Nice to Meet You:

Deception in Initial Interactions

Honors Thesis

Presented to the College of Agriculture and Life Sciences, Communication Department of Cornell University

in Partial Fulfillment of the Requirements for the Research Honors Program

By

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May 2007

Professor Jeffrey Hancock
Acknowledgements

I’d like to thank Professor Jeffrey Hancock for his tremendous amount of guidance, support and insight in both the writing of this paper, and the development and execution of this study over the past three years. There is certainly no way this paper would have come to fruition without him. My research team and coders have been enormously helpful, and I really appreciate all of their hard work: Andrew Beckwith, Tucker Barrett, Jeff Nevins, Laurel Burns, Sarah Colby, Samuel Warren, Robin Kornet, Candice Crystal, Erika Nolting, Stacey Katz and Jenna Odett. Finally, thank you to the Cornell Presidential Research Scholars program, for your gracious funding and support of my research.
Abstract

In this paper we describe an experiment comparing the production of lies in first encounters that took place face-to-face (FTF) or in computer-mediated communication (CMC: instant-messaging). Participants reviewed their conversations and retrospectively identified deceptive statements. While the overall incidence of lying did not differ across conditions, the rate of deception per information exchanged was significantly higher in CMC. The characteristics of the lies suggest that the content and severity of lies do not vary substantially across media.
Nice to Meet You: Deception in Initial Interactions

Deception is everywhere. From the headline on today’s newspaper, to the spam that floods internet users’ email accounts, elements of mistruth abound. Lying behavior often occurs in interpersonal communications. Research has found that people lie to each other, on average, 1.6 times per day (Hancock, Thom-Santelli & Ritchie, 2004). Other experiments have suggested that the trend is even more pervasive, indicating that at least one-third of participants’ social interactions involve some deception (DePaulo, Kashy, Kirkendol, Wyer & Epstein, 1996).

Lying is particularly common when people first meet. Research suggests that we lie to strangers more frequently than we lie to those with whom we are familiar. One study observed that participants who were engaged in initial interactions not only lied 60% of the time, but lied an average of 2.92 times (Feldman, Forrest & Happ, 2002). If test subjects lie two-three times in initial interactions of about 10 minutes, and only once or twice in an entire day, then a case may be made that people are more inclined to lie to others in a first conversation than after they get to know those people. Lies told during initial encounters are instances of spontaneous deception.

In the age of MySpace.com, Facebook and Friendster, we often meet new people for the first time online, which means that this spontaneous deception can now take place over several different media. How will these new communication environments affect deception in first exchanges?
Self-Presentation and Deception

One way to examine the impact of medium on deceptive communication is through the lens of self-presentation. When individuals lie to one another, it is frequently with a self-presentational goal like competence or likeability in mind. People often want to appear a certain way to others, whether or not that persona is actually in line with their natural behavior. Goffman (1959) conceptualized self-presentation as the creative performance of an actor’s behavior, carefully designed to take into account the specific context and target audience. More modern literature has broadly defined self-presentation as people’s attempts to control the impressions that are formed of them (Schlenker & Pontari, 2000). Self-presentation, then, is a process done in pursuit of some psychological reward rather than any material gain (DePaulo et al., 1996).

Self-presentation is an important overall motivation for why people lie. For example, Feldman et al. (2002) observed dyads interacting together for the first time. Partners were placed in separate rooms where they were told that they would be interacting for a period of 10 minutes. Participants were randomly assigned to the conditions of self-presenter and partner, and self-presenters were each assigned one of three self-presentation conditions: likable, competent or control. In the likable condition, participants were told that researchers were interested in the way people behave when they meet someone who is likable; in the competent condition, researchers told participants they were studying participants’ behavior with someone who is competent. Subjects in the control condition were given instructions to behave as they normally would in a first interaction. Self-presentational goals played a role
in deception: participants who were given goals of competence or ingratiation were significantly more deceptive than participants without a self-presentational goal.

**Self-Presentation and Deception Online**

Given the relationship between self-presentation goals and deception, how will new communication environments affect the relationship between self-presentation and deception? There are at least three dimensions of deception that could be affected by technology: frequency, magnitude and content.

**Frequency.** The first question is whether the number of lies told in an initial interaction increases or decreases when conducted online? The Hyperpersonal model (Walther, 1996), which describes relational patterns in mediated communication, argues that in mediated communication between unacquainted participants people engage in **selective self-presentation**. In selective self-presentation, participants take advantage of the reduced cues available in Computer Mediated Communication (CMC) to choose which characteristics of themselves they want to convey. Actors strategically structure conversation items around forming a particular impression.

Selective self-presentation predicts that participants will take advantage of the diminished social information conveyed in text-based communication (e.g., no visual information) to enhance positive aspects of their self (e.g., wit) and temper negative aspects (e.g., waistline). If this is the case, then we should expect unacquainted CMC participants to engage in even more deception in service to self-presentation than similar participants interacting face-to-face. For example, qualities such as gender and age can be manipulated far more easily in digital contexts than in person (Donath, 1998). Given that information is exchanged more slowly in CMC contexts because it
is typed rather than spoken (Clark & Brennan, 1991), it may be the case that more lies are told per amount of information (e.g., fewer lies per number of words exchanged).

On the other hand, early research on mediated communication argued that because mediated channels provided less “social presence” and were less “rich” than face-to-face contexts, they would be ill suited for the cognitively complex interactions that are necessary to form a relationship (Short, Williams & Christie, 1976). The impersonal effects might diminish the desire to form a good impression, thus reducing inclination toward deception (Kiesler, Siegel & McGuire, 1984; Siegel, Dubrovsky, Kiesler & McGuire, 1986). If CMC minimizes the drive to create false impressions then the overall frequency of lying may be decreased, or the rate at which lies are told may be decreased.

