"CAN YOU JUST PUT YOUR PHONE AWAY?": THE EFFECTS OF CELL PHONE USE ON FACE-TO-FACE CONFLICT IN ROMANTIC RELATIONSHIPS

BY

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DISSERTATION

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ABSTRACT

Effective conflict management is critical for satisfying close relationships, and communication technology is now a fundamental part of conflict management. One way that communication technology may be central to face-to-face (FtF) conflict interactions is by the presence or use of cell phones during conflict interactions. There is empirical evidence for a "mere presence" effect of cell phones on FtF interactions, such that the presence of cell phones is dissatisfying. Existing perspectives also suggest that individuals may be motivated to multitask with communication technology while carrying out a FtF interaction or meeting, but the effects of multitasking in close relationships is less clear. As such, this dissertation investigates the influence of cell phone usage and presence on conflict interactions. Romantic couples in college (n = 64 dyads) had a 10-minute serial argument conversation. Dyads were randomly assigned into a phone absent, phone present, or phone use condition, and one member of the dyad was randomly selected to act as a confederate. Confederates either received messages on their cell phone, were instructed to use their cell phone while trying to resolve the serial argument with their partner, or did not have a cell phone during the interaction. Results provide evidence that cell phone use during a FtF conflict conversation is dissatisfying. In addition, perceptions of technological interference due to confederate cell phone use elicited dissatisfaction, whereas as global ratings of partner interference increased, perceived resolvability decreased for participants in the multicommunication condition. The results offer theoretical and practical implications for effectively managing conflict when cell phones are present or are in use by a romantic partner.

To my mother, who shows me every day how to work hard for what matters.

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CHAPTER 1: INTRODUCTION

Today, how individuals connect interpersonally most certainly includes some form of computer-mediated communication (CMC), and data from the Pew Internet and American Life Project reflect this. Roughly three-quarters of American adult couples in married or committed relationships use communication technologies such as the internet, mobile phones, and social media for everyday communication (Pew Research Center, 2018). American teenagers report that they use social media, instant messaging, video chatting, mobile messaging apps, and text messaging to keep in touch throughout the day and to spend time with their significant others (Duggan & Brenner, 2013; Lenhart, Smith, Anderson, & Perrin, 2015). However, some adults report that mobile phones can be a source of tension in their relationship to the point that spouses have arguments over how much their partner uses their devices (Lenhart & Duggan, 2014). Accordingly, it is important to examine how and why individuals have disagreements about the use of communication technologies in their romantic relationships, and what effects these disagreements have on their relationships.

Another way communication technologies have become integral is through the widespread use of mobile phones, and smartphones in particular (for reviews, see Duran, Miller-Ott, & Kelly, 2015; Juhasz & Bradford, 2016). As of 2018, 95% of adults in the United States owned a cell phone and 77% of adults owned a smartphone (Pew Research Center, 2018). Some scholars have made the case that mobile phones create new challenges for how we think and relate with others. For example, one argument is that the mobile phone inhibits original and analytical thought because individuals are focused elsewhere instead of their immediate surroundings and interaction partners (Turkle, 2008). Thus, attention to one's mobile phone may make relationship initiation and maintenance more difficult (Turkle, 2011). Others have argued

that smartphone technologies further divide individuals' attention between the present and the distant (i.e., friends on social network sites) and make relational communication less satisfying (Misra, Cheng, Genevie, & Yuan, 2016). Additionally, the presence of a mobile phone during a face-to-face (FtF) conversation (Przybylski & Weinstein, 2013) and the amount of time spent using a mobile phone (Brown, Manago, & Trimble, 2016) negatively impacts relationship satisfaction and conversation satisfaction. Thus, the use of mobile communication technologies in the presence of relationship partners may be fundamentally problematic; however, it is unclear whether the effect varies under different conversational contexts.

One such important context to examine the effect of communication technologies is interpersonal conflict because how dating and marital partners communicate during conflict is key to relational quality and functioning (Caughlin, Vangelisti, & Mikucki-Enyart, 2013). There is evidence that communication technologies are now integral to how close relationship partners communicate during conflict (e.g., Caughlin, Basinger, & Sharabi, 2017). Social network sites (SNSs), for example, can be a source of conflict, such as when partners disagree about publicly broadcasting their relationship status to their network of friends on Facebook (Fox, Osborn, & Warber, 2014; Papp & Danielewicz, 2012). In short, examining the role of communication technologies is essential for understanding conflict in contemporary relationships.

Despite the arguments and evidence that mobile phones may have adverse relational effects, scholars have generally overlooked two key issues. First, the position that mobile phones negatively impact relationships does not account for whether individuals are using their devices in prosocial or destructive ways. Much of what relationship partners do with their mobile phones serve a maintenance function (Hall & Baym, 2012; Toma & Choi, 2016). For instance, text messaging may foster relational growth when partners send positive and/or relationally affirming

text messages (Luo & Tuney, 2015), sustain a sense of connection throughout the day (Pettigrew, 2009), or express affection (Coyne et al., 2011). However, the pressure to always be available via the mobile phone to romantic partners also applies to connecting with friends, family, or coworkers. The perception that partners are thinking about other people in their social network who are easily accessible on a myriad of mobile phone applications may be a source of friction in romantic relationships (Duran, Kelly, & Rotaru, 2011; Miller-Ott & Kelly, 2016) because it engenders a state of "absent presence" (Gergen, 2002, p. 227). Many romantic couples report being upset or annoyed when their partner is distracted by their mobile phone when spending time together (Lenhart & Duggan, 2014), so it would seem that perceptions of divided attention matter above and beyond the mere use of a mobile phone during conflict.

