

THESIS

COMMUNICATING THE RIGHT MESSAGE ON THE WRONG MEDIUM:
THE CONSTRUCTION OF COMPETENT MESSAGES IN MEDIUM
RULE-VIOLATION SITUATIONS

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ABSTRACT

COMMUNICATING THE RIGHT MESSAGE ON THE WRONG MEDIUM: THE CONSTRUCTION OF COMPETENT MESSAGES IN MEDIUM RULE-VIOLATION SITUATIONS

This study examines medium rule violations, or violations of people's expectancies for appropriate media selection. Examples of medium rule violations abound and include, for instance, breaking up through email and being fired over the phone. Previous scholarship (Gershon, 2010; Starks, 2007; Westmyer, DiCioccio, & Rubin, 1998) suggests that media selection may be, in some situations, a rule-governed behavior. This study proposes a unified term, "medium violations," for violations of such medium rules for appropriate media selection. In addition, it suggests a framework, drawn from Shimanoff's (1980) taxonomy of rule-governed behavior, for developing more competent messages in medium rule-violation situations. The taxonomy organizes rule-governed behaviors according to the communicator's conscious awareness of a rule when engaging in a rule-governed act. The study hypothesizes that the varying levels of rule-consciousness can be used to address communicators' face needs. Thus, the more rule-conscious the message, the more competent the message should be perceived in medium rule-violation situations.

A two (situation type: medium rule adherent vs. medium rule violation) by five (message type: negative reflective, violation, no rule acknowledgment, following, positive reflective) experiment was conducted with 291 participants. In addition, a coding scheme to better understand participants' reactions to the medium selection was

developed. The study found that messages in the medium rule-adherent situation were always viewed as more competent than medium rule-violation messages. Yet, negative reflective messages, messages where the communicator engaged in both self- and other-facework, were perceived as the most competent message type. No interaction effect between situation type and message type was found.

This study sought to increase current knowledge on medium rules and the construction of messages in medium rule-adherent and violation situations. It suggested the existence and importance of medium rules in guiding mediated interactions, and it also demonstrated the utility of Shimanoff's (1980) taxonomy of rule-governed behavior in the construction of mediated messages. Further, the emotional reaction to the medium selection coding scheme was found to be reliable and may be useful in future empirical research.

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INTRODUCTION

When Carol Bartz called Yahoo! Chairperson Roy Bostock on September 6, 2011, Bostock informed her that she had three hours to decide whether to resign or be fired from her position as CEO (Sellers, 2011). Bostock's choice of a phone call to deliver the termination message caused an eruption of conversation on the internet about firing etiquette (e.g., Flock, 2011; Lewis, 2011). Bartz's later decision to send out a company-wide email, which explicitly acknowledged that she had been fired over the phone, to Yahoo!'s over 14,000 employees further drew attention to the medium used to communicate the firing. Barely 24 hours later, Bartz called *Fortune* magazine and gave a tell-all interview, calling the board members a bunch of "doofuses" (Sellers, 2011). The circumstances surrounding Bartz's firing highlight important contemporary issues for communication researchers to examine. In particular, as the number of available communication media increase, communicators have more opportunities to send face-threatening messages in ways that violate people's expectancies for communication media use. Getting fired over the phone, for example, or dumped over email, are quintessential examples of communication medium violations. The current study examines such medium violation situations and messages.

Though it is a "digital age," where much communication occurs through channels other than face-to-face, certain unwritten rules for communication media persist. Do not fire over the phone. Do not break-up through an email. Do not announce a health problem in a text message. Although unwritten medium rules exist, sometimes these rules must be violated. In the case of Yahoo! and Bartz's termination, Flock (2011) of *The Washington Post* points out that Bartz and Bostock were traveling in opposite directions across the

country at the time of the phone call, so “they would have had no opportunity to meet in person Tuesday [September 6, 2011]” (para. 3). Bostock’s dilemma—to violate medium rules but fire Bartz in a timely manner, or follow medium rules but wait several days to do so—is a particularly difficult one. Yet, what is often forgotten is that messages can be constructed so that they are perceived as more or less competent by the receiver. Therefore, instead of focusing attention only on selecting the most socially-appropriate medium to transmit a given message, communication researchers should also attend to the issue of how communicators can create the most communicatively competent message, regardless of the medium (or in spite of it).

The reality is that people will continue to express complex or face-threatening messages through various mediated channels, ranging from text messages and email to Twitter and Facebook. It is important, then, to offer a theory-based analysis of how communicators can express messages more competently in situations where they are violating unwritten rules for medium usage. Drawing from Shimanoff’s (1980) theory and research on communication rules, this study suggests that the level of rule-consciousness exhibited in the message may be one way to influence evaluations of message competence. Theory and research on expectancy violations (Burgoon & Hale, 1988), face (Cupach & Metts, 1994; Goffman, 1959; 1967), and communication competence (Spitzberg & Cupach, 1984) also inform the current investigation. Ultimately, the study strives to enhance current understandings of how communicators can create competent messages in situations where they may be violating social norms for medium use. Simply put, this study investigates how communicators can communicate the right message on the wrong medium.

LITERATURE REVIEW

The Development and Salience of Medium Rules

One way to conceptualize medium violations is by viewing them as violations of unwritten social rules. These rules specify which media are most appropriate in certain situations for certain types of messages. Rules provide communicators with guidance for how to act under specific circumstances (Philipsen, 1992). While rules have influence over communicative behavior, they are by no means deterministic and universally-followed (Philipsen, Coutu, & Covarrubias, 2005). Instead, they help communicators make sense out of their daily interactions by prescribing or proscribing certain behavior (Argyle & Henderson, 1985). Rule violations challenge these commonly-accepted understandings of appropriate interpersonal communication. As a result, violations of these rules tend to be negatively evaluated (Shimanoff, 1980).

Due to the prevalence and multiplicity of communication media, technology users seem to have developed medium rules to understand how to use these new technologies. Medium rules are not attributes of the medium itself but are negotiated through social interactions (Gershon, 2010; Rettie, 2009). In other words, how people use a medium is critical to consider. For example, email and text messages are usually framed as asynchronous forms of communication, so the social norms for these media differ from media that are framed as synchronous, such as phone conversations. Yet, as Rettie found in her interviews with 32 cell phone users, communicators can use asynchronous media, such as text messages, in synchronous ways by texting at a quick rate. Likewise, although a telephone communicator may be physically on the phone, he or she may not be listening to or engaging in the conversation. In such situations, the telephone, a

traditionally synchronous medium, would be utilized by the communicator in an asynchronous manner. Medium rules, therefore, are likely developed based on both the technological affordances of a given medium and how communicators perceive a medium should most appropriately be used.

The term “medium violations” can be used to refer to those uses of technology that are seen as violations of commonly-accepted understandings or rules of proper media use. Although limited research has focused directly on medium violations, evidence of medium violations is abundant in popular culture. For example, the popular film *Up in the Air* (Dubiecki, Clifford, Reitman, & Reitman, 2009) directly addresses at least three medium violations. In the film, Ryan Bingham travels across the country laying people off face-to-face. When up-and-comer Natalie Keener suggests cutting costs by laying-off employees through videoconferencing, the company installs Natalie’s plan. However, by the film’s end, the company ends the videoconferencing layoff program due to governmental concerns, and Natalie is broken up with by her boyfriend and quits her job with the company all via text message.

In addition, popular culture’s interest in medium violations can also be seen in the coverage of Britney Spears’ 2006 break-up with then-husband Kevin Federline. Reportedly, Spears broke up with Federline via text message in what Goldman (2007) of *ABC News* called, “the text message heard round the world” (para. 1). The event spawned intensive analysis of the merits of text message break-ups (e.g., Goldman, 2007; Payne, 2007). In *The Washington Post*’s coverage of the break-up, Payne (2007) notes that communicators may decide to use new media to avoid telling potential romantic partners uncomfortable or bad news face-to-face. Services like STD e-cards, for example, allow

communicators to anonymously send sexual partners email messages about the need to get tested for sexual transmitted diseases. In addition, rejection hotline services enable communicators to inform unwanted suitors of their rejection through prerecorded voice-mail messages (Payne, 2007). Such uses of new media enable the communicator to send a certain message without the discomfort of a face-to-face conversation.

Medium Rules Address Face Needs

Existing academic research on medium violations provides some insight into why medium rules seem to exist. In Starks' (2007) interviews with communicators who had sent or received an online break-up message, one respondent noted, "I would prefer it [the break-up] face-to-face...it was the lack of me being able to respond and ask questions...if it was face-to-face...I would be standing in front of him and he would have to respond to me" (p. 16). As articulated by the respondent, receiving a break-up message online challenged her view of herself as a competent individual capable of making rational decisions face-to-face. In other words, her face was threatened when she received the online break-up message.

It appears that medium rules exist because they address the face needs of the communicative partners. In communication interactions, face refers to the ways an individual hopes to be viewed by others (Ting-Tomey & Kurogi, 1998). Similarly, Park (2008) notes that face can be viewed as a "public self-image" that can be enhanced or threatened in social interactions through verbal and nonverbal behaviors (p. 2051). Face-threatening messages, therefore, are messages that challenge a communicator's view of himself or herself. In all the situations mentioned above—Bostock's firing of Bartz over the phone, Spears' break-up text message, and Starks' (2007) online romantic

terminations—the communicator was sending a face-threatening message, a message that challenged the receiver’s view of himself or herself. Thus, medium rules may exist in situations where interactants’ faces are being threatened.