**Magnitude.** The second question of interest is whether people will attempt bigger lies online. Some lies are small: “I do not like the color blue.” Other lies are large: “Though I may look like a man, I am actually a woman.” In general, serious lies are not a major component of first interactions; they are frequently of great cognitive and emotional significance and reserved for those with whom the person has a close relationship (DePaulo et al., 1996; DePaulo, Ansfield, Kirkendol & Boden, 2004). A study of ‘serious lies’ found that participants told their most severe lies for the purposes of getting what they wanted, to avoid punishment, to protect themselves from confrontation, to appear to be the type of person they’d like to be, to protect others or to hurt others (DePaulo et al., 2004). Will we find these lies more online, when users can hide behind their computer screens?
In fact, some research makes the argument that we might be more truthful, and tell deeper truths, in CMC than in FTF because of the “passing stranger effect” (Rubin, 1975) and visual anonymity (Joinson, 2001; Ellison, Heino and Gibbs 2006). The “passing stranger effect” not only suggests that participants will be more inclined to tell the truth in an anonymous environment; it argues that people will share much more intimate, personal information with strangers, comforted by the idea that they will never again encounter that person. If the phenomenon translates to the internet, we should see a reduced frequency of deception in mediated communication (Rubin, 1975). These properties might make CMC an environment in which participants feel comfortable being candid.

The “passing stranger effect” serves to make predictions regarding the magnitude of truths communicated online – the physical and emotional distance combines to make for more honest and frank communications than people would convey in FTF environments. The media richness theory (Daft & Lengel, 1986) helps us to make similar predictions about how the properties of the medium will alter the magnitude of lies. The theory says that users will choose rich media for more equivocal communication activities because feedback, language variety, the number of cues and personalization are all important when complexity is an issue. The media richness theory draws on the ability for message personalization and the natural language properties of FTF in arguing that it is a richer medium, and will therefore be used for more equivocal communications. As deception is considered highly equivocal, these attributes should assist in the performance of serious lies, as well.
Taken together, these theories suggest that lies told in CMC will be of lesser magnitude than those told in Face-to-Face (interactions). However, upon considering the recent attention in the media regarding sexual predators and identity theft online, we might also expect that lies in CMC would be more extreme and exaggerated than in FTF interactions. Phishing scams, for example, direct users to fraudulent websites and lead to direct losses of $1.2 Billion for U.S. banks and card issuers in 2003 (Dhamija, Tygar & Hearst, 2006). The question in the present study is whether these types of large, harmful lies observed in the context of commerce will also be observed in more intimate interpersonal situations, or whether the online context will actually reduce the magnitude of lies by creating a psychological environment that promotes honest self-disclosure.

Content. Lastly, people lie for different reasons. For example, when President Clinton first admitted his extramarital affair with Monica Lewinsky, his rationale for having previously withheld the truth was “a desire to protect [himself] from the embarrassment of [his] own conduct.” Clinton used deception in this instance to appear more positively to the public, and to avoid disapproval; these were Clinton’s self-presentational goals (Vrij, 8). Will the particular self-presentational goals participants try to accomplish vary with medium?

Jones and Pittman (1982) identified five strategies that accomplish various self-presentational goals: ingratiation, self-promotion, exemplification, intimidation, and supplication (see Table 1). A goal of ingratiation is accomplished when a person makes his conversational partner like him. Self-promotion is a technique implemented when one person drops particular conversation items about himself into
conversation, in the hopes of appearing impressive. *Exemplification* is the self-presentational goal to describe the situation when one wants to be perceived as a role-model, or as morally virtuous (Gilbert & Jones, 1986). *Intimidation* is the strategy for instilling fear in another. *Supplication* occurs when one conversational partner wants to appear helpless (Basset, Cate & Dabbs, 2002). Depending on the situation, different strategies may be employed. For example, self-promotion might be a natural choice for an interview setting. Intimidation could be a logical technique for law enforcement officials.

How might the CMC environment affect self-presentation goals and the strategies that are employed to achieve them? Generally, people attempt to portray themselves in a favorable light when first meeting an audience of strangers (Vohs, Baumeister, Ciarocco, 2005). For that reason, we will consider the three self-presentational strategies that rely on the actor gaining a more positive image in the eyes of others (Golder & Donath, 2004), ingratiation, self-promotion and exemplification.

Complimentary other-enhancement, or flattery, is one method for accomplishing *ingratiation*. To highlight the positives in another is to make them feel good about themselves and their interaction with the ingratior (Jones & Jones, 1964). Studies have shown that ingratiators will try to minimize the difference between their own personal opinions and the stated opinions of another (Jones, Gergen & Jones, 1963). Previous research has found that the heightened ability to manage impressions in CMC contexts may lead to additional ingratiation (O’Sullivan, 2000).
There are also nonverbal approaches to accomplishing ingratiation. For example, false smiles – smiles not accompanied by the action of the orbicularis oculi – are deceptive attempts to convince another person that a positive emotion is felt, when in fact, it is not (Ekman, Davidson & Friesen, 1990). Similarly, researchers have found that when participants are given a goal to ingratiate, they nod, smile and gesture to a greater extent than participants who are given a goal to avoid approval (Rosenfeld, 1966a; Rosenfeld, 1966b). Given that nonverbal channels are restricted in CMC, nonverbal approaches to ingratiation should be reduced in CMC relative to FTF.

The concept of “automatic egotism” suggests that people will self-promote as a natural instinct when engaging in self-presentation (Paulhus, Graf & Van Selst, 1989; Paulhus & Levitt, 1987). Self-promotion may be more easily accomplished through informationally impoverished channels (Fiore & Donath, 2004). For instance, a study of online dating found that qualities of physical attractiveness were the ones most important to male participants; as a consequence, women tended to lie more about their physical appearance to come across as more physically attractive (Hancock, Toma, & Ellison, 2007). In this example, we see that nonverbal approaches to self-promotion, like physique and youth, are more easily manipulated in CMC.

