple exchange of messages may develop into exchanging phone calls, photographs, and eventually meeting in person (See Baker, 1998; Chenault, 1998; Lea & Spears, 1995; Parks & Floyd, 1996; Utz, 2000; Wallace, 2001, pp. 133-156, for the detailed research on relationships in computer-mediated communication). Even though online environments provide anonymity to the users, nicknames, avatars,¹ and self-descriptions are used to establish an identity and representation within the faceless online community.

There have been extensive researches on the subject of online representation, including nicknames, avatars, and self-descriptions (Baym, 1995a; Bechar-Israeli, 1995;

¹ Online chatting methods can be divided into text-based and graphic-based communication, with the main difference between the two methods being the use of avatars. An avatar is a visual self-representation of users in graphic on-line circumstance.
Curtis, 1997; Danet, Ruedenberg-Wright & Rosenbaum-Tamari, 1997; Featherstone & Burrows, 1995; Jacobson, 1999; Kim, 2001; Lee & Nass, 2002; Liu, 1999; Reid, 1995; Rheingold, 2000; Suler, 2001; Wallace, 2001; Waskul & Douglass, 1997). Theoretical and empirical studies are needed to show how online users form expectations toward their chat partners from these various clues, how perceivers with certain expectations respond to others, and which of computer-mediated communication environments exhibit higher attributional confidence in these expectations (See Hancock & Dunham, 2001; Tidwell & Walther, 2002; Walther, 1993, for the detailed study on attributional confidence in a short time interval computer-mediated communication versus face-to-face interactions). This thesis examines three independent variables: Busyness (cognitively non-busy vs. cognitively busy condition), CMC (text-only based vs. graphic-plus-text based communication), and attribution (the situational context describing a target’s inherent disposition vs. the situational context resulting in a target’s altered disposition).
Defining Expectations

Before a perceiver meets an unfamiliar target person, he or she may predict this person to be friendly or unfriendly based on a few preconceived ideas about the target. For instance, at the beginning of the first semester, a student who is waiting to meet a roommate may form a specific expectation based on the partner’s basic demographic characteristics (e.g., 19-year-old and African American) and more individual attributions (e.g., a law student of the same University and a scholarship student).

Expectancies can be divided into category-based expectancies and target-based expectancies (Jones & McGillis, 1976). Category-based expectancies are derived from the perceiver’s knowledge about the particular class, category, or reference group to which an individual belongs, whereas target-based expectancies are derived from the perceiver’s prior interactions with an individual.1 For example, we tend to assume that most females take more time than males to dress, most Asians are good at math, and most young people drive recklessly. Adversely, we occasionally meet a female who immediately goes out as soon as she wakes up, an Asian who is bad at math, and a young

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1 Jones (1990, pp. 79-83) classified category-based expectancies into “dispositional” and “normative” variations, whereas Jones and McGillis (1976) distinguished category-based expectancies as “stereotype” and “normative.” Jones (1990, p 267) noted that “stereotype” is essentially equivalent to the “dispositional” subcategory. Dispositional expectancies reflect a belief that one-group members share similar dispositions. As an example, we generally assume that more physically attractive people are more sociable and warm than less physically attractive people (Dion, Berscheid, & Walster, 1972). Normative expectancies emphasize usual behaviors in social interpersonal contexts. For instance, we know how we might act when we meet an old and feeble person in front of a door of a store.
man who drives carefully under the speed limit. While expectancies are developed from the perceivers’ previous thoughts toward the unfamiliar social groups, these may be modified from the perceivers’ personal experiences with a particular person, belonging to one of these groups.

Expectancies are beliefs of the potential future circumstances based on the perceivers’ direct and indirect experiences. If so, do all beliefs come out of expectancies? According to an analysis about expectancies and the related concepts, expectancies are one sort of beliefs, and not all beliefs are expectancies. Schemas are authoritative sources of expectancies, but they are not expectancies. Sets include expectancies, but particularly refer more to the objectives and intentions of the perceivers (see Olson, Roese & Zanna, 1996, pp. 211-213).

Jussim (1990, p. 4) classified expectancies into interpersonal and intrapersonal levels. Interpersonal expectancies are one person’s beliefs about a second person’s possible traits, performances, dispositions, etc. For instance, if an individual were to hug another person without first getting to know the person, the person being hugged may wonder what the intention of the individual. The recipient of the hug may perceive this behavior strangely because the recipient is not familiar with this custom of being hugged upon the first occasion. Thus, the person being hugged would be extremely cautious of the individual’s subsequent actions to him or her regardless of not knowing the individual’s motive. Due to the potentially disparate perception of nonverbal behavior, the actions and reactions may differ between these two individuals. As the alternate classification, intrapersonal expectations are an individual’s beliefs regarding his or her own future traits, performances, dispositions, etc. For example, if a girl in her early teens
was worried about her physical change, unaware whether the change was from pregnancy or other hormonal changes caused by puberty, she may hesitate to seek medical treatments.

These two examples illustrate that the process to divide expectancies into interpersonal and intrapersonal stages may sometimes prove obscure. A predominant reason as to why obscurity arises is that social interactions are dynamic and complex. The complexity of the interactions tends not to lead to an unequivocal solution among the various possibilities that arise from the interacting phenomena. In simplifying the interaction, this study concentrates mainly on describing casual interactions between perceivers and targets in its social context.

**Consequences of Expectations**

Under certain social structures, perceivers rarely interact with a target person without an expectation about how the target person will behave or perform in response to the perceivers’ actions. Perceivers choose their thoughts, feelings and behaviors within their beliefs of the immediate future reactions between perceivers and targets, thus the consequences of expectancies are the essential ingredients to form and develop relationships between them. This research reviews some consequences of particular expectancies, focusing on cognitive perceptual and behavioral procedures.

**Cognitive Perceptual Consequences**

Many previous studies have emphasized that perceivers simply select, interpret, and use information to form impressions about a target, rather than perceivers gathering small amounts of data selectively, paying more attention to the salient data. People easily conclude that their target has a certain disposition from observing only some behaviors of the target, because they do not have additional time and chance to conceive the target’s
actual character carefully. Perceivers use relevant information to minimize cognitive endeavors in thinking about their target. Bruner (1951) addressed that a subject is able to maximize the usage of relevant cues for confirming his or her hypotheses. This maximization can be much inflated by a perceiver with a particular value. For example, Bruner and Postman (1951) found that different expectations of subjects influence an assessment of the figure depicting six values measured by the Allport-Vernon Study of Values test: religious, economic, theoretical, social, political, and aesthetic. When given a figure of bending man in front of a Gothic window, a religious person posited the picture as a man praying while an economically oriented person assumed it as a man working. One possible reason is that people tend to interpret various pictures’ meaning in a particular manner based on their certain orientation.

Interpersonal expectancies color a perceiver’s perception and guide an interpretation of information. Darley and Gross (1983) investigated the process of how perceivers cognitively confirm their expectancies of a target on social economic labels. Even though the target’s test performance is the same, participants expect that a child from a high socioeconomic class has a higher level of ability, while a child from a low socioeconomic class has a lower level of ability. Although the target’s presentation is ambiguous to evaluate particularly, perceivers interpret the target’s uncertain academic capabilities as high or low from what they consider relevant demographic data.

Interpretation about a target is highly correlated to the attribution. In the Darley and his colleagues’ study, perceivers may attribute their judgments to stereotypes about social

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2 Bruner (1951) used the term “hypotheses” instead of “expectancies.” Hypotheses imply perceiver’s prior beliefs and perceptual tendencies to assume a near future result. It is thus reasonable to understand “hypotheses” and “expectancies” as equal.
class categories. When an individual acts harmfully or helpfully, his or her special behavior is related to the particular reason, and it has an implication from seeking out its cause (Heider, 1944). Jones and Davis (1965) addressed that a person’s behavior is seen as corresponding or reflecting an inferred intention and disposition of an actor.3 For example, if Ted knows that Marvin lies habitually, Ted draws a corresponding inference and believes Marvin to have a dishonest disposition.

Perceivers spontaneously search for reasons, particularly when outcomes are negative or unexpected (Weiner, 1985a), while perceivers use both consistent and inconsistent information to reduce elaborate considerations of data rather than irrelevant information.4 When a perceiver regards a target’s behavior as negative, the perceiver has a desire to know why the target chose this undesirable action among diverse choices. For instance, when spouses act hostilely to their mates, their negative behaviors cause troubles in their relationship, thus their villainous and treacherous actions need to be explained to maintain a good and peaceful relationship (Murray & Holmes, 1993). Negative results make people anxious and depressed, especially unexpected negative outcomes are more surprising and salient, and disconfirmations of expectancies trigger the attributional connections. As an example, family-only batterers’ violence is restricted to their family, whereas generally violent batterers’ violence is simply a part of their general pattern of violent and criminal behaviors (see, Holtzworth-Munroe & Stuart,

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3 Specially, Jones and McGillis (1976) focused on the implication of the different definitions of correspondences.

4 Hamilton (1988) stated that subjects with inconsistent resources take longer to arrange their complicated thoughts and memorize these better on the later retest than subjects with consistent resources. However, Hamilton et al. (1990) have argued that subjects with inconsistent data recalled these better, but it does not imply that incoherent information has more significant impacts than coherent information to find the right conclusion.
1994, for review). When a family-only batterer discloses his hidden mercilessness to a defenseless wife, her shock and injuries are more serious and last longer than those of a wife of a generally violent batterer. As a serious victim of intimate violence, a wife might ask why her loving husband acts like a violent criminal.

**Behavioral Consequences**

As a result of interactions with targets, perceivers adjust their behaviors on the underpinning of their particular expectations. When perceivers have a negative expectancy about targets, they usually treat their targets negatively, but sometimes they treat their targets more positively than the people who have a positive expectancy. In other words, the former example is substituted for self-fulfilling prophecy, and the latter instance is substituted for self-disconfirming prophecy. Previous studies about expectancy effects can be arranged on four social interactions such as experimenter-subjects interactions, teacher-student interactions, casual interactions, and bargaining and negotiation (see Miller & Turnbull, 1986, pp. 234-238). This review concentrates on social interactions between perceivers and targets in an initial relationship regarding self-fulfillment and self-disconfirming prophecies.

**Self-Fulfilling Prophecies through Social Interactions**

For about 40 years, strong constructive perspectives have argued that expectancies are often inaccurate, but pivotal in the creation of social reality (see Jussim, 1993, for a review). Jussim (1993) also emphasized that even though interpersonal expectations are prone to self-fulfilling prophecies and cognitive biases, these are highly accurate to perceive various social interaction phenomena. Merton (1948, p. 195) wrote that the self-fulfilling prophecy is, in the beginning, a false definition of the situation evoking a new behavior which makes the originally false conception come true. Snyder (1992, p. 69)
stated, “Perceivers operate as if their beliefs were true, and targets come to behave as if these beliefs were in fact true.”

It is rational to imagine that perceivers interpret targets’ behaviors to be consistent with their prior expectations, and targets’ behaviors are regarded as unequivocally confirmed by the perceivers. Farina et al. (1968) manipulated an expectancy effect of friendliness in an especially ingenious manner. Rather than providing perceivers with information about the characteristics of the target, these researchers provided perceivers with information about the expectancies that targets allegedly held about them. Specifically, the perceiver was told that the target believed that the perceiver was a former mental patient, a homosexual, or a “normal” person, while the target was given no information about the perceiver. Subsequently, the perceiver and target collaborated on a manual dexterity task during which they were allowed to converse only about task-relevant issues. Perceivers who believed they were viewed as belonging to a stigmatized category were spoken to significantly less than were perceivers who believed they were perceived as “normal.” Apparently, the perception that they were stigmatized led those perceivers to interact with their targets in a manner that actually induced stigmatization.

In another study, Snyder, Tanke, and Berscheid (1977) gave male subjects a photograph allegedly depicting a woman with whom they would interact over an intercom. The photograph showed either a physically attractive or a physically unattractive woman. Based on the stereotype of physically attractive women, subjects who were given the attractive photograph were expected to develop stronger expectancies that their partner would be warm and sociable than subjects who were given the unattractive photograph. The interactions were audiotaped, and naive judges later rated
the sociability of the women. Women who interacted with men who believed them to be attractive were rated as more sociable than women who interacted with men who believed them to be unattractive.

Under the guise of a simulated interview, Christensen and Rosenthal (1982) assigned subjects randomly to the roles of interviewer or interviewee. Each interviewer was given the expectancy that the interviewee was either a highly sociable or highly unsociable individual. The interviewers later rated the “sociable” interviewees as more enthusiastic than the “unsociable” interviewees.

Self-Disconfirming Prophecies through Social Interactions

Among the literature about the behavioral effects of interpersonal expectancies, self-disconfirming prophecies have been documented only in a few studies. Farina and Ring (1965) found that perceivers who believed that a coworker was mentally ill actually induced a more competent performance from their coworker than did perceivers who believed their coworker was “normal.” Bond (1972) found that subjects who were interacting with someone who expected them to be “cold” actually behaved more warmly than subjects who were interacting with someone who expected them to be “warm.” Similarly, Ickes et al (1982) reported that targets expected to be “unfriendly” were induced to behave in a friendlier manner than either “friendly” or unlabeled targets. Finally, Swann and Snyder (1980) found that students expected to have “Low ability” learned to do a card trick more proficiently than students expected to have “High ability” when teachers believed that success with the card trick was largely a matter of intrinsic ability.
Perceiver Characteristics Moderating Expectancy Effects

There may be no more trenchant constraints for expectancies to lead to self-fulfillments than self-disconfirming prophecies, yet various studies have shown more self-fulfilling effects. A tendency emphasizing self-fulfillments has been demonstrated by the exaggerated results of experimental studies (see Jones, 1986; Miller & Turnbull, 1986; Snyder, 1984, for review). Experimental studies were extremely well manipulated for maximizing the potential existence of self-fulfilling prophecies. It may still make sense to speak in terms of conditions to construct expectancy effects much larger or smaller than the enumerated examples of consequences of expectancies. The author concentrates only on perceiver factors among various moderating variables, because perceivers certainly confirmed their expectancies regardless of targets’ responses to them (Darley & Fazio, 1980).

About the effects of prior biased expectations, Jones (1990, p. 241) indicated, “Once an expectancy is established, it is likely to be maintained because there is a bias toward perceptual confirmation.” Jussim (1993) besides stated that perceivers with high prejudice or cognitive rigidity or belief certainty would interpret a target’s behaviors in a biased manner and form self-fulfilling prophesies, nonetheless he argued that the perceivers’ prior expectations would be reasonably accurate. One reason for this tendency is that although perceivers usually evaluate a target from the target’s apparent behaviors rather than perceivers’ own stereotypes, but stereotype-based expectations are trustable standards in informing the target’s actual dispositions (see also Jussim, 1993). It is rational to indicate that when perceivers have predetermined judgmental bias about their targets, they do not consider other conditional situations and undoubtedly follow their previous thoughts. For example, people who ride motor cycles are perceived to be wild,
however it is also possible that a person may choose to ride a motor cycle for financial reasons or for an easier access to parking.

