

ORIGINAL ARTICLE

Effects of Interpersonal Goals on Inadvertent Intrapersonal Influence in Computer-Mediated CommunicationJoseph B. Walther^{1,2}, Brandon Van Der Heide³, Stephanie Tom Tong¹, Caleb T. Carr², & Charles K. Atkin¹

1 Department of Communication, Michigan State University, East Lansing, MI 48824, USA

2 Department of Telecommunication, Information Studies and Media, Michigan State University, East Lansing, MI 48824, USA

3 School of Communication, The Ohio State University, Columbus, OH 43210, USA

This research explores a sequence of effects pertaining to the influence of relational goals on online information seeking, the use of information and arguments as relational management strategies in computer-mediated chat, and the intrapersonal attitude change resulting from these processes. Affinity versus disaffinity goals affected participants' information seeking for communicatory utility (Atkin, 1972), their conversational behaviors, and their own attitudes toward the topic and partner. People with negative relational goals used the Web to seek information for discussions more than affinity-goal participants. Individuals expressed affinity-disaffinity through arguments, agreements, and disagreements with partners' preferences, which led to changes in their own attitudes. Findings suggest renewed consideration of the interplay between mass media and interpersonal sources accessible on the Internet.

doi:10.1111/j.1468-2958.2010.01378.x

When people chat, exchange e-mails, or post comments about a topic online, how might their interpersonal goals toward another party influence what information they seek and what they express, and with what effect? When exchanging preliminary e-mails with a potentially interesting suitor from an online dating site who likes a certain breed of dog, might the dater look up that breed and praise its attributes? If an individual, Tom, does not care much about particular political debate being shown on CNN.com, but wants to impress his online chat partner, Mary, does that desire prompt him to seek information about the candidates to chat with Mary in a way that courts Mary's favor? And, if Tom was ambivalent beforehand, is he still? Aspects of Internet communication bring together dynamic influences on behavior and attitudes from the juxtaposition and interplay of mass communication and interpersonal functions (Walther et al., 2010).

Corresponding author: Joseph B. Walther; e-mail: jwalther@msu.edu

The present research examines one route by which interpersonal goals may affect the use of the Internet as a mass media information source, and how the interpersonal application of information affects attitude change *intrapersonally*. More concretely, we examine how individuals' desire to make online chat partners like or dislike them prompts them to search online for information related to the topic of the chat and the partner, and influences how they chat about the topic as a relational management strategy, which also affects their own attitudes about the topic.

In order to illuminate the significance of these research issues, we first review how online conversational partners use arguments and agreements about the topic they are discussing in order to negotiate aspects of their desired relationship. We then suggest how people use the Internet to seek information with *communicatory utility* (Atkin, 1972)—information from the mass media that is useful in subsequent interpersonal contexts—to prepare for an online encounter. We further discuss how this dynamic is altered by Internet capabilities, bearing on the complementarity of mass and interpersonal communication, and changes within and across these fields because of some features of the Internet. Next, we explore potential side effects on an individual's attitude when the individual argues or (dis)agrees with an online partner, even though those statements were formulated in the service of increasing or decreasing affinity with that partner, and we report the results of an experimental test of these contentions.

Computer-mediated communication (CMC) and relational goals

There are a variety of settings in which unacquainted people pursue affinity or disaffinity with others they meet online, as a number of surveys and field studies have shown. Individuals who use online matchmaking systems examine each other's profiles, where they are exposed to one another's interests and attitudes about a variety of topics prior to discussion (Ellison, Heino, & Gibbs, 2006). They start electronic dialogues to explore and convey their mutual interests, using in-house chat or e-mail systems, and encourage or discourage affinity in response (Fiore & Donath, 2004). Adolescents and others use the Internet to explore their personal identities by interacting with strangers (Valkenburg, Schouten, & Peter, 2005). Unacquainted individuals negotiate friendships (Parks & Floyd, 1996) and romantic attachments on the basis of their topical discussions in online forums (Baker, 1998) or online role-playing games (Parks & Roberts, 1998; Williams, Caplan, & Xiong, 2007), where interpersonal interaction is notably common (Klimmt & Hartmann, 2008). Even unacquainted gamers whose avatars battle one another exchange a considerable proportion of socioemotional communication together (Peña & Hancock, 2006). Although similar relational dynamics and strategies may appear in ongoing online or hybrid relationships (see Anderson & Emmers-Sommer, 2006; Wright, 2004), their appearance among previously unknown partners offers a particular glimpse at the potency of these processes, and they are uniquely amenable to experimental investigation. The next section explores how relational communication among strangers is hypothesized to emerge in topical online discussions and what effects

certain relational strategies are predicted to have on the communicators who generate them.

Owing to the relative lack of nonverbal cues in CMC compared with face-to-face (FtF) interaction, individuals use language-based strategies to pursue relational goals online (Walther, 2007; see Walther, 1992). In offline interaction, research has established that nonverbal cues such as proximity, pleasant facial expressions, and warm vocalic tones signal relational messages such as immediacy and affection (Burgoon & Hale, 1988). Considerable CMC research reflects that individuals use verbal communication to effect relational communication online (e.g., Walther & Burgoon, 1992). Nevertheless, little research indicates what specific verbal strategies people use in these pursuits online. Although online language research has identified verbal expressions of emotion in CMC (e.g., Hancock, Landrigan, & Silver, 2007) and the accommodation of gender-linked language styles (Thomson, Murachver, & Green, 2001), specific verbal strategies for (dis)affinity have been documented less frequently. Returning to offline traditions, Jones and Pittman (1982) suggest fundamental self-presentation strategies that are relational in nature: Ingratiation involves expressions of agreement and similarity in order to prompt believability and liking, whereas intimidation is used to gain compliance through devaluating and denigrating others' positions. Verbal strategies may include patterns of confirmation–disconfirmation (Cissna & Sieburg, 1981), agreement–disagreement (Scheerhorn, 1991/1992), and communication convergence–divergence (Jones, Gallois, Callan, & Barker, 1999) to promote affinity or disaffinity. Each of these approaches suggests that topical agreement or common perspective promote liking, whereas disagreement or disapproval of another's opinions reflect disliking. Because these relational strategies are verbal in nature, they are theoretically amenable for use in CMC.

Consistent with these suggestions, one study directly compared relational strategies in CMC and FtF experimental dyads (Walther, Loh, & Granka, 2005). Researchers instructed one dyad member to imagine that he or she really liked the partner and to interact in such a way that would make the partner desire further interaction, or alternatively to act as if he or she disliked the partner and would not wish to interact with that individual again. Participants held FtF or real-time CMC discussions. Analyses of the FtF conversations revealed that subjects' immediacy and affection were significantly associated with their vocalic and kinesic nonverbal behaviors. CMC partners expressed comparable affinity or disaffinity, however, using only verbal cues: Different forms of argument, and the expression of agreement or disagreement about the issue that the dyads discussed, were associated with perceived affinity levels. A less-frequent verbal strategy was overt statements of liking or disliking. These findings suggest that CMC users pursue affinity or disaffinity primarily by the ways in which they discuss topical issues before them, rather than through explicit affective statements, consistent with the verbal strategies mentioned above with respect to traditional means of (dis)confirmation, (dis)agreement, and ingratiation versus intimidation.

These strategies are also consistent with Heider's (1958) balance theory, which suggests that interpersonal affiliations affect our opinions about certain attitude

objects, and vice versa. For example, when Person A is attracted to Person B who feels favorably about object X, we expect A to evaluate X positively. If A dislikes B, however, and B likes X, A is prone to dislike X. Although balance theory focuses more on attitudes than the expression of attitudes, we may expect that when individuals dislike another person, they express disfavor about something that the other person likes (at least in CMC where there are fewer other ways to signal disliking) in order to achieve cognitive balance. On these bases, we predict that having an explicit relational goal (e.g., to make their partners to like them or dislike them) will influence communicators' frequency and type of topic-related online messages.

H1: CMC users with explicit affinity or disaffinity relational goals generate more arguments about their partners' preferences than do users without explicit relational goals.

The affinity versus disaffinity goals should also affect the nature of the arguments that individuals make. If arguments manifest the different goals, then affiliative individuals' arguments should support their partners' positions, whereas disaffiliative individuals should contest their partners' positions.

H2: Individuals wishing to affiliate with their partners generate more arguments that are consistent with their partners' positions than those with disaffiliative goals.

Returning to the FtF verbal strategies and CMC findings for verbal strategies of affinity, similar hypotheses are tendered for agreements and disagreements.

H3: CMC users with explicit affinity or disaffinity relational goals generate more agreements or disagreements about their partners' preferences than do users without explicit relational goals.

H4: Individuals wishing to affiliate with their partners generate (a) more agreements and (b) fewer disagreements than those with disaffiliative goals.