Fortune’s analysis of Carol Bartz’s firing from Yahoo! supports the belief that medium rules exist to address partners’ face needs. Georgia Collins, the North American managing director of the consulting firm DEGW, suggests that Bostock should have used videoconferencing to fire Bartz instead of a phone call, if indeed it was impossible to meet face-to-face (Lewis, 2011). Collins’ suggestion is consistent with communication theories, such as media richness theory (Daft & Lengel, 1986), which postulate that certain media are more appropriate for the transmission of certain messages. In media richness theory, communication media are classified as richer or leaner based on the number of cues available to the communicator and the equivocality of the task. Face-to-face, because it often includes greater verbal and nonverbal cues, is perceived as the richest medium; meanwhile, media with less nonverbal cues, like text messages, are considered leaner media. Richer media may address communicators’ face needs more than leaner media simply because richer media have more verbal and nonverbal cues. In fact, Feaster (2010) found that richer media are preferred by communicators in face-threatening situations.

If medium rules exist because they address the participants’ face needs, then additional insight into why medium violations occur can be gained. In particular, in medium rule-violation situations, communicators may simply be privileging their negative face at the expense of their positive face. Positive face refers to an actor’s desire to be liked and respected by significant members of his or her group. In contrast, negative

face is the actor's desire to be free from constraint (Brown & Levinson, 1987). Therefore, communicators who choose to send face-threatening messages (e.g., romantic and workplace termination messages) through mediated formats may simply be privileging their negative face at the expense of their positive face. Instead of being concerned about being liked or respected for following social medium rules (a concern which would privilege positive face), medium rule violators seem to care more about remaining free from any negative consequences (thus privileging their negative face). The technological restraints (e.g., fewer nonverbal cues) of the newer media allow communicators to privilege their negative face. The exploitation of these restraints was noted by Starks (2007) when she found that some communicators select Internet-based media to communicate a romantic termination message because the conversations can be shorter and less uncomfortable than comparable face-to-face conversations.

In sum, both popular and academic research seems to suggest that broad medium rules exist and that these rules guide communication medium selection, at least in some situations. When considering why medium rules exist in some situations but not others, it appears that medium rules exist in face-threatening situations because they address communicators' positive face needs. As a result, the choice to not comply with medium rules may indicate a person's desire to privilege his or her negative face over his or her positive face.

A Theory to Address Face Needs in Medium Rule-Violation Situations

Adherence to medium rules may be the best way to address face needs. Yet, as the narrative of Yahoo! demonstrates, sometimes these medium rules must be violated. Therefore, addressing communicators' face needs through facework is vital in medium

rule-violation situations. Ting-Toomey and Kurogi (1998) explain that facework “refers to a set of communication behaviors that people use to regulate their social dignity and to support and challenge the other’s social dignity” (p. 188). These behaviors can be purposefully utilized by communicators to address the needs of the self, the other, and the relationship (Ting-Toomey & Kurogi, 1998).

Cupach and Metts (1994) describe two facework strategies communicators can employ to address face needs and mitigate face threats. First, communicators can provide linguistic “disclaimers.” In a disclaimer, the communicator essentially states, “Please recognize that I am aware of social appropriateness and I ask your indulgence while I act inappropriately; I am not merely rude or stupid” (Cupach & Metts, 1994, p. 7).

Disclaimers allow the sender to acknowledge that he or she is about to engage in some socially-inappropriate behavior and to ask the receiver to not think poorly of the sender despite this violation.

Similarly, the use of politeness strategies is another way to engage in facework and address face threats (Cupach & Metts, 1994). In contrast to disclaimers, which address the sender’s face threats, politeness strategies attempt to save the face of the receiver. When utilizing politeness strategies, communicators try to effectively accomplish their goals while recognizing the needs and desires of the other person. Two types of politeness strategies can be used to address the positive or negative face of the communicative partner (Brown & Levinson, 1987). In positive politeness, the communicator emphasizes value and appreciation for the other person. In negative politeness, the communicator demonstrates concern for the partner by emphasizing his or her freedom and lack of restraint. In sum, while disclaimers attempt to save the

communicator's face, politeness strategies attempt to save the face of the communicative partner.

In addition to the face and politeness frameworks, Shimanoff's (1980) taxonomy may be relevant to medium violation situations. When the different levels of rule-consciousness are explicitly stated by the sender, the taxonomy may correspond to and address the actors' face needs. In other words, when combined with the facework strategies of disclaimers and politeness, Shimanoff's taxonomy of rule-governed behavior may be helpful in constructing varying degrees of competent messages.

Taxonomies of rule-governed behavior provide a way for researchers to classify the interaction between behavior and rules. Unlike similar taxonomies which have been proposed by other scholars (see Ganz, 1971; Toulmin, 1974), Shimanoff's (1980) taxonomy accounts for both rule-compliant and rule-noncompliant behavior. In other words, regardless of if a communicator chooses to follow or violate a rule, the taxonomy is able to classify the rule-governed behavior. Furthermore, Shimanoff's taxonomy also is unique because it classifies rule-related behaviors based on the communicator's conscious awareness of the rule when engaging in the rule-governed act.

Shimanoff's (1980) taxonomy contains nine levels. Every level assumes the existence of a rule except from "rule-absent" behavior, which exists at the center of the continuum. From most conscious rule-compliant to most conscious rule-noncompliant, rule-related behaviors are classified as "positive reflective," "following," "conforming," "fulfilling," "absent," "ignorant," "error," "violation," or "negative reflective" (see Table 1).

Table 1
Shimanoff's (1980) Taxonomy of Rule-Governed Behavior

Level of Rule-Consciousness	Description
Positive Reflective	Conscious knowledge, plus evaluation of a rule
Following	Conscious knowledge of a rule
Conforming	Tacit knowledge of a rule
Fulfilling	Rule-governed, but no knowledge of the rule
Absent	Noncontrollable, noncriticizable, or noncontextual behavior
Ignorant	Rule-governed, but no knowledge of the rule
Error	Tacit knowledge of a rule
Violation	Conscious knowledge of a rule
Negative Reflective	Conscious knowledge, plus evaluation of a rule

Each category of Shimanoff's (1980) taxonomy describes a different degree of rule-consciousness. Determinations of where to classify rule-governed behavior require the communicator to discuss his or her awareness of the communication rule. Thus, for instance, in order for a behavior to be classified as "rule-following," a communicator must be able to articulate that he or she was purposefully making sure that his or her behavior adhered to the communication rule when involved in the rule-related act. As a result, these conversations (i.e., the conversations necessary to classify the rule-governed behavior) contain statements about the communicator's level of rule-consciousness.

This study proposes that these rule-consciousness statements can be strategically used by communicators to create more or less competent messages. To illustrate how Shimanoff's taxonomy can be applied in the message design, a hypothetical telephone conversation will be used to provide further clarification. Since anecdotal evidence from Bostock's firing of Bartz over the phone seems to indicate that firing employees in person

is a medium rule, and, in turn, firing over the phone is a medium violation, this example will be used to demonstrate the utility of Shimanoff's taxonomy.

At the center of the continuum is "rule-absent" behavior, or communicative behavior that is uncontrollable, noncriticizable, or noncontextual. Such behaviors do not exist under a rules framework and may be guided by personal preferences or laws, for example. Because rule-absent behavior is not rule-governed, this level was not tested in the study.

In contrast, the first level of rule-consciousness is "rule-fulfilling" or "rule-ignorant." In rule-fulfilling behaviors, the communicator has no knowledge of the rule but just happens to follow it; conversely, when the communicator has no knowledge of the rule and happens to violate it, the behavior is known as rule-ignorant. Because the communicator is unaware of the rule at both the rule-fulfilling and rule-ignorant levels, participants at this level would not refer to the medium rule in the context of their message. Thus, if an employee was being terminated over the phone by a supervisor, the supervisor would not reference the medium rule at the rule-fulfilling or rule-ignorant level. In addition, communicators would not engage in any facework, at least not any facework related to the medium selection. Because the medium acknowledgment statements for rule-adherent and rule-violation situations are identical (essentially, no statement), these message types are referred to as the "no rule acknowledgment" messages in this study.

At the next two levels of rule-consciousness (the conforming-error and the following-violation levels), the communicator has some conscious knowledge of the rule. At the "rule-conforming" and "rule-error" levels, the communicator unconsciously

conforms to or violates the rule because he or she knows it. Since some rules may be difficult to articulate, researchers can confirm that the actor knows the rule if the actor articulates it when prompted, identifies its opposite (what should or should not have happened), or extends the rule to similar situations. Similarly, “rule-following” or “rule-violation” behaviors require communicators to know the applicable rule and consciously monitor their behavior in order to ensure that it adheres to or violates it. At these levels, the communicator engages in self-facework by providing a disclaimer for the rule-adherent or violation behavior (i.e., by stating that he or she knows the applicable rule). However, by not engaging in politeness strategies, the communicator shows no concern for the face of the communicative partner.