Unlike the effects of perceptual biases, perceivers’ interaction goals moderate expectancy confirmations.\(^5\) When perceivers interact with a target, the proscriptive perception about the target is changed by perceivers’ specific interaction goals. When perceivers exert to form stable and predictable impressions of the target, they behave consistently with their expectancies (see Snyder, 1992), whereas expectations are more likely to disconfirm when perceivers with negative expectations try to form an accurate impression of the target (Neuberg, 1989), when perceivers have the goal of establishing a good relationship with their interacting partner (see Snyder, 1992), and when relationships between perceivers and targets are constrained in the long-term commitments, or when perceivers have more powers than targets (see Miller & Turnbull, 1986). A study by Hilton and Darley (1991) shows that when a perceiver is in the “action set,” where the main objective is to work some specific tasks with a target and where the secondary purpose is to form an impression, expectancy effects may be stronger than when the perceiver is in the “assessment set,” where the primary reason is to develop an exact impression of the target.

These studies elicit a question of when perceivers’ expectancies are more likely to be confirmed or disconfirmed (see Jussim, 1993; Olson, Roese & Zanna, 1996; Snyder, 1992). Harris (1991) found that when perceivers view a target as negative, sometimes

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\(^5\) It is difficult to grasp the differences between moderating and mediating variables. About a perceiver’s interactional goal, Miller and Turnbull (1986) prescribe to the mediating link, and Jussim (1993) classifies as the moderating factor. Rosenthal (1994, p. 177) discriminates that “Moderator variables are preexisting variables, such as sex, age, and personality that influence the magnitude of interpersonal expectancy effect; mediating variables are the behaviors by which expectations are communicated.” It is more parsimonious to evaluate the interaction goal as the moderating factor, because it impinges upon thoughts, feelings and behaviors of perceivers, not direct behaviors of expecters.
they treat the target negatively based on their negative expectations (reciprocity) or
sometimes they treat the target even more positively (compensation). Especially, Harris
(1991) argued that more study is needed to find the answer to the question of when
perceivers with a negative expectancy would confirm or disconfirm.

It is important that perceivers with a negative expectation consider their target as a
possible teammate or as a casual conversational partner. Darley, Fleming, Hilton and
Swann (1988) found that perceivers change their evaluations of the target depending on
their assumption of whether they will be interacting with a target for solving the given
problems or for conversation. Perceivers in the cooperative conditions tried harder to
diagnose their target’s exclusive disposition and successfully related their negative
expectancies to the relevant target, while perceivers in the conversational condition failed
to connect the relevant resources to the right target and evaluated two different targets
(e.g., “composed” target and “frantic” target) as the same.

Harris and Perkins (1995) showed that among perceivers with a negative
expectancy, cognitively busy perceivers treated a partner more negatively, whereas
cognitively non-busy perceivers treated their partner even more positively than the
perceivers with a positive expectancy. In this study, perceivers interacted with a target for
a problem-solving task, and their negative expectations came from the GPA score of the
target. The results showed that cognitively non-busy perceivers would attempt to solve
the given task sincerely with their teammate, rather than be pessimistic about a bad
match. The perceivers’ less positive expectations made them perceive the target’
behaviors as more friendly, even when the target asked unreasonable questions.6 On the

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6 In intimate relationships, confirmation of most positive expectations and disconfirmation of less positive
expectations of spouses lead them to assume the status of the marriage as stable and satisfactory (McNulty
other hand, cognitively busy perceivers with an additional work during interacting with a partner would complain an unlucky match, rather than help their partner to manage the task. In this case, the perceivers’ less positive expectations made them anxious and nervous. One reason is that less positive expectancies make people worry about the bad future results, regardless of confirmation of their previous negative expectations (see also Olson, Roese & Zanna, 1996).

A study by Harris and Perkins (1995) has two significant limitations. Gilbert et al. (1988) stated that an actively interactive perceiver would be cognitively busier than a non-interactive perceiver (e.g., observer). However, all the perceivers in this study were interactive perceivers, some of whom were encouraged to be cognitively busy so that they might be in a hyperactive condition. The other limitation is that Harris and Perkins did not provide the perceivers with all the pertinent information. The perceivers are motivated to help the target once they find out that the target had an understandable circumstantial cause for a poorer score, whether it may be a death in the family, etc (Weiner, 1985b), yet, except for the numeral score of the target, no additional information was given to the perceivers. Indeed, more research is needed to investigate how distraction effects of cognitive busyness and expectancy effects influence perceivers’ responses to targets in cooperative situations. For a purpose of interpretive clarity, the author reviews the cognitive busyness condition, a significant variable to perceive a person and to intensify confirmation of a negative expectation.

& Karney, 2004). For example, a husband usually prepares dinner prepared a dinner for a wife then a wife will feel indifferent toward him, but if her husband does not prepare a dinner usually then she will feel a sudden compassion for him. In both cases, she regards her husband as affectionate and warm-hearted.
Influences of Cognitive Busyness Condition

After observing a sample of behaviors of a target, a perceiver describes the target’s actions as positive or negative. Ample room remains to change, because this category may not be a good representative anchorage of the target. For example, on a beautiful Sunday, Edgar meets Judy, and he is immediately attracted to her beauty. He tries his best to win her heart, but Judy is not interested. Due to this disconfirmation of his positive expectancy, Edgar is depressed, and he eliminates her name from his available dating list.

Why did Edgar fail to build a romantic relationship with Judy? Quattrone (1982) addressed that perceptions can be arranged in three stages: categorization (recognizing the target’s actions), characterization (drawing dispositional inferences about the target), and correction (adjusting those inferences in situational contexts). More specifically, correction is less cognitively automatic than categorization and characterization, because correction requires demanding exertions for perceivers to integrate a target’s distributions and situational causes for the target’s behaviors (Gilbert, Pelham, & Krull, 1988; Gilbert & Osborne, 1989; Krull & Erickson, 1995). As a result, Edgar effortlessly recognized that Judy did not pay attention to their conversation, and he considered her actions as impolite and careless. The crucial reason of his categorization is that Edgar is not an observer, but an interactive partner. Active perceivers may be more preoccupied with results and blame themselves than passive perceivers (Gilbert, Pelham, & Krull, 1988). There are diverse situational assumptions. Perhaps Edgar has avoided dating for a long time, since he had his heart broken several times. Timid Edgar is afraid of being rejected so that he would unwillingly break up with Judy. He may attribute an unhappy ending to his unattractive physical appearances or inappropriate attitude toward her.
If Edgar was aware of a reason of Judy’s defensiveness, would the results have been different? Intriguingly, cognitively busy perceivers were more likely to pay attention and memorize situational information than cognitively non-busy perceivers, but they did not use these resources to correct their initial categorization about a target (Gilbert, Pelham, & Krull, 1988, Study 1). Remarkably, characterization from nonverbal behaviors is more cognitively automatic than characterization from verbal behaviors (Gilbert & Krull, 1988), whereby most passive perceivers successfully perform all three processes in increasing order of difficulty (i.e. nonverbal characterization, verbal characterization, and correction). On the other hand, active perceivers may develop characterization from the proximal diagnostic nonverbal behaviors of the target, and hyperactive perceivers may not even approach to draw inferences from both verbal and nonverbal behaviors of the target (Gilbert, Pelham, & Krull, 1988, Study 2). It is thus easy to imagine that shy Edgar who observed rigid face and uncomfortable posture of Judy maintained his initial thoughts, and failed to guess her various situational environments.

Impaired perception of cognitively busy perceivers can be adjusted. After formerly busy perceivers saw a videotape of an anxious or mundane topic, they carefully consider diagnoses of a target or they imagine a target’s reaction in other presumptive anxiety-provoking situations after finishing a cognitive rehearsal task (Gilbert & Osborne, 1989).

Cognitively busy perceivers maintain their prior assessment of a target and do not use situational constraint information to correct their perception of the target. Nevertheless, when perceivers have detailed resources of the target and are motivated to use the resources to understand the target, impaired characterization may be repaired.
(Krull & Erickson, 1995, p. 434). If Edgar knows why Judy acts unfriendly, he would comprehend her and try to adjust his initial perception. It is valuable to investigate how various situational contexts of perceivers and targets impinge upon the distraction effects of cognitive busyness and expectancy effects. Especially when a perceiver regards a target as a potential conversational partner, the perceiver forms the most negative expectancies about the partner. Currently, there are no studies examining when perceivers confirm or disconfirm their negative expectancies of a get-acquainted conversational partner. In familiar situations people use online chatting to converse with diverse individuals, thus this study reviews synchronous chat interaction, a new place to familiarize many people with little space and time constraints.

**Computer-Mediated Communication**

Although computer networks and conferencing systems first emerged in work-related and task-oriented contexts (Kiesler, Siegel & McGuire, 1984; Walther & Burgoon, 1992), some of the biggest successes in online services are “chat areas,” where people interact with other participants via exchanging written messages (Rose, 1995). Other scholars have highlighted that communicative outcomes emerge from users’ interactions with the technology and others with whom they are communicating, in a socially constructed environment (see Baym, 1995b; Myers, 1987; Steuer, 1992). Users meet unfamiliar people in countless chatrooms by chance and get to know each other. Interestingly, most common conversational topics are related to sex and romance, consisting 47% of the total samples (Waskul & Douglass, 1997, p. 382).

Computer-mediated communication can be divided into graphic-based and text-based environments because users in graphical medium receive additional visual forms
with written messages in text-based media. The author reviews the technical and environmental differences between text-based and graphic-based settings.

**Text-Based Communication**

In text-based environments participants divulge their information selectively by various cues like ID, nickname (a.k.a. nick), profile, self-description, and so on (see Wallace, 2001, pp. 20-31; Waskul & Douglass, 1997). In a MUD, users’ nicknames are “from or inspired by myth, fantasy, or other literature, common names of real life, names of concepts, animals, and everyday objects that have representative connotations”; it is important that those names are evenly dispersed among these categories (Curtis, 1997, p. 127). Because MUDs (Multi-User Dungeons) offer multiple interactive situations, the use of nicknames makes it easier for participants to disguise their identities, and users create various provocative and witty nicks for themselves (Danet, Ruedenberg-Wright & Rosenbaum-Tamari, 1997). Humorous nicknames are popular among online users, therefore some skilled users gather diverse nicknames and send the list of nicks to new participants to be helpful (Baym, 1995a). Nicks can be a fundamental element to decode gender of users before participants get to know each other (Wallace, 2001, p. 22). For example, if a nickname, “Wild-Foxy” enters a chat room, other members might recognize this user’s gender easily. At the same time, it may lead others to perceive this person to be a promiscuous party lover. Male users might make suggestive remarks toward her from his biased stereotypes. In fact, the category of nicknames is significant to form impressions of message senders. For example, a respondent described a person who used “aldon,” his real name, as an alias; “most people enjoy the creative freedom associated

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7 A MUD (Multiuser Dungeon) is a sort of virtual space where numerous participants socially interact with other users who are in the same place through connecting on the Internet technically.
with creating name, but he was content to stick with his real name. This made me think of him as an uptight, rather boring and uncreative person” (Jacobson, 1999). Some real names are commonly regarded as attractive in western culture and associated with positive feelings, whereas other names are considered unattractive, and carries negative feelings (Anderson, 1979; Brennen, 2000; Kasof, 1993; Lawson & Roeder, 1986; Mehrabian, 1997; Steele & Smithwick, 1989). According to an analysis about nicknames in “Internet relay chat” (IRC), only 18 users out of 260 (8%) used their real name instead of a nickname (Bechar-Israeli, 1995). One possible explanation for the popularity of creative nicknames may be that IRC participants interpret using real names as nicknames to be uninteresting and unimaginative.

In IRC users can change their nickname easily, but they infrequently do and steadily use their same nick for a long time. As self-presentation in immeasurable chatrooms, the same nick can be an important part of each user’s digital identity. The largest category (45%) was related to the self in various ways (<shydude>, <stoned>, <baddady>) (Bechar-Israeli, 1995), while Waskul and Douglass (1997) found that some nicks were based on the person’s hobbies, interests (<GuitarPickn>), lifestyles (<VegDiet>), and a individual’s motives for chat-interaction (<PhoneFun4u>).

Users’ attachment to their nickname is rooted in the technical and environmental distinctiveness of IRC. An automatic “Nickserv” program ensures that no two users share an identical nickname simultaneously (Rheingold, 2000, p. 181). In interactive contexts,

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8 In the original text, Jacobson (1999) used the term “pseudonym” and “alias” instead of “nickname.” Pseudonyms, aliases and nicknames could be regarded as equal because those three terms are freely made by each participant’s intentions and purposes.

9 For instance, Curt, David, Diane, Jeff, Judy, and Linda were all related to a favorable response, whereas Agatha, Edgar, Francis, Mabel, Marvin, and Phoebe all evoked an unfavorable reaction (Anderson, 1979).
if users build a solid relationship with others and the others only know them by their nicknames, they try to keep their same nick (Bechar-Israeli, 1995). The stability of nickname is an important element to establish a presence in virtual community in IRC (Liu, 1999). For example, if Jed offers useful software and music to others for free, he might earn a virtual reputation, but his nickname may be the only feature that distinguishes him from other users. When a stranger uses his nick without his permission, it can be construed as an identity theft, because Jed has exclusively possessed the nick for a long time, and others have come to presume Jed’s existence from his nick. In fact, a particular nickname can be an owner’s property (see Wallace, 2001, p. 30).

A nick is a single form of associated words, whereas lengths, styles, and themes of a profile and a description are not limited. As more informative resources, the profile may include a member name, location, birthdate, sex, and others of one user (Waskul & Douglass, 1997, p. 386), and a self-description is an introductive content written by each user. In “MSN” personals with “match” system, the self-description becomes more in depth as the users list their ideal mate, career, hobbies, aspirations for the future, views of life, favorite wise remarks, prior marital experiences, etc. If the description portrays an attractive potential mate, the email box of the person will be filled with letters from suitors of all kinds.