An additional issue raised by these predictions is what are the psychological effects of crafting these arguments on those who write them, an issue to which we will return. More immediately, we consider where and how individuals may seek information with which to formulate arguments and bolster their attitudinal positions relative to their partners.

Communicatory utility and the merging of mass and interpersonal functions

The concept of *communicatory utility* (Atkin, 1972) presents additional insights into the resources from which online conversants may draw for the purpose of relational management. Although the concept was originally developed with traditional mass media and offline interaction in mind, Atkin (1973) proposed that when people anticipate talking with others interpersonally about some topic, they seek information from the mass media in order to be more knowledgeable about the topic. Communicatory utility is the anticipated usefulness of information in future conversations with friends, family members, coworkers, or acquaintances. Gleaning

conversational material may be a byproduct of watching TV or reading the news when one's primary motivation is entertainment or instruction, or it may be the primary purpose of media consumption (see, for a review, Atkin, 1985). One study (Atkin, 1972) demonstrated that when individuals knew they would be discussing certain topics in the near future, they sought information about those topics on television and in newspapers during their daily routines.

There are new factors related to information searching that Atkin's work in the 1970s and 1980s could not have considered, pertaining to accessibility and persistence of information in the contemporary technological landscape. Atkin focused on traditional broadcast and print media to obtain information about anticipated communication topics. Although information about current events is readily accessible in traditional media (Rubin, 1983), information on other topics may not be. People may be ill inclined to do library research for topics of casual conversation, but information seeking is one of the primary motives driving Internet use, and users recognize that it is easier to do online than using other media (Papacharissi & Rubin, 2000). Information that formerly appeared in transitory form now persists in newspaper archives or broadcast repositories such as Hulu.com and YouTube.com. Information is found in informal online discussions among experts, Wikipedia entries, and numerous Websites. The Internet's databases, reference tools, and media archives, coupled with sophisticated search tools, makes information on most topics accessible on demand (Marchionni, 1995), and Hargittai (2002) found that, with experience, Internet users employ increasingly sophisticated search strategies. Obtaining information online can take place opportunistically, before, after, or during an interpersonal discussion of the topic to which the online information pertains. These trends constitute a major shift in access to information that can theoretically support communicatory utility.

The implications of the potential to seek information online for use in interpersonal dialogue extend well beyond the communicatory utility concept, and speak to transformations in the relationship between traditional mass media and interpersonal communication. The potential intersection of mass and interpersonal functions, and research that might focus on their interplay, is an occasional subject of discussion in communication scholarship (see, for a review, Reardon & Rogers, 1988; Walther et al., 2010). The advent of new electronic media has inspired additional calls for "mergers" of mass and interpersonal communication research (e.g., Cathcart & Gumpert, 1986; Newhagen & Rafaeli, 1996; Wiemann, Hawkins, & Pingree, 1988). Despite the proposed benefits of such approaches, there has been little empirical exploration of new convergent paradigms (see, for a review, O'Sullivan, 1999, 2005; see, for an exception and review, Eveland, 2004). The development of persistent information online that was formerly the domain of mass communication, and its potential utility in online interpersonal interaction, offers new configurations of mass and interpersonal processes with interesting potential effects.

Returning to our earlier framework, the communicatory utility of online information should be greater when an individual has a specific relational goal,

and can address that goal through the presentation of information supporting arguments on the topic he or she anticipates discussing.

H5: CMC users with explicit affinity or disaffinity relational goals seek online information related to an anticipated discussion topic more frequently than those with no explicit relational goals.

It is a canon of interpersonal communication that when strangers interact they attempt to gather information with which to reduce uncertainty about their partner (Berger & Calabrese, 1975), and information seeking about a partner is more likely when social goals are salient to prospective communicators (Berger & Douglas, 1981). Just as the Internet offers a wealth of information on topical issues, Ramirez, Walther, Burgoon, and Sunnafrank (2002) suggest that the Internet offers considerable, searchable information about many prospective interactants, and their behavior in multiple social contexts such as online discussions, legal records, news stories, and social network sites. Stutzman (2006) found that individuals disclosed an abundance of demographic and personal information for public perusal on the Facebook social network system, including political and religious affiliations, level of education, relationship status, and sexual orientation. Antheunis, Valkenburg, and Peter (2010) found that social network site users scan others' profiles in efforts to reduce uncertainty about them. Lampe, Ellison, and Steinfield (2006) found that 29% of Facebook-using college students estimated that total strangers had viewed their Facebook profiles. Joinson (2008) found that "looking up" people was one of the seven uses and gratifications of Facebook use; members use Facebook to "meet or view new people and to find out more about people" (p. 1031). How the communicatory utility of interpersonal information impacts interactions has not yet been addressed, but the ability to seek both topical and social information online represents an extension of Atkin's earlier theory.

Although any CMC user may be inclined to "look up" an anticipated conversation partner, we predict that this is more likely for those who hold explicit relational goals. It is an axiom, according to Miller and Steinberg (1975), that individuals attempt to form interpersonal impressions of others in order to exert social influence on them. Much of the research on uncertainty reduction supports the contention that "under certain circumstances persons attempt to reduce their uncertainty . . . in order that they be able to select optimal messages from their available repertoire to accomplish their goals in an interaction" (Berger & Perkins, 1978, p. 172).

H6: CMC users with explicit relational goals seek information related to an anticipated discussion partner more frequently than do those with no explicit relational goals.

The effects of relationally motivated topical statements on the individual who makes them: Counterattitudinal advocacy and self-perception theory

We previously hypothesized that individuals may construct messages about topical concerns not necessarily because the messages reflect individuals' attitude toward the

topic, but in order to pursue relational goals through a process similar to balance restoration. During a conversation, when an individual states opinions about an object that do not reflect that communicator's actual attitude, the individual may be engaging in *counterattitudinal advocacy* (CA; Miller, 1973). Generating CA affects the presenters' own attitudes about the topic in the direction of the position that they advocate. In essence, individuals serve as both the source and recipient of their own persuasive message (Bodaken & Sereno, 1976).

There are several explanations regarding CA effects (see Miller, 1973 for review). Self-perception theory suggests that individuals infer their attitudes from observing their own behavior and the circumstances in which it occurs (Bem, 1972; Bem & McConnell, 1970). In the present context, although interpersonal goals may prompt certain arguments to be made, it is reasonable to expect that these arguments impact the sender's attitudes through self-perception nevertheless. Individuals who express (dis)affinity justify their behaviors by coming to believe what they are actually advocating ("I must like this thing since I'm advocating for it") and infer that the arguments they present to their partners represent how they feel. Creating counterattitudinal arguments is cognitively effortful, which should make the activity salient to those who create them.

It may seem that a simple relational goal induction of affinity or disaffinity, as we employ in the experiment described below, would not provide enough incentive to induce attitude change as a result of CA. Research has shown, however, that self-persuasion is inversely related to the strength of incentives associated with the task (Miller, 1973). For instance, Festinger and Carlsmith (1959) found that individuals attributed their behavior to extrinsic rewards when incentives for behavior were large ("I was only doing behavior X to earn \$20, not because I really believe in X"). When incentives to comply were low, however, individuals generated intrinsic accounts for enacting CA behaviors, concluding that they must have behaved as they did in consistency with their attitudes ("Because there is no other explanation, I must have done behavior X because I really believe in it"). In this way, low extrinsic motivation increases the strength of CA effects. In the current research, experimental inductions provided minimal justification for compliance. Participants were asked to make their partners like them or dislike them; their informed consent instructions stated that they could quit the experiment at any time with no penalty, and the increment of course credit they earned for their participation could have been obtained through other alternatives. Furthermore, they were not asked to advocate or argue a position, only to discuss a topic. This lack of significant inducement to advocate a particular position suggests that the generation of counterattitudinal arguments should be particularly potent with respect to their intrapersonal attitude change. In this case, it is hypothesized that when individuals generate arguments for or against their partners' initial opinions in order to achieve a relational goal, then these arguments should trigger attitude change within the individual who wrote them in a direction corresponding to the goal for which they were generated:

H7: Individuals with explicit affinity or disaffinity relational goals experience more attitude change with respect to their partner's preferences than do people with no explicit relational goal such that:

- (a) Individuals motivated to affiliate with their partners change their attitudes toward their partners' preferences.
- (b) Individuals who are motivated to disaffiliate with their partners change their attitudes away from their partners' preferences.

Finally, we offer a hypothesis to discern more about the underlying cause of the predicted intrapersonal attitude change. The previous discussion described balance theory as a potential explanation for why an individual may make statements about an attitude object as a relationally motivated strategy to establish consistency with one's feelings toward a conversational partner. We also suggested that these relationally motivated statements were subject to self-perception dynamics, which may prompt intrapersonal attitude change toward the object. Yet balance theory and self-perception theory could each be sufficient to predict attitude change toward the object. With balance theory, one need not make statements; one may simply change one's attitude privately. A critical test of which mechanism operates would assess whether attitude toward the object changes merely because of a liked or disliked partner's apparent attitude toward the object (via balance mechanisms), or whether attitude changes in conjunction with the nature and frequency of the statements about the object one makes (via self-perception), despite the purpose of those statements being independent of one's feelings about the object.