A second unexamined issue centers on the factors that may impact the effect of mobile phone use on the outcomes of relational conflict. More specifically, it is unclear to what extent individuals' perceptions of their relationship and their partners' behaviors shape the effect that mobile phone use during FtF conflict has on its outcomes. There are several factors that may attenuate or intensify the association between the use of communication technologies during FtF conflict and conversational ratings (e.g., satisfaction, resolution). Therefore, in this dissertation, I employ the close relationships literature to theoretically enhance our understanding of a common concern in contemporary relationships. The relational turbulence theory (Solomon, Knobloch, Theiss, & McLaren, 2016; Solomon & Knobloch, 2001) offers relevant explanations for why individuals may be more irritated during conflict when their partners use their mobile phones. For instance, the use of a mobile phone during an ongoing conflict interaction is one such behavior that may interfere with an individual's goals. Communication competence during conflict is another factor that may influence the extent to which the use of mobile phones

influence conflict. The competence model of relational conflict, for example, emphasizes the connections between communicative behaviors during conflict and relational outcomes (Spitzberg, Canary, & Cupach, 1994). This approach to the study of conflict highlights whether communicative behaviors meet standards for the relationship as opposed to understanding the causes of conflict, per se. The use of communication technologies such as a mobile phone during conflict may be one such way on which communicative standards are judged.

The present dissertation aims to make several contributions to the study of CMC in personal relationships. First, this study emphasizes how individuals' use of mobile phones during FtF conversations influences conversational and relational outcomes. Building on the research examining the mere presence of mobile phones (Misra et al., 2016; Przybylski & Weinstein, 2013), the current study enhances our understanding of how the use or misuse of our mobile phones influences the outcome of face-to-face conversations, and in this study particularly, conflict in close relationships. Second, this study bridges the literatures on interpersonal and organizational communication by examining the intersections of theory in both subfields. Third, this study examines whether personal and relational factors – such as relational uncertainty (Solomon & Knobloch, 2001), communication competence (Canary, Cupach, & Serpe, 2001), and cell phone rules (Miller-Ott, Kelly, & Duran, 2012) – intensify or mitigate the effect that mobile phone use has on the outcomes of conflict in close relationships. Finally, the current study examines how communication technologies are integrated into conflict conversations (Caughlin et al., 2017), answering a call to examine more closely the connections between mediated and face-to-face communication (Caughlin & Sharabi, 2013) in contemporary mixedmedia relationships (Parks, 2017).

In this dissertation, I employ theories from interpersonal and organizational communication and I use self-reports from both members of romantic partners about a serial argument conversation that took place in a campus laboratory. In Chapter Two, I review the literature that has shaped my research questions and hypotheses. Next, in Chapter Three, I provide an overview of the laboratory research design I employed in the study. In Chapter Four, I present the results from the analyses. Finally, in Chapter Five, I present the implications the present dissertation has for interpersonal relationships and computer-mediated communication.

CHAPTER 2: LITERATURE REVIEW

The literatures on computer-mediated communication (CMC) and conflict in close relationships are robust. In the following section, I review the literatures on successful conflict management in close relationships, and I examine the role of communication technology in relational conflict. Next, I review the effect that the presence of mobile phones has on conversational and relational outcomes, and I explore how the results may apply to relational conflict. Third, I introduce and review the literature on multicommunication from organizational communication. In this explanation, I also extend multicommunication into the domain of interpersonal conflict by examining how its effects are shaped by individual perceptions. **Successful conflict management in close relationships**

Conflict is a fundamental feature of close relationships, and partners' expression of disagreement is not fundamentally problematic or negative (Roloff, 2009). Instead how individuals manage conflict "prior to, during, and after a conflict is perceived" (Roloff & Chiles, 2011, p. 430) is what introduces the potential for relational damage. Individuals who perform positive and relationally-affirming techniques during conflict can both resolve the conflict and improve their relationships (Roloff, 1976). In addition, the ability to verbally and nonverbally communicate during conflict is essential for rewarding and satisfying close relationships in both the short- and long-term (Caughlin et al., 2013; Cupach, 2015). How close relationship partners manage conflict is critical because it is associated with relationship distress in the early years of marriage (Markman, Rhoades, Whitton Stanley, & Ragan, 2010) and an increase in the perceived potential for divorce in the future (Stanley, Markman, & Whitton, 2002). These findings notwithstanding, partners who are able to positively manage conflict may experience increases in

commitment to their partner and decreases in uncertainty about their partner (Siegert & Stamp, 1994).

The perception that a conflict will someday be resolved also has important implications for romantic relationships. In fact, the confidence that the topic is resolvable may serve as a shield against dissatisfaction (Johnson & Roloff, 1998). Partners who communicate in a positive problem-solving manner and work together towards resolution can increase confidence that the topic will be resolved. Productive and positive communication can also decrease the amount of rumination about a conflict. Some repeated topics of conflict (i.e., serial arguments), however, invite a pattern of dysfunctional behavior, which may lead to a lack of confidence in future resolution (Johnson & Roloff, 2000). Taken together, it is clear that perceptions of resolvability influence how close relationship partners manage conflict, which may consequently affect relationship functioning.