In simultaneous chat rooms participants reveal their characteristics during conversation. When a user types repetitious spelling errors, others may think this person as impatient.10 Profiles and self-descriptions offer users more time to write contents so

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10 All online users may not regard other participants’ mistakes as careless. Wallace (2001, pp. 36-37) found that users attribute spelling inaccuracies to inconvenient online environments and consider them as unintentional minor errors. However, this is only likely when a perceiver is familiar with the workings of the computer-mediated communication and its erratic nature.
when others view unfinished and indecipherable sentences in these information, this tendency to judge negatively become more serious (Jacobson, 1999). Also, if a user does not respond within two or three minutes, a chat partner will ask his or her existence, because an absence of instant messages expresses that this person does not have an interest in conversation or a conversationalist. When users cannot respond immediately, they use emotional symbols such as :-), ;->, :-T, :-D, :-<, :-S, -___, ^0^, or ^(oo)^.

“Smileys” or “emoticons” indicate a range of emotions, including humor, sarcasm, good spirits, disappointment, surprise, and general friendliness (see Baym, 1995b, pp. 151-153). Interestingly, most emoticons are easy to identify with a meaning, whereas some smileys are more obscure, but at the same time more evocative and effective once meaning has been explained (see Reid, 1995, p. 172). For example, if inexperienced users view “*!/#/*/^&:-)” smiley, they might not know that this is a “schizophrenic” smiley.

When participants are familiar with chatrooms, they will grasp the meaning and share it with others in virtual communities.

**Graphic-Based Communication**

Waskul and Douglass (1997, p 387) addressed, “Cyberselves emerge in the disembodied and dislocated context of cyberspace and thus cannot be affixed to a body, place, or any other fixed physical thing.” However, this is arguable as graphical environments now offer a new communication pattern commonly known as Avatar. Featherstone and Burrows (1995, pp 11-12) defined an avatar as the iconic representation of the bodies of people logged into the Metaverse, in the novel *Snow Crash* by Stephenson. In general, avatars are human like characters based on 2Dimensional and 3D

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11 The term avatar, originally from Hindu mythology, refers to the temporary body a god inhabits while visiting earth.
environments. In 2D environments, users can choose one of the avatars, as a complete form, but they do not have the options to create a customized avatar by selecting different parts themselves.\footnote{Most graphic-based channels of the United States are based on 2D environments, and the “Palace” is one of most famous chatting services. Suler (2001) has analyzed that avatars in the Palace can be divided into animal avatars, cartoon avatars, celebrity avatars, evil avatars, real face avatars, etc, and each avatar has different meanings (e.g., animals imply certain traits such as strength, loyalty, or independence whereas celebrity’s image represent intelligence or power). At the dissimilar perspective, Krikorian et al. (2000) conducted a study on how subjects think of the spatial relationships between avatars in the Palace. They found that social attraction (i.e., liking) decreased at middle distances and increased at low and high distances. In fact, although the form of avatars is just cartoonlike figures, cyber characters might provide a certain meaning while online users with their own visual representation converse with an unfamiliar person in a virtual world.}

Conversely, users in 3D environments can make “combination” avatars by choosing various faces, clothes, accessories, hairstyles, body types, etc. In Habitat, an avatar has one head and a body that can move around the space on the screen, and users’ messages immediately appear above their own avatar’s head when they type something on the keyboard (Rheingold, 2000, pp 196-197). Moreover, 3D animated characters’ movements can be transformed social-emotional information. In the “Moove” service, participants can express “happiness” by making their character do an upbeat be-bop dance, or “anger” by making their avatar lash its arms or wave its fists with a few click of specific keys that are provided in the system. For example, a subject responded, “Aldon’s name had no role in my impression formation... Immediately after I entered the MOO, aldon waved to me. This simple action made an impression on me. Right then, I saw aldon as very nice guy, someone who is very warm and very social” (Jacobson, 1999).

Like text-based settings, it is difficult to decode gender and age of a user in graphic-based communication, because this person can be anybody from teenager to elderly, or a female or a male. However, users in 3D graphic-based media can have more informative cues
such as facial expressions, bodily movements, and physical appearances than text-based media.

In a study about a visual system, “Sayclub” in Korea, Kim (2001, pp. 144-149) found that the teenagers focus more on decorating their characters than reflecting their real physical appearances to their avatars. In Sayclub users can buy various avatar items with cash. Because many teens do not have extra money to adorn cyber character, a luxurious avatar is desired by the group of that age, regarded as an object of envy, and the users possessing these kinds of lavish avatars tend to lead the flow of conversation. The desire to create a cool and unique character rather than their physical counterpart in their avatar can be explained by the fact egocentrism in adolescence dictates them to be preoccupied with *imaginary audience*, whom they constantly try to impress (Elkind, 1967, pp 102-1034). Teenagers tend to overestimate how much others are watching and evaluating them. Even though their visual representations may not resemble their real features entirely, they have strong attachment to their characters, and they regard their avatars as their alter egos in the virtual world (Kim, 2001, pp 144-149).

Females in their twenties and males in their twenties and thirties tried to match their physical appearances to their avatars. One possible explanation for this trend is that

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13 Contrary to pessimistic predictions, Sayclub earned 1.2 million dollars for this service in 2001. Nowadays, most chat systems in Korea offer avatar service for a fee.

14 Recently, hacking and prostitutions have been serious in Korea, because teenagers without an avatar aspire passionately to obtain their own character. In “Habitat” system, users’ avatars could be killed by others, and the death of characters becomes a cause of depression for some owners (Rheingold, 2000, pp. 198-199). Likewise, similar to the death of an avatar, when owners find that their avatar are missing items due to theft by hackers, the owners can become very frustrated.

15 In this study, a female participant responded, “Frankly, I wish to have pretty avatars, but my friend criticized that my avatar doesn’t look like me at all. After that, I argued with my classmates and it made me so depressed. Now, my avatar is just like me, but I really don’t like that at all. I don’t think I’m pretty and I don’t want other people to know that I’m not pretty through looking at my avatar.” In fact, female teens’ avatar may be different whenever they meet an unfamiliar person or a familiar person in the Sayclub.
they were more practical and used this service to meet various single people. Unlike the teens, who desire to express themselves creatively through avatar, the slightly older users want to expose their photographs instead of cybercharacter.\(^{16}\) Lastly, the tendency of females in their thirties was not fixed; some of them wanted to have a fantastic avatar while some wanted to make a realistic character. Even though users in their twenties and thirties were unfamiliar with cybercharacter and cyberworld, they also considered their avatars as the alter egos in virtual communities (Kim, 2001, pp 149-153).

On social influence, avatar influenced a perception of communicating partners (Lee & Nass, 2002). Lee and Nass (2002) conducted a study on how seeing other participant’s decision making process plays a role in making one’s own decision, when the subject was given three different forms of communication: text, text with stick figures, and text with visual characters. Participants agreed with their partners’ decisions that were represented by simple textboxes more than those represented by stick figures or visual characters, whereas participants perceived their partners to be more competent, trustworthy, and socially attractive when represented by animated characters than by motionless figures or textboxes (Lee & Nass, 2002, study 1, p. 364).\(^{17}\) In another experiment, participants were led to believe that they were interacting with stick figures generated by computers, not human, and they rated the stick figure condition to be less personal and less likable (Lee

\(^{16}\) As a visual image, some of online systems enable users to provide their own pictures to others. The presence of a photograph prior to and during computer conferencing had positive effects on intimacy/affection and social attractiveness for short-term CMC partners (Walther, Slovacek & Tidwell, 2001, p 121). However, Walther et al. (2001, p 123) emphasized, “Users felt that CMC facilitated more success at creating a positive impression when they used text alone, rather than when interaction was accompanied by photographs.” In anonymous settings, users selectively reveal their information to make themselves appear more attractive and favorable, but it is harder to do so when users expose their physical appearances.

\(^{17}\) In experiment 1, subjects may be more familiar with text-based channels because they usually send and receive a lot of e-mails and use messenger services such as Yahoo or MSN. Therefore, they might be much agreed with the opinions of other participants in a familiar situation.
& Nass, 2002, study 2, p. 373). In fact, perceivers felt animated characters as more friendly and sensitive when anthropomorphic figures were provided by humans, not by computers.

In cyberspace an avatar is a user’s physically embodied form, the alter ego of each participant, and may act as an effective clue to find a potential conversational partner with similar inclinations and personalities because users can view a visual image presented by other participants before they start a conversation. (See Balsamo, Heim, Lupton, Holland, Land, Lupton & Tomas, 1995, Biocca & Nowak, 2002, for the detailed research on embodied and disembodied subjectivities).

Summary

This thesis attempted to understand initial interactions in the social contexts of chat rooms to clarify and illustrate the coherence of cognitive perceptual processes of the perceivers who have negative expectations about a person. According to Meta-Analysis about expectancy effects, sometimes perceivers will treat the target negatively based on their negative expectancies (reciprocity), or sometimes they will treat the target more positively (compensation) (Harris, 1991). Harris (1991) argued that a question of when perceivers will confirm or disconfirm their negative expectations about the target still remains, and an answer might be captured through analyses of variables moderated expectancy effects.

Among moderating variables of negative expectancies, when perceivers consider their target as a potential conversational partner, not as a possible teammate for a cooperative work, they treat this person more negatively based on their negative expectations (Darley et al., 1988). Moreover, when perceivers interact with a target to
solve a given problem, cognitively busy perceivers respond to the target more negatively than cognitively non-busy perceivers (Harris & Perkins, 1995).

The purpose of this experiment was to examine when perceivers confirm or disconfirm their negative expectations about a getting-acquainted chat partner in synchronous chatting system. There were three variables: text-only based vs. graphic-plus-text based system, cognitively non-busy vs. cognitively busy condition, and the situational context describing a target’s inherent disposition vs. the situational context resulting in a target’s altered disposition. The author investigated how perceivers with an initial negative expectation about the get-acquainted chat partner developed their expectations in various conditions.

Hypotheses

- **H1.** Perceivers in a situational condition will say that situational information about a person influenced the person’s attitudes more toward new people than will those in a dispositional condition, regardless of the level of cognitive distraction.

- **H2.** Perceivers who read that situational information influenced a person’s attitude toward new people will form more positive expectations regarding the person’s “reactions to a new relationship” than those who read that dispositional information influenced the person’s attitude toward new people, regardless of the level of cognitive distraction.

- **H3.** Perceivers who read that situational information influenced a person’s attitude toward new people will form more positive expectations regarding the person’s “reactions to new people” than those who read that dispositional information influenced the person’s attitude toward new people, regardless of the level of cognitive distraction.

- **H4.** Perceivers who read that situational information influenced a person’s reactions toward new people will be more willingly to converse with the person than those who read that dispositional information influenced the person’s reactions toward new people, regardless of the level of cognitive distraction.

- **H5a.** Perceivers who receive a person’s visual and text information through avatar-based communication will exhibit higher attributional confidence than those who receive the person’s information through text-based communication only, regardless of the level of cognitive distraction.
H5b. Cognitively busy perceivers will exhibit higher attributional confidence than cognitively non-busy perceivers.

- RQ1. How do cognitively busy perceivers versus non-cognitively busy perceivers form their attributions about a person’s “reactions to a new relationship” when they read that situational information influenced the person’s attitude toward new people versus reading dispositional information in text-based versus avatar-based communication?

- RQ2. How do cognitively busy perceivers versus non-cognitively busy perceivers form their attributions about a person’s “reactions to new people” when they read that situational information influenced the person’s attitude toward new people versus reading dispositional information in text-based versus avatar-based communication?
CHAPTER 3
RESEARCH METHODS

Overview of the Experiment

In this $2 \times 2 \times 2$ experiment, 207 subjects were randomly assigned to one of the eight experimental conditions (Table 1) where they watched a compact disk with a silent video about a particular person. As the fundamental design, 104 subjects read a text-only video message with a female target’s nickname (e.g., Suspicious_Blue82), while 103 subjects viewed a video with the same nickname plus an avatar and the text messages. Of the 104 subjects who saw the target’s nickname only (i.e., without avatar), and read the target’s verbal messages, 50 subjects received dispositional information describing the target’s inherent disposition (e.g., target is usually unfriendly towards strangers), while 54 subjects viewed situational information explaining why the target is suspicious (e.g., target is a recent rape victim and has a hard time meeting new people). Of the other 103 subjects who viewed the target’s same nickname plus the avatar, and watched the target’s verbal and visual descriptions, 51 subjects received the dispositional context, while 52 subjects watched the situational context. Cell sizes ranged from 25 to 29 (Table 1).

After watching one screen with the target’s nickname or the same nickname plus the avatar, all subjects were asked to fill out a questionnaire to indicate their initial expectations about the target. Next, 50 subjects who read the target’s nickname and 53 subjects who viewed the target’s nickname and the avatar were asked to perform a cognitive rehearsal task (i.e., reading the situational or dispositional information carefully and recalling an eight-digit number) while the other 104 subjects were not required to pay
special attention to the descriptions about the target and to recall the number. After viewing the screens with the target’s detailed resources, only the subjects in the cognitive busyness condition were asked to recall the eight-digit number.

Table 1. Experimental Design

<table>
<thead>
<tr>
<th></th>
<th>Nickname Only</th>
<th></th>
<th>Nickname + Avatar</th>
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<tr>
<td></td>
<td>Non busy</td>
<td>Busy</td>
<td>Non busy</td>
<td>Busy</td>
</tr>
<tr>
<td>Disposition</td>
<td>25</td>
<td>25</td>
<td>25</td>
<td>26</td>
</tr>
<tr>
<td>Situation</td>
<td>29</td>
<td>25</td>
<td>25</td>
<td>27</td>
</tr>
<tr>
<td>Totals</td>
<td>54</td>
<td>50</td>
<td>(104)</td>
<td>50</td>
</tr>
</tbody>
</table>

Next, all subjects were asked to fill out another questionnaire to rate their perceptions about the situational or dispositional circumstance from the video during the experiment, their final expectations of the target, attributional confidence in these expectations, and their own inclination to converse with the target. Only the busy subjects rated distraction in the cognitive busy manipulation. Following the experiment, all subjects were debriefed, thanked and dismissed.

Subjects

Subjects (N = 207) were recruited from three different undergraduate communication courses (e.g., Principles of Public Relations, Writing for the Electronic Media, and Introduction to Telecommunication) at the University of Florida. Focusing on a subset of college students was reasonable as college students are major users of online games and online chatting (Rheingold, 2000, p. 188). Only 18 to 25 years old subjects who have used the Internet for at least four months were randomly assigned to participate in a 2 (dispositional context vs. situational context) × 2 (cognitively non-busy vs. cognitively busy) × 2 (text-only vs. text-plus-graphic) factorial design experiment.
Subjects volunteered to attend one 25 minute experimental session in return for extra credit issued with the permission of instructors for the courses.