H8: The more an individual argues about an object, the greater is his or her attitude change about the object.

Method

Participants

Ninety-two undergraduate students from a large university in the midwestern United States participated in the experiment either for extra course credit or to satisfy a course research requirement. Participants ranged in age from 18 to 26 ($M = 20.40$, $SD = 1.82$), and reported their race: 68% Caucasian, 17% African American, 10% Asian or Pacific Islander, 1% Hispanic or Latino, and 4% reported their race as "other." For this study, participants were divided into 46 dyads. Dyads were randomly assigned to an affinity-goal condition.

Procedure

Two participants were recruited independently for each lab session. When a participant arrived at the laboratory, an experimenter escorted him or her to a private room containing a computer connected to the Internet, a computer desk, and a chair. Participants were physically isolated from their partners before and during the experiment. After participants gave their consent to participate in the study, they were given

forms that asked them to provide their full names and to rank order their preferences for “The best hamburger in the area, all factors taken into consideration” among five national chains. They also rated each brand on 7-point semantic differential scales, with 1 being *Very Bad* and 7 being *Very Good*. After completing their prediscussion hamburger preferences, a researcher exchanged the forms between the two partners. After receiving each other’s forms, participants were told they would have 10 minutes to prepare for an interaction with their partner regarding the topic of hamburgers. The hamburger preferences topic was chosen through preexperimental discussions with a similar sample of subjects. This topic is one about which members of the population are familiar and hold some existing attitudes and preferences, but these attitudes are generally not strongly held and would be pliable. It was expected that subjects could make arguments about the topic based on experience, and search for additional information online if they wished to, making it a suitable topic for the present study.

Within each dyad, one member was randomly assigned to be a “confederate” and received additional instructions. These instructions were designed to induce either an affinity or disaffinity interpersonal goal, following the procedures described in Walther et al. (2005). In the affinity condition, participants were instructed that they should imagine that they really liked their partner and that they should make themselves as friendly as possible to that person, without making it obvious that this was their intent, and try to gain favor so that they could, if they wished, connect with their partner again. In the disaffinity condition, confederates were instructed to imagine that they really disliked their partner and that they should make themselves as unfriendly as possible to that person, without making it obvious that this was their intent, and try to gain disfavor so that they would not have to interact with that person again. The other member of each dyad was a naïve subject. They were given no explicit interpersonal goal and were only informed that they would be having a discussion about their hamburger preferences.

A 10-minute interval was provided between the provision of instructions and the beginning of the online chat, in order to create an opportunity for participants to engage in online information seeking related to the upcoming discussion. Researchers carefully instructed participants so that the opportunity to search online was made clear but that it did not appear to be required. Participants were told that they were free to do whatever they wished during this interval, that they could prepare for their upcoming discussion if they wanted to, and that they were free to use the computer to access the Internet for any purpose they chose. They were prohibited only from using cell phones in any way. Unbeknownst to participants at the time, all activity that took place on the computer screen was digitally recorded using Camtasia software, for content analysis at a later time. During the postexperimental debriefing, participants were asked either to authorize retention of their recordings or to request their deletion; only one participant requested deletion.

There seems to have been no demand characteristic induced by these instructions, as participants frequently used the computer for activities unrelated to the upcoming discussion: 23 individuals checked their e-mail; 9 played online games; 2 checked their

bank accounts; 3 used Instant Messenger; and 8 examined pages on the university's Website (other analyses to follow).

After the 10-minute interval, a researcher instructed participants to begin their chat discussion. Participants were directed to open a chat window, which presented an online chat room using Chatzy (<http://www.chatzy.com>), an online service that provides easy-to-use private chats using synchronous text-based communication. Participants chose their own screen names, after which they were left to interact for 10 minutes on the topic of their "favorite hamburger in the area, all factors taken into consideration." Conversations were allowed to flow freely; participants discussing off-topic materials were not directed back to the topic. Chat sessions were also recorded for content analysis.

After completing the interaction, a researcher terminated the chat session and opened a new screen containing postdiscussion questionnaires, including dependent measures and a postdiscussion hamburger ranking and rating similar to the one participants completed initially, as well as demographic questions. Finally, subjects were debriefed and thanked for their participation.

Measures

In order to assess participants' reported affinity or disaffinity goal attainment strategies, participants were given the open-ended question: "What did you do, if anything, to deliberately please or displease your partner?" Two coders independently evaluated participants' responses and assigned each response to one of four categories. Strategies for pleasing or displeasing a partner were coded as (a) expressing agreement with a partner's preference or statement, (b) expressing disagreement with a partner's preference or statement, (c) expressing arguments (arguing, opinions, or evaluations of aspects of the hamburgers or vendors), (d) other, or (e) no specific strategy use. After coding independently, coders met to reach consensus on coding, resulting in agreement on all responses.

Attitude change in relation to hamburgers was assessed using a series of calculations on specific pre- and postdiscussion hamburger rankings and ratings. Calculations focused on participants' attitudes toward the hamburger that their respective partners had designated as their prediscussion favorite. A change score was calculated by subtracting individuals' 1-to-7 prediscussion (*Very Bad* to *Very Good*) rating from their postdiscussion ratings on that same hamburger. Positive scores indicate attitude convergence with one's partner (i.e., liking one's partner's top-choice burger more than one originally did) and negative scores indicate attitude divergence (i.e., liking one's partner's top-choice burger less than one originally did).¹

Participants additionally completed scales measuring several interpersonal assessments. These included five items from Burgoon and Hale's (1984) measure of relational immediacy/affection. The 7-interval Likert-type items, anchored by 1 (*Strongly Disagree*) and 7 (*Strongly Agree*) included, "The person I talked with acted like we were good friends," and, reverse scored, "The person I talked with

communicated coldness rather than warmth.” These items were acceptably reliable, $\alpha = .75$. Participants also assessed their partners’ social, task, and physical attractiveness using McCroskey and McCain’s (1974) measures, which were also presented as 7-interval Likert-type items. Each subscale employed six items. Social attractiveness generated $\alpha = .74$, task attractiveness $\alpha = .79$, and physical attractiveness $\alpha = .76$. Even though partners did not see each other, systematic differences in perceived physical attractiveness may occur as a result of overattributions of generalized liking, consistent with previously documented hyperpersonal and hypernegative effects of CMC (Walther, 1997).

Information seeking and chat coding

Online information-seeking behavior was assessed by coding the recordings of subjects’ Web use in the 10-minute preinteraction interval. Two independent coders, unaware of hypotheses, examined the recordings and coded the behavior related to the following: (a) searching on (i) Facebook or (ii) a Web search engine for the partner’s name; (b) using search engine terms on the topic of (i) hamburger or (ii) brand attributes; (c) looking at Websites regarding (i) any of the hamburger chains, (ii) aggregate rating and opinion sites related to hamburgers, or (iii) comparative nutrition information; (d) YouTube views for videos such as advertisements; or (e) nonrelated applications (checking e-mail or banking, etc.). Given the specificity and number of coding categories, coder training was extensive and repeated, until intercoder agreement stabilized at 85%. The Scott’s *pi* coefficient was .58.²

Coders also assessed argument generation and agreement–disagreement frequency by coding the chat session between subjects. Coders analyzed one dyad member at a time and classified statements as positive or negative comments related to each fast food restaurant regarding taste, price, quantity, side items, nutrition, locations/proximity, social factors, advertising, restaurant attributes, or other miscellaneous comments. Coders also counted the number of agreements and disagreements communicated during the interaction. Intercoder reliability was sufficient, percent agreement = 72%; Scott’s *pi* = .55.

Two measures of communication behaviors were used by this study: participants’ self-reports and observers’ analyses of recordings from participants’ behaviors. The use of both sources of data was important for several reasons. First, self-report data provide insight into how participants actually perceived their communication behavior (i.e., arguing, agreeing, insulting, complimenting, etc.) in a dyadic setting, and how one’s perceptions of behavior affect attitudes, consistent with self-perception theory (Bem, 1972; Bem & McConnell, 1970). Alternatively, perceptions of one’s own behavior may not always reflect objective occurrences (see Knapp, Wiemann, & Daly, 1978). Thus, behaviors were objectively coded in this study to distinguish between the effects of self-perception and the effects of actual behaviors on outcome variables.

Manipulation check

In order to determine whether the relational goal inductions affected confederates as intended—for confederates to make the subjects like or dislike them—the naïve subjects who were not given specific goal inductions rated their partners' relational communication in the chat. Comparisons indicated that partners who received the disaffinity goal were rated as significantly less immediate and affectionate, $M = 3.92$, $SD = 1.19$, than were partners who received the affinity-goal induction, $M = 4.80$, $SD = 1.06$, $t(44) = 2.67$, $p = .01$, $\eta^2 = .14$. Thus, the relational goal manipulation effectively altered the interpersonal orientation of the confederates.

