

Channel Choice as a Relational Message

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A thesis
submitted in partial fulfillment of the
requirements for the degree of

Master of Arts

University of Washington

2014

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Program Authorized to Offer Degree:
Department of Communication

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Abstract

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The process of communicating relational meaning is complex and involves the interplay of relational goals, messages, and frames. Relational meaning is often sent through nonverbal cues, which are important sources of social meaning and exist in many forms. This study addressed multiple components of the relational meaning process. First, it explored channel selection as a potential nonverbal cue that can carry relational meaning. Second, it investigated the role of nonverbal cues in the activation and displacement of relational frames. Findings in this study suggest that people consider channel selection to be a nonverbal cue born from the relational goal of affinity/disaffinity. Additionally, the data suggest there may be a relationship between nonverbal cues and relational frame activation.

Channel Choice as a Relational Message

In their everyday interactions, people pursue *relational goals*; these goals include such things as our intention to preserve closeness, avoid rejection, and end a friendship (Bandura, 1986; Carver & Scheier, 1998; Deci & Ryan, 1985; Fitzsimons & Bargh, 2003). To work towards these relational goals, we use verbal and nonverbal cues such as word choice, bodily expressions, and tone of voice that communicate *relational messages* defined as our feelings towards another and our view of our relationship with that person (Burgoon & Hale, 1984, 1988; Watzlawick, Beavin, & Jackson, 1967; Wiener & Mehrabian, 1968).

The concepts of relational goals and relational messages are inextricably interwoven. Relational goals motivate individuals to transmit particular relational messages through particular verbal and nonverbal cues (i.e., leaning forward/backward in order to communicate trust/distrust for one's communication partner or adjusting levels of eye contact to communicate attachment/detachment) (Burgoon & Hale, 1984; Dillard, Segrin, & Harden, 1989). Moreover, whether crafted consciously or subconsciously, relational messages are decoded by those with whom we communicate through a process of interpreting clues and drawing on frames of reference (i.e., *relational frames*) through which to understand them.

These frames are particularly important when they help us to determine the relational component of messages that are not straightforward (Solomon & McLaren, 2008). Solomon and McLaren liken the process to deciphering hastily scrawled text. To make sense of it, one can use surrounding text to help narrow down its potential meaning(s). Many potential meanings may be possible; however, until one commits to a particular meaning (*frame activation*), it is difficult to move on in the text. Moreover, according to Solomon and McLaren, we tend to focus on one particular meaning and discard alternate interpretations (*frame displacement*).

Relational Framing Theory (RFT) offers a useful means for understanding how we handle the interpretation of ambiguous relational cues. RFT suggests that this process of interpretation is influenced by message content, the social episode, the history between communicators, dispositional tendencies, and social norms; however, it does not provide an indication of how nonverbal cues or relational goals may influence the activation or displacement of frames (Solomon & McLaren, 2008). More specifically, it does not outline what may cause one to choose a particular interpretation of an ambiguous cue while simultaneously discarding the alternate interpretations offered by the opposing frame. Considering the significant role that nonverbal cues and their underlying relational goals play in transmitting relational messages, their influence on how we come to choose a particular interpretation for cues that may have an array of meanings while discarding alternate interpretations may also be significant.

When interpreting the relational meaning of messages, emphasis is often placed on how an utterance is said (i.e., its accompanying vocalics), a concept that relates to the nonverbal cues generated within these ambiguous moments. Thus, the role of contextualizing cues in the interpretation of relational meaning is vital to how we define and describe our interpersonal relationships as well as the ongoing patterns of exchange within them. This study explores the relational framing process by message encoders and decoders by examining a particular, potentially ambiguous nonverbal cue: *channel selection* (i.e., choosing the mode of communicating a message to another). In doing so, it attempts to understand (a) how frame activation and displacement occur; and (b) how the nonverbal cue of channel selection is interpreted by message encoders and decoders.

In sum, the meaning of relational messages is embedded within the larger context of the relational communication process. They are conveyed both verbally and nonverbally, are encoded both consciously and subconsciously, and are interpreted as being both straightforward and ambiguous. Our interpretation of relational messages, particularly ambiguous ones, is influenced by a variety of factors. These interpretations have the ability to shape the understanding we have of our relationships and this understanding is ultimately capable of defining our relationships. Thus, the relational communication process is complex.

Understanding the influence that relational goals and nonverbal cues, factors significant to the transmission of relational meaning, have on this process will help us to better understand how we convey and decipher the relational messages that are so instrumental in our relationships.

Literature Review

Relational Communication

Relationships define and are defined by our interpersonal interactions (Bateson, 1951; Rogers, 2008). The relational process is an interdependent one wherein parts (individual communication events such as messages) combine to form the whole (a relationship system such as parent-child or teacher-student) (Rogers, 2008). Moreover, the understanding of relationships as an interactive process postulates that individuals transmit information about themselves and their relationships through message exchange and feedback loops. Individual messages are seen as crucial parts of a whole interactive process that creates relational meaning. Such meaning can be symmetrical (messages reflected by both communication partners) or complementary (different messages given by each partner that fit together). Through ongoing patterns of meaning exchange, then, partners define their relationship with one another (Bateson, 1951).