To measure Internet usage patterns, the subjects were asked to indicate their weekly experience levels of using the Internet on a 6-point scale (1 = none, 2 = less than one hour, 3 = one to five hours, 4 = five to ten hours, 5 = ten to twenty hours, or 6 = more than twenty hours). Among the 207 college students, 35.3 % (N = 73) of the subjects use the Internet from five to ten hours in a week and another one third (32.4 %, N = 67) of the subjects use the Internet from ten to twenty hours in a week. Another 21.2 % (N = 44) of the subjects use the Internet less than five hours in a week and 11.1 % (N = 23) of the subjects use the Internet more than twenty hours in a week.

When the subjects were asked to mark one, primary reason for using the Internet, 72 % (N = 149) of the subjects said e-mailing and instant messaging, while about one-sixth, 15.5 % (N = 32) of the subjects stated homework for school. For the remainder of the subjects, 5.8 % (N = 12) checked web surfing, 5.3 % (N = 11) marked reading news, weather or sports, and less than 1 % (0.15 %, N = 3) of the subjects individually chose buying goods or services, banking online, and other works as their predominant drive for surfing the Internet.

For time spent chatting, 42 % (N = 87) of the subjects spend about one to five hours in a week chatting with someone, while 17.9 % (N = 37) of the subjects expend roughly five to ten hours in a week chatting with other online users. Of the remaining two-fifths of the subjects, 30.4 % (N = 63) spend less than one hour per week talking with someone through instant messenger, while 8.2 % (N = 17) spend approximately ten to twenty hours per week talking with others via instant messenger. Rounding out the percentages,
a slight number of subjects (1.4 %, N = 3) spend more than twenty hours per week in a chat rooms, chatting.

For use of instant messenger services, among all the subjects queried, an overwhelming percentage 90.8 % (N = 188) utilize AOL’s instant messaging services, while 9.2 % (N = 19) use MSN messenger services. Of the remainder of the subjects, 4.8 % (N = 10) use Yahoo messenger and 1 % (N = 2) use ICQ messenger. Lastly, a small percentage of the subjects (1.4 %, N = 3) habitually use graphical chat rooms with visuals and 2.4 % (N = 5) use other chat services.

**Instructions**

Upon their arrival at the computer laboratory, a female experimenter greeted the subjects and provided them with a concise oral introduction to the experiment. The experimenter then escorted each subject to a seat facing a computer monitor with the complete written instructions showed on the computer screen, with the complete written instructions appearing before them on the monitor. During the experiment, individual subjects clicked the “right arrow” button on the computer screen unlocking the remaining experimental materials. The written instructions explained that this study examined the way people perceive an individual in computer-mediated communication, and that subjects would view 14 screens with information about a young woman whose chat nickname is “Suspicious_Blue82.” They were told that the participant’s goal in viewing the screens was to accurately estimate personality ratings of the woman in various situations. Subjects were told that the woman’s messages on the screen were captured from an interview with her in an online chat room, and she may be one of their possible conversational partners in a chat room later in the study (The actual instructions can be founded in the Appendix A).
Presentation of Stimulus Materials

Expectancy Manipulation

Development of nickname

To develop an appropriate nickname, various screen names were collected to select an unfavorable nickname for the study. According to previous studies, “fuckjesus” was classified as the most provocative nickname (Bechar-Israeli, 1995), but this label was rejected because it could trigger a disrespectful and offensive affectivity from subjects with certain religious beliefs.

Real names were rejected because when a participant uses his or her real name as a nickname, it can provoke unlikable reactions in virtual communities (Jacobson, 1999).

Waskul and Douglass (1997) found that in “Internet relay chat” (IRC) the largest category of nicknames (45%) was related to the self in various ways (e.g., <stoned>, <baddady>) (Bechar-Israeli, 1995), and some nicknames were based on the person’s hobbies, lifestyles (e.g., <GuitarPickn>), and individual’s motives for chat-interactions (e.g., <PhoneFun4u>). Based on these results, the form of nickname was chosen as an adjective to show the person’s personality. Earlier studies showed that different trait labels might polarize a first impression of a target into positive or negative responses. Asch (1946) found that perceivers judge the target presented with the words related to “warm” to be friendly, or conversely, and with the adjective “cold” to be unfriendly.1 Anderson (1968) arranged a list of 555 traits rated for attractiveness by 100 college students. The most attractive traits were sincere (#1), intelligent (#7), considerate (#12),

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1 Arch (1946) regarded the term warm and cold as the central traits. Yet, Jones (1990, pp. 27-32) criticized that central traits may be peripheral as peripheral traits may be central when the other words in a stimulus list are offered to change the context entirely. For example, “wise” of a warm person is not the equal with the “wise” of a cold person. In general, we tend to assume that an intelligent and cold person is crafty and astute.
and warm (#16). The least attractive traits were cold (#486), rude (#537), dishonest (#548), and liar (#555). To show the female target’s attitude toward strangers and her emotional condition, the word “Suspicious_Blue82” was chosen as the nickname. To ensure the effective responses of the chosen nickname, a pre-test was conducted. In the current experiment, subjects in the text-based setting condition saw this nickname on the computer screen.

**Avatar**

To investigate the negativity of expectations for an avatar, the commercial service “WhoRU” system was chosen among various chat systems that offer graphical methods. This system was selected because of its attractive and unique ways of interacting with others through convenient use of a cybercharacter.

On the “Texmo” (i.e., Text to Motion) engine service, the WhoRU system ensures that an avatar’s facial expressions and bodily movements are automatically changed whenever users type something on the keyboard. This enables all subjects to easily convey their 24 different emotional conditions to other users. To illustrate, if users type “hi” on the keyboard, simultaneously their cyber characters nod their heads, wave the hands, wink, or salute to other chat partners as a friendly manner. In contrast, the word “no” on the keyboard would impel their visual representations to shake their heads suggestive of the opposite signal.

In a user-friendly manner, all chat rooms in WhoRU provide “camera” techniques such as “zoom-in” and “zoom-out.” Through this method, users can see their own character’s visual image along with any physical activities they may engage in synchronously. Additionally, the program provides the perceivers with the opportunity to enjoy conversation in various angles and distances. Interestingly, the users can take a
screen shot of their chat partner’s cyber character and themselves to memorize a particular moment, or to facilitate play.

To present a negative avatar for this study, the most unattractive hairstyle, clothes, shoes, and accessories among various avatar items were chosen for this study. The author used a distinctive words dictionary to illustrate different nonverbal expressions of an avatar and dichotomized these data into positive and negative. To avoid any doubts, an avatar’s visual gestures and postures were described, inciting extremely negative expectancies. To make certain the effectiveness of the constructed avatar’s physical appearances and body movements, a pre-test was completed. In the experiment, when subjects in the avatar-plus-text condition indicated their initial expectations about an avatar, they watched the frowning and unpleasant avatar’s appearance with the target’s nickname “Suspicious_Blue82” on the computer screen.

**Self-description**

After viewing the target’s nickname or the same nickname plus an avatar, subjects read a short introduction of the target (e.g., her name: Judy, age: twenty-one-years, gender: female, occupation: junior at the University of Florida, marital status: single). This was done because age, gender, occupation and some other demographic characters help users find their potential conversational partner easily (Waskul & Douglass, 1997, p 386).

Next, subjects observed the target’s self-descriptions about the eleven attributions (e.g., hobbies, favorite types of music, consideration toward neighbors, thought about friends, idea about pets, ideal mate, college life, behavior at parties, plans to do after graduation, view of fate, and portrayal of the future). The content was composed in a question and answer form. For instance, about ‘favorite types of music,’ the female target
answered that she would prefer to listen to heavy metal music loudly in the dark and that she sometimes screamed along. Related to this question, the answer for the next question regarding ‘consideration toward neighbors’ was that she had no regard for her neighbors even though her music was highly disruptive. Also, she was described as inclined to avoid socializing with anonymous people at the party and even at the school. Unfinished and indecipherable words were printed in the information about the target (Eleven complete questions and answers about the target can be found in the Appendix B).  

To compare the efficiency of different computer-mediated communication situations, one stimulus was made in a text-only model, while another was constructed with a graphic-plus-text-model. In the graphic-based setting, the avatar’s facial expressions and bodily movements were dramatically changed by the avatar’s different messages. For instance, when the word “boring” was included in the avatar’s descriptions, the female target’s visual representation yawned heavily. Also, when the term “afraid” was shown in the messages, the animated character sobbed convulsively. In the experiment, subjects viewed the avatar’s short introduction along with the eleven questions and answers on the screen. Examples of the screen snapshots of the target’s messages for the text-only situation and graphic-plus-text situation are shown in Figure 1 and 2.

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2 While the author pondered whether the “Schizophrenic” smiley, “*/#*/,^&:&:-)” would be appropriate to add in the target’s descriptions, this complicated word was rejected because most participants, especially inexperienced on-line users, might not know the meaning of this mark.
Figure 1. Screen snapshot of one of the target’s messages for the text-only situation

5. Do you own a pet?  A dog maybe?

A dog?  I barely take care of myself, besides they don't allow pets in my apartment anyway. Maybe fish?  Something that is not physically there to look after all the time would be ok. I guess I won't feel too alone that way.

Figure 2. Screen snapshot of one of the target’s messages for the graphic-plus-text situation
Manipulation of Context

Situational Context

After viewing a target’s simple introduction, the subjects watched two different situational contexts. Because a study by Trope and his colleagues (1991, Study1) found that situational information exerts little influence on the interpretation of a behavior if the situational resource is presented after the behavior, the situational context was shown on the computer screen before the subjects read the target’s description. Trope and his colleagues also suggest that clear situational information can be used to interpret a behavior. It has been shown that understanding people means that we have to understand situations (Jones, 1990, p. 3). One of the most extremely miserable situations with a stranger among numerous problems is rape. In the experiment, 106 subjects received the following situational information about Judy’s rape by a stranger.

“A week ago, Judy was walking toward home alone after a meeting with classmates. In a dark side street, a stranger asked her for her phone number. She said no and walked away. He started following her. She asked him to stop following her as she walked home. In spite of her request, the stranger persisted, pulled out a gun, and he raped her.”

Dispositional Stimulus

To correctly adjust the target’s character under the certain situational circumstance is required for perceivers to spend their extra time and efforts, but people also put their attentional endeavor in seeking out other possible alternatives (e.g., a target’s actual

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dispositional and situational inferences) (Krull & Erickson, 1995, study 2). Accordingly, another piece of situational information ensured that perceivers inferred the woman’s negative disposition. Also, this situational condition showed that Judy's suspicious behaviors toward her new neighbor is irrelative with the situation (i.e. the accidental encounter with Judy and her new neighbor). The other 101 subjects viewed the following situational context.

“A week ago, a new neighbor moved next door to Judy. When he saw her in her kitchen, he knocked at her door to ask her for a can opener, but she did not open the door, and she turned off all the lights in her house.”

**Cognitive Busyness Manipulation**

To make sure the experimental cognitive busy manipulation worked, a pre-test was performed. After viewing a screen with the target’s fundamental information, subjects in the busy condition were informed that the experimenter is interested in studying how well people could memorize resources about the target person while they perform different tasks. They were asked to read the stimulus carefully and later while viewing the video with the target’s detailed resources to recall an eight-digit number. After watching all messages about the target on the computer screen, only busy subjects were asked to recall the number based on their memorization. This cognitive busy manipulation was successfully used by Gilbert and his colleagues’ study (1988, 1989), and in the Harris and Perkins’ study (1995) to show distraction effects on person perception.

Cognitively busy subjects viewed one screen with the eight-digit number, and then they took their own time to memorize this number before they passed on to other remaining screens. Gilbert and Osborne (1989) gave twenty-five seconds to their subjects for remembering the number, however, the current researcher did not provide a fixed
time to the subjects in this study, because giving a specific time limit might prevent subjects from remembering the number of numbers and evaluating the target’s personality at the same time.\footnote{“Rushing manipulation” leads people to conclude their thoughts about a motivational issue quickly (see review by Kruglanski, 1989), and it is used by Krull and Erickson’ study (1995, study 2). With negative expectancies, perceivers’ motivation in understanding a target’s negative behaviors is very important to this study. However, this experiment did not use the method, rushing manipulation, because the purpose of this study is to examine the cognitive perceptual processes of perceivers while performing two dissimilar works at the same time.}

After viewing the number, the subjects watched the target’s remaining descriptions, while attempting to remember the numbers. Non-cognitively busy subjects were not shown the number of numbers on the screen and were not told about the need to recall anything.

**Dependent Measures**

**Perceived Initial Expectations Dependent Variable Measures**

After watching the first screen with the female target’s nickname “Suspicious_Blue82” or the same nickname plus an avatar, subjects were asked to fill out a questionnaire to indicate their initial expectations of the target. All dependent measures were a 9-point scale.\footnote{In another study, participants completed 13-point bipolar scales to diagnose their target’s dispositional anxiety, however, it may have caused too much thought and weakened the distraction effects (see Gilbert & Osborne, 1989). In this study all dependent measures were arranged on a 9-point scale used by the Krull and Erickson’ study (1995).}

**Reactions to New People**

The first question was “Based on your impression for her nickname, how do you think “Suspicious_Blue82” would react to new people in her daily life?” Subjects responded to a 9-point scale from very unfriendly (1) to very friendly (9), from very rude (1) to very courteous (9), from very unkind (1) to very kind (9), from very insincere (1) to...
very sincere (9), from very uncaring (1) to very caring (9), and from very careless (1) to very careful (9). The lower the score the more negative the reactions to the female target.

**Reactions to a New Relationship**

The second question was “How do you think Suspicious_Blue82 would feel about starting a relationship with a new person?” Subjects used a 9-point scale ranging from very insecure (1) to very secure (9), from very uncomfortable (1) to very comfortable (9), from very unsafe (1) to very safe (9), from very indifferent (1) to very excited (9), from very pessimistic (1) to very optimistic (9), and from very unenthusiastic (1) to very enthusiastic (9), with lower scores indicating more negative thoughts to the target.

**Cognitive Busyness Manipulation Measures**

After watching the video with the target’s short introduction and self-descriptions, the “busy” subjects were asked to recall an eight-digit number they had seen on the screen earlier. They then wrote the number of numbers on a piece of paper and next indicated how distracted they were by memorizing the numbers.

**Perceived Final Expectations Dependent Variable Measures**

**Situational Influences**

Next, all subjects were asked to indicate, “How much Suspicious_Blue82’s encounter with a stranger last week influenced her attitude toward strangers?” The situational influences was measured on a 9-point scale (e.g., 1 = not at all influential, 9 = extremely influential), with higher scores explaining that the encounter with Judy and the stranger significantly influenced her behavioral tendency toward new people.