Results

The first four hypotheses were predicated on the notion that because the nonverbal cues that are typically employed to pursue relational goals in FtF discussion are absent in CMC, CMC users adopt verbal strategies to signal affect. H1 predicted that individuals who had explicit affinity or disaffinity goals generate more arguments about their partners' hamburger preferences than do those individuals with no particular relational goals.

The first analyses involved the participants' self-reported answers to the question, "What did you do . . . to deliberately please or displease your partner?" With regard to the number of individuals who reported using arguments, 24 out of 46 confederates reported stating their evaluations of various hamburgers, offering their opinions about various vendors, "putting down" their partners' favorite vendors, trying to persuade them to change their minds, or even "lying about the meat they use in McDonald's burgers." Among the naïve subjects, one reported expressing opinions or views about hamburgers, and 45 did not. These differences were significant, $\chi^2(1, N = 92) = 29.57$, $p < .01$, $\phi = .57$, supporting H1.³ Rather than expressing opinions or other views about hamburgers to please or displease their partner, naïve subjects reported that they engaged in more general relational communication behaviors. Responses coded as nonarguments included statements that they "tried to get to know their partner" or they "did nothing to either please or displease" their partners.

H1 was reanalyzed using data from coded observations of arguments from the chat recordings. The number of arguments an individual produced was measured as the sum of positive and negative comments about some aspect of each of the five hamburger chains or their products; individuals could be credited with more than one argument. Descriptive statistics appear in Table 1. In contrast to the differences in self-reports, a paired-samples t -test (to protect for interdependence within confederate–subject pairs) yielded no significant difference between arguments generated by goal-directed versus naïve participants, $t(43) = .06$, $p = .96$. (Discrepancies between the self-report versus objective observation of certain behaviors, and their effects on different confederates, will arise again in the results and discussion.) Furthermore, a posthoc probe among only the confederates showed no differences in total arguments

Table 1 Arguments, Agreements, and Disagreements Coded for Naïve Subjects and Goal-Induced Confederates

		Arguments	Agreements	Disagreements
Naïve subjects	<i>M</i>	3.93	2.37	.33
	<i>SD</i>	2.79	1.64	.60
Goal-induced confederates	<i>M</i>	3.93	3.23	.91
	<i>SD</i>	3.60	3.52	1.16

Note: $n = 46$.

based on whether they received the affinity goal, $M = 4.09$, $SD = 2.92$, or disaffinity goal, $M = 3.76$, $SD = 4.30$, according to an independent samples t -test, $t(42) = .30$, $p = .77$.

H2 predicted that individuals with explicit affinity goals generated arguments that were more consistent with their partners' positions than did those with disaffinity goals. Self-report data were not available with respect to the direction of confederates' arguments, and analyses relied on observer-coded data. An index of argument positivity was calculated such that a more positive score reflected greater agreement with the partner's preinteraction rankings of their most-favored and least-favored hamburger, as follows: the number of positive arguments about the partner's favorite hamburger, plus the number of negative arguments about the partner's least favorite hamburger, minus the number of unfavorable arguments about the partner's favorite hamburger, minus the number of arguments favoring the partner's least favorite hamburger. Scores on this index ranged from -3 to $+2$. A significant difference emerged due to relational goal, $t(42) = 1.86$, $p = .04$ (one-tailed), $\eta^2 = .04$, consistent with predictions: Affinity-goal confederates' arguments were more consistent with their partners' hamburger preferences, $M = .61$, $SD = .94$, than were disaffinity confederates, $M = .00$, $SD = 1.22$.

H3 offered similar predictions as H1 but with regard to participants' reports that they expressed agreement or disagreement with their partners, compared on the basis of whether they had an explicit relational goal or not. Although 24 out of 46 individuals who were given an explicit relational goal indicated that they agreed or disagreed with their partners, only 5 of the 46 naïve participants indicated that they had agreed or disagreed, $\chi^2(1, N = 92) = 16.32$, $p < .001$, $\phi = .42$. Consistent with self-reports, observational data showed that confederates generated more verbal agreements than did naïve subjects, $t(43) = 1.82$, $p = .04$ (one-tailed), $\eta^2 = .07$, as well as more disagreements, $t(43) = 4.20$, $p < .01$ (one-tailed), $\eta^2 = .38$ (see Table 1).

H4 analyses assessed whether participants who operated under a liking–affinity goal generated (a) more agreements and (b) fewer disagreements than those with disliking–disaffinity goals. Individuals with an affinity goal more frequently reported that they had agreed with their partners ($n = 7$, or 30%) than did those who

had a disaffinity goal ($n = 1$, or 4%), $\chi^2(1, N = 46) = 5.45, p = .02, \phi = .34$, supporting H4a. Conversely, affinity confederates very rarely mentioned disagreeing with their partners ($n = 1$, or 4%), whereas disaffinity confederates did so significantly more often ($n = 16$, or 70%), $\chi^2(1, N = 46) = 20.99, p < .01, \phi = .68$, supporting H4b. (One disaffinity confederate reported both agreeing and disagreeing with the partner on different points.) Observational rather than self-reported data generated similar findings. Those with affinity goals generated more agreements, $M = 4.30, SD = 2.30$, than those with disaffinity goals, $M = 1.13, SD = 1.75, t(42) = 3.57, p < .01, \eta^2 = .23$, and those with disaffinity goals produced more disagreements, $M = 1.62, SD = 1.24$, than those with affinity goals, $M = .26, SD = .54, t(42) = 4.77, p < .01, \eta^2 = .35$.

H5 predicted that having explicit relational goals prompts more topical online information seeking compared with those without a priori goals. Analyses involved the data that were obtained by coding the video recordings of participants' online information-seeking behaviors related to hamburgers during the 10-minute prediscussion interval. Collapsing across the coding categories created totals for each participant, and analyses compared the means of these counts between confederates and naïve subjects. Analysis revealed no differences between the number of information-seeking activities of individuals with a relational goal, $M = .11, SD = .16$, and those given no relational goal, $M = .10, SD = .16$. However, additional analysis revealed that those with a disaffinity goal sought significantly more hamburger-related information, $M = .16, SD = .19$, than did those with an affinity goal, $M = .04, SD = .09, t(42) = 2.83, p < .01, \eta^2 = .16$. This finding suggests some support for the argument that relational goals prompt prediscussion topical information seeking, but limits the effect to a difference between disliking- and liking-oriented situations.

Differences became clearer when the analysis changed focus from individuals' overall hamburger-related information seeking to include only information seeking related to one's partner's and one's own most preferred hamburger because participants had been made aware of their partner's preferences prior to the 10-minute preparation interval. Information with the greatest communicatory utility should be centered on topics that are most likely to be the focus of an impending discussion. These topics, in turn, would most likely be the foci of agreements or disagreements. Pairwise comparisons of means among those with affinity goals, disaffinity goals, or no specific goals, with respect both to information about their partners' top-choice hamburger and their own preferred hamburger, yielded some specific differences ($p < .05$) of note.⁴ Those with disaffinity goals sought information about their partners' top-choice hamburger preference, $M = .25, SD = .30$, significantly more frequently than did participants with affinity goals, $M = .07, SD = .17$, or those with no specific goals, $M = .12, SD = .22$. Moreover, those with disaffinity goals looked at information about their partners' top-choice hamburger more than they looked at information regarding their own top choice, $M = .09, SD = .19$, whereas no such differences appeared among other participant types.

These analyses generally depict that those with affinity goals did not engage in information seeking in anticipation of their impending conversation in the manner that was predicted. Their information seeking was unexpectedly less than the disaffinity counterparts', and did not differ from naïve subjects' information seeking. Only the behavior of those with disaffinity goals matched predictions. H5 is partially supported.

In addition to these effects on hamburger-related information seeking, there were qualitative differences in the foci of the information searching strategies between goal-induced confederates and naïve subjects. Participants in both conditions used search terms composed of individual hamburger brands (20 confederates vs. 17 subjects), multiple brands (2 confederates vs. 7 subjects), and comparative information such as "best hamburger," "most sold hamburger," or "fast food ranking" (6 confederates vs. 7 subjects). However, goal-induced confederates employed some search terms that naïve subjects altogether did not. These included seven searches for specifically negative hamburger information ("bad things about . . .") and two searches for "unhealthy" or "obese" plus a restaurant name. They also searched for guidance on interpersonal behavior such as "how to be mean" (or ". . . be unpleasant," or ". . . insult people"), "negative impressions," "mean phrases," and "how to be unpleasant . . . while chatting." These queries occurred eight times; no searches were focused on how to act nicely. We will address these findings in terms of the salience of disaffinity confederates' efforts in the discussion.