Additionally, CMC facilitates verbal self-promotion. Another study of online dating showed that participants took great care in word choice and went through several drafts of messages before sending them in an attempt to appear to be a more perfect version of themselves (Ellison et al., 2006). This ability to selectively self-
present in online media, combined with the natural desire to do so implicated by automatic egotism, suggests that self-promotion would occur more frequently in CMC than in FTF.

Exemplification can be accomplished a few different ways. Research has shown that some ways to do this include presenting oneself as morally virtuous, invariably honest, or as a pragmatist who is responsive to situational demands (Gilbert & Jones, 1986). Overwhelmingly, the approaches to exemplification require verbal communication (Baumeister, Stillwell & Heatherton, 1994; Gilbert & Jones, 1986; Olson, Hafer & Tayler, 2001). Because nonverbal communication does not play a significant role in the self-presentation of exemplification, we do not expect a major change in frequency across media, however there may be a small change due to the ability to edit verbal communication in CMC.

The Present Study

To examine these predictions, we replicated a recent study by Feldman et al. (2002), in which they examined the number of lies produced in initial interactions. Participants in the Feldman were placed in dyads and covertly videotaped. One member of each dyad was given a self-presentation goal of likeability, competence or simply to get to know their partner (control condition). Afterwards, participants used a retroactive lie identification technique to identify instances of deception; subjects viewed a video of their conversation and pointed out times when they had lied. Feldman et al. observed that participants produced approximately 2 lies on average in first encounters, and that participants with self-presentational goals of competence or likeability lied more frequently than participants without a self-presentational goal.
In the present study, we adapted the Feldman et al.'s procedure to compare overall lying rates and characteristics across CMC and FTF. This procedure involved priming half of the participants with the goal of ingratiation. One participant in these dyads was given the instructions to try to get their partner to like them. Feldman et al. determined that participants lie more when given a self-presentational goal. Individuals will likely have self-presentational goals during first interactions, and those goals usually take the form of self-promotion, ingratiation, and exemplification (Golder & Donath, 2004). These self-presentational goals may affect the magnitude of the lies told. This study is an attempt to understand how self-presentational goals affect behavior across media.

**Methods**

**Participants**

Participants (n = 162, median age = 20) were paired into same-sex dyads (male = 36, female = 45). They were recruited from undergraduate communication courses at an Ivy League university. Participants were unacquainted with each other, and were recruited for a “communication study.” For their participation, both the self-presenters and the partners received extra credit in their lower-level communications classes.

**Procedure**

Participants were given instructions to meet in a specific area of an academic building. Before they were brought inside the laboratory, they were asked if they knew any of the other participants. Those subjects who knew each other were placed
in different dyads to ensure that every conversation in the study was an initial interaction.

Written instructions informed participants that the purpose of the study was to examine how individuals behave when they meet someone for the first time. Dyads were randomly assigned to the FTF or CMC conditions. FTF participants were given the directions, “we are interested in how people talk and behave when they meet someone new,” making no reference to medium. Instructions for CMC participants read, “we are interested in how people talk and behave when they meet someone new online.”

Participants were randomly assigned to the self-presenter and partner conditions. The self-presentational goal (likable or control) was manipulated in the written instructions to the self-presenter (see Appendix A and B) and reiterated in the verbal instructions that each participant received. Participants assigned to the partner condition were told, “This activity will be relatively simple; all you have to do is behave like you normally would when first meeting someone online, getting to know each other as well as possible.” For self-presenters this sentence was followed by another which said, “However, we want you to try and get your partner to like you.”

After each participant had read through the instructions and granted informed consent (see Appendix C), they were given a verbal briefing. In the likable condition, the self-presenters were told again that it was their goal to make their partners like them; when they felt that they had gotten to know their partners as best they could, and that they had successfully made their partner like them, they were done. Participants in the goal condition were given instructions to “not let their partners
know they were trying to appear likeable.” In the control condition, both partners were told that the purpose of the study was to observe behavior when meeting someone new, and that their goal was to get to know their partners as well as possible.

Due to the higher rate of exchange in FTF communications, partners in the CMC condition were told that achieving their goal “usually took about 30 minutes.” Participants in the FTF condition were told that the conversations usually took about 10 minutes. Dyads signaled when they felt they were finished meeting their partner. The average duration of FTF interactions was 12:06 minutes, while the average duration in CMC was 31:59. For this reason, the number of words exchanged was also measured so that a rate comparison could be made.

Dyads randomly assigned to the FTF condition \((n=41)\) interacted in the same room. Participants were told that their interaction would be recorded. A video camera was located behind a 1-way mirror and captured both participants. Subjects were aware that they were being audio-taped but unaware that they were being videotaped. Dyads assigned to the CMC condition \((n = 40)\) were lead to separate rooms that contained a personal computer. Participants interacted via AOL’s instant messaging software AIM using anonymous accounts set up by the experimenters.

After the conversation, FTF participants were lead to separate rooms. There, they were asked to review the video of the interaction and identify any instances in which they were less than honest (see Appendix D). In the CMC condition, participants reviewed their transcripts with the same instructions. Participants identified lies and wrote down what might have been a more truthful statement.
Researchers provided examples of lies, such as saying a subject had “received an A on a test when in fact they had received a C.”

Some examples of lies told in this study include one instance in which a participant told his partner, “My views are moderate,” when the participant actually believes that his “views are very conservative.” Another participant said that she “laughed at the thought of the electrified ferrets,” but wrote in the truth column, “I do not find his ferrets comment funny.”

Coding Scheme

Each lie instance was coded following Feldman et al.’s coding scheme (based on DePaulo et al. (1996). Lies were coded for their type (outright, exaggerated, subtle) and for their referent (was the lie about the self, the partner, or an entity outside of the interaction). For further description of the type and referent classifications, see Appendix E. Each lie was coded by two raters. Reliability between the raters for the coding was satisfactory ($\kappa = .72$).