Next, subjects rated their final evaluations of the target, with the measures used early in this study to test the expectations. Terminal attributional confidences in these expectations were assessed with a five-item subset of Clatterbuck’s CL7 measure.
(Clatterbuck, 1979) that has shown an adequate reliability (coefficient alpha consistently exceeded .80). Douglas (1990) developed this measure to focus on the two scales of feelings and behaviors generated from subjects and their partners, and Tidwell and Walther used these two scales to surface the differences between computer-mediated communication and face-to-face situation (2002, $\alpha = .90$).

**Confidence in Predicting**

In this study, the five questions were: (1) How confident are you of your general ability to predict how Suspicious_Blue82 will behave in a similar situation in the future?; (2) How confident are you of your general ability to predict the values she holds?; (3) How confident are you of your general ability to predict her attitudes?; (4) How confident are you of your general ability to predict her feelings or emotions?; and (5) How confident are you of how well you know her?

Subjects then rated their Knowledge confidence on a 9-point rating scale (e.g., 1 = not at all confident, 9 = extremely confident), with higher scores indicating higher confidence 1) to predict Suspicious_Blue82’s behaviors in a similar situation in the future, 2) to predict her values, 3) to predict her attitudes, 4) to predict her feelings or emotional conditions, and 5) to well know her.

**Willingness to Converse**

The confirmation or disconfirmation of initial negative expectations of the target was evaluated with the question, “How likely would you be to initiate a conversation with Suspicious_Blue82?” Subjects signified their willingness on a 9-point scale (e.g., 1= very unlikely, 9=very likely), with higher scores showing a greater likelihood to start a chatting session with the target.
The cognitive busyness manipulation success was assessed by a perceived distraction question. The question was “How distracting was it to have to memorize the eight-digit number?” The busy subjects responded on a 9-item checklist (e.g., 1 = not at all distracting, 9 = extremely distracting), with higher scores showing more distracting by memorizing the numbers while reading the situational or dispositional information carefully. The questionnaire for the cognitively non-busy subjects is contained in Appendix C, and the one for the cognitively busy subjects is in Appendix D.
CHAPTER 4
RESULTS

Cognitive Busy Manipulation

After watching a video with detailed information about a female, the subjects in the cognitively busy condition were asked to recall the eight-digit number that they saw on the computer screen during the experiment. A total of 103 cognitively busy subjects wrote the number based on what they remembered. Among them, 70% \((N = 72)\) of the subjects were able to accurately recall the 8-digit numbers correctly, with a mean of 7.1 and a standard deviation of 1.6 for the number of digits memorized exactly, which is relatively high.

A two-way ANOVA was conducted to be sure that recall for text-based vs. graphic-plus-text based messages condition did not vary by attributional cues (situational vs. dispositional) condition. There was no interaction effect for CMC by attribution \([F(1,102) = .012, p < .91; \eta_p^2 = .000; \text{Power} = .051]\). The mean scores on the accurately recalled number of digits between busy subjects who received the female’s verbal messages through the text-only based setting \((M = 7.4, SD = 1.2, N = 50)\) and those who received the female’s visual and verbal messages through the graphic-plus-text based setting was not different \([F(1,102) = 2.13, p < .15; \eta_p^2 = .021; \text{Power} = .304]\). Similarly, there was no attribution main effect for the number of digits recalled correctly between the cognitively busy subjects in the situational condition \((M = 7.1, SD = 1.7, N = 52)\) vs. those in the dispositional condition \([F(1,102) = 0.01, p < .91; \eta_p^2 = .000; \text{Power} = .051]\).
To test how well the manipulation worked to distract, when the subjects in the busy condition recalled the eight-digit number, they rated how distracted they were by memorizing the numbers while reading the situational or dispositional information carefully. There was no significant CMC main effect \( F(1,102) = 1.05, p < .31; \eta_p^2 = .010; \) Power = .174] or attributional cues main effect \( F(1,102) = .97, p < .33; \eta_p^2 = .010; \) Power = (.164], however, a significant interaction effect for text vs. avatar by situational vs. dispositional condition existed \( F(1,102) = 11.32, p < .001; \eta_p^2 = .103; \) Power = (.915]. Table 2 presents the mean scores for the busy subjects’ perceived distraction by CMC environments and attributional cues. Scheffe’s post hoc difference of means test was performed to investigate which of these conditions were significantly different from others \( p < .05 \). A test for linear trends was significant in each case at \( p < .01 \).

Cognitively busy subjects with situational context in the avatar-based system and those with dispositional message in the text-based system said that their test conditions were more distracting than the other two groups.

Table 2. Mean Scores for the “Busy” Subjects’ Distraction by CMC and Attribution

<table>
<thead>
<tr>
<th>Attributional Cues</th>
<th>Computer-Mediated Communication Environments</th>
<th>Text Messages Only</th>
<th>Avatar Plus Text Messages</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>( M )</td>
<td>( SD )</td>
</tr>
<tr>
<td>Disposition</td>
<td></td>
<td>5.7(^b)</td>
<td>2.5</td>
</tr>
<tr>
<td>Situation</td>
<td></td>
<td>3.5(^a)</td>
<td>2.4</td>
</tr>
</tbody>
</table>

*Note: Numbers reported here represent mean score on nine-point scales. Higher values indicate greater perceived distraction from reading information carefully and memorizing the numbers.*
Those means that do not share superscripts are significantly different from each other (Scheffe’s ad hoc difference of means test, \( p < .05 \)). Linear trend analysis significant at \( p < .01 \).

As can be seen in Table 2, the cognitively busy subjects in avatar-plus-text methods condition said that they were more distracted \( (M = 4.7) \) when they had a situational context to understand the female target described antisocially than when the other subjects in the same condition saw dispositional information about the female’s negative personality \( (M = 3.5) \). By contrast, the busy subjects who received dispositional information about the female in text-only based state regarded their experimental circumstance as more desultory \( (M = 5.7) \) than the busy subjects who read a situational explanation \( (M = 3.5) \).

**Perceptions of Female’s Reactions**

Perceptions of how the female would react in different situations were measured with 12 different dependent variables (Chapter 3, p. 41). These items were submitted to a principal axis factor analysis, and two factors with eigenvalues > 1.0 emerged. Based on the scree plot of the eigenvalues, a two-factor solution was perceived to be a reasonable interpretation of the data. Table 3 represents the factor loadings for the two-factor solution with a varimax rotation with Kaiser Normalization. The varimax rotation was chosen over the oblique rotation because the factor loadings were basically the same as in the non-orthogonal one and the orthogonal solution was more appropriate to this study’s objective of exploring the subcomponents of perceived final expectations.

To interpret the results, the investigator used the factor scores to create the two indices. The two factors were labeled by the type of questions asked in the experiment. For the first question, “How do you think Suspicious_Blue82 would feel about starting a
"relationship with a new person?,” the 207 subjects responded to four items on a nine-point scale from (a) from very uncomfortable (1) to very comfortable (9), (b) from very insecure (1) to very secure (9), (c) from very pessimistic (1) to very optimistic (9), and (d) from very unsafe (1) to very safe (9). The Cronbach alpha for these four questions is .88.

This first factor is believed to represent “attributions made about female’s reactions to a new relationship.”

Table 3. Factor Analysis of Attributions Made to Female’s Reactions to New People and to New relationships

<table>
<thead>
<tr>
<th>Factor Loadings</th>
<th>1</th>
<th>2</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Reactions to a New Relationship</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Uncomfortable – Comfortable</td>
<td>.90</td>
<td></td>
<td>2.0</td>
<td>1.3</td>
</tr>
<tr>
<td>b. Insecure – Secure</td>
<td>.88</td>
<td></td>
<td>1.9</td>
<td>1.3</td>
</tr>
<tr>
<td>c. Pessimistic – Optimistic</td>
<td>.78</td>
<td></td>
<td>1.8</td>
<td>1.3</td>
</tr>
<tr>
<td>d. Unsafe – Safe</td>
<td>.60</td>
<td></td>
<td>2.3</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Reactions to New People</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>e. Unkind – Kind</td>
<td>.43</td>
<td>.78</td>
<td>2.9</td>
<td>1.5</td>
</tr>
<tr>
<td>f. Rude – Courteous</td>
<td>.40</td>
<td>.77</td>
<td>2.7</td>
<td>1.4</td>
</tr>
<tr>
<td>g. Uncaring – Caring</td>
<td>.31</td>
<td>.68</td>
<td>2.6</td>
<td>1.6</td>
</tr>
<tr>
<td>h. Insincere – Sincere</td>
<td>.63</td>
<td></td>
<td>3.2</td>
<td>2.0</td>
</tr>
<tr>
<td>i. Careless – Careful</td>
<td>.42</td>
<td></td>
<td>4.3</td>
<td>2.9</td>
</tr>
<tr>
<td><strong>Mixed items</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>j. Unfriendly – Friendly</td>
<td>.58</td>
<td>.58</td>
<td>2.4</td>
<td>1.3</td>
</tr>
<tr>
<td>k. Unenthusiastic – Enthusiastic</td>
<td>.58</td>
<td>.39</td>
<td>2.3</td>
<td>1.5</td>
</tr>
<tr>
<td>l. Indifferent – Excited</td>
<td>.44</td>
<td>.32</td>
<td>2.9</td>
<td>1.8</td>
</tr>
<tr>
<td><strong>Percent of variance explained</strong></td>
<td>51.1</td>
<td>12.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Eigenvalue</strong></td>
<td>6.1</td>
<td>1.5</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Standardized Cronbach Alpha</strong></td>
<td>.88</td>
<td>.83</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Only factor loadings greater than .30 are reported for the sake of parsimony.

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1 Principal Axis Factoring, Varimax Rotation
Regarding the next question, “Based on your impression for her nickname, how do you think “Suspicious_Blue82” would react to new people in her daily life?,” all subjects responded to five items on a nine-point scale from (e) from very unkind (1) to very kind (9), (f) from very rude (1) to very courteous (9), (g) from very uncaring (1) to very caring (9), (h) from very insincere (1) to very sincere (9), and (i) from very careless (1) to very careful (9). The Cronbach alpha for these five items is .83, and the second factor is believed to represent “attributions about female’s reactions to new people.”

These mean scores were very low and this indicated that overall the subjects thought the female would react very negatively to a new relationship and almost as negatively to meeting new people.

**Confirmation and Disconfirmation of Negative Expectations**

The primary hypotheses in this study examined the differences in the mean scores on the perceptions of situational influences, perceptions of the female’s reactions to a new relationship and reactions to new people, and willingness to converse among subjects who received the situational stimulus about the female versus those who received the dispositional stimulus.

**Attributions to Female about Reactions to New People by Attributional Cues: H1**

H1. Perceivers in a situational condition will say that situational information about a person influenced the person’s attitudes more toward new people than will those in a dispositional condition, regardless of the level of cognitive distraction.

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2 Three of the items [(j) very unfriendly (1) to very friendly (9), (k) very unenthusiastic (1) to very enthusiastic (9), and (l) very indifferent (1) to very excited (9)] loaded on both factors and are considered “mixed” items.
First a two-way ANOVA was conducted to test for an interaction to determine that the differences in the perceived situational influences for attributional cues are not different for the cognitively busy vs. non-busy condition. There was no interaction effect for attributions by cognitive busyness \([F(1,203) = 1.04, p < .31; \eta^2_p = .005; \text{Power} = .174]\). For the second part of the hypothesis, the main effect for situational influences by attributional cues (situational vs. dispositional condition) was significant \([F(1,203) = 85.5, p < .001; \eta^2_p = .296; \text{Power} = 1.0]\). Perceivers who read situational information about the female said that the information influenced the female’s attitudes less negatively toward new people \((M = 7.4, SD = 2.2, N = 106)\) than did those who read dispositional information about the female \((M = 4.5, SD = 2.3, N = 101)\) Finally, it can be noted that there was no significant main effect for situational influences by the cognitively busy (cognitively non-busy vs. cognitively busy) condition \([F(1,203) = .19, p < .66; \eta^2_p = .001; \text{Power} = .072]\). As a result, Hypothesis 1 is fully supported, and the effects do not vary by how busy the subject was during the reading of the message.

**Attributions to Female about Starting a New Relationship by Attributional Cues: H^2**

\(H^2\). Perceivers who read that situational information influenced a person’s attitude toward new people will form more positive expectations regarding the person’s “reactions to a new relationship” than those who read that dispositional information influenced the person’s attitude toward new people, regardless of the level of cognitive distraction.

A two-way ANOVA allowed the investigation of an interaction to determine that the differences in the female’s reactions to starting a relationship with a new person for attributional cues are not different for the cognitive busyness (cognitively non-busy vs.
cognitively busy) condition. There was no interaction effect for attributions by the cognitively busy conditions \( F(1,203) = .12, p < .73; \eta_r^2 = .001; \text{Power} = .064 \). In a test for the second part of the hypothesis, it was found that the main effect for attribution about the female’s reactions to a new relationship by attributional cues (situation vs. disposition) was not significant \( F(1,203) = .001, p < .98; \eta_r^2 = .000; \text{Power} = .05 \). There was no significant difference in the “attributions to the female’s reactions to a new relationship” for perceivers who were told the female’s negative behaviors results from situational conditions \( (M = -.002, SD = 1.0, N = 106) \) versus those who were told the female’s same behaviors were because of the female’s dispositions \( (M = .002, SD = .9, N = 101) \). Lastly, the main effect for the person’s reactions to a new relationship by the two different conditions of cognitive busyness was not significant \( F(1,203) = .32, p < .56; \eta_r^2 = .002; \text{Power} = .086 \). As a consequence, Hypothesis 2 is not supported, and the subjects’ expectations about how the apparently antisocial female would react to a new relationship do not vary by what information the subjects received during the experiment or by their cognitively busy states.

**Reactions to New People Factor by Attributional Cues: H3**

H3. Perceivers who read that situational information influenced a person’s attitude toward new people will form more positive expectations regarding the person’s “reactions to new people” than those who read that dispositional information influenced the person’s attitude toward new people, regardless of the level of cognitive distraction.

A two-way ANOVA was used to test for an interaction to ascertain that there are no differences in the person’s reactions to new people in daily life for each of the attributional cues by the cognitively busy situations. The interaction for attributions by
cognitive busyness was not significant \( F(1,203) = .37, p < .54; \eta^2_p = .002; \text{Power} = .093 \). There is however, a near significant attributional cues main effect \( F(1,203) = 2.9, p < .09; \eta^2_p = .014; \text{Power} = .397 \), as hypothesized. Perceivers who were told the female’s reactions resulted from a situational context formed less negative expectations \((M = .1, SD = .9, N = 106)\) than those who read that the female’s negative actions came from the female’s innate character \((M = -.1, SD = .9, N = 101)\). Finally, there was no significant cognitive busyness main effect \( F(1,203) = .48, p < .49; \eta^2_p = .002; \text{Power} = .105 \). Consequently, there is some tentative support for this hypothesis at the .09 level. It appears that perceivers formed expectations regarding the person’s reactions to new people in daily life differently by the type of cue they received and these differences do not vary by how distracted subjects were while reading the materials and making their evaluations.