H6 predicted that CMC users with explicit relational goals seek information related to the partner with whom they anticipate chatting more than CMC users with no particular relational goal do. Four confederates with relational goals looked up their partners on Facebook; none of the naïve subjects did so. The frequency of behaviors that constituted this variable was too small to analyze, and no formal support can be claimed for the hypothesis. Some participants from both conditions used Facebook during the interval to look up their own friends or to update their own profiles (confederates $n = 7$, naïve subjects $n = 13$). None of the participants looked up their partners using search engines or the university directory. It is interesting to note that naïve subjects used the computers significantly more frequently for activities unrelated to the upcoming discussion ($n = 43$) such as Facebook, e-mail, games, banking, instant messaging, and campus information, compared with goal-induced confederates ($n = 24$), $\chi^2(1, N = 92) = 19.83, p < .01, \phi = .46$.

H7 predicted that people with specific relational goals experience greater attitude change related to their partners' favorite hamburger than do those individuals with no specific goals. The dependent variable reflected a change score between a subject's prediscussion and postdiscussion rating of the hamburger that his or her partner had originally ranked as first. The first analysis compared means from with-goal confederates, $M = -.24, SD = 1.16$, with means from no-goal participants, $M = .23, SD = .94$, resulting in a significant difference, $t(43) = -2.17, p = .02$ (one-tailed), $\eta^2 = .09$. It was suspected that this difference resulted in part from the disaffinity confederates' negative attitude change, rather than because of the relative magnitude of attitude change of confederates versus subjects, as was anticipated in

H7a and H7b (see below). A supplementary analysis examined whether there were differences in the absolute values of the attitude change scores between goal and no-goal conditions, in order to obviate the effect of different directions of attitude change. The absolute values of change scores of the affinity-seeking and disaffinity-seeking participants, $M = .65$, $SD = .99$, did not differ in the magnitude of change than those individuals who were assigned no goal, $M = .67$, $SD = .67$.

Regarding the direction of attitude change, H7a and H7b were supported. The mean score of affinity-seeking confederates' attitude change about their partners' favorite hamburger was $.13$, $SD = .76$; disaffinity-seeking confederates' attitude change mean was $-.57$, $SD = 1.41$. The two types of confederates differed in attitude change as expected, $t(44) = 2.09$, $p = .04$, $\eta^2 = .09$.

Finally, H8 predicted that confederates' arguments drive their own attitude change. This analysis also employed the argument positivity index, in which a more positive score reflects arguments with greater consistency with the partner's initial position, and a more negative score reflects countering the partner's position. Although analyses did not show an association between arguments and attitude change for affinity confederates, $r(23) = .14$, $p = .26$ (one-tailed), the relationship was significantly negative for disaffinity confederates, $r(21) = -.43$, $p = .03$. A follow-up analysis examining the relationship between confederates' self-reported argument frequency (not valence) also indicated a significant association in the predicted direction for disaffinity confederates, whose attitudes toward their partner's preference became more negative as they reported more argumentation, $r(21) = -.41$, $p = .03$ (one-tailed), while no association was found for affinity confederates, $r(23) = .01$, $p = .50$. The hypothesis was supported with respect to those disaffinity goals but not affinity goals.

Discussion

This research examined how relational goals affect the way that people strategically seek information in order to support the expression of affinity or disaffinity toward an online conversational partner through their statements about a topic of discussion, and how these discussion behaviors, which were generated to accomplish interpersonal goals, influence their authors' own attitudes intrapersonally.

Conversational behaviors and attitude change

Investigation of the first four hypotheses generally indicated that, in an effort to garner liking or disliking from a CMC conversational partner, without prompting on how to achieve these goals, people spontaneously used positive or negative statements about their partners' opinions and the objects that their partners liked.

Other results indicate that communicators' relational goals came to affect their own attitudes about the conversational topic, relative to their partners' attitudes. Those seeking affinity tended to converge toward their partners' preference compared with disaffinity-seekers, who diverged. These effects, to some extent, were

due to the goal-seekers' own statements about the topic, even though the original impetus for those statements was the relational goal. These results could be due to the self-persuasive effects of CA and self-perception. Alternatively, it could be a matter of cognitive balance: I dislike you, you really like McBurgers, so whatever I felt before, I now dislike McBurgers, too. Although attitudes did change consistent with confederates' relational goal, the results related to H8 ultimately do not rule out either explanation in favor of the other because goal-seekers' argumentation corresponded to their attitude change in the disaffinity condition only. It may also be the case that other verbal strategies the participants used, outside of the focus of the present analyses, had a causal effect on their attitude change. The findings as a whole suggest that behaviors motivated by certain relational goals can—unexpectedly, we surmise—become a potent source of influence on one's own perceptions and attitudes.

Some supplementary analyses add credence to the intrapersonal effect of one's discourse on one's own perceptions, but in this case, the partner rather than the topic is the focus of perception. Analyses of confederates' rating of the attractiveness of the naïve subjects who they had tried to attract or repel through the hamburger-oriented discussion revealed that the more agreements that confederates expressed, the more the confederates perceived their partners to be socially attractive, task attractive, and even physically attractive (see Table 2). The more disagreements confederates expressed, the less socially and task-attractive their partners seemed to be (with no effect on physical attractiveness); and the more confederates' arguments were consistent with partners' preferences, the more socially attractive they found their partners to be. These findings provide further indications of the potency of self-influence online: Generating online comments about objects affected perceptions not only about these objects, but also about the qualities of the persons with whom they were discussed. This self-influence occurred even when the impetus for those statements about specific objects could rationally be attributed to an external induction (the experimental instructions to either affiliate or disaffiliate with the partner). Naïve subjects' ratings of confederates' three attractiveness dimensions, in contrast, did not correlate with confederates' agreements, disagreements, or argument consistency, the largest $r(44) = .23$, $p = .13$. This may suggest that confederates' *intrapersonal* effects constituted a self-fulfilling prophecy, but not a reciprocal influence effect such as behavioral confirmation.

Table 2 Correlations Between Goal-Seekers' Agreements, Disagreements, and Argument Positivity and Their Perceptions of Naïve Partners' Attractiveness

	Agreements	Disagreements	Argument Positivity
Social attractiveness	.49**	-.37**	.39**
Task attractiveness	.44**	-.43**	.29
Physical attractiveness	.36*	-.07	.18

Note: ** $p \leq .01$, * $p < .05$, two-tailed; $n = 44$.

Self-report and observational discrepancies and their implications

There were discrepancies between self-perception and behavioral observation of confederates' arguments in some analyses. Confederates reported making more arguments than naïve participants, although objectively they did not differ. This pattern suggests that the cognizance of their relational goals may have made the arguments they wrote more salient to them, especially the disaffinity-seeking confederates, and those individuals may have overestimated the degree that they actually made such statements. The opposite reaction may have been experienced by affinity-seeking confederates, and for this reason affinity seekers' attitudes were not affected in the manner that had been predicted in H8. It may come so easily to people to generate concurrence-seeking arguments with a conversation partner, whether they are sincerely felt or not, that affinity seekers were unaware of the extent that they wrote them, reducing the effect that their arguments had on them.

Other findings, too, suggest that generating disaffinity prompted more effortful conversational preparation by those participants who had this goal, as seen in their greater search for online information with communicatory utility—information that could be used in pursuit of the relational goal. The conclusion that disaffinity confederates sought more and different information is derived from several findings: Disaffinity confederates sought hamburger information more frequently than affinity confederates or naïve subjects, especially with regard to their partners' favorite hamburger. They also sought negatively oriented information about hamburgers, and instruction on how to “be mean” or portray disaffinity in online chats.

The discrepancies in self-reported argument frequency and the alternative information-seeking behaviors by disaffinity confederates all suggest differences in the resources that people apply when they anticipate affirming or negating others. People who are going to affiliate did not particularly look for conversational resources. It may be easier to anticipate simply reciprocating a partner's views for a conversation one anticipates making agreeable from the outset. In contrast, garnering additional information becomes useful for substantiating anticipated disagreements. A debater needs no evidence to agree with the opposition's position, but to refute that position a debater must present contrary evidence. Likewise, people seemed to trust their intuitive ability to treat others favorably online, but when it came to treating others negatively, some sought guidance on how to do so. In terms of marshalling resources to stimulate relational rejection, disaffinity confederates may have experienced more initial uncertainty, as they appear to have used greater uncertainty-reduction strategies using online information seeking in anticipation of their conversation. These information-seeking foci extend the concept of communicatory utility that Atkin (1972, 1985) originally explored. Previous discussion of communicatory utility focused primarily on gleaning material from mass media that could facilitate common ground in topical conversations with others. Garnering information to wage a conflict is consistent with this notion in the abstract, but incorporates relational goals that are broader than communicatory utility research has previously considered.