Lies were coded for their demonstrated self-presentational goals (ingratiation, self-promotion and exemplification), irrespective of the subjects’ goal assignment (likable or control). The coding scheme was developed from the definitions described by Jones and Pittman (1982). Some instances of ingratiation lies were those in which an individual gave his or her conversational partner a disingenuous compliment; when an individual pretended to find something funny; or when an individual acted as if they could relate to their partner. One example of ingratiation that includes deception was when a participant told his partner that “he loved his pants,” when in fact he found his pants to be unattractive. Another ingratiation-
oriented lie would be when one participant pretended to identify with a “party-hard” mentality, when in fact she did not enjoy “drinking or partying at all.” For a more in-depth description of the self-presentation coding scheme, see Appendix F.

Lies were also coded for severity on a Likert scale (1-10). An example of a low-magnitude lie was when one participant said that his “closest neighbor is like a mile away,” when the truth was that his “grandparents live next door, but other neighbors are at least ¼ - ½ a mile away.” A more severe lie was when one participant described an experience as “not a bad way to spend a year” when she really felt that “part of it was the worst couple months of [her] life.”

Results

Frequency

Overall, 85.4% of the participants lied at least once during their conversation, producing on average 2.56 lies per interaction, a rate of lying that is consistent with Feldman et al’s (2002) original finding. Participants in the FTF condition produced slightly more lies than CMC participants, although this difference was not significant, $F(1,161) = 1.68, p = .19$.

FTF participants, however, exchanged significantly more information ($M = 1090.30$ words) than CMC participants ($M = 649.17$ words), $F(1,158) = 57.01, p < .001$. To control for this difference in information exchange, we calculated the rate of lies per 1000 words (see Table 2). Consistent with our predictions, participants in the CMC condition produced 3.95 lies every thousand words, significantly more than the rate of 2.79 in the FTF condition, $F(1,161) = 5.98, p = .016$.

Magnitude
There was no overall difference in the severity of lies told based on medium. FTF participants exchanged slightly more severe lies ($M = 1.97$ on a 1-10 scale) than CMC participants ($M = 1.93$), $F(1,372) = .106$, $p < .001$, but the difference was not significant (see Table 3). Similarly, there was no overall effect of likeability on any of the dimensions measured. Participants in the likable condition showed no significant difference when lying in FTF ($M = 1.97$) than in CMC ($M = 1.86$), $F(1,200) = .85$, $p < .001$ (see Table 3).

**Content**

Coders classified lies as an “outright lie” if it was a complete falsehood. One example of an outright lie was when one participant identified as his lie, “I said that his visiting dairy farms sounded like fun,” and his more truthful statement as, “That sounds awful and that is a horrible way to spend break.” Coders classified a lie as an exaggeration if it was a case “in which liars overstate the facts, or convey an impression that exceeds the truth.” An instance of exaggeration occurred when one participant described his academic performance in a particular class as “not doing so well,” and then identified as a more truthful statement, “I’m doing horribly in the class.” A subtle lie was one that is used to evade or omit relevant details; behavioral and white lies were also included in this category. A subtle lie might be told for simplicity purposes, like when one participant identified his lie as having “gotten two hours of sleep,” and his truth as, “I was always sleep deprived; I don’t remember how many hours of sleep I got.”

Overall, more outright lies were told than exaggerated or subtle, $F(2,322) = 2.98$, $p = .05$. Contrary to expectations, however, lies in CMC were not more outright
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(M = .74, SE = .13) or exaggerated (M = .74, SE = .13) than those observed FTF, $F(2,322) < 1$ (see Table 4).

In general, participants lied about themselves more than about their partner or entities outside the interaction, $F(2,322) = 29.57, p < .001$. An interaction between the referent of the lie and medium revealed that FTF participants were more likely to lie about entities outside the interaction than CMC participants, $F(2,322) = 2.65, p = .074$, suggesting that, as predicted by the Hyperpersonal model, CMC participants lied relatively more often about themselves (see Table 4). One example of a self-referential lie was when one participant identified as his lie, “My views are moderate,” and his truth as, “My views are very conservative.” A partner-oriented lie would be when one participant said, “I said that living with 15 girls sounded cool,” and then identified a more truthful statement as, “I personally would never want to live with 15 girls.” A lie whose referent was an outside entity occurred when the lie read, “Talking about goldfish, she says they ate each other. I agree.” but the more truthful column read, “My goldfish never ate each other.”

Participants in FTF used self-presentational strategies differently when lying than participants in CMC, with a marginally significant difference in the pattern of self-presentation strategies across conditions, $X^2(4) = 7.84, p = .09$. The biggest difference was in the use of self-promotion across media. 84 self-promotion lies were told in FTF, while 67 were told in CMC. With the other self-presentational goals, the difference was smaller. Of 151 ingratiation lies, 78 were told FTF and 73 were told in CMC, proportionally the same amount based on the number of lies told in each condition. Exemplification and supplication did not make up a large portion of lies
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in either condition. While there were 6 instances of supplication in FTF, there was only 1 in CMC. FTF participants used exemplification 3 times, as compared to 7 in CMC (see Table 5).

Discussion

The present study confirms that deception is a common part of self-presentations during first encounters. Over 80% of our participants lied during their conversation with a partner, and on average they lied more than twice. The frequency of deception observed is higher than the one observed in the comparable Feldman et al. (1996) study, in which about 60% of the participants lied. Additionally, the study is consistent with previous findings that lying is a common part of everyday life. Where DePaulo et al. (1996) found that about a third of all interactions include some deception and Hancock et al. (2004) found that rate to be about 26%, this study confirmed that lying behavior starts the very first time people meet.

Somewhat surprisingly, the same overall incidence of lying was observed during FTF and CMC conversations. Both conditions featured about two lies per conversation, a frequency consistent with the one observed in Feldman et al. (1996), Consistent with the Hyperpersonal model’s process of selective self-presentation, however, the rate of lies per information exchanged was higher in CMC than in FTF. CMC participants produced almost four lies every thousand words, while FTF participants produced less than three. Taken together, these data suggest that a higher proportion of the information exchanged in CMC conversations was deceptive.