**Willingness to Converse by Attributional Cues: H^4**

\( H^4 \). Perceivers who read that situational information influenced a person’s reactions toward new people will be more willingly to converse with the person than those who read that dispositional information influenced the person’s reactions toward new people, regardless of the level of cognitive distraction.

To measure willingness to converse with the female whose chat nickname is “Suspicious_Blue,” the question, “How likely would you be to initiate a conversation with Suspicious_Blue82?” was asked. All 207 subjects responded on a nine-point scale from *very unlikely* (1) to *very likely* (9). A two-way ANOVA was conducted to test for an interaction to verify that the differences in willingness to converse for attributional cues are not different for cognitive busyness. There was no interaction effect for attributional
processes by the cognitively busy states with the attributional cues \( F(1,203) = .044, p < .84; \eta_p^2 = .000; \text{Power} = .055 \). The overall hypothesis is supported as there is an attributional main effect for willingness to chat with the female \( F(1,203) = 7.64, p < .006; \eta_p^2 = .036; \text{Power} = .786 \). Perceivers in the situational condition were less likely to not want to converse with the female \( (M = 2.9, SD = 1.9, N = 106) \) than those in the dispositional condition \( (M = 2.3, SD = 1.7, N = 101) \). Finally there was no cognitive busyness main effect for willingness to talk with the female \( F(1,203) = 1.30, p < .26; \eta_p^2 = .006; \text{Power} = .206 \). As a consequence, Hypothesis 3 is fully supported, and the effects do not differ by how distracted the subject was in a different situational information condition.

Overall, then, H1 and H4 are supported, H3 is near significant and H2 is not supported.

**Attributional Confidence in Predicting Factor**

Attributional confidence in negative expectations was measured with five different dependent variables (Chapter 3, p. 43). These items were submitted to a principal axis factor analysis, and a one factor solution with eigenvalues > 1.0 emerged. The researcher concluded from the scree plot of the eigenvalues that a one-factor solution would be a reasonable interpretation of the data. Table 4 presents the factor loadings for the one-factor solution with a varimax rotation, and the Cronbach alpha for five items is .88.

To interpret the results, the researcher used the factor scores to create the one index. For the five questions, (1) How confident are you of your general ability to predict how Suspicious_Blue82 will behave in a similar situation in the future?; (2) How confident are you of your general ability to predict the values she holds?; (3) How confident are
you of your general ability to predict her attitudes?; (4) How confident are you of your
genital ability to predict her feeling or emotions?; and (5) How confident are you of how
well you know her?, the 207 subjects responded on a nine-point scale from *not at all
confident* (1) to *extremely confident* (9). The label given to the factor stems from an
interpretation of the factor, as “attributional confidence in predictions about the female.”

Table 4. Factor Analysis of Attributional Confidence Measures

<table>
<thead>
<tr>
<th>Factor</th>
<th>Factor Loading</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Predict behavior</td>
<td>.87</td>
<td>6.0</td>
<td>1.8</td>
</tr>
<tr>
<td>Predict values</td>
<td>.84</td>
<td>5.8</td>
<td>1.7</td>
</tr>
<tr>
<td>Predict attitudes</td>
<td>.81</td>
<td>6.4</td>
<td>1.8</td>
</tr>
<tr>
<td>Predict feelings or emotions</td>
<td>.71</td>
<td>6.2</td>
<td>1.8</td>
</tr>
<tr>
<td>Know her well</td>
<td>.63</td>
<td>4.4</td>
<td>2.0</td>
</tr>
</tbody>
</table>

Percent of variance explained 67.8
Eigenvalue 3.4
Standardized Cronbach Alpha .88

Note: Mean scores reported here measured on nine-point scales.

Higher values indicate that subjects were confident to predict the female’s potential
future.

As can be seen in Table 4, the highest means here were for confidence in predicting
the female’s attitudes and the only one that was markedly low was for “knowing” the
person.

**Attributional Confidence in Predicting Factor by CMC and by Busy Conditions:**

- H^5a. Perceivers who receive a person’s visual and text information through avatar-
based communication will exhibit higher attributional confidence than those who receive the person’s information through text-based communication only, regardless of the level of cognitive distraction.

---

^3 Principal Axis Factoring, Varimax Rotation
H5b. Cognitively busy perceivers will exhibit higher attributional confidence than cognitively non-busy perceivers.

A two-way ANOVA was performed to test for differences between two groups by CMC conditions do not vary by two different busy (cognitively busy vs. non-busy) conditions. The two-way analysis indicated that there was no significant interaction effect for CMC by busyness \[F(1,203) = .003, p < .96; \eta^2_p = .000; Power = .050\]. The test for the main effect by CMC, showed no significant difference on the “attributinal confidence in predicting” factor score by CMC (text-based vs. avatar-based) environments \[F(1,203) = .67, p < .42; \eta^2_p = .003; Power = .129\]. The difference between subjects who were involved in the avatar-based setting \((M = .06, SD = 1.0, N = 103)\) and those who were involved in the text-based setting \((M = -.06, SD = .9, N = 104)\) was not significant. Next, the main effect by the cognitively busy situations was examined, and no significant difference was not found \[F(1,203) = .63, p < .43; \eta^2_p = .003; Power = .124\]. The mean score of cognitive busy subjects \((M = .06, SD = .9, N = 103)\) on the factor “confidence in predicting” was not higher than the mean score for cognitively non-busy subjects \((M = -.05, SD = 1.0, N = 104)\). Consequently, two hypotheses regarding the “attributinal confidence in predicting” factor by CMC settings \((H^{5a})\) and by busy conditions \((H^{5b})\) were not supported.

**Post Hoc Analyses**

In addition to the five hypotheses for this study, with respect to total 207 subject’s behavioral tendency to use the Internet in their daily life, the investigator explored the differences in the subjects’ Internet usage patterns on the dependent variable, “attributinal confidence in predicting” factor. A univariate analyses of variance (ANOVA) was performed to test the differences among the various groups. Interestingly,
there was a near significant Internet use hours main effect, $[F(3,203) = 1.81, p < .147; \eta_p^2 = .026; Power = .466]$. The subjects who spent more than twenty hours in a week to use the Internet scored higher on confidence ($M = .18, SD = .9, N = 23$) when compared to those who spent less than five hours in a week to use the same medium ($M = -.28, SD = 1.0, N = 44$)\(^4\), but Scheffe’s post hoc difference indicated that the means for each groups were not significantly different from each other. Table 5 presents the mean scores for the attributional confidence measures by the subjects’ Internet use hours.

Table 5. Scheffe Tests for Mean Scores for Confidence in Predicting by Internet Use Hours

<table>
<thead>
<tr>
<th>Hours in a week using the Internet</th>
<th>Attribitional Confidence in Predicting Factor</th>
<th>M</th>
<th>SD</th>
<th>N</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than five hours</td>
<td></td>
<td>-.28(^a)</td>
<td>1.0</td>
<td>44</td>
</tr>
<tr>
<td>Five to ten hours</td>
<td></td>
<td>.02(^a)</td>
<td>1.0</td>
<td>73</td>
</tr>
<tr>
<td>Ten to twenty hours</td>
<td></td>
<td>.09(^a)</td>
<td>.8</td>
<td>67</td>
</tr>
<tr>
<td>More than twenty hours</td>
<td></td>
<td>.18(^a)</td>
<td>.9</td>
<td>23</td>
</tr>
</tbody>
</table>

\(^a\) Those means are not significantly different from each other (Scheffe’s ad hoc difference of means test, \(p < .05\)).

Further, multivariate analyses of variance (ANOVA) was conducted to measure the differences in various dependent variables (i.e., perceived situational influences, perceived final expectations regarding reactions to a new relationship, reactions to new people, willingness to converse, and attributional confidence) for the three independent variables: CMC environments, attributional cues, and cognitive busyness conditions. The Box test of equality of covariance matrices revealed that the observed covariance

\(^4\) In the actual data of the experiment, three subjects responded that they used the Internet less than one hour. To interpret the data, the experimenter combined these three subjects into a group that used the Internet about one to five hours.
matrices of the dependent variables were equal across groups. Among various interaction effects, three interaction effects were statistically different.

**Interaction Effects on Perceptions of Situational Influences**

There is a significant three-way interaction of perception of situational influences by CMC × attribution × busyness \([F(1,206) = 4.75, p < .03); \eta_p^2 = .023; Power = .583]\).

Figure 3 represents the mean scores of how cognitively non-busy subjects vs. cognitively busy subjects perceive the situational information about the female by what information they read (disposition vs. situation) and what CMC condition they placed in (text-based system vs. graphic-plus-text-based system).

Figure 3. Interaction Effect of Situational Influences by CMC, Busyness, and Attribution

Scheffe’s post hoc pairwise analysis was conducted to test which conditions were significantly different \((p < .05)\) (see Table 6). A test for linear trends was significant in each case at \(p < .001\). The Scheffe comparison test revealed two conditions where the
mean scores were significantly different than one other condition. It should be noted that the greatest differences occurred for the Graphic – Busy – Situation cell ($M = 8.3$, $SD = 1.5$, $N = 27$) vs. the Graphic – Busy – Disposition cell ($M = 4.0$, $SD = 2.2$, $N = 26$) and the Text – Not Busy – Disposition cell [(M = 4.2, SD = 2.3, N = 25), $F(7,199) = 14.0$, $p < .001$; $\eta^2_p = .329$; Power = 1.0]. The common denominator for these differences in that the highest four all had a situation condition while the lowest four all had a dispositional condition and there were no consistent trends for the graphic-text condition not the busy-not busy condition for attributions about situational influences.

Table 6. Scheffe Tests for Mean Scores for Situational Influences by CMC, Busyness, and Situation vs. Disposition

<table>
<thead>
<tr>
<th>Between Groups</th>
<th>Stranger encounter influenced the female’s attitudes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$M$</td>
</tr>
<tr>
<td>Graphic-Busy-Situation</td>
<td>8.3$^e$</td>
</tr>
<tr>
<td>Graphic-Not busy-Situation</td>
<td>7.4$^d$</td>
</tr>
<tr>
<td>Text-Not busy-Situation</td>
<td>7.2$^d$</td>
</tr>
<tr>
<td>Text-Busy-Situation</td>
<td>6.6$^{cd}$</td>
</tr>
<tr>
<td>Graphic-Not busy-Disposition</td>
<td>5.1$^{bc}$</td>
</tr>
<tr>
<td>Text-Busy-Disposition</td>
<td>4.4$^b$</td>
</tr>
<tr>
<td>Text-Not busy-Disposition</td>
<td>4.2$^a$</td>
</tr>
<tr>
<td>Graphic-Busy-Disposition</td>
<td>4.0$^a$</td>
</tr>
</tbody>
</table>

*Note*: Numbers reported here represent mean score on nine-point scales.

$^{abcde}$ Those means that do not share superscripts are significantly different from each other (Scheffe’s ad hoc difference of means tests, $p < .05$). $^f$Linear trend analysis significant at $p < .001$.

**Interaction Effects on Attributions about Reactions to a New Relationship**

RQ$^1$. How do cognitively busy perceivers versus non-cognitively busy perceivers form their attributions about a person’s “reactions to a new relationship” when they read
that situational information influenced the person’s attitude toward new people versus reading dispositional information in text-based versus avatar-based communication?

The first research question asked how cognitively busy perceivers vs. cognitively non-busy perceivers form their expectations about a female by what information they read (disposition vs. situation) in different conditions (text-based setting vs. graphic-based setting). There was a near significant three-way interaction for attributions about the female’s reactions to a new relationship [$F(1,206) = 2.79, p < .08; \eta^2_p = .015; \text{Power} = .416$]. Figure 4 shows the mean scores of each group’s impressions about the female’s reactions to a new relationship.

![Figure 4. Interaction Effect of Reactions to a New Relationship by CMC, Busyness, and Attribution](image)

Scheffe’s post hoc comparison test was performed to discriminate which conditions were significantly different ($p < .05$). A post hoc analysis showed that none of the means...
for the different groups were significantly different from each other, as is also reflected by the fact that the $F$ was only near significant at .08.

**Interactions Effects on Attributions about Reactions to New People**

RQ\(^2\). How do cognitively busy perceivers versus non-cognitively busy perceivers form their attributions about a person’s “reactions to new people” when they read that situational information influenced the person’s attitude toward new people versus reading dispositional information in text-based versus avatar-based communication?

The second research question asked that subjects in the two different busy conditions (busy vs. non-busy) may form different impressions about a female’s reactions to new people by attributional cues (disposition vs. situation) and CMC conditions (text-based vs. avatar-based method). There was no significant three-way interaction for female’s reactions to new people [$F(1,206) = 1.47, p < .23; \eta_p^2 = .007; Power = .227$]. But a two-way interaction of reactions to new people by CMC × busyness was significant [$F(1,206) = 4.19, p < .04; \eta_p^2 = .021; Power = .531$]. Figure 5 shows that the mean scores of the female’s reactions to new people for attributional cues are different for cognitive busyness. Scheffe’s post hoc comparison test was performed to distinguish which conditions were significantly different ($p < .05$). A post hoc analysis showed that the means for the different groups were not significantly different from each other.