When viewing communication through this perspective, individual messages serve the important function of connecting message encoders and decoders along two dimensions: content (subject of conversation) and relation (feelings about one's communication partner). Content refers to what is said, whereas relation refers to how it is said (Bateson, 1972). Moreover, "how it is said" often refers to the nonverbal elements of a particular message. Although some amount of each dimension is present in both verbal and nonverbal forms of communication, it is typically through nonverbal communication that we convey relational information.

Nonverbal Communication

Often in conjunction with verbal messages, nonverbal signs, or *cues*, communicate relational meaning. These nonverbal cues include, among others, how we use time (chronemics), proximity (physical distance), kinesics (facial expressions/gestures), and touch (haptics) in our interactions (Beavin & Chovil, 2006; Fridlund & Russell, 2006). Using these types of nonverbal cues alongside verbal messages can help us show others how much we value them, how intimate we feel towards them, or even how satisfied we are with the relationship we have (Burgoon, Buller, Hale, & de Turck, 1984; Giles & Le Poire, 2006; Noller, 2006). It is common for these cues to be encoded subconsciously; they are also often decoded automatically and can help us form impressions of others and our relationship with others (Lakin, 2006).

Often, nonverbal communication is thought to be most prominent in face-to-face communication, however nonverbal communication can take many forms, in both face-to-face and computer-mediated communication. Face-to-face nonverbal cues often include eye contact, body lean, proximity, smiling, and touch, whereas CMC nonverbal cues take on different forms including how messages are sent (e.g., timing/synchronicity, turn-taking, chunking) and how they are crafted (e.g., language choice, punctuation, capitalization) (Baron, 2004, 2010; Burgoon

et al., 1984; Hancock & Dunham, 2001; Hancock, Landrigan, & Silver, 2007; Kalman & Rafaeli, 2005; Ling & Baron, 2007; Walther, 1992, 2012).

Whether transmitted face-to-face or via CMC, nonverbal cues have been demonstrated to convey relational meanings such as immediacy, intimacy, attraction, trust, caring, dominance, persuasiveness, aggressiveness, composure, arousal, and formality (Burgoon et al., 1984). The ubiquity of these meanings has been captured through Burgoon and Hale's (1984) Relational Communication Scale (RCS), which measures the relational meanings of nonverbal cues and has been used across a variety of contexts, including family, health care, and mass communication settings (Graham & Titsworth, 2009). The scale's strong validity and reliability across such a wide-range of contexts suggests that relational meaning is present in many different types of nonverbal cues and within many different relational interactions.

Whereas Burgoon and Newton (1991) suggest that there are "consensually recognized meanings for behavior" that are often transmitted and interpreted at a subconscious level, the presentation of nonverbal cues by a message encoder does not ensure the automatic interpretation of relational meaning by the message decoder. More specifically, when a nonverbal cue falls outside of the norm (i.e., an unusual gesture) or is in some other way ambiguous (i.e., can communicate several different meanings), we may need to process its relational message value with more intention (Solomon & McLaren, 2008).

We often encounter relational messages that are ambiguous. For example, if a person whom we do not know well says, "I'd like it if you'd come to the party," interpreting the relational meaning of this message can be difficult. Do they see us as a potential romantic partner? A helper to setup the event? A friend? When faced with ambiguous messages, we must use the knowledge that we have of our communication partner, of our previous communication

experiences, and of the social episode (i.e., performance review, first date) as clues to help us decipher relational meaning (Solomon & McLaren, 2008). This sense-making process is outlined by Relational Framing Theory (RFT) and involves “sorting” verbal and nonverbal cues into particular frames of reference.

Relational Framing Theory

Burgoon and Hale’s (1984) Relational Communication Scale (RCS) is an extensive and nuanced measurement assessment of the types of relational information that nonverbal messages are capable of conveying. Relational types, or dimensions, in the RCS include immediacy/affection, similarity/depth, receptivity/trust, composure, formality, dominance, equality, and task orientation. The detail captured in these categories has demonstrated strong predictive validity and good reliability; however, when presented with ambiguous cues, the process of determining meaning is potentially challenging.

In these situations, communicators must often act quickly, using message context as a means of interpreting relational meaning. From a cognitive perspective, our ability to attend to nuance in such scenarios is more limited than when we are presented with cues that we deem to be non-ambiguous, as we are tasked with both locating contextual cues and drawing on multiple knowledge sets (of our partner, communication, and the social episode); at the same time, we are also tasked with applying that information to the cue requiring decoding (Solomon & McLaren, 2008). As such, when presented with situations that require choosing from various possible meanings, communicators tend to rely on a somewhat more heuristic method that utilizes a set of relational categories for interpretation. Relational frames can be one such heuristic.