Selective self-presentation suggests that the rate of deception in CMC contexts will be higher because the medium provides only textual information. Participants
can choose positive and desirable traits to portray, and focus the energy normally allocated to physical cues in FTF toward more carefully constructing the message in terms of language selection, message construction and impression management (Hancock & Dunham, 2001; Walther, 1996, 1997). Moreover, the Hyperpersonal model argues that all of these processes make impressions formed in CMC more intense than the ones formed in FTF, with users making overattributions regarding the personality traits reflected in these heavily crafted messages. When compounded by the natural inclination to make a good first impression, these qualities should lead to what we observed, namely a higher rate of deception in CMC than in FTF.

The cues-filtered out (CFO) perspective, in contrast, argues that CMC users should lie less (see Culnan & Markus, 1987). The absence of information in CMC should make for a depersonalized impression, with a decreased awareness of others and presumably less concern with impressing their partner. The CFO perspective stands in contrast with our findings; we observed a rate of deception nearly twice as high in CMC as in FTF. The reasoning in CFO that users will not try to foster positive impressions appears to not be the case in the context of lying behavior. Rather, participants used self-presentational strategies about equally across the two media (see “Content” section for more discussion of self-presentational goals). A possible reason that the predictions of CFO did not hold true in the present study may be that the test population was particularly technologically savvy. All participants were undergraduates at an Ivy League university where use of AOL Instant Messenger and Facebook.com is prevalent. Subjects were already accustomed to meeting in online media.
Magnitude

Empirical research has suggested that exposure to severe lies leads the confederate to like his partner less (Tyler, Feldman & Reichert, 2006). Tyler et al. (2006) conducted two experiments. In the first, dyads were covertly videotaped and one partner retroactively identified lies they had told in the conversation. Likeability was inversely correlated with lie frequency. In the second, participants viewed a video of a confederate telling one or four exaggerated or minimized lies and then evaluated the confederate. Afterward, participants and confederates engaged in conversation. Viewing four exaggerated lies made participants like confederates less than having witnessed one exaggerated lie, or one or four minimal lies. The Tyler et al. (2006) findings, combined with empirical research suggesting that individuals like to present themselves positively in first interactions (Vohs et al., 2005), may explain why participants, in general, did not tell very severe lies. On a scale of 1-10, the average lie rating was below two in both CMC and FTF.

There was no difference in severity across media. The consistency may again be a product of the drive to make a positive self-presentation in first interactions. While selective self-presentation suggests that CMC will enable participants to successfully tell more severe or exaggerated lies, research has found that exposure to exaggerated lies not only diminishes likeability, but trust, in a confederate (Tyler et al., 2006). Given the heightened dependence on trust in CMC, participants may have been eager to appear believable in service to positive self-presentation.

Again, such a rationale seems to contradict the arguments of the CFO model. Where the CFO model would say that people will lie less because they care less, and
the minimal severity of lies is an outgrowth of that apathy, the Hyperpersonal model would say it is precisely because participants care that the severity of lies is so low. In this case, we again defer to the increased rate of deception in CMC to err on the side of the Hyperpersonal model. Participants lied more times as a function of words exchanged, but told minimally severe lies, to slightly doctor and improve their self-presentation.

Content

The lies told in the CMC conversations were not more outright or exaggerated than those told in FTF, as might have been expected from popular reports of sexual predation and identity theft online. Obviously, the experimental and laboratory constraints in the present study make it difficult to generalize to these more extreme forms of deception. However, the present study suggests that just because we are freer to lie in text-based interactions does not necessarily mean we do. Instead, the data support the Hyperpersonal model’s view of enhancing self-presentation by taking advantage of the medium to present oneself in a better light. The Hyperpersonal model predicts that participants will focus on positive cues that can be used in CMC like witty rapport, etc., which is consistent with the finding that the rate of outright lies was no higher in CMC than in FTF.

Also consistent with selective self-presentation, CMC participants tended to lie less about entities outside of the interaction, such as events and other people, than FTF participants. That is, lies in CMC tended to focus more on the liar and the partner than in FTF, perhaps because the reduced social information (e.g., visual cues) allowed for more elasticity with the truth than in FTF interactions. CMC interactions
may require more self-description in initial interactions due to the reduced cues available. We hypothesized that there would be more lies about the self in CMC because selective self-presentation suggests that people will carefully construct and exaggerate certain elements of the self during that description process.

Overall, 84% of the lies identified could be attributed to a self-presentational goal of ingratiation, self-promotion or exemplification. Unlike previous findings, however, we did not observe that participants lie more frequently in service to self-promotion than to ingratiation. Rather, the same overall incidence of incidence of lies coded for these two self-presentational goals was observed.

Consistent with our hypothesis, we observed a slightly higher rate of ingratiation in FTF than in CMC. One reason for this hypothesis was empirical research on the importance of nonverbal communication in the self-presentation of ingratiation. Individuals who ingratiate tend to engage in a large amount of reactive behavior that would be impossible in CMC, including nodding, smiling and gesturing (Godfrey et al., 1986; Rosenfield, 1966a, 1966b).

While we had predicted that there would be a higher rate of self-promotion in CMC than in FTF, there was no significant difference in the frequency of self-promotion across media. Self-promoters tend to engage in pro-active behavior, which would be facilitated by the ability to selectively pick the elements of your personality to portray, as suggested by selective self-presentation. However the lies that were told in service to self-promotion were very similar across media. In CMC, one participant identified as a lie, “I got a B,” and as her truth, “I actually got a B-.” In FTF a similar self-promotion-oriented lie occurred when one participant said of his
academic performance, “I’m not doing so well,” and then identified his more truthful statement, “I’m doing horribly in the class.” Conceptually, the two lies are extremely similar.