But, there was no significant interaction effect for the means scores of willingness to converse with the female and for attributional confidence in prediction about the female’s potential future. In addition to, there was no CMC main effect for willingness to converse and no attribution main effect for attributional confidence in expectations. Table 7 summarizes the various interaction effects for the three independent variables.
Figure 5. Interaction Effect of Reactions to New People by CMC and Busyness

Table 7. Interaction Effects of CMC, Attribution, Busyness on Situational Influences, Perceived Final Expectations, Willingness, Attributional Confidence

<table>
<thead>
<tr>
<th>Variable</th>
<th>Situational Influences</th>
<th>Reactions to a New Relationship</th>
<th>Reactions to New People</th>
<th>Willingness to Converse</th>
<th>Attributional Confidence</th>
</tr>
</thead>
<tbody>
<tr>
<td>CMC * Attribution</td>
<td>.001</td>
<td>1.0</td>
<td>1.3</td>
<td>.26</td>
<td>.13</td>
</tr>
<tr>
<td>CMC * Busyness</td>
<td>4.2</td>
<td>.04</td>
<td>.24</td>
<td>.62</td>
<td>.001</td>
</tr>
<tr>
<td>Attribution* Busyness</td>
<td>.32</td>
<td>.57</td>
<td>.03</td>
<td>.86</td>
<td>.54</td>
</tr>
<tr>
<td>CMC * Attribution * Busyness</td>
<td>4.8</td>
<td>.03</td>
<td>3.1</td>
<td>.08</td>
<td>1.5</td>
</tr>
</tbody>
</table>

a Computed using alpha = .05
Summary of Results

This study examined whether perceivers with an initial negative expectation about a female confirm their prior thoughts or disconfirm, and how different communicative conditions influence the perceivers’ perceptual cognitive processes toward the female whose chat nickname is “Suspicious Blue82.” In the experiment, the perceivers in a situational condition evaluated that the information affected her suspicious attitude more toward strangers than those in a dispositional condition, regardless of the level of cognitive distraction. When the perceivers read situational information about the female, they formed less negative expectations regarding the female’s reactions to new people, and they would be likely to initiate a conversation with the female, regardless of distraction in the experimental condition. The results indicated that the perceivers formed negative expectations regarding the female’s reactions to a new relationship, regardless of attributional cues and the degree of cognitive busyness.

There were no differences for attributional confidence in predicting the female’s potential future for a text-based message vs. an avatar-plus-text based message by a cognitively non-busy condition vs. cognitively busy one. There was, however, a near significant difference in the perceivers’ confidence in their expectations for those who spent more than twenty hours in a week using the Internet compared to those who spent less than five hours in a week.

Overall, there were three-way interaction effects on perception of situational influences and the female’s reactions to a new relationship by CMC, attribution, and cognitively busy conditions. In addition, there was a two-way interaction effect on attributions about the female’s reactions to new people by CMC and cognitively busy states. The Scheffe test showed that the greatest differences occurred for the Graphic –
Busy – Situation cell vs. the Graphic – Busy – Disposition cell and the Text – Not Busy – Disposition cell. The Graphic – Busy – Situation cell responded that the situational context significantly affected the female’s attitudes more toward new people than the other two groups.
In an online chat room, online users encounter their conversational partners in a casual manner and interact through the exchange of messages usually without knowing each other. As are customarily the cases during the conversation, the interacting subjects form impressions of each other based on the basic cues like their partner’s digital identity (nicknames, avatars, email addresses, and so on). The identity cues can be achromatic, simple text messages or colorful, dynamic figures with facial expressions and gestures like Disney’s cartoon characters. In addition, they might be influenced by the first several sentences to describe chat partners’ background information, mood, and characteristics. Their degree of devotion to the conversation may affect interacting participant’s forming impressions of others. During the interactions they might be exposed to other distracting items such as background music, the aroma of food, a ringing telephone, unsolicited E-mails (a.k.a., SPAM), etc. In this study, it was assumed that communicating participants’ perceptions of others could be influenced by what kind of identity cues they receive and by how distracted they were during the interactions.

Previous studies showed that perceivers’ forming impressions about their conversational partner varies depending on the background information about the person and the perceiver’s attention level paid to the given information. Gilbert and his colleagues found that cognitively busy perceivers responded toward their target more negatively than cognitively non-busy perceivers in face-to-face interaction (Gilbert, Pelham, & Krull, 1988; Gilbert & Osborne, 1989; Harris & Perkins, 1995). However,
Krull and Erickson (1995) argued that the result of Gilbert and his colleagues’ studies could be changed when the cognitively busy perceivers had different amount of information about the person and when they made additional efforts to find out the person’s real characteristics. Thus, it was assumed in this study that perceivers’ estimations of how the female would react to a new relationship and to new people could be influenced not by the level of cognitive distraction, but by the type of information they received.

Results in this present study revealed that there were no differences on the perception of situational influences, the female’s reactions to a new relationship, reactions to new people, and willingness to converse with the female. In other words, perceivers in this present study responded differently only by what information they had, regardless of cognitively busy or cognitively non-busy conditions. When they read the female’s situational cues for her negative behavior, they tended to think that the situation influenced her reactions to new people in her daily life and they were more likely to initiate a conversation with the female whose nickname was “Suspicious_Blue82.” Cronbach’s alpha ($\alpha$) for the female’s reactions to a new relationship scale was .83.

But they seemed not to use the situational contexts for understanding why the female reacted negatively in forming a relationship with a new person even though they reported that the female’s negative behaviors resulted from situational conditions. The Cronbach alpha for the female’s reactions to a new relationship scale was reliable ($\alpha = .88$). Perhaps the perceivers need more concrete cues to evaluate the female’s reactions to a new relationship, even though the female’s detailed self-descriptions were shown on the computer screen during the experiment.
It is particularly important that there were three-way interactions of situational influences and the female’s reactions to a new relationship by CMC × busyness × attribution, and a two-way interaction of the female’s reactions to new people by CMC × busyness. Scheffe’s post hoc analysis revealed two conditions where the means for the perceived situational influences were significantly different than one other condition.

Subjects in the Graphic – Busy – Situation cell were more likely to say that the situational cues significantly influenced the female’s attitudes toward strangers (\(M = 8.3, SD = 1.5, N = 27\)) than those in the Graphic – Busy – Disposition cell (\(M = 4.0, SD = 2.2, N = 26\)) and those in the Text – Not Busy – Disposition cell [(\(M = 4.2, SD = 2.3, N = 25\)), \(F(7,199) = 14.0, p < .001; \eta_p^2 = .329; Power = 1.0\)].

Interestingly, the cognitively busy subjects reported that they were more distracted by the experimental tasks when they read situational information in the graphic system and when they read dispositional information in the text system than the other two opposite conditions. Previous studies showed that the procedures of using the situational information to understand the target’s unfavorable behaviors were more difficult than reading the descriptive information about the target’s negative dispositions (Gilbert, Pelham, & Krull, 1988; Gilbert & Osborne, 1989). However, another study showed that perceivers put their efforts to diagnose the target’s actual personalities and the possible situational contexts equivalently (Krull & Erickson, 1995, study 2). Perhaps busy subjects could identify more with the female when they had the avatar’s physical appearances and dynamic body movements in the situational condition while in the dispositional condition they had to think a great deal because they did not like the unfriendly female and they had a text message which remembering the numbers confounded.
It should be noted that there was a CMC main effect for the perceived situational influences. The subjects who received the avatar-based identity cues were more likely to say that the female’s situation affected her attitudes toward strangers \((M = 6.2, \ SD = 2.6, N = 103)\) than those who received the text-based cues \((M = 5.7, \ SD = 2.8, N = 104)\). It might be possible that the subjects who watched the avatar’s frown faces with anger and unfriendly gestures with text messages thought that the female’s suspicious attitudes toward new people resulted from the situation.

On the other hand, it was found that perceivers’ attributional confidence in their impressions about the person was influenced by the message format (text vs. graphic) and by the cognitive busyness (cognitively non-busy vs. cognitively busy) condition. Previous studies showed that subjects who watched a target person’s nonverbal behaviors more automatically evaluated the target’s personality than those who read the target’s verbal behaviors (Gilbert & Krull, 1988; Gilbert, Pelham, & Krull, 1988). In addition, cognitively busy subjects formed their impressions of the target with less cognitive load than cognitively non-busy subjects (Krull & Erickson, 1995).

However, the cognitively busy subjects in the current study said that they did not have attributional confidence in predicting the female’s potential future, although they were in the graphic-plus-text based system. Cronbach’s alpha coefficient \((\alpha)\) for the attributional confidence scale was .88.

A reliability analysis was performed to ensure whether subjects’ estimations about the female scale yielded the same results when applied repeatedly. To test for internal consistency of the subjects’ perceptions scale, Cronbach alpha was computed to
determine how each item correlated to the remaining items. The overall items with alpha scores greater than .80 were considered to have internal reliability.

For measurement validity, in this study all dependent measures were arranged on a nine-point scale used by the Krull and Erickson’s study on a person’s perception in the different level of cognitive distraction (1995). In addition, terminal attributional confidence in predicting was assessed with a five-item subset of Clatterbuck’s CL7 measure (Clatterbuck, 1979) with an adequate reliability of $\alpha = .80$.

**Limitations and Possibilities for Future Research**

This study has several limitations, which may account for the lack of significant results required to support all of the hypotheses. Future research may refer to the methodological limitations of this study and advance this research by overcoming the limitations.

**Sample**

The nature of the sample used for this study limited the research findings. A small convenience sample of university students was used instead of a random sample because college students are the major group of online games and online chatting (Rheingold, 2000, p. 188). Due to that, the results should not be generalized beyond the sample of students.

In the current study, subjects were not needed to indicate their gender. However, the gender variable may be significantly influenced the responses about a female’s situation (e.g., the female is a recent rape victim). Perhaps female subjects would be more sensitive to the situational context about sexual assaults than male subjects, and they would think that the female’s awful situation affect changing her attitude more toward strangers than the male subjects do.
Future research should be examined the difference between male and female subjects regarding their responses about the rape information. In addition, it should be tested a variety of online chat-interaction users, and considered the difference between each individual’s technological experience using diverse online services.

**Instrument**

It needed to be noted that only the level of subjects’ hours using the Internet was positively related with attributional confidence in expecting the female. Hancock and Dunham (2001) indicated that subjects in a short-term CMC interaction have less confident attribution than those who were in face-to-face interaction. However, Walther (2002) found that the advantage of attributional confidence in FtF over CMC situation disappeared as CMC subjects involved in more personal conversations. Jacobson (1999) emphasized that quantity of information with a length of the relationship was important to form accurate impressions in the text-based communication. Hinds (1999) suggested that evaluating a person’s traits was more biased when subjects received audio and visual information than when they did audio message only. However, Walther (2001) found that subjects with a photograph of their getting-acquainted conversation partner had more positive intimacy/affection and social attractiveness than those without the photo during the interactions.

This study focused on short-term psychological responses to the female, followed by the comparison of attributional confidence between the text-based and the graphic-plus-text based system. Future research may try to use various messages with a multimedia format (e.g., audio only, text only, audio + text, avatar + text, avatar + audio, photo + audio, photo + text, etc.) to clarify which communicative conditions lead to higher attributional confidence.
Future research also needs to provide some concrete attributional cues to help perceivers evaluate the female’s reactions to a new relationship. Even if the instrument for this scale is deemed reliable ($\alpha = .88$), it does not entirely warrant the validity issue. Among several factors that threaten internal validity, the testing sensitization might have influenced this research design during the pre- and post-test. In this study, subjects were asked to respond to the questions regarding the female’s reactions to a new relationship after they received the female’s basic identity cues (nickname vs. avatar + nickname). Later, they were also asked to answer the same questions used earlier after they read the female’s detailed descriptions (text messages vs. avatar + text messages). For this reason, an initial measurement in the current study may be influenced the subsequent measurement.

The female’s messages were constructed to induce the subjects to form negative impressions of the apparently suspicious female. The results revealed that the subjects drew a negative image of the female. However, they did not correct their negative perceptions about the female even though they received the situational cues. Instead of forming positive impressions, they regarded the female less negatively when they read the situational cues than when the remaining subjects read the descriptive information. Future research needs to compose the revised text and graphic messages that could ensure subjects to perceive their target person positively when they know the situational reason why this person acts unfriendly toward new people.

It should be considered that there is an individual difference in performing different works at the same time. It is easy to observe that some individuals have better capacity to do different works than others do. For instance, some people may chat with others online
while they listen to music and do their homework simultaneously. On other hand, some people try to focus on the conversation itself.

Bergen and his colleagues (2005) found that diverse CNN’s news formats shown on a television gave viewers extra attentional works to remember and summarize the information they watched. Future research needs to construct different types of cognitive busyness conditions. As an example, it is reasonable to set up a participant to watch divergent subtitles of recent news (e.g., simple text messages, multicolored graphic messages, vocal messages format, etc) or to search for information about a certain topic while they form impressions about a perceived person based on the person’s messages.

**Implications of the Study**

It is emphasized how people perceive an individual in various face-to-face interactions. The current study examined how perceivers form their impressions about a person in different CMC conditions. Many previous studies mainly focused on the effective predominance of FtF over CMC environments or the functional usefulness of various communicative methods (e.g., text only, audio only, text plus audio, etc.). However, it is needed to investigate how individual online user evaluates other participants when different identity cues and diverse external interferences are provided during the interactions.

This research showed the informational processes of how online users form their initial expectations about their getting-acquainted conversational partner based on the basic cues (e.g., nickname or avatar), and how they develop their prior thoughts about the person based on the more detailed messages (e.g., text only messages or avatar-plus-text messages). It should be noted that online chatting users finally decided whether they would initiate a conversation with the person grounding in the information they received.
As the results showed, there were three interaction effects on the situational influences, a female’s reactions to a new relationship and to new people. Perhaps three independent variables could have an explainable power to examine the social interactions in computer-mediated communication environments. Through the analyses of this experiment, it is clarified that many moderating variables significantly influence social interpersonal contexts in computer-mediated communications.
Please read the material below.

This study looks at the way people perceive an individual in computer-mediated communication. You will view 14 screens with information about a young woman whose chat nickname is "Suspicious_Blue2." Your goal in viewing the screens is to accurately estimate personality ratings of this woman in various situations. The character on the screen is this woman's visual image in a chatroom. This character's bodily movement and physical appearances change based on her messages. This woman's screen messages are captured from an interview with her in a chatroom. She may be one of your possible conversational partners in a chatroom later in the study.

When you finished reading the material above, please click the "Right Arrow" on the computer screen and read the next screen.
APPENDIX B
SELF-DESCRIPTION ABOUT THE TARGET

Target’s Negative Descriptions

1. What do you like to do in your spare time?

   I guess……..nothing much…….just watch TV, listen to music or go through chat rooms online, stuff like that, you know……..It seems like I’m not getting anywhere though, everything is boring to me.

2. What kind of music do you listen to?

   I listen to techno, trans and some new stuff I hear on the radio or TV. Lately, I’m kinda into the heavy metal… I like to listen to it real loud in the dark…. I sometimes scream along, it’s quite liberating. My neighbors don’t like it, but I don’t really care.

   They can go screw themselves. Jerks.

3. You really don’t care if your neighbors don’t like you?

   Well, I pay the rent to have my own space, so they can’t really say anything. I mean… I don’t want any trouble with my neighbors… but they don’t have to love me or anything. As long as I keep the music down so they don’t have to call the cops on me. They think I’m weird. Maybe I am… Whatever… I’m ok as long as nobody bothers me.