RFT points to two categories, or frames, of relational meaning: *affinity/disaffinity* (expressions of our amicable nature towards or dislike of another) and *dominance/submission* (expressions of our feelings regarding the level of authority and control we feel we have in relation to another) (Dillard, Solomon, & Palmer, 1999). These frames do not discount the nuance offered by Burgoon and Hale's (1984) dimensions; rather, they encapsulate them, at least for the affinity/disaffinity frame, which subsumes several dimensions of the RCS including similarity, affect, receptivity, equality, composure, and formality. The dominance/submission frame is defined by the dominance/submission factor included in the scale.

Once people select a particular frame, they are likely to decode all additional clues through its lens, "displacing" the opposing frame (Dillard, Solomon, & Samp, 1996). Thus, if we determined that the relational message being conveyed is about feelings of affinity, then we will interpret all accompanying word choices, bodily expressions, and tone of voice through this frame. On the other hand, if we determined that the message being conveyed is about dominance, then we will interpret these same clues as evidence that our communication partner views us as either dominant or submissive to them. Frame activation and displacement are purported to occur at the same time; however, the suggestion that choosing a particular interpretation of an ambiguous cue, in effect, replaces potential opposing interpretations, has yet to be supported empirically (Solomon & McLaren, 2008). Further, although we know that nonverbal cues and relational goals are instrumental in the transmission of relational messages, the role that they may play in the activation/displacement process purported by RFT is unclear.

This process allows us to make sense of otherwise uncertain relational messages and cues for which we do not have single, consensually recognized meanings. We may be faced with such situations when we have not yet experienced a particular message, such as when we

communicate interculturally and do not know the meaning of particular cues as used in another's culture. Likewise, we may have to infer a meaning out of several equally possible interpretations even within our own communication community (i.e., crossing one's arms). Additionally, we may encounter ambiguity when we are faced with a cue for which we have no previous communication experience or knowledge of shared meaning, a process likely to occur within computer-mediated communication.

Channel Selection as an Ambiguous Nonverbal Cue

The nonverbal capabilities of CMC have become increasingly important as CMC has become more integrated in our daily lives, sometimes taking the place of face-to-face (FTF) interaction. Multi-channel communicators, those that use the internet, instant messaging, text messaging, cell phones, and social networking sites simultaneously for communication, are becoming increasingly common (Lenhart, Madden, MacGill, & Smith, 2007). For these users, mobile, email, and telephone communication use have been found to be complementary to FTF communication, rather than as a substitute for it. More specifically, individuals often engage multiple channels when interacting with others, taking advantage of both the strengths and limitations of each and selecting them purposely for particular social, practical, and financial circumstances (Madell & Muncer, 2005). In support of his argument, several factors have been found to underlie this process of *channel selection*; among these are channel related factors like efficiency and effectiveness, communicator-related factors like perceived skill and communication style, and contextual factors like access to channels and physical distance between communicators (Ho, 2005).

In addition, individuals select a channel based on its ability to achieve particular goals. For instance, romantic partners in conflict made channel selection choices based on the channel's

compatibility with their communication style and/or its capability to help one save face (Frisby & Westerman, 2010; Ho, 2005). Moreover, Kayany, Watring, and Forrest (1996) found when people have competitive goals, they choose channels that will allow them to have more control over the interaction in which they will engage. Further, individuals have demonstrated preferences for certain channels based on the desire to fulfill particular interpersonal goals such as pleasure, inclusion, escape, or relaxation (Westmyer, DiCiccio, & Rubin, 1998).

The existence of these types of choices and preferences for other communicative acts suggests that similar motivations may be present when transmitting relational information. There is some evidence that relational goals (e.g., the desire of an individual to express how he or she feels about another person) are a factor in the channel selection process. In particular, researchers have found an association between relational closeness and channel selection (e.g., Ledbetter, 2008).

Communicators have been shown to be willing to use several types of channels to communicate with those whom they considered to have strong ties, whereas they preferred social networking or FTF for those with whom they have weak ties (Van Cleemput, 2010). Based on the status of the person with whom they are communicating, people have been shown to select particular channels for relational *maintenance* based on relationship status (i.e., friends, significant others, and relatives may be communicated with differently given their status with the message encoder) (Houser, Fleuriet, & Estrada, 2012; O'Sullivan, Hunt, & Lippert, 2004). Thus, individuals have the ability—and willingness—to make choices about what channels to use for communication based on factors in the communicative exchange.

Likewise, when receiving messages through particular channels, we may be able to infer how the person that encoded the message feels about us (i.e., a strong tie versus a weak tie or

relationship status), and we may interpret the choice of a particular channel as, in part, a relational one. For example, if we receive a message through a social networking website, we know that the message encoder has made the choice to send it in that sphere rather than in an array of other options. If convenience and accessibility are not factors, meaning that other channel options were equally as convenient and available to use, then it is possible that the choice to select this particular channel was motivated, at least in part, by some other factor.