Exemplification made up a very small portion of the overall lie pool, but there was no significant difference in the rate of deception in FTF and CMC. The minimal usage of exemplification may have been the product of the laboratory setting and test subjects, and not a very generalizable finding. Given the circumstance of the study – participants of roughly the same rank and station in terms of age and class level meeting for the first time in an experiment for which they were receiving class credit – it seems unlikely that exemplification would play a large role. There was no apparent motivation for appearing morally superior in this study.

Conclusion

Based on our findings, it seems to be the case that people are very eager to shape the impressions formed of them in a first conversation. Rather than crafting an entirely new persona, however, they will tell minor lies intended to either self-promote or make themselves appear more likable. Interestingly, despite stories of rampant and severe internet deception, the lies told in first interactions in CMC are likely to be very similar to the ones told in FTF. Though there is a slightly higher rate of deception in CMC, the qualities of those lies – in either content or severity – will not be any different. Apparently, a lie is a lie is a lie.
References


**Table 1**

*Self-Presentational Strategies*

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ingratiation</strong></td>
<td><strong>Definition</strong>: The self-presentation of likeability</td>
</tr>
<tr>
<td></td>
<td><strong>Achieved when</strong> individual is perceived has presented an attractive ‘face’ to another</td>
</tr>
<tr>
<td></td>
<td>(Basset, Cate &amp; Dabbs, 2002).</td>
</tr>
<tr>
<td></td>
<td><strong>Example</strong>: “I love your shirt!”</td>
</tr>
<tr>
<td><strong>Self-Promotion</strong></td>
<td><strong>Definition</strong>: The self-presentation of competence and skill</td>
</tr>
<tr>
<td></td>
<td><strong>Achieved when</strong> individual is perceived as intelligent, adept (Basset, Cate &amp; Dabbs, 2002).</td>
</tr>
</tbody>
</table>
**Exemplification**

**Definition**: The self-presentation of moral character

Achieved when individual is perceived as honest, pious, self-abnegating, etc. Exemplifier seeks the attributions of integrity and moral worth (Basset, Cate & Dabbs, 2002; Gilbert & Jones, 1986).

**Example**: “When I proved Fermat’s last theorem last week, it really made my day.”

**Supplication**

**Definition**: The self-presentation of helplessness

Achieved when one is perceived as dependent and in need of aid (Basset, Cate & Dabbs, 2002; Gilbert & Jones, 1986).

**Example**: “Last week when I spend the day volunteering at a soup kitchen, I met the most darling little boy.”
<table>
<thead>
<tr>
<th>Intimidation</th>
</tr>
</thead>
</table>

**Definition:** The self-presentation of threatening qualities

**Achieved when** one is perceived as dangerous and has the ability to coerce others (Basset, Cate & Dabbs, 2002).

**Example:** “I can make your life very difficult.”

Cate & Dabbs, 2002).

**Example:** “I’ve never changed a lightbulb before. Can you help?”
Table 2

Rates of Lying by Medium

<table>
<thead>
<tr>
<th></th>
<th>FtF</th>
<th></th>
<th>CMC</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Total Lies</td>
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<td>.27</td>
<td>2.31</td>
<td>.27</td>
</tr>
<tr>
<td>Lies per 1000 Words</td>
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<td>.34</td>
<td>3.95</td>
<td>.34</td>
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</table>
Table 3

Severity of Lie by Medium

<table>
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<th>CMC</th>
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</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SE</td>
</tr>
<tr>
<td>Severity of Lie,</td>
<td>1.96</td>
<td>.07</td>
</tr>
<tr>
<td>All Participants (1-10)</td>
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<td></td>
</tr>
<tr>
<td>Severity of Lie,</td>
<td>1.97</td>
<td>.09</td>
</tr>
<tr>
<td>“Likeable” Participants</td>
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</tr>
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Table 4

*Types of Lies and Referents by Medium*

<table>
<thead>
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<th>CMC</th>
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<tr>
<td></td>
<td>M</td>
<td>SE</td>
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<td>SE</td>
</tr>
<tr>
<td><strong>Type</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>Outright</td>
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<td>.75</td>
<td>.13</td>
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<tr>
<td>Exaggerated</td>
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<td>.49</td>
<td>.11</td>
</tr>
<tr>
<td>Subtle</td>
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<td>.09</td>
<td>.41</td>
<td>.09</td>
</tr>
<tr>
<td><strong>Referent</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self</td>
<td>1.06</td>
<td>.16</td>
<td>1.06</td>
<td>.15</td>
</tr>
<tr>
<td>Partner</td>
<td>.13</td>
<td>.08</td>
<td>.17</td>
<td>.08</td>
</tr>
<tr>
<td>Other Entity</td>
<td>.79</td>
<td>.11</td>
<td>.42</td>
<td>.11</td>
</tr>
</tbody>
</table>

Note: The sum of the means may not sum to condition mean as not all lies could be Coded for Type and Referent
Table 5

*Self-presentational Strategies*

<table>
<thead>
<tr>
<th>Self-Presentational Strategy</th>
<th>Setting</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FTF</td>
<td>CMC</td>
</tr>
<tr>
<td>Ingratiation</td>
<td>78</td>
<td>73</td>
</tr>
<tr>
<td>Self-Promotion</td>
<td>84</td>
<td>67</td>
</tr>
<tr>
<td>Supplication</td>
<td>6</td>
<td>1</td>
</tr>
<tr>
<td>Exemplification</td>
<td>3</td>
<td>7</td>
</tr>
<tr>
<td>Miscellaneous</td>
<td>33</td>
<td>18</td>
</tr>
<tr>
<td>Total</td>
<td>204</td>
<td>166</td>
</tr>
</tbody>
</table>
Figure 1. Self-Presentational Strategies
Deception in Initial Interactions

**Self-Presentation Strategies**
What do you think of me?

- **Self Promotion**
  - Do you think I'm great?
  - "I'm kind of a big deal. People know me.