Although conforming-error and the following-violation levels may be different conceptually, they are nearly identical when applied in a specific message. Therefore, in this study, these two levels of rule-consciousness are combined and the ensuing rule-adherent and rule-violation messages are simply referred to as the “rule-following” or “rule-violation” message types. As a result, if an employer were to fire an employee in person (i.e., a rule-adherent behavior), he or she might demonstrate rule-following awareness by stating, “Letting you know in person seemed like the right thing to do.” In contrast, if an employer fired an employee over the phone (i.e., a rule-violation behavior), he or she could demonstrate rule-violation awareness by saying, “I know it would be better to tell you in person than over the phone.” Such messages demonstrate that the communicator knows the appropriate communication rule and is ensuring that his or her behavior adheres to or violates it.

At the highest level of rule-consciousness, communicators acknowledge the rule and provide some justification for why the rule was followed (positive rule reflective) or violated (negative rule reflective) in the content of their message. In such situations, the communicator engages both in self- and other-facework. In other words, the communicator provides a disclaimer for his or her behavior, thus employing self-facework, and engages in politeness strategies (other-facework) by explaining why he or she chose to follow or violate the rule. For an employer firing an employee in person, he or she might demonstrate a positive rule reflective awareness of the rule by stating, "Letting you know in person seemed like the right thing to do, and I wanted you to find out first from me." In contrast, an employer terminating an employee over the phone might demonstrate negative rule reflective awareness by stating, "I know it would be better to tell you in person than over the phone, but I wanted you to find out first from me." Message types which contain a reference to both the rule and provide a justification for medium rule adherence or violation are referred to as positive reflective or negative reflective messages in this study.

To summarize, although medium rule-violations seem to challenge the face of both the sender and receiver of a message, facework strategies can be used to address participants' face needs. Applying Shimanoff's (1980) levels of rule-consciousness in message construction may be one way to engage in facework. The previously described, modified version of Shimanoff's taxonomy includes three levels of rule-consciousness with five distinct message types. At the no rule acknowledgment level of rule-consciousness, communicators have no knowledge that their behavior is rule-governed, and as a result, the no rule acknowledgment messages contain no references to the

communication rule. Communicators with a rule-following or rule-violation awareness, in turn, know the applicable communication rule and purposefully ensure that their behavior adheres to or violates the rule. When communicators at the following-violation levels describe their rule-consciousness, their following-violation messages essentially provide a disclaimer and allow the communicator to engage in self-facework. Finally, at the highest level of rule-consciousness, communicators know the applicable communication rule and also analyze the merits of the rule before choosing to follow it (positive reflective) or violate it (negative reflective). Thus, when communicators at this highest level of rule-consciousness describe their rule-consciousness, their positive reflective messages and negative reflective messages allow the communicator to engage in both self- and other-facework.

Evaluating the Competence of Medium Rule-Governed Messages

Because rules are generally known and agreed upon by members of a given group, rule-governed behaviors can be evaluated (Argyle & Henderson, 1985; Shimanoff, 1980). One way rule-governed behavior can be evaluated is by assessing the communication competence of the behavior. Spitzberg and Cupach (1984) define communication competence as “the extent to which objectives functionally related to communication are fulfilled through cooperative interaction appropriate to the interpersonal context” (p. 100). Communication competence, then, can be understood as the effective fulfillment of communication-related goals in ways that adhere to social norms of appropriateness.

In evaluations of communicative behavior, the most common outcomes for communication competence are coorientation, appropriateness, effectiveness,

satisfaction, efficiency, and relational development (Spitzberg, 2006). Generally, communication competence and these outcomes are positively related; yet, sometimes communicators privilege one outcome at the expense of another. For example, media selection is sometimes based on the negotiation of the outcomes of appropriateness, the communicator's or message's perceived fit (often determined on the basis of social rules) to the situation, and effectiveness, the communicator's or message's ability to accomplish preferred objectives (Spitzberg, 2006; Tidwell & Walther, 2002). As a result, while Bostock's choice to fire Bartz over the phone was effective, it was not particularly appropriate according to medium rules.

Although message competence may be the goal of a communicator, evaluations of communication competence are made on a continuum (Spitzberg & Cupach, 1984). In other words, since competence is based on perception, communicative actions cannot be considered as solely competent or incompetent; instead, actions and messages are viewed as more or less competent by the communicative partner. This distinction is necessary for the purpose of the current study, for while messages that adhere to medium rules may always be viewed as more competent than medium rule-violations, some types of medium rule-violation messages may be viewed more competently than others.

In order to increase current understandings of how communicators can better construct messages in medium rule-governed situations, this study will consider the communication competence of Shimanoff's five message types (i.e., the no rule acknowledgment, rule-following, rule-violation, positive reflective, and negative reflective message types). It is proposed that, in medium rule-adherent situations, the degree of rule-consciousness exhibited in the message will not matter in evaluations of

communication competence. This prediction is consistent with expectancy violations theory (EVT). According to Burgoon and Hale's (1988) EVT, when an expectancy is met by the sender, the receiver experiences no psychological arousal about expectancy and rather interprets the message based on pre-interactional and interactional factors. These factors could include the meaning of the nonverbal and verbal behaviors being transmitted, communicator and relational characteristics, and the type of situation. As a result of EVT's postulations, when the medium rule is followed, the receiver should not experience any psychological arousal about the medium rule. Instead, the receiver simply considers the message content. Thus, positive reflective messages, rule-following messages, and no rule acknowledgment messages should be perceived as similar in message competence in this study. These messages are correct applications of the medium rule; in other words, the communicator knows the correct medium rule and decides to follow it.

Yet, sometimes communicators inaccurately apply the communication rule in medium rule-adherent situations. In other words, if a communicator in a medium rule-adherent situation sent a rule-violation or negative reflective message, the communicator would essentially state that his or her behavior is "wrong" according to the medium rule even though the behavior actually adhered to the medium rule. For example, if a supervisor were to fire an employee in person (a rule-adherent behavior) but use a rule-violation message (i.e., stating, "Letting you know in person is not the best way to let you know"), the communicator would be inaccurately applying the medium rule. As a result, the inaccurate rule application messages (i.e., rule-violation and negative reflective messages) should be viewed as less competent than correct rule applications (i.e., no rule

acknowledgment, rule-following, and positive reflective messages). Yet, even when the medium rule is being inaccurately applied, the level of rule-consciousness should not matter. Thus, the first hypothesis for the study is as follows:

H₁: In situations where a medium rule is followed, correct (or no) rule applications will be perceived as more competent than incorrect rule applications.

In contrast, in medium rule-violation situations, the receiver is psychologically aroused to the medium rule and evaluates the deviation (Burgoon & Hale, 1988). As a result, this study predicts that in medium rule-violation situations, messages which demonstrate negative reflective behavior, and engage in both self- and other-facework, will be viewed as the most competent message type. In turn, rule-violation messages, which engage in some facework, will be viewed as more competent than no rule acknowledgment messages (which engage in no facework). Negative reflective, rule-violation, and no rule acknowledgment messages all correctly apply the medium rule; that is, the communicator knows that his or her behavior is inconsistent with the medium rule. In contrast, inaccurate applications of the rule (following and positive reflective messages) will be perceived as less competent than correct (or no) rule applications. Put in another way, communicators whose messages adhere to the following and positive reflective message types believe that their behavior is consistent with the medium rule, but, in actuality, their behavior is inconsistent with the medium rule. Despite this inaccurate rule application, positive reflective messages will still be viewed as more competent than following messages because of the additional degree of facework

embedded within them. Formally stated, then, hypotheses two through four are as follows:

H₂: In situations where a medium rule violation occurs and the communicator accurately applies the rule, negative reflective messages will be viewed as the most competent message type followed by violation and no rule acknowledgment messages.

H₃: In situations where a medium rule violation occurs and the communicator inaccurately applies the rule, positive reflective messages will be viewed as the most competent message type followed by following messages.

H₄: In situations where a medium rule is violated, correct (or no) rule applications will be perceived as more competent than incorrect rule applications.

In addition, because communication competence is defined, in part, as adherence to social norms and rules, messages in medium rule-adherent situations should always be viewed as more competent than medium rule-violation messages. Therefore, hypothesis five is as follows:

H₅: Medium rule adherence will be viewed as more competent than medium rule violations.

Evaluating the Emotional Reaction to Medium Rule-Governed Messages

In addition to assessing the communication competence of the rule-conscious message types, this study also sought to better understand the receiver's emotional reaction when receiving the message. Although the communication competence construct is important for assessing the appropriateness and effectiveness of a message, it does not

measure the receiver's emotional reaction to the message and medium selection. Face-threatening situations, such as online break-ups, tend to elicit an emotional response (Gershon, 2010; Starks, 2007), so it was important for the current investigation to better understand if and how the different message types can address the receiver's emotional needs.

Emotional experience is conceptualized as having two dimensions: valence and arousal (Jin & Cameron, 2007). Detenber and Reeves (1996) suggest that valence can be best understood as a dimension ranging from positive to negative, from pleasant to unpleasant; meanwhile, the arousal dimension can be viewed as the receiver's emotional intensity, an intensity that ranges from energized to peaceful. Although the general emotional reaction to a message is important to consider, this study's primary interest was to better understand the receiver's emotional reaction to the medium selection.