Although there is evidence that conflict can negatively impact health (e.g., Reznik, Roloff, & Miller, 2010; Harburg, Kaciroti, Glieberman, Julius, & Schork, 2008), successful conflict management may serve as a buffer for many negative health effects. Active listening during conflict (Reznik, Roloff, & Miller, 2012), perceptions that a partner is compromising during an ongoing serial argument (Bevan & Sparks, 2014), or perceiving partner support following a conflict (Heffner, Kiecolt-Glaser, Loving, Glaser, & Malarkey, 2004) may lessen the potential for negative health outcomes. Likewise, perceiving that a conflict or argument will eventually be resolved is associated with fewer mental and physical health issues (Reznik, 2016). These studies collectively suggest that conflict may have serious health implications for relationship partners, but how partners communicate during and after a conflict may minimize such effects.

Conflict and Communication Technology

The body of research on communication technology and interpersonal conflict is small but growing. The research that does exist is somewhat mixed. Some findings show that the use of communication technologies during difficult or confrontational topics such as conflict is associated with more negative communication in romantic relationships (Coyne et al., 2011). The use of CMC during conflict may also cause new issues in close relationships (Miller-Ott, Kelly, & Duran, 2012; Zhao, Sosik, & Cosley, 2012). On the other hand, CMC may help to improve relationships already saturated with existing conflicts. Kanter, Afifi, and Robbins (2012) observed that college children who were friended by their parents on Facebook felt closer, especially in those relationships already fraught with conflict. CMC can also be useful during conflict insomuch that individuals may be better able to get their emotions under control and say precisely what they want compared to when they communicate in-person (Perry & Werner-Wilson, 2011). The use of CMC during conflict may also have health implications, such as when interacting parties experienced an increase in negative affect and a decrease in positive affect when arguing over technology (Burge & Tatar, 2009). In short, there is evidence that communication technology is integral to relational conflict, but the use of some devices (i.e., mobile phones, computers) may yield varying results.

Comparing mediated and face-to-face conflict. One prominent way scholars have studied computer-mediated conflict interactions is through a comparison of conversations that occur via CMC and those that occur in-person. Scholars who compared CMC and face-to-face (FtF) conflicts in the 1970s and 1980s took a cues-filtered-out (CFO) theoretical approach (Culnan & Markus, 1987). CFO theories assumed "that the functions served by nonverbal cues in FtF interaction go unmet in computer-mediated interaction because the nonverbal cues are

absent" (Walther & Parks, 2002, p. 532). Accordingly, this perspective implied that in the absence of nonverbal cues in online communication, relationships are difficult to develop and maintain. If by chance they do form, according to Culnan and Markus (1987), then they must be impersonal, which would have important implications for how communicators in established relationships interact via cue-lean channels during conflict.

The most widely tested CFO theories are social presence theory (Short, Williams, & Christie, 1976) and the lack of social context approach to CMC (Kiesler, Seigel, & McGuire, 1984). Short et al.'s (1976) social presence theory outlined how a mediated channel's bandwidth, or the number of nonverbal cues available, has implications for social presence, or how salient an interaction partner is during an interaction. For example, the lack of nonverbal cues in text-based communication (e.g., instant messaging, text messaging) inhibit communicators from perceiving that there is an individual on the other keyboard or mobile device. However, as nonverbal cue systems are added to a communication channel, social presence increases. In addition, communication channels with high social presence foster conversational warmth and friendliness (Short et al., 1976). The lack of social context cues approach (Kiesler et al., 1984) outlined how CMC lacked important nonverbal cues that are available in FtF communication. Thus, according to this perspective, CMC communicators are more focused on the task at hand instead of their communication partner or the relationship. As a result, communication occurring over mediated channels was believed to be more hostile than in-person interactions, as evidenced by the occurrence of more negative, profane, and inflammatory remarks in CMC environments (Sproull & Kiesler, 1986). The social presence theory approach also held that CMC was inherently more hostile than FtF communication. The theory stipulates that the lack of social context cues in CMC prevents individuals from communicating messages that are emotional or relational in

nature (Siegel, Dubrovsky, Kiesler, & McGuire, 1986). Spears and Lea (1992) suggested that the features of CMC are a mechanism for deregulated behavior because of the perception that there are few social norms and/or constraints to interpersonal conduct.

Despite early CFO theorizing, there is little consensus that CMC is fundamentally more conflict-ridden than FtF communication. Strauss (1997) observed that CMC groups had more task-oriented conflict than those in the FtF condition due to the lack of nonverbal cue systems present in the text-based CMC environment. In contrast, Miranda and Bostrom (1993) found that online group support system (GSS) groups experienced less interpersonal conflict than FtF groups. One way to reconcile these divergent findings is to examine how different communication channels carry varying amounts of information that may require additional time or messages. Indeed, research comparing CMC to FtF groups generally support the notion that CMC groups require sufficient time to exchange messages and effectively manage conflict (e.g., Chidambaram, Bostrom, & Wynne, 1990; Poole & DeSanctis, 1989). Initial differences between CMC and FtF groups are a product of the additional time CMC groups require to exchange messages (Miranda & Bostrom, 1993; Strauss, 1997), and over-time these differences in conflict dissipate (Hobman, Bordia, Irmer, & Chang, 2002). In summation, it may not be that individuals communicating via CMC have more intense conflict; instead, individuals communicating via CMC may simply require more time to resolve issues due to the lack of nonverbal cues in some cue-lean channels, which necessitates additional exchanged messages to reach a shared understanding of message content.