Together, these findings reflect that there may be an association between the relationship of communicators and channel choice, one that suggests relational goals as one driver behind channel selection. It is possible that this choice, just as the choice to lean forward/backward or increase/decrease eye contact, is a relationally motivated nonverbal message. Stated differently, if channel choice can function as a nonverbal message motivated by relational goals, then it can also have the potential to convey relational messages. This argument is the basis of the current project.

In understanding channel selection as a relational message, the present study examines channel choice preferences of message encoders influenced by particular relational goals as well as the interpretation of such choices by those receiving these messages. Although RFT provides a framework to understand how people make sense of ambiguous relational messages, it does not provide an explanation for how we choose a particular frame through which to interpret ambiguous nonverbal cues (Solomon & McLaren, 2008). Thus, this study has the potential to add to the completeness of RFT.

Hypotheses

Kayany, Watring, and Forrest's (1996) findings regarding relational goals and channel selection suggest that those with more competitive goals select channels that provide more

opportunity for control. Control is often defined by one's ability to manage his or her self-presentation, and the best opportunity for controlled self-presentation is through computer-mediated channels (Walther, 1996). As text- or voice-based computer-mediated channels do not capture many of the nonverbal cues that we can send when in the presence of another (such as facial expressions, gestures, and body movements), communicators have the opportunity to craft relational messages at a more conscious level. These channels allow message encoders to decide what information they want to expose about themselves, whether accurate or inaccurate. They also give the message encoder more time to devise messages as the demand for an immediate response is not *as* present as it is in FTF interactions.

When attempting to dominate another, communication must often be strategic, and the more control that an individual has over the communication event, the more likely he or she will succeed (Kayany, Watring, & Forrest, 1996; Walther, 1996). Thus, channels that are more asynchronous and allow for more control over cues are likely to be chosen when the communicator's relational goal involves the transmission of dominance or submission. Email provides the greatest level of control, as it allows for careful message manipulation and it is mostly asynchronous, and encoders will likely make this channel choice consistent with best meeting their goals. Given the shared meanings of many nonverbal cues, those *receiving* messages through these channels should also interpret them as more dominant than other channels.

H₁: Message encoders will demonstrate a preference for email communication over other channels when communicating dominance messages.

H₂: Message decoders will rate messages received via email as higher in dominance than they will rate messages received from other channels.

Ledbetter (2008) found that both the perceived efficiency and convenience of a particular communication channel can determine one's likelihood of selecting it. As such, the telephone was a predictor of relational closeness in his study. Such a finding suggests that channels that allow communicators to stay in touch regularly, due to either convenience or ease of use, allow individuals to communicate more frequently, and, as a result, are associated with a greater sense of immediacy. This argument aligns with the prediction that those who wish to express closeness with their communication partner will likely show a preference for this type, or similar types, of communication. Both the telephone and text messaging allow for convenient and efficient regular communication, thus they are more likely to be chosen by those with affiliative goals. Further, those receiving messages via telephone should interpret them as more affiliative than they would interpret messages from other channels.

H₃: Message encoders will demonstrate a preference for telephone and text-message communication when communicating affinity messages as compared to other channels.

H₄: Message decoders will rate messages received via telephone and text-message as higher in affinity than they will rate message received via other channels.

Finally, face-to-face communication has long been thought to be a "rich" form of communication (Daft & Lengel, 1984). As the channel has a high capacity for using different types of nonverbal cues in a synchronous format, it is considered the most "robust" of the channels indicated here. When interacting FTF, communicators have the advantage of being in each other's physical presence, allowing them to exchange glances, display gestures, adjust their proximity, and even touch simultaneously. These cues are unavailable through many other communication channels, and thus FTF communication is often thought to provide the fullest or richest communication experience.

Although it is generally believed that FTF communication is reserved for more complex messages, much of the research supporting such claims is dated or has been disproven (Walther, 2011). As technology has become more integrated into our everyday lives, and the relational capacity of such channels is discovered, it is unclear if FTF channel will yield higher or lower ratings for any relational message type. Thus, although studies suggest that CMC is not used as a substitute for FTF communication, the relational goals driving the selection of this channel are not yet known (Flaherty, Pearce, & Rubin, 1998). Given this, two research questions are posed:

RQ1: How will message encoders rate the face-to-face channel in response to all relational message types?

RQ2: How will message decoders rate relational messages received from the face-to-face channel?

Understanding how channel selection contributes to the crafting and interpretation of relational messages helps to address some of what RFT does not yet do: the effect that relational goals and ambiguous nonverbal cues have on frame activation and displacement. The following studies are an exploration of the relational forces at work in the encoding and decoding of nonverbal messages transmitted through channel selection (Dillard et al., 1999). The role of relational goals and nonverbal cues in the encoding and decoding of relational meaning is an important component to how we define and describe our interpersonal relationships as well as the exchanges we have within them. The studies in this project are an attempt to gain a better understanding of the relational frames activated and displaced by relationally motivated and ambiguous nonverbal messages.