The receiver's *emotional response*, or the positive and negative emotions stated by a recipient in reaction to a medium selection, was used to assess the receiver's emotional valence. Communicators who receive a message on an appropriate medium should be more likely to respond with more positive emotions. In contrast, communicators who receive a message on an inappropriate medium should be more likely to respond with negative emotions. Furthermore, communicators who receive a message with higher degrees of rule-consciousness (and thus more facework) should have more positive emotions. Meanwhile, communicators who receive a message with lower degrees of rule-consciousness should have more negative emotions. By measuring the receiver's positive and negative emotional response, insight into receiver's emotional

valence after receiving the medium rule-governed message may be gained. Hypotheses eight, nine, ten, and eleven are as follows:

H₈: The existence of positive emotions is more likely in medium rule-adherent messages than medium-violation messages.

H₉: The existence of negative emotions is more likely in medium rule-violation messages than in medium rule-adherent messages.

H₁₀: The existence of positive emotions is more likely in higher rule-conscious message types than lower-rule conscious message types.

H₁₁: The existence of negative emotions is more likely in lower rule-conscious message types than higher rule-conscious message types.

Measuring the receiver's *actual modal salience* and *alternative modal preference* after receiving a medium rule-governed message may be two ways to assess the receiver's arousal to the medium selection. Actual modal salience refers to the degree of a communicator's awareness of the medium used to transmit a certain message. EVT (Burgoon & Hale, 1988) suggests that when an expectancy is violated, communicators are aroused to the violation and assess it. By extension, then, when a medium is used in an inappropriate manner, evaluations of the message should include more references to the medium than when the medium is used in an appropriate manner. In addition, because higher degrees of rule-consciousness involve more facework in the message construction, message types with higher rule-consciousness should contain fewer references to the medium. In other words, the increased facework may reduce the importance of the medium selection and communicators will be less likely to mention the selected medium. By measuring the number of times the receiver refers to the medium used to transmit the

message, insight into the receiver's emotional arousal may be gained. Hypotheses twelve and thirteen, then, are as follows:

H₁₂: Actual modal salience is greater in medium rule-violation situations than in medium rule-adherent situations.

H₁₃: Actual modal salience is greater in lower rule-conscious message types than higher rule-conscious message types.

The receiver's alternative modal preference may be another way to assess the receiver's emotional arousal after receiving a medium rule-governed message.

Alternative modal preference refers to if another medium is suggested as more appropriate for transmitting a given message. Since understandings of the proper uses for one medium are always reliant upon how other media are perceived (Gershon, 2010), communicators evaluating inappropriate media selections should be more likely to mention that another medium would be more appropriate. In addition, messages which contain higher degrees of rule-consciousness and more facework should have fewer references to alternative media. Put another way, since the higher levels of rule-consciousness enable the sender to argue for why the selected medium was chosen, there should be less references to alternative media in evaluations of the message. Hypotheses 14 and 15, then, are as follows:

H₁₄: Alternative modal preference is greater in medium rule-violation situations than in medium rule-adherent situations.

H₁₅: Alternative modal preference is greater in lower rule-conscious message types than higher rule-conscious message types.

METHOD

Participants

Participants were 291 (59% women, 41% men) undergraduates enrolled in two communication courses at a large Midwestern university. Participants ranged in age from 18 to 50 years ($M = 20.41$, $SD = 2.69$). Students received extra credit for completing an online, survey-based experiment. Thirteen participants did not complete the questionnaire and were excluded from analysis, leaving 278 participants. Participants enrolled in a wide variety of college majors completed the questionnaire, with the College of Liberal Arts (36.7%), the College of Applied Human Sciences (20.1%), the College of Agricultural Sciences (12.9%), and the College of Natural Sciences (11.2%) representing the most students.

Procedure and Instrumentation

After being informed of the study by their classroom instructor, students accessed the online, survey-based experiment and were randomly assigned to a scenario and message. A two (situation type: one week vs. two year relationship) by five (message type: negative reflective, violation, no rule acknowledgement, following, positive reflective) experiment was conducted. The scenario described a situation in which two people met on an online dating website. In the scenario, “Jamie” decided that the relationship needed to end and sent an email message to “Taylor” to terminate the relationship. See Table 2 for a copy of the scenario descriptions. Approximately half (48%) of the participants were informed that the romantic partners had known each other for one week, while the other half (52%) were told two years. This differing description

was used to manipulate situation type, with the one week condition seen as “rule adherent” and the two year condition as “rule violation.”

Table 2
Situation Type as Manipulated in Study Design

Type of Rule-Governed Situation	Scenario
Rule Adherent	One week ago, Jamie and Taylor met on a popular dating website. Both live within a few miles of each other, and after exchanging e-mails online, they met once for coffee at a local coffee shop. However, Jamie recently realized that what they want from a future relationship is very different. Jamie decided that it would be best to send Taylor an e-mail to end their relationship.
Rule Violation	Two years ago, Jamie and Taylor met on a popular dating website. Both live within a few miles of each other, and after exchanging e-mails online, they met once for coffee at a local coffee shop. They have been exclusively dating for two years. However, Jamie recently realized that what they want from a future relationship is very different. Jamie decided that it would be best to send Taylor an e-mail to end their relationship.

Immediately following the scenario description, participants read the romantic terminator’s email message. Participants were presented with one of five email messages indicative of Shimanoff’s (1980) modified taxonomy outlined earlier in the study. Each message contained differing degrees of rule-consciousness (i.e., “negative reflective,” “violation,” “no rule acknowledgment,” “following,” “positive reflective”). After the sentence, “I don’t think we should continue our relationship,” the subsequent sentences contained the rule-consciousness statement (see Table 3). Following the rule-acknowledgment sentence(s), the terminator indicated the reason for the break-up (i.e., differing visions for the future).

Table 3*Levels of Rule-Consciousness as Manipulated in Study Design*

Level of Rule-Consciousness	Statement
Negative Reflective	I don't think we should continue our relationship. I know that sending an e-mail isn't the best way to let you know, but e-mail allows me the time to think about how to say everything in a kind and clear way. I've been realizing that your vision for the next few years is very different from mine. In particular, I've always dreamed of having children and being a parent. You've explained to me that you aren't sure if you want to have kids or even adopt. Neither one of us should have to sacrifice such an important thing for another person. I think it would be best if you and I moved on from each other.
Violation	I don't think we should continue our relationship. I know that sending an e-mail isn't the best way to let you know. I've been realizing that your vision for the next few years is very different from mine. In particular, I've always dreamed of having children and being a parent. You've explained to me that you aren't sure if you want to have kids or even adopt. Neither one of us should have to sacrifice such an important thing for another person. I think it would be best if you and I moved on from each other.
No Rule Acknowledgment	I don't think we should continue our relationship. I've been realizing that your vision for the next few years is very different from mine. In particular, I've always dreamed of having children and being a parent. You've explained to me that you aren't sure if you want to have kids or even adopt. Neither one of us should have to sacrifice such an important thing for another person. I think it would be best if you and I moved on from each other.
Following	I don't think we should continue our relationship. I thought it would be alright to let you know through e-mail. I've been realizing that your vision for the next few years is very different from mine. In particular, I've always dreamed of having children and being a parent. You've explained to me that you aren't sure if you want to have kids or even adopt. Neither one of us should have to sacrifice such an important thing for another person. I think it would be best if you and I moved on from each other.
Positive Reflective	I don't think we should continue our relationship. I thought it would be alright to let you know through e-mail because e-mail allows me the time to think about how to say everything in a kind and clear way. I've been realizing that your vision for the next few years is very different from mine. In particular, I've always dreamed of having children and being a parent. You've explained to me that you aren't sure if you want to have kids or even adopt. Neither one of us should have to sacrifice such an important thing for another person. I think it would be best if you and I moved on from each other.

Finally, participants were asked to place themselves in the described situation. They were asked to imagine that they had just received the email message and wanted to let their best friend know about the break-up right away. Participants then constructed an email detailing their reaction to the situation and message.

A brief note on the ecological validity of the study design is likely necessary. Medium rule adherence was operationalized as a one-week online dating termination because of the social norms of online daters. Whitty (2008) found in her study with 60 online daters that over half the participants (57.4%) stated that they met their potential romantic partner face-to-face within one or two weeks after meeting them online. Furthermore, 67.7% of the participants stated that the purpose of the first date was to determine if the relationship would progress. In other words, the first date served as a “screening out process [for participants]—one that determined if there was a possibility for a relationship to develop” (Whitty, 2008, p. 1719). Therefore, if a “deal breaker” for an online dater was children, and if a potential romantic partner did not want children, then many online daters would likely terminate the relationship after the first date.

Furthermore, many popular online dating services like eHarmony and Match.com encourage their users to not share personal information early in the relationship (eHarmony.com, 2012; Match.com, 2012). Therefore, it is unlikely that online daters would have a potential romantic partner’s phone number (or other personal information) one week into the relationship. As a result, an email seems to be the most likely way online daters would inform their unwanted romantic partner of their rejection. In contrast, the inappropriateness of ending a long-term relationship (e.g., a two-year romantic

relationship) through new media has been well-documented in both popular and empirical works (i.e., Payne, 2007; Starks, 2007)

Measurement

After reading the scenario and email message, participants completed a 16-item scale. The communication competence scale (Westmyer, DiCioccio, & Rubin, 1998) was based on Spitzberg and Canary's (1985) semantic differential scale. Although the measure was developed to be multidimensional with the two dimensions of appropriateness and effectiveness, Westmyer et al. suggest that this measure might be most appropriately employed as a unidimensional measure.

Then, participants identified if they or someone they knew had experienced a similar situation, evaluated the message's realism, and completed a perceived self-communication competence measure (adapted from Guerrero, 1994). Finally, participants constructed an email message to their best friend where they described the situation and their reaction.