More recently, scholars have examined how individuals evaluate the utility of communicating via CMC or FtF during relational conflict. For example, some dating partners viewed CMC as more productive than FtF communication during problem solving conversations,

and they rated conversations as equivalently satisfying regardless of the medium (Perry & Werner-Wilson, 2011). However, familiarity with the mediated channel predicted individuals' satisfaction when communicating via CMC. As such, any comparisons between CMC and FtF communication for relational conflict should consider how skilled one is at communicating during conflict via CMC or in-person. Also, there is some evidence that people may use CMC to enhance the way they engage in FtF conflict; for instance, some couples reported using CMC to "break off" from a FtF conflict conversation, which suggests that partners can cool off or carefully consider their response before replying when communicating over asynchronous or near asynchronous CMC (e.g., text messaging, instant messaging; Caughlin et al., 2017). Individuals who proficiently integrate communication technologies into relational conflict may have more successful conflict management in their relationships.

Technology as a source of conflict in relationships. The inundation of communication technologies in what Parks (2017) describes as mixed-media relationships may be beneficial for many tasks, but it may also be the basis of conflict for relationship partners. Communication technologies may sometimes interfere with in-person conversations or present new sources of relational strife. For example, Coyne et al. (2011) found that 38% of participants in their sample sent texts or emails while carrying out a FtF conversation with their partner. The use of mobile phones while in FtF contact with a relationship partner may be an issue for some couples. For instance, individuals who reported dissatisfaction with how their partners used their mobile phone also reported lower satisfaction in their relationship (Miller-Ott et al., 2012). How technology may "intrude, interrupt, and/or get in the way of couple or family interactions in everyday life," or technoference, may be the source of such dissatisfaction (McDaniel, 2015, p. 228). Moreover, technoference was the cause of conflict in some romantic relationships, and

women were particularly dissatisfied when their partner frequently performed such behaviors (McDaniel & Coyne, 2016). Overall, there seems to be evidence that points to how technology intended to help maintain current ties poses new potential threats to relationships. In the following paragraphs, I examine how social network sites (SNSs) and mobile phones can be the reason for relational conflict for close relationship partners.

Individuals' behaviors on SNSs are one example of how communication technology may present new problems for relationship partners. Facebook, for example, can trigger conflict when partners disagree over whether their relationship status should be public (e.g., going Facebook official; Fox et al., 2014; Papp & Danilewicz, 2012) or if relationship partners violate previously negotiated behavioral expectations on the platform (e.g., posting inappropriate content; Zhao, Sosik, & Cosley, 2012). The collaborative nature of the Facebook profile also allows for other members of an individuals' network to contribute to his or her online profile. These posts may present issues for dating couples, especially if the posts are ambiguous (e.g., the use of "vaguebooking," or strategically ambiguous public posts on SNSs; Child & Starcher, 2016).

SNSs like Facebook may not be a completely novel source of conflict. Individuals may have observed their partner's photographs elsewhere or noticed a flirty exchange in person. Facebook nonetheless makes these behaviors more salient because evidence of these behaviors remains visible over time (i.e., the persistence affordance of communication technology; Fox & McEwan, 2017). Because of the potential for relational problems instigated by behaviors on SNSs, individuals may delete content from their profile to circumvent potential conflict (Child, Haridakis, & Petronio, 2012). In short, the relational problems that SNSs pose may stimulate new issues of conflict in a relationship that may require one or more conversations aimed at resolution. Likewise, despite the well-documented opportunities that SNSs present for relational

maintenance (e.g., Tong & Walther, 2011), the social technology can also activate uncertainty, anxiety, or conflict in romantic relationships.

The mobile phone is another communication technology that may be a source of conflict in romantic relationships in a variety of ways (Lenhart & Duggan, 2014). Scholars have identified that how and under what circumstances individuals use their mobile phone is an evolving issue of relational conflict in romantic relationships (e.g., Miller-Ott & Kelly, 2016). The mobile phone is a source of conflict in two prominent ways. First, relationship partners may have arguments about the extent to which they contact each other throughout the day. This is especially true among college dating couples who reported that they had disagreements about the frequency of contact and availability to receive calls or text messages (Duran, Kelly, & Rotaru, 2011). As a result, many dating couples developed rules about when to call or text. Arguments about how often dating couples call or text throughout the day are perhaps due to the feeling of "perpetual contact" that mobile phones offer (Katz & Aakhus, 2002). The portability of the mobile phone yields greater availability expectations, and violations of such expectations invite relational dispute. In addition, the expectations set "into motion a cycle of conflict, rule generation, wanting control over the other, and feelings of restricted freedom" (Duran et al., 2011, p. 34).

A second way that mobile phones may present new issues in relationships relates to individuals' availability to others in their social network while in the presence of their romantic partner. Individuals must manage their mobile phone "reachability" (Green & Haddon, 2009, p. 103), which may include turning their phones off, silencing all notifications, or screening selected notifications (e.g., applications, text messages, phone calls). Much like the expectations for perpetual contact, individuals who violate prescribed mobile phone etiquette when spending

time with their partner FtF invite arguments about when and where mobile phone use is acceptable (Miller-Ott & Kelly, 2015). Taken together, it is evident that mobile phones create new opportunities for relationship partners to be in conflict.