Method

Two studies were conducted to better understand the role of channel selection as a nonverbal cue communicating relational message value. These studies explored the underlying goals of channel selection from the encoder's perspective and the interpretations of this choice from the decoder's perspective. Study One focused on message encoders and the relational goals that influence their channel choices. Study Two focused on message decoder interpretations of relational messages. Details for each study are outlined in the next sections.

Participants

For both studies, online questionnaires were distributed to a convenience sample recruited from a large undergraduate Communication course at the University of Washington. In exchange for their responses, participants were eligible to receive course credit. They were also offered an alternate assignment if they chose not to participate. As an additional incentive, potential participants were given the option to enter a gift card raffle. Although this study used a convenience sample, it is important to note the significance of the population from which it was drawn. College students tend to communicate via technology with more frequency and variety than older generations and have the financial resources available to them to participate in these technologies, making them ideal candidates for the purposes of this study (Madell & Muncer, 2005).

Procedure

Phase 1: Survey development. Instrument development for the following experiments was adapted from Lanutti and Monahan's (2002) study of relational frames, alcohol consumption, and sexual communication. In their investigation, the authors used RFT as a means of assessing the interpretation of nonverbal cues in scenarios involving sexual escalation and

coercion. Their aim was to determine the effect that alcohol use had on the salience of relational frames. The present study does something similar, requesting that participants interpret relational information gleaned from particular cues. Additionally, RFT guided the design of the instrument as well as the means of analysis (collapsing the multiple relational dimensions captured in the Relational Communication Scale into the two relational frames theorized by RFT) (Dillard et al., 1989, 1999).

Phase 2: Pilot testing. Survey instruments were pilot tested prior to the start of the formal study to ensure (a) that the messages presented in fact expressed the relational information as intended; and (b) that the survey instructions were clear to participants. The pilot test was conducted on 24 undergraduate students enrolled in Communication courses. No compensation was exchanged for their participation. Results of the pilot test, available from the author, indicated that the instructions were clear and that the messages presented communicated relational information as intended. No modifications were necessary prior to the administration of the study.

Phase 3: Survey administration. Participants were randomly assigned to the following studies and conditions: Study One message encoders (conditions: affinity/disaffinity and dominance/submission) or Study Two message decoders (conditions: face-to-face, telephone, text messaging, email). Details and findings for each study follow.

Study 1: Message Encoders

Independent Variables

Relational frame of message. Messages were created by the researcher, with content of a general nature representative of typical relational scenarios that participants are likely to experience in their daily lives and in a variety of relationships. Such messages included making

plans to go to the movies, discussing the assembly of an un-named object, and disagreeing about where to meet for dinner (See Table 1). As noted, they were crafted to represent each end of two relational frames outlined by RFT: affiliation/disaffiliation and dominance/submission (Dillard et al., 1999). The relational frame of each message was considered its goal. Thus, relational goals underlying the choices that participants made were operationalized as the messages deemed to best represent affiliation/disaffiliation and dominance/submission, and that received the highest ratings on that dimension during pilot testing.

Dependent Measures

Type of channel. The scope of the study ruled out channels used largely for one-to-many communication (i.e., Twitter, Facebook), whereas channels that lend themselves to interpersonal one-on-one communication were included. Although many social networking websites offer private messaging functions, such channels were considered equivalent to at least one other channel selected for analysis. For example, as many users access Facebook via their mobile phones, Facebook private messaging was thought to be very similar to text messaging. The study therefore included four distinct communication channels, chosen on account of their widespread use and adoption among the study population as well as their ability to represent a range of channel characteristics such as varying levels of visual cues, synchronicity, and convenience. These channels are face-to-face, telephone, text messaging, and email. Participants were asked to select the degree of likelihood of selecting each channel through which to communicate the series of messages.

Participants

Surveys were completed by 137 participants who were randomly assigned to the experiment's conditions, but the conditions were not counterbalanced, explaining the difference

in cell sizes. An *a priori* power analysis indicated that 54 subjects would be needed in each of the six groups to have 95% power for detecting a medium sized effect when employing the traditional .05 criterion of statistical significance. Participants were distributed as follows: affinity/disaffinity ($n = 54$) and dominance/submission ($n = 83$). The mean age of participants was 21, and a majority identified themselves as female (61%). In addition, participants identified mostly as Asian/Pacific Islander (45%) or White (36%).