RESULTS

Preliminary Analysis

Situation and message realism. After reading the situation and email message, participants identified the believability of the situation and messages. The realism of the situation and messages were considered acceptable ($M = 3.503$, $SD = 1.123$) because the mean was above the midpoint of the 1-5 Likert-type scale.

Factor analysis of competence measure. Consistent with Westmyer et al. (1998), the 16-item communication competence scale was found to be most appropriately employed as a unidimensional measure. This is based upon the results of a principal axis factor analysis with promax rotation. Although the initial analysis yielded three factors, it appeared, based on the factor loadings, that one factor was especially dominant. When one factor was requested in a follow-up analysis, 14-items loaded cleanly onto a single factor; clean loadings were based on a .5/.3 split from primary to secondary loading. The single factor accounted for 51.176% of the variance (eigenvalue = 8.188). The remaining two items (active-passive and dominant-adverse) were excluded since they did not load cleanly on the single factor. Cronbach's α for the 14-item communication competence measure was .939.

Tests for potential covariates. Pearson correlations were run with three variables that could be potential covariates for the communication competence variable.

Specifically, it was analyzed if the participant had personal experience with the situation or knew someone who had experienced a similar situation. Additionally, the participant's perceived self-competence was considered. Principal axis factor analysis (with promax rotation) was conducted on the six self-competence items. In the analysis, one factor

emerged with an eigenvalue above 1.0 (eigenvalue = 2.546; 42.431% of variance accounted for). Only two of the six items, however, loaded on that factor above .50. Those two items were “I am a good communicator” and “I have a wide variety of social skills.” Thus, those two items were summed to create the self-communication competence variable. The two items were correlated at $r = .705$ ($p < .00$).

No significant correlations with communication competence were found for if the participants had personal experience with the situation, $r = .058$, $p = .336$, and perceived self-competence, $r = -.003$, $p = .965$. Yet, a significant correlation was found for if the participant knew someone who had experienced a similar situation, $r = .119$, $p < .048$. However, the relationship was so weak that knowing someone who had experienced a similar situation was not considered a covariate of communication competence.

Hypothesis Testing for Experiment: Perceived Message Competence

To test the hypotheses, a two (situation type: one week vs. two year relationship) by five (message type) ANOVA was conducted. The dependent variable in the analysis was perceived message competence. Results indicated significant main effects for situation type, $F(1, 277) = 49.313$, $p < .000$, $\eta^2 = .147$ (see figure 1), and message type, $F(4, 277) = 2.710$, $p < .031$, $\eta^2 = .032$ (see figure 2). There was, however, no significant interaction effect, $F(4, 277) = .879$, $p = .477$ (see figure 3).

In terms of the significant main effect for situation type, it was found that the one week condition was perceived as significantly more competent ($M = 4.11$, $SD = .10$) than the two year condition ($M = 3.11$, $SD = .10$). Thus, hypothesis five, which stated that medium rule-adherent behavior will be viewed as more communicatively competent than medium rule-violation behavior, was supported.