- **Ingratiation**
  - Can I make you like me?
  - I think you're extremely cool.

- **Intimidation**
  - You wouldn't like me when I'm angry.
  - Be afraid, be very afraid.

- **Exemplification**
  - Will you copy me?
  - "I joined Jason Craig and lost 30 pounds.

- **Supplication**
  - Can I please you?
  - "I think that's a shock, sorry you just told me that thing."
Appendix A

A – CMC - C

Initial Interaction Study

Communication Department, Cornell University

Today you are going to be participating in a study of interpersonal behavior during an initial interaction with a stranger. We are interested in how people talk and behave when they meet someone new online. You are going to meet someone in an online interaction, much like a conversation you would have over AOL Instant Messenger. This activity will be relatively simple; all you have to do is behave like you normally would when first meeting someone online, getting to know each other as well as possible. Generally, interaction usually takes between 25-30 minutes. It is your choice to decide when the interaction ends.
Appendix B

A – CMC - L

Initial Interaction Study

*Communication Department, Cornell University*

Today you are going to be participating in a study of interpersonal behavior during an initial interaction with a stranger. We are interested in how people talk and behave when they meet someone new online. You are going to meet someone in an online interaction, much like a conversation you would have over AOL Instant Messenger. This activity will be relatively simple; all you have to do is behave like you normally would when first meeting someone online, getting to know each other as well as possible. However, we want you to try and get your partner to *like* you. That is, your goal is to try your best to get your partner to like you during the interaction. Do not let your partner know that this your goal. Generally, the interaction takes between 25-30 minutes. It is your choice to decide when the interaction ends.
Appendix C

Consent Form for
*Examing Initial Interactions*

You are invited to participate in a research study of behavior in initial interactions. You were selected as a possible participant because you are a student in a Communication class. We ask that you read this form and ask any questions you may have before agreeing to be in the study.

**Background Information:** The purpose of this study is to look at individuals’ behavior when interacting with strangers.

**Procedures:** If you agree to be in this study, we will ask you to do something we all have to do frequently, namely meet someone you don’t know. We will ask you to meet someone either online or face-to-face and get to know one another.

**Risks and Benefits of Being in the Study:** We do not anticipate any risks for you participating in this study, other than those encountered in day-to-day life.

The direct benefits to participating are that you will get some experience and insight into how communication research is conducted.

**Compensation:** You will receive course credit for your participation in our study.

**Voluntary Nature of Participation:** Your decision whether or not to participate will not affect your current or future relations with Cornell University. If you decide to participate, you are free to withdraw at any time without affecting those relationships.

**Confidentiality:** The records of this study will be kept private. In any sort of report we might publish, we will not include any information that will make it possible to identify you. Research records will be kept in a locked file; only the researchers will have access to the records. Video recordings may be made of your conversations, but will be kept secure in our research laboratory and will only be accessible to the researchers in this study.

**Contacts and Questions:** The researcher(s) conducting this study is Prof. Jeffrey Hancock and Erica Fink. Please ask any questions you have now. If you have questions later, you may contact Prof. Hancock at jth34@cornell.edu. If you have any questions or concerns regarding your rights as a subject in this study, you may contact the University Committee on Human Subjects (UCHS) at 607-255-5138, or access their website at http://www.osp.cornell.edu/Compliance/UCHS/homepageUCHS.htm. You will be given a copy of this form for your records.

**Statement of Consent:** I have read the above information, and have received answers to any questions I asked. I consent to participate in the study.
Signature _________________________________  Date ______________________

This consent form will be kept by the researcher for at least three years beyond the end of the study and was approved by the UCHS on February 18, 2005.
Appendix D

Lie Identification Form

Directions: Please number your lies. Then, write out the lie (word-for-word not necessary), and what a more truthful statement would have been. There are additional spaces on the back.

Lie 1: ____________________________________________________________

More Truthful Statement: __________________________________________

_______________________________________________________________

Lie 2: ____________________________________________________________

More Truthful Statement: __________________________________________

_______________________________________________________________

Lie 3: ____________________________________________________________

More Truthful Statement: __________________________________________

_______________________________________________________________

Lie 4: ____________________________________________________________

More Truthful Statement: __________________________________________

_______________________________________________________________

Lie 5: ____________________________________________________________

More Truthful Statement: __________________________________________

_______________________________________________________________
Appendix E
Coding Scheme for Deception

Step 1 – Is the utterance misleading?

**INTENTIONALITY** is key here. If it was not intentional, DO NOT code it as a lie.

Was what the person said *not* what the person believed to be true?

EX1: “It’s cool that you take care of your cat while stoned.” – The participant identified this as a lie, saying that he did not understand how a person could take care of a cat while stoned.

EX2: “I got 2 hours of sleep last night.” – The participant actually got about 4 or 5 hours of sleep but felt that the specifics were unimportant as he felt sleep-deprived.

**If an individual did not know exact information, but provided specifics anyway, we classify that as misleading.**

**If, upon reading a statement, you can jump straight to the type of lie, then it’s clearly both misleading and deliberate.**

If the utterance is not misleading, then move to the next utterance.

Step 2 – Is the utterance deliberate?

Did the person mean what they said?

EX1: “I lost the course syllabus” – The individual never received the course syllabus so this statement was misleading, but not misspoken – she intended to say that she had lost the syllabus.

EX2: “This has been a pleasure” – The individual felt that the interaction was socially awkward, but intended to say that she felt it had been enjoyable speaking with her partner.

If the answer is yes to both questions 1 and 2, then you have a lie!
CODE: 0 = NOT LIE; 1 = LIE

Step 3 – Is it verbal or nonverbal?

Nonverbal lies – facial gestures, laughs (anything to convey information without the use of words)
EX1: “Laughed when I didn’t find it funny.”

If it is a NONVERBAL lie, then it is SUBTLE.

Verbal lies – All lies accomplished through the use of words.

CODE: 1= VERBAL; 2 = NONVERBAL

Step 4 – Classify the lie.