Limitations and future research suggestions

The dynamics examined in this study may be potent effects in initial interactions among people who meet via online discussions, dating sites, games, or other venues where strangers interact, and try to attract or repel one another (see, e.g., Ellison et al., 2006; Tong & Walther, 2009). Their pertinence in longer-term interactions or relationships is less clear. There is nothing specified in the present constellation of effects that, in principle, should not obtain in established relationships. Nevertheless, the research employed a single episode in a prescribed chronological sequence of information search, then chat. Spontaneous online activities may not be so linearly segmented: The Internet's transformation of the storage and retrieval of information with communicatory utility may enable multiple sequences of conversation and searching, cyclically or simultaneously (Walther et al., 2010), and potentially across modalities. Future research should address the successive use of what Stephens (2007, p. 487) calls "myriad communication options and many tasks [in] ongoing communication that unfolds over time." Approaches such as Stephens's media succession model may be fruitful in examining the sequential use of communication tools and technologies because different interpersonal tasks and targets affect information-seeking channel selection (Westerman, Van Der Heide, Klein, & Walther, 2008), and the sequence of channels may affect relational communication and attitude change. Likewise, the conversations in this study were focused on a topic, by design. Although there are many topical discussion spaces online where strangers meet and converse, other conversational contexts, such as getting acquainted, might produce different effects (cf. Tidwell & Walther, 2002).

Some of the dynamics specified in this relational-conversational-attitudinal chain of events may not be unique to the CMC environment, and there is no offline control condition in this study to make it clear how particular to CMC these dynamics truly are. Future research should extend these conditions to investigate this issue. With that said, there are reasons to believe that the dynamics observed in this research may be especially potent in online encounters. First, discussions about objects may be more likely to comprise relational strategies in CMC than FtF settings. Although conflicts in FtF discussions may also focus on objects, relational communication in FtF communication is conveyed primarily nonverbally (Burgoon & Hale, 1987), while verbiage may act deictically to focus or ground the nonverbal affective messages on the conversational object (Clark, 1996). While this duality is not always the case FtF, it is not an option in CMC where affect is conveyed through attitudinally colored statements about things or explicit statements of emotion (Walther et al., 2005). Because verbal statements are the only communicative mechanisms in CMC, their effects on relational communication online parallel those of FtF cues offline (Walther & Burgoon, 1992). In addition, it takes very little prompting for individuals to develop stronger relational reactions in CMC than in parallel offline episodes. Research on the hyperpersonal model of CMC (Walther, 1996) for example, shows that CMC users' editing and message content display differential

relational orientations to CMC partners on the basis of no information other than their otherwise unknown partners' gender-linked names (Walther, 2007) or photos (Wang, Moon, Kwon, Evans, & Stefanone, 2010). In other research, attraction to FtF partners is less extreme than in parallel CMC (Walther, 1997). Therefore, although additional research is required to determine the extent to which the effects identified in this study are partly or fully embedded in CMC dynamics, there are reasons to believe that CMC facilitates these events in ways that other communication media may not.

Finally, the role of visual persistence of conversations deserves further exploration in terms of self-perception phenomena. One's conversational behaviors persist more in CMC than in FtF interaction because one's statements appear and linger on the computer screen for some time in CMC. Research has explored "persistent conversations" in CMC (Herring, 2001, 2004), which contrast the ephemerality of FtF speech. This phenomenon may add a literal component to self-perception, where individuals actually see the arguments they make as they make them, and afterward. Visual persistence of one's own statements is likely to reinforce the self-perception mechanism underlying counterattitudinal advocacy effects, and increase the likelihood that these statements affect individuals' own attitude change. Moreover, the visual persistence of unusually negative behaviors such as disagreements and arguments might increase the salience of those disaffinity behaviors among the individuals who make them, even if some of these behaviors are not objectively more frequent. This may have had some role in the difference between self-reported argument frequency and actual argument frequency, discussed above.

Nowadays, CMC rarely occurs in a vacuum. On the screen, near the interpersonal chat window are Web browsers and search engines. Mass-mediated information is perpetually, opportunistically, and even surreptitiously available to users before or during CMC conversations. This research asks questions about how the use of multiple online channels affects interpersonal goals and vice versa. The present work reaffirms the utility of a relational approach to CMC. It expands that approach by exploring the long causal chain of how relational goals affect online information seeking and mediated conversations. Using some of the communication media of our time, electronic conversation behaviors affect attitudes intrapersonally, even when those behaviors were knowingly undertaken for interpersonal purposes. The communicatory utility construct deserves further investigation in the new media environment where information seeking is so easily accomplished. Its scope should be expanded through renewed consideration of how particular social goals affect the type and valence of information-seeking people use media to pursue, and with what ultimate effects on themselves and others.

Acknowledgments

The authors are grateful to three anonymous reviewers for their helpful suggestions.

Notes

- 1 Single-item measures were used both before and after the interaction to assess participants' hamburger preferences. These measures prevented participants from having an onerous task prior to interaction, and risk an unintentional negative mood induction, which may have attenuated experimental variance between conditions. Although single-item measures are often discouraged because of their unknown reliability, in some situations they may be preferable because they are efficient and easy to understand (Wanous, Reichers, & Hudy, 1997). Moreover, the primary concern with the low reliability accompanying a single-item measure is that it attenuates findings. The significant findings that emerged using these measures assuage these concerns.
- 2 Although a reliability coefficient of such a level may be cause for concern, pi is sensitive to fluctuations in the base rate of the frequencies in the use of different categories (Scott, 1955). That is, when the true occurrence of different types of behaviors is not uniform among different categories, pi is reduced even if there is great agreement among coders. Nevertheless, 80% of the data were coded and discussed by both coders to resolve discrepancies, after which one coder finished classifying the remaining data.
- 3 The categorical data analyzed for H1–H4 were treated at the individual, rather than dyadic, level because the data displayed substantial noninterdependence. Following the procedure suggested by Kenny, Kashy, and Cook (2006), a Cohen's $kappa$ calculated on these data, $\kappa = 0.04$, $p > .10$, indicated that the data justified analysis at the individual level.
- 4 The data analyzed in the posthoc portion of H5 were analyzed at the individual level. These data describing one's information seeking about hamburgers were obtained from each participant prior to interaction between dyad partners and were not subject to dyadic effects (beyond seeing the partner's prediscussion hamburger preferences). Moreover, statistical diagnostics suggested by Kenny et al. (2006) indicated no dyadic effects, $r(44) = -.23$, $p = .13$.

References

- Anderson, T. L., & Emmers-Sommer, T. M. (2006). Predictors of relationship satisfaction in online romantic relationships. *Communication Studies*, *57*, 153–172.
- Antheunis, M. L., Valkenburg, P. M., & Peter, J. (2010). Getting acquainted through social network sites: Testing a model of online uncertainty reduction and social attraction. *Computers in Human Behavior*, *26*, 100–109.
- Atkin, C. K. (1972). Anticipated communication and mass-media information seeking. *Public Opinion Quarterly*, *36*, 188–199.
- Atkin, C. K. (1973). Instrumental utilities and information seeking. In P. Clark (Ed.), *New models for mass communication research* (pp. 205–242). Beverly Hills, CA: Sage.
- Atkin, C. K. (1985). Informational utility and selective exposure to entertainment media. In D. Zillman & J. Bryant (Eds.), *Selective exposure to communication* (pp. 63–92). Hillsdale, NJ: Lawrence Erlbaum.
- Baker, A. (1998, July). Cyberspace couples finding romance online then meeting for the first time in real life. *CMC Magazine*. Retrieved January 3, 2007, from <http://www.december.com/cmc/mag/1998/jul/baker.html>

- Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology* (Vol. 6, pp. 1–62). New York: Academic Press.
- Bem, D. J., & McConnell, H. K. (1970). Testing the self-perception explanation of dissonance phenomena: On the salience of premanipulation attitudes. *Journal of Personality and Social Psychology*, *14*, 23–31.
- Berger, C. R., & Calabrese, R. J. (1975). Some explorations in initial interaction and beyond: Toward a developmental theory of interpersonal communication. *Human Communication Research*, *2*, 99–112.
- Berger, C. R., & Douglas, W. (1981). Studies in interpersonal epistemology III: Anticipated interaction, self-monitoring and observational context selection. *Communication Monographs*, *48*, 183–196.
- Berger, C. R., & Perkins, J. W. (1978). Studies in interpersonal epistemology I: Situational attributes in observational context selection. In B. D. Ruben (Ed.), *Communication yearbook 2* (pp. 171–191). New Brunswick, NJ: Transaction Books.
- Bodaken, E. M., & Sereno, K. K. (1976). Counterattitudinal advocacy, ego-involvement, and persuasive effect. *Western Speech Communication*, *40*, 236–248.
- Burgoon, J. K., & Hale, J. L. (1984). The fundamental *topoi* of relational communication. *Communication Monographs*, *51*, 193–214.
- Burgoon, J. K., & Hale, J. L. (1987). Validation and measurement of the fundamental themes of relational communication. *Communication Monographs*, *54*, 19–41.
- Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communication Monographs*, *55*, 58–79.
- Cathcart, R., & Gumpert, G. (1986). Mediated interpersonal communication: Toward a new typology. In G. Gumpert & R. Cathcart (Eds.), *Intcr/media: Interpersonal communication in a media world* (3rd ed., pp. 26–40). New York: Oxford University Press.
- Cissna, K. N., & Sieburg, E. (1981). Patterns of interactional confirmation and disconfirmation. In C. Wilder-Mott & J. H. Weakland (Eds.), *Rigor and imagination: Essays from the legacy of Gregory Bateson* (pp. 253–282). New York: Praeger.
- Clark, H. H. (1996). *Using language*. Cambridge, UK: Cambridge University Press.
- Ellison, N., Heino, R., & Gibbs, J. (2006). Managing impressions online: Self-presentation process in the online dating environment. *Journal of Computer-Mediated Communication*, *11*, 415–441.
- Eveland, W. P., Jr. (2004). The effect of political discussion in producing informed citizens: The roles of information, motivation, and elaboration. *Political Communication*, *21*, 177–193.
- Festinger, L., & Carlsmith, J. M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal and Social Psychology*, *58*, 203–210.
- Fiore, A. T., & Donath, J. S. (2004). Online personals: An overview. In *CHI '04 extended abstracts on human factors in computing systems* (pp. 1395–1398). New York: Association for Computing Machinery.
- Hancock, J. T., Landrigan, C., & Silver, C. (2007). Expressing emotion in text-based communication. In *Proceeding of the 25th annual SIGCHI conference on human factors in computing systems* (pp. 929–932). New York: ACM Press.
- Hargittai, E. (2002). Second-level digital divide: Differences in people's online skills. *First Monday*, *7*(4). Retrieved January 28, 2010, from <http://firstmonday.org/htbin/cgiwrap/bin/ojs/index.php/fm/article/viewArticle/942/864#h4>
- Heider, F. (1958). *The psychology of interpersonal relations*. New York: John Wiley & Sons.

- Herring, S. C. (2001). Computer-mediated discourse. In D. Schiffrin, D. Tannen, & H. Hamilton (Eds.), *The handbook of discourse analysis* (pp. 612–634). Oxford, UK: Blackwell.
- Herring, S. C. (2004). Slouching toward the ordinary: Current trends in computer-mediated communication. *New Media & Society*, *6*, 26–36.
- Joinson, A. N. (2008). Looking at, looking up or keeping up with people? Motives and use of Facebook. In *Proceeding of the 26th annual SIGCHI conference on human factors in computing systems* (pp. 1027–1036). New York: ACM Press.
- Jones, E., Gallois, C., Callan, V., & Barker, M. (1999). Strategies of accommodation: Development of a coding system for conversational interaction. *Journal of Language and Social Psychology*, *18*, 123–152.
- Jones, E. E., & Pittman, T. S. (1982). Toward a general theory of strategic self-presentation. In J. Suls (Ed.), *Psychological perspectives on the self* (pp. 231–262). Hillsdale, NJ: Erlbaum.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. New York: Guilford.
- Klimmt, C., & Hartmann, T. (2008). Mediated interpersonal communication in multiplayer video games: Implications for entertainment and relationship management. In E. A. Konijn, S. Utz, M. Tanis, & S. B. Barnes (Eds.), *Mediated interpersonal communication* (pp. 309–330). New York: Routledge.
- Knapp, M. L., Wiemann, J. M., & Daly, J. A. (1987). Nonverbal communication: Issues and appraisal. *Human Communication Research*, *4*, 271–279.
- Lampe, C., Ellison, N., & Steinfield, C. (2006). A Face(book) in the crowd: Social searching vs. social browsing. In *Proceedings of the 2006 20th anniversary conference on computer supported cooperative work* (pp. 167–170). New York: ACM Press.
- Marchionni, G. (1995). *Information seeking in electronic environments*. Cambridge, UK: Cambridge University Press.
- McCroskey, J., & McCain, T. (1974). The measurement of interpersonal attraction. *Speech Monographs*, *41*, 261–266.
- Miller, G. R. (1973). Introduction: Counterattitudinal advocacy: A current appraisal. In C. D. Mortensen & K. K. Sereno (Eds.), *Advances in communication research* (pp. 105–152). New York: Harper & Row.
- Miller, G. R., & Steinberg, M. (1975). *Between people: A new analysis of interpersonal communication*. Palo Alto, CA: Science Research.
- Newhagen, J. E., & Rafaeli, S. (1996). Why communication researchers should study the Internet: A dialogue. *Journal of Communication*, *46*, 4–13.
- O'Sullivan, P. B. (1999). Bridging mass and interpersonal communication: Synthesis scholarship in HCR. *Human Communication Research*, *25*, 569–588.
- O'Sullivan, P. B. (2005, May). *Masspersonal communication: Rethinking the mass interpersonal divide*. Paper presented at the annual meeting of the International Communication Association, New York.
- Papacharissi, Z., & Rubin, A. M. (2000). Predictors of Internet use. *Journal of Broadcasting & Electronic Media*, *44*, 175–196.
- Parks, M. R., & Floyd, K. (1996). Making friends in cyberspace. *Journal of Communication*, *40*, 80–97.
- Parks, M. R., & Roberts, L. (1998). Making MOOsic: The development of personal relationships on line and a comparison to their off-line counterparts. *Journal of Social and Personal Relationships*, *15*, 517–537.

- Peña, J., & Hancock, J. T. (2006). An analysis of socioemotional and task-oriented communication in an online multiplayer video game. *Communication Research*, **33**, 92–109.
- Ramirez, Jr., A., Walther, J. B., Burgoon, J. K., & Sunnafrank, M. (2002). Information seeking strategies, uncertainty, and computer-mediated communication: Toward a conceptual model. *Human Communication Research*, **28**, 213–228.
- Reardon, K. K., & Rogers, E. M. (1988). Interpersonal versus mass media communication: A false dichotomy. *Human Communication Research*, **15**, 284–303.
- Rubin, A. M. (1983). Television uses and gratifications: The interaction of viewing patterns and motivations. *Journal of Broadcasting*, **27**, 37–52.
- Scheerhorn, D. R. (1991/1992). Politeness in decision-making. *Research on Language and Social Interaction*, **25**, 253–273.
- Scott, W. A. (1955). Reliability of content analysis: The case of nominal scale coding. *Public Opinion Quarterly*, **19**, 321–325.
- Stephens, K. K. (2007). The successive use of information and communication technologies at work. *Communication Theory*, **17**, 486–507.
- Stutzman, F. (2006, April). *The evaluation of identity-sharing behavior in social network communities*. Paper presented at the conference of the International Digital Media and Arts Association, Miami University Center for Interactive Media Studies, Oxford, OH. Retrieved January 7, 2007, from http://www.units.muohio.edu/codeconference/papers/papers/stutzman_track5.pdf
- Thomson, R., Murachver, T., & Green, J. (2001). Where is the gender in gendered language? *Psychological Science*, **12**, 171–175.
- Tidwell, L. C., & Walther, J. B. (2002). Computer-mediated communication effects on disclosure, impressions, and interpersonal evaluations: Getting to know one another a bit at a time. *Human Communication Research*, **28**, 317–348.
- Tong, S. T., & Walther, J. B. (2009, May). *Romantic rejection across computer-mediated communication*. Paper presented at the annual meeting of the International Communication Association, Chicago.
- Valkenburg, P. M., Schouten, A. P., & Peter, J. (2005). Adolescents' identity experiments on the Internet. *New Media & Society*, **7**, 383–402.
- Walther, J. B. (1992). Interpersonal effects in computer-mediated interaction: A relational perspective. *Communication Research*, **19**, 52–90.
- Walther, J. B. (1996). Computer-mediated communication: Impersonal, interpersonal, and hyperpersonal interaction. *Communication Research*, **23**, 3–43.
- Walther, J. B. (1997). Group and interpersonal effects in international computer-mediated collaboration. *Human Communication Research*, **23**, 342–369.
- Walther, J. B. (2007). Selective self-presentation in computer-mediated communication: Hyperpersonal dimensions of technology, language, and cognition. *Computers in Human Behavior*, **23**, 2538–2557.
- Walther, J. B., & Burgoon, J. K. (1992). Relational communication in computer-mediated interaction. *Human Communication Research*, **19**, 50–88.
- Walther, J. B., Carr, C., Choi, S., DeAndrea, D., Kim, J., Tong, S. T., et al. (in press). Interaction of interpersonal, peer, and media influence sources online: A research agenda for technology convergence. In Z. Papacharissi (Ed.), *A networked self: Identity, community and culture on social network sites*. New York: Routledge.