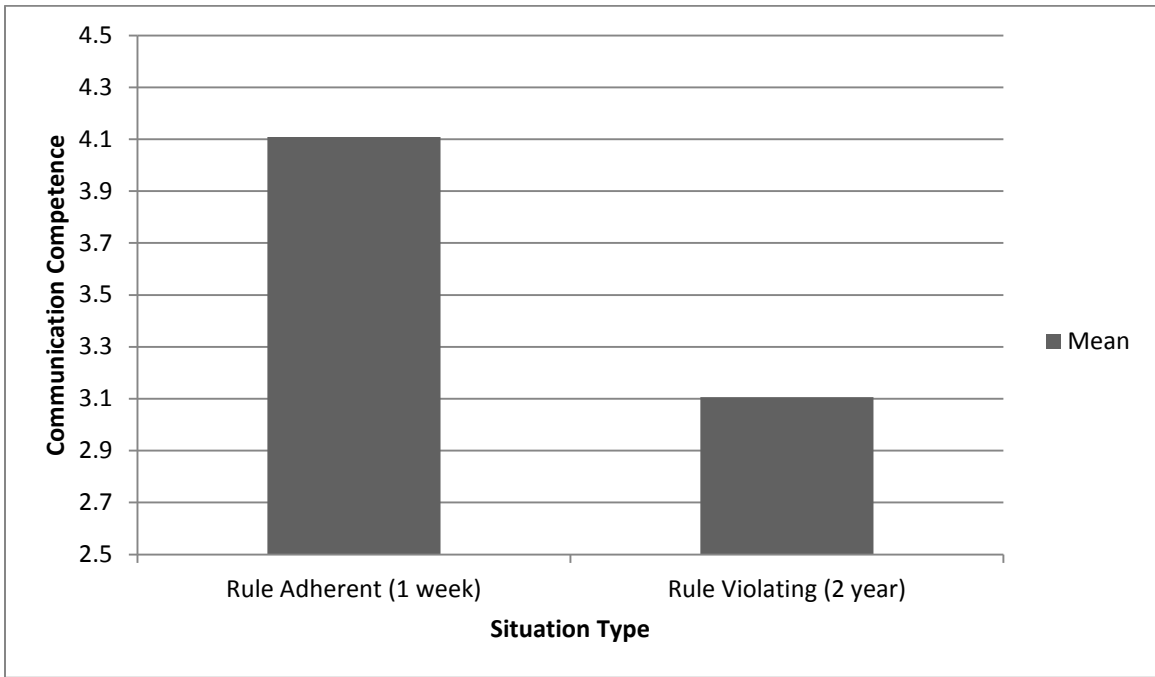


Figure 1. Results for Communication Competence based on Situation Type

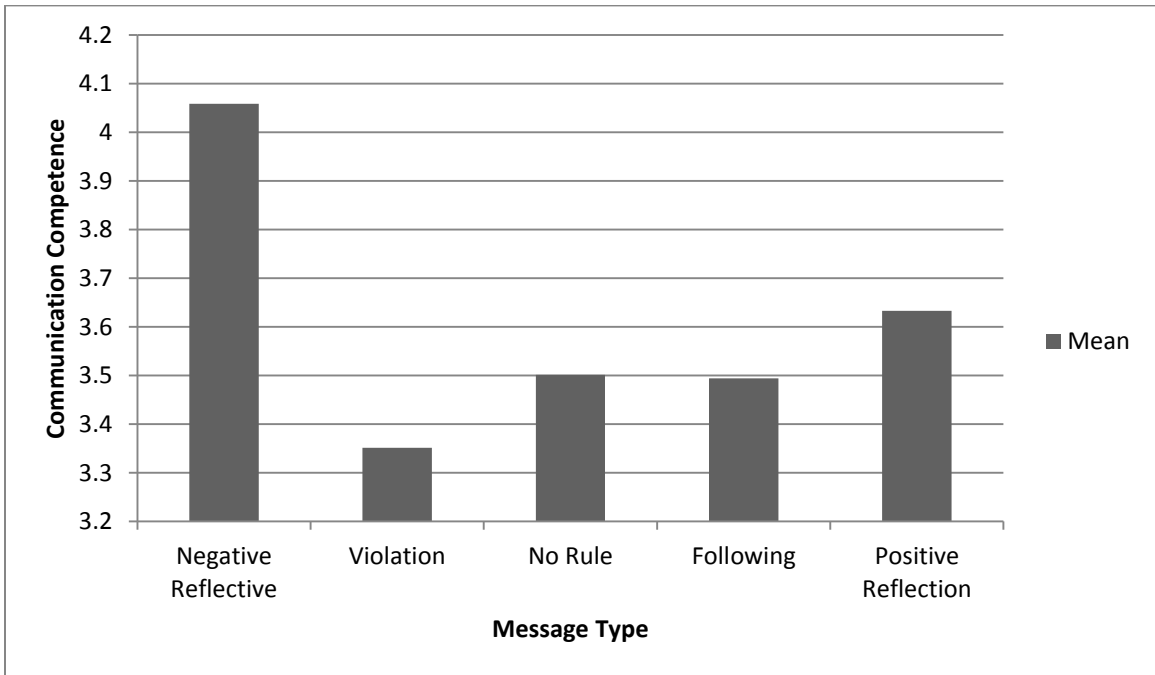


Figure 2. Results for Communication Competence based on Message Type

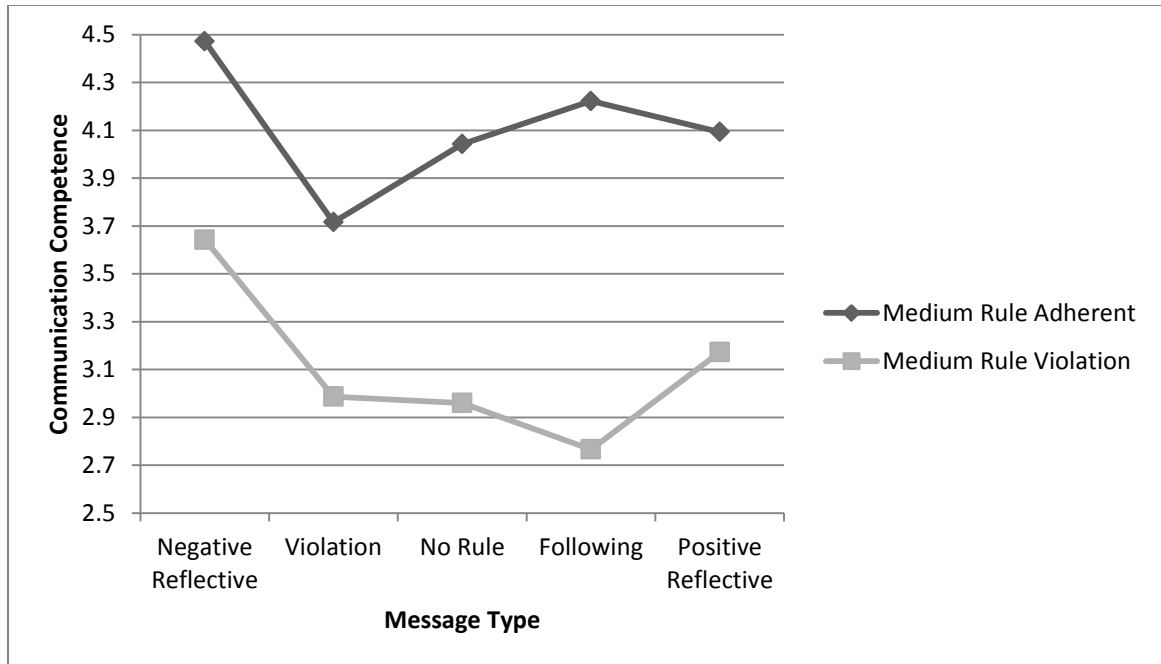


Figure 3. Results for Communication Competence Based on Situation Type and Message Type

In terms of message type, negative reflective messages were considered the most competent message type ($M = 4.10$, $SD = .17$) followed by the positive reflective ($M = 3.63$, $SD = .14$), no rule acknowledgment ($M = 3.50$, $SD = .18$), violation ($M = 3.35$, $SD = .16$), and following ($M = 3.49$, $SD = .15$) message types. Based on Tukey's HSD post-hoc tests, though, only two significant differences were present in the data. Specifically, negative reflective messages ($M = 4.10$, $SD = .17$) were perceived as significantly more competent than both violation messages ($M = 3.35$, $SD = .16$) and following messages ($M = 3.49$, $SD = .15$). The former effect was significant at $p = .015$, while the latter was significant at $p = .049$.

Correct and incorrect applications of the medium rule were also tested. In the rule-adherent situation, positive reflective, following, and no rule acknowledgment message types were recoded as correct rule applications; meanwhile, negative reflective and violation messages types were recoded as incorrect rule applications. Conversely, in

the rule-violation situation, negative reflective, violation, and no rule acknowledgment message types were recoded as correct rule applications, and positive reflective and following message types were recoded as incorrect rule applications.

Hypothesis one predicted that, in the rule-adherent situations, correct applications of the medium rule (i.e., no rule acknowledgment, following, and positive reflective message types) would be viewed as more competent than inaccurate applications of the medium rule (i.e., violation and negative reflective messages). This prediction was not supported, although the means differed as predicted. Message types where the rule was correctly applied ($M = 4.178$, $SD = 1.256$) were not considered significantly more competent than message types where the rule was incorrectly applied ($M = 4.077$, $SD = 1.238$), $t(86.925) = .179$, $p = .858$.

Hypothesis four, in contrast, predicted that correct applications of the medium rule (i.e., no rule acknowledgment, violation, and negative reflective message types) would be viewed as more competent in medium rule-violation situations than incorrect applications (i.e., following and positive reflective message types). Though the means differed as expected, the difference did not reach statistical significance. In medium rule-violation situations, correct applications of the medium rule ($M = 3.211$, $SD = 1.173$) did not differ significantly from incorrect applications of the medium rule ($M = 2.948$, $SD = 1.012$), $t(142.466) = 1.451$, $p = .149$.

Because no significant interaction effect between situation type and message type was found, hypotheses two and three were not supported. Yet, as will be discussed below, several limitations may have impacted this finding. Additional information, specifically

from the significance of the message type main effect, may be able to provide insight into this question.

Preliminary Analysis for Emotional Reaction

Coding scheme for emotional reaction. The emotional response to the email message, actual modal salience, and alternative modal preference were coded. See Table 4 for a copy of the coding scheme. Drawing from Trénel's (2004) coding of positive and negative emotions, the existence of positive and negative emotions was noted. In addition, for the actual modal salience variable, the number of times the participant mentioned the word "email" in the message was coded. Finally, alternative modal preference was coded according to if another medium was noted as more appropriate than email for transmitting the romantic termination message.

Cohen's kappa reliabilities for open-ended question. In order to assess intercoder reliability, another graduate student was trained on the coding scheme and independently coded a randomly-selected 15% of the data. Cohen's kappa was acceptable for all four variables, including: modal salience ($\kappa = .960$), alternative modal preference ($\kappa = .834$), positive emotions ($\kappa = .752$), and negative emotions ($\kappa = .709$). In addition, 21 of the participants did not complete the open-ended question or did not correctly follow directions and were excluded from analysis. Thus, a total of 257 responses were coded.

Hypothesis Testing for Experiment: Emotional Reaction

Four chi-square tests were used to test emotional response. Hypothesis eight was supported, but hypotheses nine, ten, and eleven were not supported. Participants evaluating the medium rule-adherent messages were significantly more likely to use positive emotions in their message than participants evaluating the medium rule-violation

Table 4

Coding Scheme for Assessing Participants' Emotional Reactions

The participant understood directions (i.e., the respondent sent an email to their best friend).

If no, "0" and discontinue coding.

If yes, "1" and continue coding email.

Number of times the participant mentioned the word "email."

Did the participant mention that another medium would have been more appropriate?

If no (i.e., no mention that another medium would have been more appropriate), then "0."

If yes (i.e., another medium mentioned), then "1."

Did participant mention a face-to-face conversation would have been more appropriate?

If no, then "0."

If yes, then "1."

Did participant mention a phone call would have been more appropriate?

If no, then "0."

If yes, then "1."

Did participant mention a text message would have been more appropriate?

If no, then "0."

If yes, then "1."

Did participant mention another medium (other than face-to-face, cell phone call, text message) would have been more appropriate?

If no, leave blank.

If yes, fill in with the name of medium.

The response to situation includes positive emotions. Trénel (2004) explains that positive emotions "are present when appreciation, happiness, hopes, optimism, gratefulness and other positive emotions are explicitly articulated. Sometimes, emoticons might indicate the expression of positive emotions. Humor should be coded as "positive emotions" since they have the potential to create a positive climate. However, sarcastic and ironic humor (or ambivalent humor in general) should rather be coded as an expression of negative emotions" (p. 33).

If no positive emotions, then "0."

If positive emotions are found, then "1."

The response to situation includes negative emotions. Trénel (2004) explains that negative emotions "are present when sadness, fear, aggression, pessimism and other negative emotions are explicitly articulated. Sometimes, emoticons or writing with large capitals might indicate the expression of negative emotions. Sarcastic and ironic humor (or ambivalent humor in general) should be coded as an expression of negative emotions" (p. 31).

If no negative emotions, then "0."

If negative emotions are found, then "1."

messages, $\chi^2(1, N = 257) = 10.892, p < .001$. Yet, participants evaluating the medium

rule-violation messages did not reference negative emotions more than those participants

evaluating medium rule-adherent messages, $\chi^2(1, N = 216) = 2.787, p = .095$. However,

this result did approach significance. In addition, participants evaluating the five different messages types did not significantly reference positive emotions differently in their evaluation message, $\chi^2(4, N = 257) = 2.701, p = .609$. Finally, participants evaluating the different message types did not significantly differ in their reference to negative emotions in their evaluation message, $\chi^2(4, N = 257) = 5.390, p = .250$.

A *t* test and an ANOVA were used to test actual modal salience. Hypothesis 12 was supported, but hypothesis 13 was not. The number of references to the medium (email) in evaluations of medium rule-violation messages ($M = 1.443, SD = .843$) differed from evaluations of medium rule-adherent messages ($M = 1.222, SD = .779$) as predicted, $t(254.593) = -2.180, p < .030$. However, the number of references to the medium (email) did not differ across message types, $F(4, 256) = 1.403, p = .234$.

Two chi-square tests were used to test alternative modal preference. Hypothesis 14 was supported, but hypothesis 15 was not supported. Participants evaluating the medium rule-violation messages were significantly more likely to mention that another medium would be more appropriate to transmit the message than participants evaluating the medium rule-adherent messages, $\chi^2(1, N = 257) = 8.215, p < .004$. However, participants evaluating the different message types did not reference alternative media differently, $\chi^2(4, N = 257) = 1.412, p = .842$.

DISCUSSION

This study sought to increase current knowledge on medium rules and the construction of messages in medium rule-adherent and violation situations. It suggested the existence and importance of medium rules in guiding mediated interactions, and it also demonstrated the utility of Shimanoff's (1980) taxonomy of rule-governed behavior in the construction of mediated messages. Further, the emotional reaction to the medium selection coding scheme was found to be reliable and may be useful in future empirical research.

Perhaps the most significant finding from the study is in regards to the salience of medium rules in evaluations of communicative behaviors. Irrespective of the message type, participants viewed one-week email break-up messages as more communicatively competent than two-year email break-up messages. Even further, participants used more positive language when evaluating medium rule-adherent messages than medium rule-violation messages. These findings are consistent with previous research (Gershon, 2010; Starks, 2007) which discuss the perceived inappropriateness of online romantic break-ups for long-term relationships.