Procedure

Participants were randomly assigned to one of two relational frame conditions: affinity/disaffinity or dominance/submission. In section 1, instructions asked participants to write down the name of someone they know well and with whom they communicate frequently. The purpose of this task was to make the participants envision a particular communication partner so as to encourage their responses to be as true-to-life as possible. They were asked to provide information about their relationship with this person such as length of relationship and how they would classify this individual (friend, family, romantic partner, coworker, etc.). They were also asked the sex of this person. In section 2, participants were asked to respond to the remainder of the survey, imagining that they would be sending the messages that followed to the person they identified in section 1, selecting the channel through which they are most likely to send the messages. The series of messages with which each participant was presented was determined by the condition to which they were assigned. Thus, those assigned to the affinity/disaffinity category received the pilot tested messages that demonstrated this relational dimension, and those assigned to the dominance/submission category received messages corresponding to that dimension. As a way to account for additional factors that might influence

their channel preference, participants were instructed to imagine that there were no cost, convenience, or access restraints present when making their channel selection.

Results

Hypotheses predicted that message encoders sending dominance messages would demonstrate greater preference for email (H_1) and a greater preference for telephone and text message communication for affinitive messages (H_3). To test these predictions, paired-samples t-tests were conducted to compare channel preference (face-to-face, telephone, text message, and email) and affinity/disaffinity and dominance/submission frame conditions. There was a significant difference in text message preference scores for the affinity/disaffinity frame ($M = 5.25$, $SD = 1.12$) and dominance/submission frame ($M = 6.01$, $SD = 1.03$); $t(53) = -3.77$, $p < .001$. Further, means were higher for affinitive messages ($M = 4.83$, $SD = 0.68$) than they were for disaffinitive messages ($M = 4.05$, $SD = 0.96$).

There was not a significant difference in the face-to-face preference scores for the affinity/disaffinity frame ($M = 5.25$, $SD = 1.12$) and the dominance/submission frame ($M = 5.84$, $SD = 0.95$), telephone preference scores for the affinity/disaffinity frame ($M = 4.96$, $SD = 1.45$) and the dominance/submission frame ($M = 5.41$, $SD = 1.30$), or email scores for the affinity/disaffinity frame ($M = 1.89$, $SD = 1.07$) and the dominance/submission frame ($M = 2.21$, $SD = 1.40$). The data reveal a significant relationship between relational frame and channel preference, providing partial support for H_3 , however the null hypothesis cannot be rejected for H_1 . Further, as no significant findings were revealed regarding relational frame and face-to-face channel preferences, conclusions cannot be drawn from the question posed in RQ1. Altogether, these results suggest that only messages with an affinity/disaffinity goal affected channel choice preferences for message encoders in this study. Specifically, these tests suggest that when

message encoders desired to transmit an affiliative message, they were more likely to choose the text message channel rather than any of the other channels.

Study 2: Message Decoders

Dependent Measures

Relational frame of message. All messages used in Study One were included in the questionnaire for each condition. Participants were asked to rate the relational messages present using an adaptation of Burgoon and Hale's (1984) Relational Communication Scale (see Appendix B for the adapted scale). The RCS is versatile and has been used for 30 years in a variety of contexts both within and outside of the Communication field, has demonstrated reliability, and was thus a strong measure for the purposes of this study (see Burgoon & Hale, 1987, 1988; Hale, Lundy, & Mongeau, 1989; Manusov, 2005; Walther & Burgoon, 1992).

Not unexpectedly, RFT indicates that several of the foundational relational messages included on the RCS can be collapsed, however, into the two larger frames that Relational Frame Theory identifies (Dillard et. al., 1999). Thus, the RCS measures for immediacy/affection, similarity/depth, and receptivity/trust were subsumed under the affiliation/disaffiliation frame, and those measuring dominance/equality were equated with the dominance/submission frame. The remaining dimensions of the RCS were not included, as they were not applicable to the items to be rated in the questionnaires. Through the modified RCS, participants were asked to rate their agreement with the aforementioned relational characteristics for each message.

Procedure

Participants were randomly assigned to one of four channel conditions: face-to-face, telephone, text messaging, or email. A manipulation check was included to ensure that the participants paid attention to their condition. Questionnaires used the same content from sections

1 and 3 of Study One's questionnaires and also included a unique second section. In section 2, participants were asked to imagine that they have received the messages that followed through the channel to which they were assigned and from the individual that they identified previously. They were asked to rate each message in terms of how much they agreed with the statements that followed it. (See Appendix A for sample questions.)

Participants

Surveys were completed by 276 participants who were randomly assigned to the experiment's conditions; however, only data that passed the survey's manipulation check were included in the analysis ($n = 190$): face-to-face ($n = 55$), phone ($n = 20$), text messaging ($n = 68$), and email ($n = 47$). An *a priori* power analysis indicated that 54 subjects would be needed in each of the six groups to have 95% power for detecting a medium sized effect when employing the traditional .05 criterion of statistical significance, and this was not quite achieved. The mean age of these participants was 20, and a majority identified themselves as female (55%). In addition, participants identified mostly as Asian/Pacific Islander (46%) or White (39%).