- Walther, J. B., Loh, T., & Granka, L. (2005). Let me count the ways: The interchange of verbal and nonverbal cues in computer-mediated and face-to-face affinity. *Journal of Language and Social Psychology, 24*, 36–65.
- Wang, S. S., Moon, S.-I., Kwon, K. H., Evans, C. A., & Stefanone, M. A. (2010). Face off: Implications of visual cues on initiating friendship in Facebook. *Computers in Human Behavior, 26*, 226–234.
- Wanous, J. P., Reichers, A. E., & Hudy, M. J. (1997). Overall job satisfaction: How good are single-item measures. *Journal of Applied Psychology, 82*, 247–252.
- Westerman, D., Van Der Heide, B., Klein, K. A., & Walther, J. B. (2008). How do people really seek information about others? Information seeking across Internet and traditional communication sources. *Journal of Computer-Mediated Communication, 13*, 751–767.
- Wiemann, J. M., Hawkins, R. P., & Pingree, S. (1988). Fragmentation in the field—And the movement toward integration in communication science. *Human Communication Research, 15*, 304–310.
- Williams, D., Caplan, S., & Xiong, L. (2007). Can you hear me now? The impact of voice in an online gaming community. *Human Communication Research, 33*, 427–449.
- Wright, K. B. (2004). Online maintenance strategies and perceptions of partners within exclusively Internet-based and primarily Internet-based relationships. *Communication Studies, 55*, 239–253.

电脑传播中人际目标对非故意内心影响的效应

Joseph B. Walther

密歇根州立大学传播系，电子传播，信息和媒体系

Brandon Van Der Heide

俄亥俄州立大学传播学院

Stephanie Tom Tong

密歇根州立大学传播系

Caleb T. Carr

密歇根州立大学电子传播，信息和媒体系

Charles K. Atkin

密歇根州立大学传播系

【摘要：】

本研究探讨了关系目标对寻求在线信息，以及它对在线聊天中使用信息和争论作为关系管理策略，和从这些过程中产生的内心态度转变的一系列效应。亲和与非亲和的目标影响参与者对传播效用的信息寻求 (Atkin, 1972)，他们的对话行为，以及他们对话题和伙伴的自身态度。负面关系目标的人比有亲和目标的人更多地利用网络寻求信息进行讨论。人们通过争论、赞同和不赞同伙伴的偏好来表达亲和与非亲和的关系，从而导致了自身的态度的改变。研究结果表明应重新考虑大众传媒和网上人际资源的相互作用。

Les effets des buts interpersonnels sur l'influence intrapersonnelle non intentionnelle
en communication médiée par ordinateur

Joseph B. Walther

Department of Communication

Department of Telecommunication, Information Studies, and Media

Michigan State University

Brandon Van Der Heide

School of Communication

Ohio State University

Stephanie Tom Tong

Department of Communication

Michigan State University

Caleb T. Carr

Department of Telecommunication, Information Studies, and Media

Michigan State University

Charles K. Atkin

Department of Communication

Michigan State University

Authors' note: The authors are grateful to three anonymous reviewers for their helpful suggestions.

Résumé

Cette étude explore une séquence d'effets concernant l'influence des buts relationnels sur la recherche d'informations en ligne, l'utilisation d'informations et d'arguments comme stratégies de gestion de la relation dans les conversations électroniques et les changements d'attitudes intrapersonnelles résultant de ces processus. Des buts d'affinité ou de non-affinité ont influencé les participants dans leurs recherches d'informations d'utilité communicationnelle (Atkin, 1972), dans leurs comportements conversationnels ainsi que dans leurs propres attitudes à l'égard du sujet et du partenaire de conversation. Les gens visant des buts relationnels négatifs utilisaient le web pour chercher de l'information en prévision des discussions plus que ne le faisaient les participants aux buts positifs. Les personnes ont exprimé de l'affinité ou de la non-affinité dans les arguments ainsi que dans les accords et désaccords avec les préférences de leurs partenaires, ce qui les a menés à changer leurs propres attitudes. Les résultats invitent à revoir l'interaction entre les médias de masse et les sources interpersonnelles disponibles sur Internet.

Mots clés : communication médiée par ordinateur, utilité communicationnelle, communication relationnelle, perception de soi, influence intrapersonnelle, recherche d'informations

Wirkungen von interpersonalen Zielen auf versehentlichen interpersonalen Einfluss bei computervermittelter Kommunikation

Joseph B. Walther, Brandon Van Der Heide, Stephanie Tom Tong, Caleb T. Carr, Charles K. Atkin

Die Untersuchung befasst sich mit einer Reihe von Effekten zum Einfluss von Beziehungszielen auf die Online-Informationssuche, die Nutzung von Informationen und Argumenten als Beziehungsmanagementstrategien bei computervermittelten Chats und intrapersonaler Einstellungsänderung, die aus diesen Prozessen resultiert. Affinitäts- vs. Nichtaffinitätsziele beeinflussten die Suche der Teilnehmer nach Informationen zur Kommunikationsnützlichkeit (Atkin, 1972), ihr Konversationsverhalten und ihre Einstellungen zum Thema und Partner. Menschen mit negativen Beziehungszielen nutzten das Web häufiger zur Suche nach Informationen für Diskussionen als Affinitätsziel-Teilnehmer. Personen drückten ihre Affinität/Nichtaffinität durch Argumente, Zustimmung und Ablehnung der Partnerpräferenzen aus, welche dazu führten, dass sich die eigenen Einstellungen änderten. Die Ergebnisse deuten auf eine erneuerte Betrachtung des Zusammenspiels aus Massenmedien und interpersonalen Internetquellen hin.

Schlüsselbegriffe: computervermittelte Kommunikation, kommunikative Nützlichkeit, Beziehungskommunikation, Selbstwahrnehmung, intrapersonaler Einfluss, Informationssuche.

Effects of Interpersonal Goals on Inadvertent Intrapersonal Influence in
Computer-Mediated Communication

컴퓨터 매개 커뮤니케이션내에서의 부주의한 개인내 영향에 대한 개인간 목표들의
효과들

Joseph B. Walther

Brandon Van Der Heide

Stephanie Tom Tong

Caleb T. Carr

Charles K. Atkin

요약

본 연구는 온라인 정보추구에 대한 관계적 목표들의 영향에 대한 효과들의 순서,
컴퓨터매개 잡담에서의 관계적 관리전략으로서의 정보와 논쟁의 사용, 그리고 이러한
과정들로부터 결과된 개인간 태도변화를 연구한 것이다. 친밀성 대 비친밀성 목표들은
대화 유틸리티를 위한 참여자들의 정보추구에 영향을 주었으며 (Atkin, 1972), 그들의
대화적 행위들 그리고 주제들과 파트너들에 대한 그들 자신의 태도들에 영향을 주었다.
부정적인 관계적 목표를 지닌 사람들은 친밀한 목표지향의 참여자들보다 웹사이트에서

대화를 위한 정보를 더욱 많이 찾는 것으로 나타났다. 개인들은 파트너들의 선호도에
논쟁하거나, 동의하거나, 동의하지 않거나 하는 과정을 통해 친밀성/비친밀성을
표현하였는데, 이는 그들 자신들의 태도를 변화하는 것으로 이끌었다. 발견들은
매스미디어와 인터넷에서 접근가능한 개인간 출처사이의 상호작용을 새롭게
고려해야한다고 제안하고 있다.

Los Efectos de los Objetivos Interpersonales sobre la Influencia Intrapersonal Inadvertida en

La Comunicación Mediada por la Computadora

Joseph B. Walther

Department of Communication

Department of Telecommunication, Information Studies, and Media

Michigan State University

Brandon Van Der Heide

School of Communication

Ohio State University

Stephanie Tom Tong

Department of Communication

Michigan State University

Caleb T. Carr

Department of Telecommunication, Information Studies, and Media

Michigan State University

Charles K. Atkin

Department of Communication

Michigan State University

Resumen

Esta investigación explora una secuencia de efectos relacionados con la influencia de los objetivos de relación en la búsqueda de información online, el uso de información y los argumentos como estrategias de manejo de relaciones en las conversaciones por medio de la

computadora, y el cambio de actitud intrapersonal resultante en estos procesos. Los objetivos de afinidad versus los de diferencia afectaron la búsqueda de información y la utilidad de su comunicación entre los participantes (Atkin, 1972), sus comportamientos conversacionales, y sus opiniones propias acerca de un tema y de su compañero. La gente con objetivos de relación negativos usaron la Web para buscar información sobre las discusiones más que los participantes con objetivos de afinidad. Los individuos expresaron su afinidad/diferencia a través de argumentos, acuerdos, y desacuerdos con las preferencias de sus compañeros, lo cual llevó a cambios en sus propias actitudes. Los hallazgos sugieren una consideración renovada de la intersección entre los medios de comunicación y las fuentes interpersonales accesibles por el Internet.

Palabras claves: Comunicación mediada por la computadora; utilidad de la comunicación y comunicación sobre la relación; auto-percepción; influencia intrapersonal; búsqueda de información