The "Mere Presence" Hypothesis and Relational Conflict

Recently, scholars have examined the effect of mobile phones on relational quality and FtF conversational quality (e.g., Dwyer, Kuhlev, & Dunn, in press; Miller-Ott & Kelly, 2015, 2016; Misra et al., 2016; Przybylski & Weinstein, 2013). One explanation for the deleterious effect of mobile phones on conversational and relational quality is the "mere presence" hypothesis. Researchers who forward such a position speculate that the presence of a mobile phone during FtF conversations negatively influences relational and conversational quality. The evidence that the presence of a mobile phone was dissatisfying during a previous FtF conversation suggests that relational partners may later have an argument about how they make their phones available during future in-person conversations.

Scholars have found support for the "mere presence" hypothesis in experimental and quasi-experimental studies. Przybylski and Weinstein (2013), for instance, found that the presence of a mobile phone on a table between dyadic partners was associated with diminished levels of closeness, empathic concern, and conversational quality, and these effects were more pronounced when the conversational topic was meaningful (as opposed to casual). Additionally, Dwyer and colleagues (in press) identified that participants felt much more distracted and enjoyed their time with their interaction partner less when a mobile phone was present compared to when mobile phones were absent from the interaction.

Misra and colleagues (2016) also observed support for the "mere presence" hypothesis in their quasi-experimental study. They observed dyads conversing in a coffee shop and identified

whether one or more mobile phone was present during the interaction. After 10 minutes had elapsed, the dyads completed a short questionnaire about their interaction. Dyads where one or both partners had their mobile phone in plain sight felt significantly less connected to their partner. On its face, the data from two tests of the "mere presence" hypothesis suggest that having one's mobile phone out during a FtF conversation has at least the potential to diminish individuals' perceptions of the conversation and their conversation partners.

However, not all studies have consistently supported the "mere presence" hypothesis. Allred and Crowley (2016) did not observe significant differences in conversation satisfaction when comparing phone present and absent conditions. Pairs of friends had unstructured 10minute conversations either in the absence of mobile phones or with one member of the dyad placing his/her phone on a bench in plain view where they were both seated. Instead, Allred and Crowley found that whether individuals' accurately recalled that their partners' mobile phone was present accounted for any differences in conversation satisfaction between the experimental and control conditions. They concluded that the negative impact that the presence of mobile phones has on conversational quality must therefore depend on whether the devices are "perceptually salient" to participants (p. 10).

The mixed findings from studies testing the "mere presence" hypothesis suggest that additional research is warranted to examine other explanations for why mobile communication technology may elicit dissatisfaction or diminished relational quality. An alternative possibility to the mere presence hypothesis is that what individuals do with their mobile phones when they are communicating with their partner FtF may matter. The studies that support the absence/presence position (Misra et al., 2016; Przybylski & Weinstein, 2013) do not account for how individuals use their mobile communication technologies during FtF conversations. Data

from the Pew Research Center demonstrate that a sizeable percentage of married and unmarried American adults report dissatisfaction or annoyance when their partners used their mobile phone (Lenhart & Duggan, 2014). It is therefore prudent to continue examining how individuals' use of their mobile devices during FtF interactions influences partner perceptions. There is evidence, for instance, that partners who used a mobile messaging application during a FtF conversation were rated less attentive and polite compared to partners who did not use such applications (Vanden Abeele, Antheunis, & Schouten, 2016). In addition, Dwyer and colleagues (in press) established in a second study that participants who used their phone did not enjoy their conversations over a seven-day period compared to those interactions where they did not use their mobile phone. Moreover, partners who checked their mobile phone for messages during a negotiation task were also rated less professional and trustworthy when compared to partners who ignored such notifications (Krishnan, Kurtzberg, & Naquin, 2014). It follows then that how mobile communication technologies are used (or misused) during FtF conflict may provoke varying outcomes.

Multicommunicating During Conflict

How relational partners use mobile communication technologies during FtF conversations may be a more convincing explanation for diminished conversational and relational ratings than the "mere presence" hypothesis offers. Recently, scholars have explored how individuals are sometimes dissatisfied with their partners' use of their mobile phone, especially when they are spending meaningful time together (e.g., on a date; Miller-Ott, Kelly, & Duran, 2012). There is also evidence that individuals may blatantly ignore their partners and instead concentrate on the content and conversations on their smartphones. This set of dissatisfying behaviors has been described as "phubbing," or snubbing one's partner by paying

attention to his/her phone (Chotpitayasundondh & Douglas, 2016). Roberts and David (2016) identified a negative relationship between phubbing and relationship satisfaction; however, that association was mediated by the extent to which individuals have directly communicated with their partners about how irritating their mobile phone use is. Thus, instead of depending on whether mobile phones are present during FtF conversations, dissatisfaction with mobile phones during FtF conversations may be a product of perceived misuse and the extent to which relational partners have discussed problematic uses.

Of course, perceived misuse of a phone by one person does not necessarily mean that is the other person's intent. One using a mobile phone while having a FtF conversation is not necessarily ignoring the other person deliberately, and such behavior may instead be a result of a desire to achieve multiple communication goals or tasks simultaneously. This possibility has been described as multicommunicating, which is a concept with roots in organizational communication where there may be added pressure to complete multiple tasks in a single work day. Multicommunication is defined as the participation "in two or more conversations [...] using nearly synchronous media, such as face-to-face speech, telephone calls, videoconferencing, and email" (Reinsch, Turner, & Tinsley, 2008, p. 392). The integration of increasingly mobile communication technologies into everyday conversations and/or tasks invites individuals to multicommunicate, which is a specific type of media multitasking (Lang & Chrzan, 2015). Likewise, the pervasiveness of mobile communication technology invites multicommunicating in many situations and conversations, including everyday mundane relational communication or during relational conflict. It is unclear how individuals' multicommunicating practices during FtF conflict conversations impact task completion (i.e., conflict resolution). In addition, relational partners need to "recognize the sensitivity associated with certain audiences and tasks"

(Reinsch et al., 2008, p. 400). Relational conflict is one such task that may require more conscious sensitivity to their partners' perceptions, goals, and messages. Consequently, it is important to examine how relationship partners' multicommunicating during a conflict conversation contributes to better or worse conversational and relational outcomes.