Results

Hypotheses predicted that message decoders would rate messages received via email as higher in dominance (H_2) and those received via telephone and text message as higher in affinity (H_4). To test these predictions, a one-way ANOVA of channel condition (face-to-face, phone, text messaging, and email) was conducted and yielded no significant differences between groups in regard to relational communication scale scores for the dominance/submission frame, $F(3, 186) = 1.73, p = .162$. Significant differences were found for channel condition and relational communication scores for the affinity/disaffinity frame, $F(3, 186) = 3.50, p = .017$. Post hoc

comparisons using the Tukey HSD test indicated that the mean affinity/disaffinity score for the FTF condition ($M = 4.74$, $SD = 0.71$) was significantly different than the text message condition ($M = 4.43$, $SD = 0.56$). Additionally, affinitive messages ($M = 5.65$, $SD = 0.76$) yielded a higher mean than did disaffinitive messages ($M = 3.43$, $SD = 0.89$). The email ($M = 4.44$, $SD = 0.47$) and telephone conditions ($M = 4.60$, $SD = 0.55$), however, did not significantly differ from the FTF and text message conditions. The data reveal significant relationships between the independent and dependent variables, providing partial support for H_4 ; however, the null hypothesis cannot be rejected for H_2 . Results do provide implications for RQ2, however, as those receiving messages via face-to-face communication rated affinitive messages more highly.

Taken together, these results suggest that particular channels of communication had an effect on the affinity levels interpreted by message decoders but not on the dominance levels interpreted. Specifically, these results suggest that when affinitive messages are communicated through face-to-face communication or text message, those receiving these messages interpreted them as more affinitive than they would if they had received them via telephone or email. Such a finding suggests that these particular channels are better at communicating affinity than are other channels.

Discussion

The preceding studies investigated the relational messages transmitted by channel selection cues. Additionally, it explored how these messages were interpreted through the relational framing process. Promising findings regarding channel selection and relational messages emerged. RFT outlines the process of interpreting relational information present in messages yet does not outline how the interpretive process plays out regarding nonverbal cues or

relational goals. Findings in this study have several implications for the connection between nonverbal cues, relational goals, and relational frames.

Results indicate some support for the assertion that channel selection can act as a nonverbal cue capable of transmitting relational messages and that this act is influenced by relational goals. As message encoders exhibited a preference for text message communication when they had the goal of communicating affinity, and message decoders rated these same messages more highly when received via text message and face-to-face communication, it appears that one's choice of channel can be imbued with particular types of relational meaning. That is, it appears to have a consensual social meaning as defined by Burgoon and Newton (1991). The fact that dominance messages did not demonstrate similar results may not detract from the conclusion that channel selection can serve as a nonverbal cue but, rather, that for these types of messages, different nonverbal cues (i.e., timing of message, punctuation) may do a better job of encoding relational meaning. In addition, when considering Frisby and Westerman's (2010) findings on channel selection in romantic conflict episodes, it also may be possible that one's communication style and level of concern regarding self-presentation may be better indicators of the choices that communicators wishing to express dominance or submission make. Finally, it may be that dominance/submission messages needed to be much more extreme to be labeled as such by message decoders. As pilot tests indicated that the messages used in these studies were not extreme, message decoders may not have detected dominance/submission where it may in fact have been present.

Further, when considering results from the message decoder study (Study Two), the increase in levels of affinity through particular channel selections may indicate something about the relationship between relational frame activation and nonverbal messages. Although previous

research in RFT has found that relational frame activation can be influenced by message content, the social episode within which the message is received, the history of interactions between the communicators, a message receiver's dispositional tendency, and social norms, it does not provide an indication of how nonverbal cues influence the activation of such frame (Solomon & McLaren, 2008).

As message content was identical for those asked to decode relational content across channel conditions, the fact that the affinity/disaffinity frame was detected more strongly after the introduction of a particular nonverbal cue (face-to-face or text message communication), while, at the same time, dominance/submission messages were not more or less greatly detected with the introduction of the same cues, suggests *that nonverbal messages may influence frame activation*. This finding supports RFT's assertion that frame activation also results in frame displacement, a crucial factor in our understanding of the processes involved in relational messaging processing and, in effect, of the relationships that these processes define and describe. As dominance/submission message scores did not demonstrate any significant changes in response to channel conditions, it may be possible that, when channel cue of face-to-face and/or text message communication is present, the affinity/disaffinity frame is activated, while the dominance/submission frame, is discarded. Put another way, when communicators see that their partner has communicated with them face-to-face or through text messaging, they may interpret this channel cue, and their relationship with this partner, as affinitive, while simultaneously casting away any alternate interpretations offered by the dominance frame (i.e., that their partner is trying to control them).

Limitations and Future Research

The studies presented here have limitations. Although the pilot test did not suggest such a high failure rate for the instructional manipulation check included in Study Two (“Based on the survey’s instructions, through what channel were the preceding messages received?”), the final study necessitated the removal of 30% of data collected. Such a large rate of error suggests that the manipulation of independent variable (channel) may not have been adequately pronounced. Moreover, the high failure rate significantly reduced the size of the sample available for data analysis, reducing the power of the analyses. This is particularly true for the telephone condition, which was reduced to a sample size of just 20 participants. Thus, the reliability of the results obtained from this study should be approached with caution, and the procedure should be replicated with a larger sample size in order to verify results. Repeating the current study with additional measures aimed at ensuring that participants understand the instructions of the survey will increase internal validity.