Furthermore, these findings add additional support to Shimanoff's (1980) rule theory and expectancy violations theory (Burgoon & Hale, 1988). Both theories suggest that communicators are only aroused to the communication rule or expectancy when it is violated. In this study, when participants were asked to evaluate one-week break-up messages, they referenced alternative media less and used the word "email" fewer times than those evaluating the two-year email break-up messages. These findings seem to indicate that participants evaluating medium rule-adherent messages were less aware of

the medium used to transmit the message than participants evaluating medium rule-violation messages. Based on these findings, the decision to adhere to or violate medium rules seems to have important implications for evaluations of rule-governed messages.

Although Shimanoff's (1980) taxonomy did not influence perceptions of message competence as was initially predicted, this study illustrates how differing types of references to medium rules influences communication competence. A significant main effect existed across messages types (negative reflective, violation, no rule acknowledgment, following, and positive reflective). Thus, communicators interested in creating competent messages in mediated formats should recognize that the inclusion or exclusion of rule-related statements have implications for their perceived communication competence.

Post-hoc tests provided further insight into the message types. In particular, negative reflective messages were perceived as more competent than the violation or following messages. This finding is particularly interesting given that all three of these message types included a degree of facework. Because following and violation messages engaged in self-facework and negative reflective messages engaged in both self- and other-facework, it is plausible that participants saw following and violation messages as unfair to the receiver. This conclusion is especially compelling given Oetzel, Ting-Toomey, Yokochi, Masumoto, and Takai's (2000) finding that in conflict situations, facework behaviors which privilege communicators' self-face are generally perceived as incompetent. In contrast, integrating conflict strategies, strategies which attempt to save the face of both the self and the other, are perceived as the most competent conflict strategy (Oetzel et al., 2000). Thus, the finding that participants perceived the negative

reflective message type as most competent is consistent with previous research on face negotiation theory.

This study also supports the inclusion of other-oriented facework strategies in medium-rule governed messages. Although positive reflective messages were not significantly different than any other message types, they were evaluated as the most competent message type behind negative reflective messages. Therefore, engaging in other-oriented facework by including a politeness statement, for example, seems to be a strategic way for communicators to increase their perceived communication competence. Future studies should focus directly on investigating additional other-oriented facework strategies to see which are most competent alongside the rule-related, disclaimer statements.

In addition, this study included the development of a coding scheme for participants' emotional reaction to medium selection. This coding scheme coded for three variables: actual modal salience, alternative modal preference, and emotional response. The results from this newly-developed coding scheme aligned nicely with the previously-validated communication competence measure (Spitzberg & Canary, 1985; Westmyer et al.'s, 1998). Although the emotional response variable needs additional modification, communicators evaluating rule-violation messages were more aware of the medium (actual modal salience) and suggested alternative media more often (alternative modal preference) than communicators evaluating rule-adherent messages. Thus, participants seemed more aroused by the medium when evaluating medium rule-violation messages than those evaluating medium rule-adherent messages. These findings are mirrored by the communication competence measure in which all rule-adherent message types were

perceived as more competent than the rule-violation message types. Based on these findings, the emotional reaction coding scheme seems to hold promise in attempts to better understand medium rules and selection.

The implications of this study for both online dating website users, specifically, and online daters, in general, must also be mentioned. In 2006, the Pew Internet and Life Project reported that 10 million Americans both use the internet and are interested in meeting a dating partner. Further, of these 10 million Americans, 3.7 million use online dating websites to meet their romantic goals (Madden & Lenhart, 2006). As a result, the importance of mediated formats in facilitating romantic relationships cannot be ignored. This study seems to suggest that the length of the romantic relationship and the number of mediated formats available to appropriately terminate the relationship are inversely related. Early in the romantic relationship, communicators may be able to more competently use mediated formats to break-up. Yet, as the relationship progresses, the importance of a face-to-face break-up seems to increase. Similarly, the length of the romantic relationship and the importance of message construction seem to be positive related. In other words, frameworks such as those suggested here seem to be more important in long-term romantic terminations than in shorter-term break-ups.

Although this study did not investigate non-romantic termination contents, the findings can perhaps be extended to other face-threatening situations. Although no interaction effect existed between situation type and message type, the fact that negative reflective messages were always viewed as most competent, across situation type, seems to indicate that medium rule violators should consider utilizing these messages. Given that medium rules seem to exist alongside face-threatening situations, communicators

should consider engaging in other-oriented facework. Even further, the study seems to suggest that if a communicator is involved in a face-threatening situation but is unsure of the medium rule, it is best to state that one's behavior, though potentially inappropriate, is done purposefully. For example, the sender could state that the medium selection is for the benefit of the communicative partner.

Limitations

As an online survey-based experiment, several limitations of the study must be noted. Participants were given two weeks to access the online survey. Given that participants were in frequent contact with other potential participants, it is possible that some degree of diffusion of treatments occurred. Although the purpose of the study was masked by simply telling participants that the study "examines how people view communication messages across different types of communication encounters," recruiters and past participants may have shared some information about the study with participants who accessed the survey later in the data collection process.

In addition, the online survey software did not equally distribute participants across conditions. Although the total number of participants was considered adequate ($N = 279$), the number of participants in each of the ten conditions varied from 18-36. Thus, while participants were randomly assigned to one of the ten conditions, the survey software failed to evenly distribute participants across the conditions. The impact of this issue is unclear, but future studies should address this issue in pretesting.

Instrumentation issues also existed in the coding scheme. The fact that both rule-violation and rule-adherent message reactions contained relatively equal amounts of negative emotions is problematic. Although this finding may not be surprising, since both

messages surrounded a likely unpleasant romantic termination, a limitation of the coding scheme is evident. The participants' constructed email messages (i.e., their reactions to the experimental situation and message) were simply coded for if the "reaction to the situation" contained positive or negative emotions. The coding scheme should have required the coder to identify if the reaction to the medium selection was positive or negative. Since the break-up situation was unpleasant and somewhat negative in the first place, the lack of specificity in the coding scheme limits the ability to generalize the findings for the emotional response variable.

The overall generalizability of the study's results is also in question. Since participants were undergraduate students recruited through convenience sampling, the external validity of the study is limited. Further, 68 (23.4%) of the participants were senior Communication Studies students enrolled in a capstone course. These students may have been more attentive to social norms, message design, and other relevant features than the general undergraduate population. However, Hayes (2005) suggests that the necessity of probability sampling methods in experimental research may be overstated. In situations where the development and testing of theory are the primary concern, such as in this study, probability sampling methods are less important. Despite this, the study needs to be replicated in other populations in order to better understand the influence of this study's particular population on the study's results.

Along with replicating the study amongst different populations, the study should also be duplicated with other medium rules and communication technologies. This study focused only on the use of email in online romantic termination conversations. Thus, the generalizability of the study's findings to other communication media (e.g., text

messages, telephones, web conferencing systems) and other medium rules (e.g., workplace terminations, health updates, ceremonial messages) is limited. In addition, although online romantic terminations seem to be a medium rule-violation today, this medium rule may not exist or be as prominent in the future. As more technology is developed and used in increasingly-varied ways, it is important to remember that the findings from this study are simply those from a snap-shot in time. Thus, while the proposed rule-consciousness framework may be more stable, the specific medium rules used to test this framework may be more transient.

A limitation of the study design can also be found in the operationalization of the situation type variable as a one-week and two-year romantic termination, respectively. In particular, an incongruity seems to exist between the researcher's *a priori* assumptions of rule-adherent behavior and many participants' interpretations of that behavior. Negative reflective messages were perceived as most competent for both the rule-adherent and rule-violation condition. In other words, in both the one-week and two-year situation types, participants viewed the message, "I know that sending an e-mail isn't the best way to let you know, but e-mail allows me the time to think about how to say everything in a kind and clear way" as most appropriate. This finding is problematic because participants may not have perceived the one-week online romantic termination as rule-adherent. The decision to operationalize rule-adherent behavior as an online romantic termination after one week was a limitation of the study.

Future studies should address this significant limitation by ensuring that medium rule-adherent behavior and medium rule-violation behavior are readily recognized as such by the participant population. Although the study design allowed the researcher to

control for potential intervening variables by limiting the entire study to one medium (email), some participants may have been unsure of the etiquette of the online dating culture. These participants may have reverted back to medium rules in which they were familiar, medium rules which tend to privilege face-to-face communication (Westmyer et al., 1998). By ensuring that the research design adequately represents the rule-related variable of interest, future studies may find an interaction effect between situation type and message type. Or, at the very least, those message types where the rule is correctly applied will be viewed as more competent than those message types where the rule is incorrectly applied to the situation.

Although the above explanation is likely, the subtle differences between the negative reflective and positive reflective message types may also have impacted the results. When comparing the positive reflective and negative reflective messages, the negative reflective message was far more grammatically-pleasing than the positive reflective message. In other words, it simply “sounds” better. In the negative reflective message, the two independent clauses were combined with the word “but.” This choice results in a far more fluid sentence than the rather uneven and awkward positive reflective message. In addition, the conjunction “but” tied the rule-related statement and the justification statement closely together; as a result, the negative reflective messages may have appeared as more kind and clear than the positive reflective messages. Simply put, the participants may have perceived that the negative reflective messages did more competent facework than the positive reflective messages. As a result, future research should carefully attend to the phrasing of the negative and positive reflective message to ensure their consistency in both content and syntax.