4. Don’t you have any friends to hang out with?

   Not really. I used to have some, but I don’t talk to them anymore cause they talk too much BS. They don’t want to talk about real things. Instead, they want to talk about stupid things like guys or girls they met. They are all bunch of gossiping, back-stabbing…….you know. I get kinda lonely sometimes, but whatever…..

5. Do you own a pet? A dog maybe?

   A dog? I barely take care of myself, besides they don’t allow pets in my apartment anyway. Maybe fish? Something that is not physically there to look after all the time would be ok. I guess I won’t feel too alone that way.

6. Do you have a boyfriend? Or do you want one?
Well, I will be lying if I say that I can live in this world alone but, I don’t want a guy to expect anything like sex. I don’t know what I should expect from him either. Companionship? I don’t think he can ever know me. Nobody does…

I am afraid of getting hurt by someone again…..

7. What do you like?

What do you mean?

8. Do you at least like going to school?

To be honest, I don’t know why I’m going to school. Well,, maybe because everybody else does, I think I’m going to school because I don’t know what else that I need to be doing if I don’t go. I don’t know what I want anymore….Shhhhhhh….ggggmm…

9. What do you want to do after you graduate?

I don’t know. Maybe get a job…. I can’t think of anything at the moment.

10. You go to UF, right? Isn’t that a party school?

Party school? Maybe to people who party. But for people like me who don’t party, then, it is just school. I don’t socialize with bunch of drunks. I think they are all there for one thing, you know what I’m saying.

11. You don’t sound like you are living a very healthy life. Do you look forward to anything?

I used to think people could be whoever they want to be as long as they work hard enough for it… but I don’t think that anymore. I guess I grew up too much. I’ve seen too many people getting their dreams crushed by circumstances that they have no control over……. I want to believe in all that good stuff about controlling your own destiny, but that’s all baloney, just a dream.
APPENDIX C
QUESTIONNAIRE FOR THE NON-BUSY SUBJECTS

Questionnaire #1

Please answer the following questions.

1. On average, about how many hours in a week do you spend using the Internet?

<table>
<thead>
<tr>
<th></th>
<th>(    )</th>
<th>Five to ten hours</th>
<th>(    )</th>
</tr>
</thead>
<tbody>
<tr>
<td>None</td>
<td>(    )</td>
<td>Less than one hour</td>
<td>(    )</td>
</tr>
<tr>
<td>None</td>
<td>(    )</td>
<td>Less than one hour</td>
<td>(    )</td>
</tr>
<tr>
<td>Less than one hour</td>
<td>(    )</td>
<td>Ten to twenty hours</td>
<td>(    )</td>
</tr>
<tr>
<td>One to five hours</td>
<td>(    )</td>
<td>More than twenty hours</td>
<td>(    )</td>
</tr>
</tbody>
</table>

2. What is your primary reason to use the Internet? (Check only one)

<table>
<thead>
<tr>
<th>Reason</th>
<th>(    )</th>
<th>Reason</th>
<th>(    )</th>
</tr>
</thead>
<tbody>
<tr>
<td>E-mail and instant messaging</td>
<td>(    )</td>
<td>Entertainment such as playing games</td>
<td>(    )</td>
</tr>
<tr>
<td>Reading news, weather or sports</td>
<td>(    )</td>
<td>Buying goods or services</td>
<td>(    )</td>
</tr>
<tr>
<td>Homework for school</td>
<td>(    )</td>
<td>Banking online</td>
<td>(    )</td>
</tr>
<tr>
<td>Web surfing</td>
<td>(    )</td>
<td>Other</td>
<td>(    )</td>
</tr>
</tbody>
</table>

3. How many hours in a week do you spend chatting with someone?

<table>
<thead>
<tr>
<th></th>
<th>(    )</th>
<th>Five to ten hours</th>
<th>(    )</th>
</tr>
</thead>
<tbody>
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<td>None</td>
<td>(    )</td>
<td>Less than one hour</td>
<td>(    )</td>
</tr>
<tr>
<td>None</td>
<td>(    )</td>
<td>Less than one hour</td>
<td>(    )</td>
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<tr>
<td>Less than one hour</td>
<td>(    )</td>
<td>Ten to twenty hours</td>
<td>(    )</td>
</tr>
<tr>
<td>One to five hours</td>
<td>(    )</td>
<td>More than twenty hours</td>
<td>(    )</td>
</tr>
</tbody>
</table>

4. Which chat systems do you usually use to meet someone? (Check all that apply)

<table>
<thead>
<tr>
<th>System</th>
<th>(    )</th>
<th>System</th>
<th>(    )</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSN messenger</td>
<td>(    )</td>
<td>ICQ messenger</td>
<td>(    )</td>
</tr>
<tr>
<td>Yahoo messenger</td>
<td>(    )</td>
<td>Graphical chat rooms (with visuals)</td>
<td>(    )</td>
</tr>
<tr>
<td>AOL messenger</td>
<td>(    )</td>
<td>Other</td>
<td>(    )</td>
</tr>
</tbody>
</table>
Questionnaire #2

After reading the third screen, please fill in below.

Please indicate
1. Based on your impression for her nickname, how do you think “Suspicious_Blue82” would react to new people in her daily life?

<table>
<thead>
<tr>
<th>She would be:</th>
<th>Very unfriendly</th>
<th>1 2 3 4 5 6 7 8 9</th>
<th>Very friendly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very rude</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very courteous</td>
<td></td>
</tr>
<tr>
<td>Very unkind</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very kind</td>
<td></td>
</tr>
<tr>
<td>Very insincere</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very sincere</td>
<td></td>
</tr>
<tr>
<td>Very uncaring</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very caring</td>
<td></td>
</tr>
<tr>
<td>Very careless</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very careful</td>
<td></td>
</tr>
</tbody>
</table>

2. How do you think Suspicious_Blue82 would feel about starting a relationship with a new person?

<table>
<thead>
<tr>
<th>She would be:</th>
<th>Very insecure</th>
<th>1 2 3 4 5 6 7 8 9</th>
<th>Very secure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very uncomfortable</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very comfortable</td>
<td></td>
</tr>
<tr>
<td>Very unsafe</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very safe</td>
<td></td>
</tr>
<tr>
<td>Very indifferent</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very excited</td>
<td></td>
</tr>
<tr>
<td>Very pessimistic</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very optimistic</td>
<td></td>
</tr>
<tr>
<td>Very unenthusiastic</td>
<td>1 2 3 4 5 6 7 8 9</td>
<td>Very enthusiastic</td>
<td></td>
</tr>
</tbody>
</table>
Questionnaire #3

After reading the final screen, please fill in below.

Please indicate
1. How much Suspicious Blue82’s encounter with a stranger last week influenced her attitudes toward strangers?

<table>
<thead>
<tr>
<th>Not at all influential</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely influential</th>
</tr>
</thead>
</table>

2. How do you think Suspicious Blue82 would react to new people in her daily life?

She would be:

<table>
<thead>
<tr>
<th>Very unfriendly</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very friendly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very rude</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very courteous</td>
</tr>
<tr>
<td>Very unkind</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very kind</td>
</tr>
<tr>
<td>Very insincere</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very sincere</td>
</tr>
<tr>
<td>Very uncaring</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very caring</td>
</tr>
<tr>
<td>Very careless</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very careful</td>
</tr>
</tbody>
</table>

3. How do you think Suspicious Blue82 would feel about starting a relationship with a new person?

She would be:

<table>
<thead>
<tr>
<th>Very insecure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very secure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very uncomfortable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very comfortable</td>
</tr>
<tr>
<td>Very unsafe</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very safe</td>
</tr>
<tr>
<td>Very indifferent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very excited</td>
</tr>
<tr>
<td>Very pessimistic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very optimistic</td>
</tr>
<tr>
<td>Very unenthusiastic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very enthusiastic</td>
</tr>
</tbody>
</table>

4. How confident are you of your general ability to predict how Suspicious Blue82 will behave in a similar situation in the future?
5. How confident are you of your general ability to predict the values she holds?

<table>
<thead>
<tr>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely confident</th>
</tr>
</thead>
</table>

6. How confident are you of your general ability to predict her attitudes?

<table>
<thead>
<tr>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely confident</th>
</tr>
</thead>
</table>

7. How confident are you of your general ability to predict her feelings or emotions?

<table>
<thead>
<tr>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely confident</th>
</tr>
</thead>
</table>

8. How confident are you of how well you know her?

<table>
<thead>
<tr>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely confident</th>
</tr>
</thead>
</table>

9. How likely would you be to initiate a conversation with Suspicious_Blue82?

<table>
<thead>
<tr>
<th>Very unlikely</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very likely</th>
</tr>
</thead>
</table>
APPENDIX D
QUESTIONNAIRE FOR THE BUSY SUBJECTS

Questionnaire #1

Please answer the following questions.

1. On average, about how many hours in a week do you spend using the Internet?

<table>
<thead>
<tr>
<th>None</th>
<th>( )</th>
<th>Five to ten hours</th>
<th>( )</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than one hour</td>
<td>( )</td>
<td>Ten to twenty hours</td>
<td>( )</td>
</tr>
<tr>
<td>One to five hours</td>
<td>( )</td>
<td>More than twenty hours</td>
<td>( )</td>
</tr>
</tbody>
</table>

2. What is your primary reason to use the Internet? (Check only one)

<table>
<thead>
<tr>
<th>E-mail and instant messaging</th>
<th>( )</th>
<th>Entertainment such as playing games</th>
<th>( )</th>
</tr>
</thead>
<tbody>
<tr>
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<td>Buying goods or services</td>
<td>( )</td>
</tr>
<tr>
<td>Homework for school</td>
<td>( )</td>
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<td>( )</td>
</tr>
<tr>
<td>Web surfing</td>
<td>( )</td>
<td>Other</td>
<td>( )</td>
</tr>
</tbody>
</table>

3. How many hours in a week do you spend chatting with someone?

<table>
<thead>
<tr>
<th>None</th>
<th>( )</th>
<th>Five to ten hours</th>
<th>( )</th>
</tr>
</thead>
<tbody>
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<td>Less than one hour</td>
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<tbody>
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<td>Yahoo messenger</td>
<td>( )</td>
<td>Graphical chat rooms (with visuals)</td>
<td>( )</td>
</tr>
<tr>
<td>AOL messenger</td>
<td>( )</td>
<td>Other</td>
<td>( )</td>
</tr>
</tbody>
</table>
Questionnaire #2

After reading the third screen, please fill in below.

Please indicate
1. Based on your impression for her nickname, how do you think “Suspicious_Blue82” would react to new people in her daily life?

<table>
<thead>
<tr>
<th>She would be:</th>
<th>1</th>
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<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very unfriendly</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very rude</td>
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<tr>
<td>Very unkind</td>
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<tr>
<td>Very insincere</td>
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<td></td>
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<tr>
<td>Very uncaring</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Very careless</td>
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<td></td>
</tr>
</tbody>
</table>

2. How do you think Suspicious_Blue82 would feel about starting a relationship with a new person?

<table>
<thead>
<tr>
<th>She would be:</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very insecure</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Very uncomfortable</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Very unsafe</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Very indifferent</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very pessimistic</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Very unenthusiastic</td>
<td></td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
**Questionnaire #3**

After reading the final screen, please fill in below.

Please indicate
1. How much Suspicious_Blue82’s encounter with a stranger last week influenced her attitudes toward strangers?

<table>
<thead>
<tr>
<th>Not at all influential</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely influential</th>
</tr>
</thead>
</table>

2. How do you think Suspicious_Blue82 would react to new people in her daily life?

She would be:

<table>
<thead>
<tr>
<th>Very unfriendly</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very friendly</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very rude</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very courteous</td>
</tr>
<tr>
<td>Very unkind</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very kind</td>
</tr>
<tr>
<td>Very insincere</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very sincere</td>
</tr>
<tr>
<td>Very uncaring</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very caring</td>
</tr>
<tr>
<td>Very careless</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very careful</td>
</tr>
</tbody>
</table>

3. How do you think Suspicious_Blue82 would feel about starting a relationship with a new person?

She would be:

<table>
<thead>
<tr>
<th>Very insecure</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very secure</th>
</tr>
</thead>
<tbody>
<tr>
<td>Very uncomfortable</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very comfortable</td>
</tr>
<tr>
<td>Very unsafe</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very safe</td>
</tr>
<tr>
<td>Very indifferent</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very excited</td>
</tr>
<tr>
<td>Very pessimistic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very optimistic</td>
</tr>
<tr>
<td>Very unenthusiastic</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
<td>9</td>
<td>Very enthusiastic</td>
</tr>
</tbody>
</table>

4. How confident are you of your general ability to predict how Suspicious_Blue82 will behave in a similar situation in the future?

<table>
<thead>
<tr>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely confident</th>
</tr>
</thead>
</table>
5. How confident are you of your general ability to predict the values she holds?

<table>
<thead>
<tr>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely confident</th>
</tr>
</thead>
</table>

6. How confident are you of your general ability to predict her attitudes?

<table>
<thead>
<tr>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely confident</th>
</tr>
</thead>
</table>

7. How confident are you of your general ability to predict her feelings or emotions?

<table>
<thead>
<tr>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely confident</th>
</tr>
</thead>
</table>

8. How confident are you of how well you know her?

<table>
<thead>
<tr>
<th>Not at all confident</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely confident</th>
</tr>
</thead>
</table>

9. How likely would you be to initiate a conversation with Suspicious_Blue82?

<table>
<thead>
<tr>
<th>Very unlikely</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Very likely</th>
</tr>
</thead>
</table>

10. How distracting was it to have to memorize the eight-digit number?

<table>
<thead>
<tr>
<th>Not at all distracting</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>Extremely distracting</th>
</tr>
</thead>
</table>
LIST OF REFERENCES


BIOGRAPHICAL SKETCH

Hokyung Kim was born on March 3, 1976, in Seoul City, Korea. She was awarded the University Scholarship for 4 consecutive years and she assisted Dr. Kim in his research projects as an official correspondence for 2 years from the Konkuk University. In August of 1998, she received a Bachelor of Science in Mass Communication (with Honors) from the Konkuk University. Miss. Kim began her graduate studies in summer 1999 and she was awarded the Graduate School Scholarship for 2 consecutive years from the Yonsei University. In addition, she supported as an undergraduate and graduate assistant for Dr. Kang and she was responsible for all duties in 2 undergraduate mass communication sections in the spring and fall terms of 2000. In July of 2001, Miss. Kim earned a Master of Mass Communication degree and she entered the University of Florida in August of 2001. After continuing her education at the University of Florida, she expects to receive her Master of Arts in Mass Communication in December 2005. After the completion of her master’s work, she will continue to pursue a career in mass communication, with specific interests in impression management, person perception in computer-mediated communication.