Type:

Outright Total falsehoods.
EX1: “I play basketball,” when you have never actually played basketball.
CODE = 1

Exaggerations Lies in which liars overstate the facts, or convey an impression that exceeds the truth.
EX1: “I play basketball,” in context of a discussion of varsity sports, but, in reality, you play IM basketball.
CODE = 2

Subtle Lying by evading or omitting relevant details. Also behavioral and white lies.

If a lie is told for SIMPLICITY purposes, it is SUBTLE
EX1: “I’m from New York City,” when you live 5 minutes outside of the city.
EX2: “I got two hours of sleep last night,” when you are too tired to know exactly how many hours it was, but you know that it was severe sleep-deprivation.

CODE = 3

Referent

***What’s the object of the sentence?

Heuristic: What is the referent of the lie?
Is self involved?
Which is more important?

Liar
"I am very athletic,” when he in fact has never played a sport.
CODE = 1

Target
"It was a pleasure meeting you,” when the liar actually felt it was awkward meeting the other person.
CODE = 2

Other Person
“My friend Jaime is the captain of Varsity basketball” when Jaime is not the captain of any team.
CODE = 3

Event or Object
“The scarf is green,” when in fact the scarf is brown.
CODE = 4
Appendix F

Coding Scheme for Self-Presentational Goals

(1) **Ingratiation** is defined as “the self presentation of likeability” (Jones and Pittman 1982). It is the attempt by an individual to get his/her conversational partner to like him/her, who may, consequently, portray an appealing and charismatic aura around himself/herself. Examples of ingratiation would include the following:

- When an individual gives his/her conversational partner an insincere compliment.
  
  e.g., “I love your pants”  
  *Person does not have a strong opinion about their partner’s pants.*

- When an individual laughs or giggles at a joke or comment made by his/her conversational partner makes, which they do not actually believe to be funny.

- When an individual pretends to relate to a scenario, when they really do not care or are unable to relate

  e.g., “It’s so cool that you joined a fraternity.”  
  *Person could care less that their conversational partner’s fraternity.*
  e.g., “I heard that class is supposed to be great!”  
  *Person knows nothing about class.*

- When an individual pretends to relate to his/her conversational partner’s personal philosophy, when it in fact is not one to which they subscribe.

  e.g., “Drinking and partying is cool.”  
  *Person does not drink, and thinks partying is not cool.*
  e.g., “Everyone at Cornell is smart.”  
  *Person believes that not all individuals at Cornell are smart.*

- Pretending to know something for the sake of making the other person like you.

- Pretending not to have certain information for the sake of being “cool.”

(2) **Self-promotion** is defined as “the self-presentation of competence and skill” (Jones and Pittman 1982). It is “a technique implemented when one person drops particular conversation items about himself into conversation, in the hopes of appearing impressive.”
• When an individual pretends to know information, when they are not sure or do not know the information

  e.g. “I know the fraternity you’re talking about.”
  Person does not know what fraternity their conversational partner is talking about.

• When an individual heightens his/her status

  e.g. “My high school was rated number one in the northeast.”
  School is not ranked number one in the northeast.

• When an individual portrays himself/herself as having a different social life then he/she really has.

  e.g. “I can afford to only go out once a week, because I have so much work to do.”
  Person really doesn’t like to go out and party.

• When an individual depicts a scenario as being more arduous then it actually is.

  e.g. “My economics problem set is so difficult. It takes forever, and I do it with three people”
  Person’s problem sets are not as difficult as he depicts it to be.

• Pretending to know something for the sake of knowledge

(3) **Exemplification** is defined as “the self-presentation of moral character” (Jones and Pittman 1982). When an individual wants to be thought of as a “role model” or “moral virtuous”, they will implement this self-presentational goal to describe the situation that will lead an individual to think highly of them.

• When an individual over-dramatizes his/her role in an organization that he/she participates in.

  e.g. “Every Sunday, I go help out at the soup kitchen in Binghamton, so I can’t be on the flag football team.
  Person has gone once in the past four months.

• When an individual does not tell the truth in order to appear untainted

  e.g. “I have never, and would never, cheat on a test!
  Person has cheated on a test in his/her past.”
• When an individual shields the truth with a lie that will make them seem morally superior to the alternative view of that individual.

  e.g. “I did not have sexual relations with that woman.”
  *Individual did indeed have sexual relation with “that” woman.*

(4) **Supplification** is “the self-presentation of helplessness” (Jones and Pittman 1982). It is when one a conversational partner knows the answer to a question or is capable of an activity, but compliments/flatters his/her conversational partner by asking for their assistance.

• When an individual pretends not to know a piece of information, in the hopes of having his/her conversational partner assist him/her.

  e.g. “I don’t know the Greek alphabet. What do the letters for your fraternity stand for?
  *Individual can read the Greek alphabet, and knows what the letters stand for.*

  e.g. “Do you remember what the homework assignment for our last class was?”
  *Individual recalls what the homework assignment was.*

• When an individual requests for help that requires physical labor, from his/her conversational partner.

  e.g. “Can you help me open my water bottle?”
  *Individual knows he/she is capable of opening his/her own water bottle.*

  e.g. “This window seems to be stuck, could you help me open it?
  *Individual knows he/she can open window if he/she tries hard enough.*

(5) **Intimidation** is “the self-presentation of threatening qualities” (Jones and Pittman 1982). This can be used as an approach for instilling fear and apprehension in to another individual.

• When an individual uses intimidating words in the hopes of scaring an individual

  e.g. “You stay away from my girlfriend, or else I’m going to kick you’re a$$.”
Person has no intent of actually beating up the other individual.

- When an individual uses untruthful threats in the hopes that his/her conversational partner will concede to his/her wishes

  e.g. “If you don’t pay me back, I’m going to come to your house and get you”  
  Person has no idea where the other individual lives nor does he/she have any intent of “getting” the other individual.