Motives for multicommunicating. Individuals may perceive their partners' multicommunication on their mobile phone as their partners' obvious disregard for the conversation, but the goals or motives for multicommunication identified in the literature suggest that this perception may not be entirely accurate. When examining the individuals' explanations for multicommunicating in the workplace during meetings, most if not all reasons concern the desire to be communicatively efficient and effective (Reinsch et al., 2008). Stephens (2012) identified three reasons why individuals multicommunicate during organizational meetings. First, individuals may engage in a simultaneous conversation because they need to clarify the content by speaking with someone else via IM or another cue-lean channel. Second, individuals may multicommunicate to encourage, offer advice, or coach others. A third reason individuals multicommunicate is to engage in a parallel conversation where they may joke around with others, make sarcastic comments, vent, or otherwise distract them from the present FtF meeting. Taken together, individuals' goals for multicommunicating vary, and it seems that they consciously choose to engage in simultaneous conversations instead of merely browsing random webpages or applications (e.g., Facebook).

Such reasons for multicommunicating imply that it may be useful in the workplace where everyone is expected to complete multiple tasks throughout the day. Yet, relational conflict may not benefit from such efficiency. Moreover, what is efficient and effective communication in a less proximate communicative context may not be ideal in conflict that occurs in a FtF

conversation. Thus, it is important to consider multicommunicating specifically within a relational context, including the motives for its use in that context.

The reasons individuals multicommunicate during an organizational meeting shares some similarities with relational partners' motives for using communication technologies during a FtF conflict conversation. For example, relational partners may interact with others on their mobile phones to ask questions to members of their social network during an ongoing conflict (Caughlin et al., 2017). In many ways, individuals who reach out to a friend during a conflict conversation resemble members of an organization using available communication technology to clarify content; however, these may be backchannel conversations with others in the present meeting, whereas during conflict individuals are speaking with others who are typically not involved in the conversation. Another purpose for multicommunicating during a FtF conflict is for affect regulation. Individuals may send text messages or fidget with other applications to distract themselves from the conversation and control their emotions. This is analogous to Stephens' (2012) observation that organizational members may have a conversation on an instant messenger service during a meeting to blow off steam or joke around. These findings suggest that the goals for multicommunicating during organizational meetings and during relational conflict share some overlap. Additionally, it is indicative of how the findings from the literature on multicommunicating may inform our understanding of how close relationship partners manage conflict while in possession of their mobile communication devices.

The effects of multicommunicating. Multicommunicating may be an efficient and effective way to achieve several communicative goals or tasks simultaneously. However, it may also be challenging for some individuals, rendering task completion difficult and minimizing overall performance. In the following paragraphs, I review the cognitive effects of

multicommunication more generally. Next, I explain how the effects translate to the outcomes of relational conflict.

Multicommunication presents some unique cognitive challenges because individuals must actively attend to multiple conversations. In other words, multicommunicating "short circuits" message interpretation, goal planning, and message production processes (Turner & Reinsch, 2010, p. 282). This notion is analogous to how individuals who multitask perform worse than individuals who focus on a single task because the requirements for multiple tasks interfere with the brain's ability to process information (Stroop, 1935). In the classroom, students who sent text messages or used Facebook in ways that were irrelevant to the lecture material had lower information recall and less useful note-taking practices compared to students who were solely engaged in the lecture (Kuznekoff, Munz, & Titsworth, 2015). Likewise, individuals may be less adept at processing their partners' messages in the immediate FtF conversation context when they are simultaneously attending to another unrelated IM, email, or text message conversation on their mobile devices. The increased cognitive load that multicommunicating invites vis-à-vis carrying on multiple concurrent conversations is perhaps best illustrated in two ways. First, there may be more frequent gaps between speaking turns when one or both partners are multicommunicating. Second, individuals may have less coordination when juggling multiple conversational tasks (Crosson, 2000). The most obvious reason for conversational gaps and coordination difficulty is because individuals must cycle between two or more ongoing conversations. Individuals must actively monitor each conversation by processing their messages, cognitively generating communicative goals, and producing messages to move each conversation forward (Turner et al., 2008). In short, multicommunicating is challenging, and

individuals vary in their ability to successfully manage multiple ongoing conversations (Cameron & Webster, 2011).