Additionally, both studies assessed the choices that participants would make in hypothetical situations, a choice made to bolster the systematic nature of the study. The messages included in the questionnaires were constructed in such a way that they would have a high likelihood of being used in typical conversations, and participants were encouraged to think about a particular other when responding; however, the scenarios were still hypothetical rather than actual. Further, the hypothetical message scenarios presented were not created to capture additional factors known to influence relational frame activation such as social episode and dispositional tendency. These are important considerations when interpreting this paper’s findings, as the method used does not fully capture the complexities of interaction. Because participants’ actual behavior may differ from what they reported in the questionnaire, studies that

address additional factors known to influence relational frames (e.g., social episode, dispositional tendency) as well as those analyzing real-time interaction data are needed.

Finally, although these findings suggest that there is a relationship between nonverbal cues and relational frames, it is not clear if nonverbal cues influence relational frame activation or if relational frames influence the interpretation of nonverbal cues. Additional research should be conducted to address this effect as well.

Conclusion

Interpreting relational meaning is an interactional process involving the coordination of message encoders' relational goals, relational messages, and nonverbal cues with message decoders' appropriate interpretation of them. Increasing our knowledge of the cues that influence this process helps us to better understand how our relationships are defined. The present research project adds to the body of knowledge regarding relational communication. In investigating different factors that can influence our interpretation of cues (such as the computer-mediated ones analyzed here), we may be able to better understand how to create and interpret the relational meaning of messages that contribute to the development of our relationships.

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Table 1*Relational Frame of Messages*

Relational Frame	Message
<i>Affinity</i>	I really want you to come to the movies tonight. You always make me laugh. Last night was so much fun. I hope you feel better.
<i>Disaffinity</i>	Your nagging is driving me crazy. You can really annoy me sometimes. I can't believe you would do something awful like that. I don't think it's a good idea for you to come to the party.
<i>Dominance</i>	Stop showing up late all of the time. Just finish it and let me know when you're done. I need a copy of that photo we took. Give me your address.
<i>Submission</i>	Wherever you want to go for dinner is fine. I need help. I don't know how to put this thing together. It would be nice if you could help me out. I wish you would meet at my house this time.

Appendix A**Sample Question: Message Decoder/Face-to-face Condition/Affinity Messages**

Instructions: Imagine that you are communicating Face-to-face with the person you previously indicated and have received the following messages. A series of statements follows each one. For each, indicate the degree to which you agree or disagree with the statement. Please complete all items.

Message: "I really want you to come to the movies tonight."

- | | | | | | | | |
|---|---|---|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she did not want a deeper relationship between us. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she communicated coldness rather than warmth. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she created a sense of distance between us. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she was interested in talking to me. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she showed enthusiasm while talking to me. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she acted like we were good friends. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she seemed to desire further communication with me. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she seemed to care if I liked him/her. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she was interested in talking with me. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she wanted me to trust him/her. |

Sample Question: Message Decoder/ Face-to-face Condition/Disaffinity Messages

Instructions: Imagine that you are communicating Face-to-face with the person you previously indicated and have received the following messages. A series of statements follows each one. For each, indicate the degree to which you agree or disagree with the statement. Please complete all items.

Message: "Stop showing up late all of the time."

- | | | | | | | | |
|---|---|---|---|---|---|---|--|
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she didn't attempt to influence me. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she tried to control the interaction. |
| 1 | 2 | 3 | 4 | 5 | 6 | 7 | He/she had the upper hand in the conversation. |

Appendix B

Adapted Relational Communication Scale from Burgoon and Hale (1984)

Affinity/Disaffinity

1	2	3	4	5	6	7	He/she did not want a deeper relationship between us.
1	2	3	4	5	6	7	He/she communicated coldness rather than warmth.
1	2	3	4	5	6	7	He/she created a sense of distance between us.
1	2	3	4	5	6	7	He/she was interested in talking to me.
1	2	3	4	5	6	7	He/she showed enthusiasm while talking to me.
1	2	3	4	5	6	7	He/she acted like we were good friends.
1	2	3	4	5	6	7	He/she seemed to desire further communication with me.
1	2	3	4	5	6	7	He/she seemed to care if I liked him/her.
1	2	3	4	5	6	7	He/she was interested in talking with me.
1	2	3	4	5	6	7	He/she wanted me to trust him/her.

Dominance/Submission

1	2	3	4	5	6	7	He/she didn't attempt to influence me.
1	2	3	4	5	6	7	He/she tried to control the interaction.
1	2	3	4	5	6	7	He/she had the upper hand in the conversation.