Future Research

Future research should consider the role of disclaimer statements—i.e., statements where the communicator acknowledges that he or she knows the medium rule—in evaluations of communication competence. The following and violation conditions were perceived as the two least competent messages types, even less competent than the no rule acknowledgment message. Yet, the positive and negative reflective messages, messages which included the same disclaimer content as the following and violation conditions, were viewed as most competent. Future studies should investigate the relationship between the following-violation level and the positive-negative reflective levels of rule-consciousness. Perhaps, the disclaimer statements found in both these levels are unnecessary and the justification for medium rule adherence or violation is the only statement that matters in evaluations of communication competence. Only future study can parcel out the role of rule acknowledgment in medium rule-governed situations.

More broadly, future research should apply this study's framework in other medium rule-violation situations and across different media types. The utility of the framework in other face-threatening situations is unclear. Some face-threatening situations, such as romantic break-ups, may be more face-threatening for the receiver than the sender. In such situations, the politeness statements may take on more importance. Yet, other situations exist where the sender's face is being threatened by sending the rule-violation message. Violating medium rules in ceremonial situations (e.g., text message wedding invitations, email thank-you notes) may threaten the sender's face more than the receiver's face. In such situations, disclaimer statements and other self-

facework strategies may be more important in evaluations of message competence. Further research can investigate the interaction between situation type and facework strategies.

Finally, future studies should address mediated usage which is not rule-governed but may be inappropriate amongst certain populations. Gershon's (2010) concept of a media ideology may be fruitful in such studies. When selecting and using a certain medium, communicators draw from "their belief[s] about how a medium communicates and structures communication" (Gershon, 2010, p. 18). Communicators develop these media ideologies in conversation with others. As a result, while societal medium rules may not exist for a given situation, local medium rules may guide medium selection and use for a certain population. Future research should investigate these local medium selection and usage rules, for individuals and organizations may be able to more competently transmit messages after such inquiries. By combining this media ideology inquiry with the proposed theory of message competence through rule-consciousness, communicators may be able to violate these media ideologies in competent ways.

CONCLUSION

In sum, as new technologies increase in number and prominence, new users may not know the rules for that new medium. Or, medium rules may differ based on age, gender, socio-economic status, or a variety of other factors. Future studies need to attend to the issue of medium rules, for medium rules seem to have significant implications for perceptions of communication competence. The ability to communicate competently across communication media is only going to increase in importance in interpersonal and business contents. Ultimately, this study provides support for the development of additional theoretical frameworks that address how communicators can competently-construct the right message on the wrong medium.

REFERENCES

- Argyle, M., Henderson, M. (1985). The rules of relationships. In S. Duck & D. Perlman (Eds.), *Understanding Personal Relationships*. London: Sage.
- Brown, P., & Levinson, S. (1987). *Politeness: Some universals in language usage*. Cambridge: Cambridge University Press.
- Burgoon, J. K., & Hale, J. L. (1988). Nonverbal expectancy violations: Model elaboration and application to immediacy behaviors. *Communication Monographs*, 55, 58-79.
- Cupach, W. R., & Metts, S. (1994). *Facework*. Thousand Oaks: Sage.
- Daft, R. L., & Lengel, R. H. (1986). Organizational information requirements, media richness, and structural determinants. *Management Science*, 32, 554-571.
- Detenber, B. H., & Reeves, B. (1996). A bio-informational theory of emotion: Motion image and size effects on viewers. *Journal of Communication*, 46(3), 66-84.
- Dubiecki, D., Clifford, J., Reitman, I., & Reitman, J. (Producers) & Reitman, J. (Director). (2009). *Up in the Air* [Motion Picture]. United States: Paramount Pictures.
- eHarmony.com (2012). Safety tips: Making your eHarmony experience safe & successful. Retrieved from <http://www.eharmony.com/safety/tips>.
- Feaster, J. C., (2010). Expanding the impression management model of communication channels: An information control scale. *Journal of Computer-Mediated Communication*, 16(1), 115-138.
- Flock, E. (2011, Sept. 7). Why Yahoo CEO Carol Bartz was fired over the phone. *The Washington Post*. Retrieved from http://www.washingtonpost.com/blogs/blogpost/post/yahoo-ceo-carol-bartz-is-fired-over-the-phone/2011/09/07/gIQAAaDsE9J_blog.html.
- Ganz, J. S. (1971). *Rules: A systematic study*. Paris: Mouton.
- Gershon, I. (2010). *The break-up 2.0: Disconnecting over new media*. New York: Cornell.
- Goffman, E. (1959). *The presentation of self in everyday life*. New York: Overlook.
- Goffman, E. (1967). *Interaction ritual: Essays on face-to-face behavior*. New York: Pantheon.

- Goldman, R. (2007, November 16). "U R dumped: Breaking up in the digital age." *ABC News*. Retrieved from <http://abcnews.go.com/Technology/story?id=3875954&page=1>.
- Guerrero, L. K. (1994). "I'm so mad I could scream:" The effects of anger expression on relational satisfaction and communication competence. *The Southern Communication Journal*, 59, 125-141.
- Hayes, A. F. (2005). *Statistical methods for communication science*. New York: Routledge.
- Jin, Y., & Cameron, G. T. (2007). The effects of threat type and duration on public relations practitioner's cognitive, affective, and cognate responses in crisis situations. *Journal of Public Relations Research*, 19(3), 255-281.
- Lewis, K. R. (2011, Sept. 12). The new rules of firing—and being fired. *Fortune*. Retrieved from <http://management.fortune.cnn.com/2011/09/12/the-new-rules-of-firing-and-being-fired/>.
- Madden, M., & Lenhart, A. (2006). Online dating. *Pew Internet & American Life Project*. Retrieved from http://www.pewinternet.org/~media/Files/Reports/2006/PIP_Online_Dating.pdf.
- Match.com (2012). Good advice: Safety tips to follow. Retrieved from <http://www.match.com/cp.aspx?cpp=/cphp/corp/safetytips.html&ER=sessiontimeout>.
- Oetzel, J.R., Ting-Toomey, S., Yokochi, Y., Masumoto, T., & Takai, J. (2000). A typology of facework behaviors in conflicts with best friends and relative strangers. *Communication Quarterly*, 48(4), 397-419.
- Park, J. (2008). Linguistic politeness and face-work in computer mediated communication, Part 1: A theoretical framework. *Journal of the American Society for Information Science and Technology*, 59(13), 2051-2059.
- Payne, J. W. (2007, February 13). "Hey, you're breaking up on me!" *The Washington Post*. Retrieved from <http://www.washingtonpost.com>.
- Philipsen, G. (1992). *Speaking culturally: Explorations in social communication*. Albany: State University of New York Press.
- Philipsen, G., Coutu, L.M., & Covarrubias, P. (2005). Speech codes theory: Restatement, revisions, and response to criticisms. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication* (p. 55-68). Thousand Oaks, CA: Sage.

- Rettie, R. (2009). Mobile phone communication: Extending Goffman to mediated interaction. *Sociology*, 43, 421-438.
- Sellers, P. (2011, Sept. 8). Carol Bartz exclusive: Yahoo “f---ed me over.” *Fortune*. Retrieved from <http://postcards.blogs.fortune.cnn.com/2011/09/08/carol-bartz-fired-yahoo/>.
- Shimanoff, S. B. (1980). *Communication rules: Theory and research*. Beverly Hills: Sage.
- Spitzberg, B. H. (2006). Preliminary development of a model and measure of computer-mediated communication (CMC) competence. *Journal of Computer-Mediated Communication*, 11(2). article 12. <http://jcmc.indiana.edu/vol11/issue2/spitzberg.html>
- Spitzberg, B. H., & Canary, D. J. (1985). Loneliness and relationally competent communication. *Journal of Social and Personal Relationships*, 2, 387-402.
- Spitzberg, B. H., & Cupach, W. R. (1984). *Interpersonal communication competence*. Beverly Hills: Sage.
- Starks, K. M. (2007). Bye bye love: Computer-mediated communication and relational dissolution. *Texas Speech Communication Journal*, 31(1), 11-20.
- 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(3), 317-348.
- Ting-Toomey, S., & Kurogi, A. (1998). Facework competence in intercultural conflict: An updated face-negotiation theory. *International Journal of Intercultural Relations*, 22(2), 187-225.
- Toulmin, S. E. (1974). Rules and their relevance for understanding human behavior. In T. Mischel (Ed.), *Understanding Other People*. Oxford: Blackwell.
- Trénel, M. (2004). Measuring the quality of online deliberation. Coding scheme 2.2. Unpublished paper, 07.10.2004, Social Science Research Center Berlin, Germany. Available at http://www.wz-berlin.de/~trenel/tools/qod_2_0.pdf
- Westmyer, S. A., DiCioccio, R. L., & Rubin, R. B. (1998). Appropriateness and effectiveness of communication channels in competent interpersonal communication. *Journal of Communication*, 48(3), 27-48.
- Whitty, M. T. (2008). Revealing the ‘real’ me, searching for the ‘actual’ you: Presentations of self on an internet dating site. *Computers in Human Behavior* 24, 1707-1723.