The challenges that multicommunicating present during relational conflict potentially may match or exceed those experienced during routine relational communication. The oppositional nature of goals during conflict presents a unique communicative context that may require more attentiveness than other routine conversations. Yet relational conflict may resemble many organizational meetings where multicommunicating is quite prevalent and colleagues may need to engage in group decision making processes. During relational conflict, individuals need to consider both their own and their partners' goals, their verbal messages, and their nonverbal behaviors. Indeed, how partners verbally and nonverbally manage conflict has implications for relational functioning (Roloff & Chiles, 2011). The use of mobile communication technology during conflict is another element of the communicative context. For example, individuals may perceive their partners' multicommunication during conflict as disinterest in resolving the conversation or as lacking commitment to the relationship. This is analogous to how in the workplace individuals may perceive that their conversation partner is merely feigning an active ear to their ideas while carrying on another conversation on their device (Turner & Reinsch, 2010). The negative perceptions of partners' multicommunicating practices during a FtF conflict conversation may influence their own verbal and nonverbal communication, which, in turn, may have conversational or relational consequences. Consequently, it is important to not only examine the effect of the presence of mobile communication technology on relational conflict, but it is also critical to understand how dating partners actively use their devices during an ongoing FtF conflict. As such, I forward the following hypotheses:

H1A: Individuals will be less satisfied with their conflict conversation when one partner multicommunicates.

H1B: Individuals will rate their conflict as less resolvable when one partner multicommunicates.

One way to examine the influence that multicommunicating has on conflict conversations is by investigating whether multicommunicating individuals' responses to their partners' messages are delayed. There is evidence that multicommunicating increases the amount of time required for task completion. For instance, individuals completing a reading task took significantly longer to finish while simultaneously holding an IM conversation compared to those who solely focused on the reading (Bowman, Levine, Waite, & Gendron, 2010; Fox et al., 2009). Given that multicommunicating requires divided attention, which may decrease task performance, it is possible that diminished communicative performance during conflict may manifest itself through increased response latencies. The time it takes for individuals to respond to their partners' messages may be a conversational marker of how message processing suffers when individuals attempt to simultaneously receive and interpret multiple messages (Turner & Reinsch, 2010). In addition, it is possible that the longer response latencies as a product of multicommunicating may have effects on conversation outcomes, including conversation satisfaction and perceived resolvability of a conflict. Therefore, I forward the following research questions:

RQ1: Will multicommunicating individuals' response latencies exceed those of individuals who have a phone present?

RQ2: Will the length of time confederates take to respond to their partner when multicommunicating be associated with participants' conversation satisfaction and perceived resolvability of the conflict?

It is also possible that the volume of multicommunicating during conflict conversations may impact perceptions about the conversation. One group of researchers arrived at this conclusion in a study of friendship pairs communicating in-person for five minutes while waiting for the "actual study" to commence (Brown, Manago, & Trimble, 2016). They found that among the dyads who used their mobile phones during the interaction, the amount of time they spent on their devices was inversely associated with conversational quality. This would suggest that how much or how often partners multicommunicate during a conflict conversation would similarly yield more negative conversational ratings. Given these findings, I pose the following hypothesis:

H2: The amount of time one relationship partner uses mobile communication technology during a FtF conflict conversation will be negatively associated with (a) conversation satisfaction and (b) perceived resolvability of the conflict.

Factors that influence multicommunicating perceptions. Thus far, my review of the effect of the presence and use of mobile phones during relational conflict does not address other factors that may influence individuals' ratings of FtF conversations. Several theoretically and practically important elements likely influence the effects of mobile phone use during FtF conversations. In the paragraphs to follow, I review how conversational features and individuals' perceptions of their partner and their relationship may shape the influence that multicommunicating has on relational conflict.

Norms or rules. To begin, organizational, group, or relational norms are a set of related factors that may be theoretically relevant to examine. These negotiated behavioral standards also influence whether individuals perceive that their partners' multicommunicating is appropriate (Turner et al., 2008). On the one hand, norms may encourage multicommunication because there is an agreed-upon understanding that the conversation partner is occupied with other work, tasks, or conversations. Alternatively, dyads, groups, or organizations may have standards under specific conditions where its practice would be considered rude or unacceptable. For example, parents and children develop rules about acceptable technology use when in the presence of family, such as during family dinner (Hiniker, Schoenbeck, & Kientz, 2016). Romantic partners may likewise have rules that restrict contact with third parties while in the presence of each other (Miller-Ott et al., 2012). However, such constraints were associated with more dissatisfaction for couples, perhaps due to pressure to be attentive in-person but also to be available to noncopresent others (Miller-Ott & Kelly, 2016). The extant literature, therefore, indicates that individuals are motivated to simultaneously manage multiple conversations, but relationship partners may negotiate under which conditions these behaviors are satisfactory or acceptable.

Certainly, the rules relationship partners have about multicommunicating seem to be context dependent, such that serious or important situations may require more undivided attention. This is true from the perspective of the "mere presence" hypothesis, which suggests that the effect of a mobile phone is more pronounced under more serious conversational contexts (Przybylski & Weinstein, 2013). Relational conflict is a situation where norms about technology use may be more restrictive because individuals may expect their partner to be motivated to exclusively focus on their conversation instead of conversations with friends or family on their mobile phone. The norms about multicommunicating and rules about mobile phone use in the

presence of a romantic partner may shape such perceptions of appropriateness. As such, it is reasonable to speculate that norms, rules, or expectations regarding multicommunicating influence how individuals rate conflict conversations. With this in mind, I propose the following research question:

RQ3: Do rules about technology use during conflict conversations attenuate the differences in conversation satisfaction and the perceived resolvability of the conflict between partners who multicommunicate, have a phone present, and do not have a phone present?

Relationship length. Relationship length is another potential factor that may influence how commonly relational partners multicommunicate and their perceptions of such behavior. Idiosyncratic relational norms and rules are often developed over time (Burgoon & Hale, 1988), and dating partners' expectations for multicommunicating may be a product of their shared understanding over time. This builds upon Miller-Ott and Kelly's (2015) findings that the rules governing mobile phone use for dating couples spending time alone may develop over time. To assess whether the length of relationship influences rules about multicommunicating and the effect that multicommunicating has on conversational outcomes, I pose the following research questions:

RQ4: Is relationship length associated with the extent to which dating partners have mobile phone rules?

RQ5: Does relationship length attenuate the difference in conversation satisfaction, perceived resolvability of the conflict, and relational perceptions between conversations where one partner multicommunicates, one partner has a phone present, and neither partners have a phone present?

Communication competence. In addition to the rules about technology and relationship length, communication competence may influence individuals' perceptions of multicommunicating during conflict. Communication competence refers to an individual's ability to communicate effectively and appropriately (Spitzberg & Cupach, 1984). Moreover, Cupach (2015) described communication competence as the "impressions communicators form about their own and others' communication performance" (p. 349). This definition highlights the importance of individuals' perceptions of their own and their partners' level of skill to be "flexible and adaptable in different situations" (Guerrero, 1994, p. 130). Such a conceptualization, which emphasizes the role of global perceptions, is the focus of the present dissertation. In addition, the distinction fits within a framework that individuals' perceptions may shape the effects of multicommunication on conversational and relational outcomes.

Communication competence is particularly useful in the study of relational conflict because of the perceived goal incompatibility that is the very definition of conflict (Canary, Cupach, & Serpe, 2001). In other words, one must attempt to meet his or her partner's standards for communication during conflict while simultaneously attempting to meet his or her goals. Generally, distributive conflict behaviors are negatively associated with communication competence whereas integrative conflict styles are positively associated with communication competence and relational quality (Canary & Cupach, 1988; Canary et al., 2001; Cupach, 2015). These findings highlight how perceptions of partners' ability to competently communicate during times of goal incompatibility are significant predictors of better or worse relational outcomes (e.g., satisfaction, maintenance, longevity).

The evidence that communication competence is associated with more satisfying relational conflict has important implications for our understanding of the effects of

multicommunication during relational conflict. Turner and Reinsch (2007) explain that individuals' ability to carry on a conversation when their attention is divided by one or more additional conversations occurring over their mobile communication technology is fundamentally an issue of competence. Described as "competent presence" (p. 52), individuals who are perceived as being sufficiently cognitively present to carry on a conversation may be rated more favorably when multicommunicating compared to those who are cognitively absent when simultaneously managing more than one conversation. For example, dating partners who can send a text message while also responding to what their partner just said in their FtF conversation would be viewed as highly cognitively present. On the other hand, individuals who struggle to interpret or send messages in the FtF context with their partner while carrying on a simultaneous conversation on a mobile messaging application (e.g., Snapchat, WhatsApp) would be rated as cognitively absent.

Turner and Reinsch's (2007) conceptualization of competent presence has important implications for the oft-examined communication competence construct. From the perspective of goal achievement, Lakey and Canary (2002) reasoned that competence is a product of individuals' ability to achieve their own goals while also keeping their partners' goals salient. In short, individuals are competent to the extent they that communicate both effectively and appropriately (Spitzberg, 2000). This may have important implications for multicommunication; therefore, I propose the following hypotheses:

H3: Individuals' perceptions of their partners' communication competence will be positively associated with (a) conversation satisfaction and (b) perceived resolution of the conflict.

H4: Individuals' perceptions of their partners' communication competence will attenuate the differences in (a) communication satisfaction and (b) perceived resolution of the argument between partners who multicommunicate, have a phone present, and do not have a phone present.

Moreover, communicator presence is another factor that may shape the effect of multicommunicating on conversational outcomes. Communicator presence is distinct from appropriate communication, which concerns the extent to which an individual is sending messages that are suitable for a particular context. Communicators who are present during a FtF conversation can attend to multiple conversations without any significant decline in message processing or production. Even in the absence of communication technology, however, individuals may perceive that their partner is not fully cognitively present during a conversation. For instance, individuals may be distracted by other thoughts (e.g., chores, tasks, homework). These extraneous thoughts could influence how well their partners think they are actively engaged in the conversation. Other individuals may be more adept at minimizing their attention to such thoughts, and in turn, continue to be conversationally present to their partner. Likewise, individuals may be able to maintain their communicator presence to their partner even in the face of a friend entering the room and briefly interrupting with a side conversation. That is, individuals who are present demonstrate little perceptible cognitive short circuiting when multitasking or multicommunicating (Turner & Reinsch, 2007). Considering such associations, I forward the following research questions:

RQ6: Will individuals' perceptions of their partners' communicator presence be positively associated with conversation satisfaction, relational closeness, and relational satisfaction?

RQ7: Will individuals' perceptions of their partners' communicator presence be positively associated with the perceived resolution of the conflict?

Relational turbulence. In addition to individuals' perceptions of their partners' communication competence, the extent to which individuals perceive turbulence in their relationship may similarly influence the effect that multicommunication has on the conversational outcomes of relational conflict. The relational turbulence theory (Solomon, Knobloch, Theiss, & McLaren, 2016; Solomon & Knobloch, 2001) sheds light on how and why couples experience varying outcomes during or after a conflict episode. Originally conceptualized as a model of relationship development, relational turbulence theory offers explanations for why the transition from casual to serious dating can be a trying time for couples as they experience more conflict episodes, more frequent and negative emotions, and more relationship-oriented thinking (Solomon & Knobloch, 2001; Solomon & Theiss, 2008). The heuristic of the theory also offers explanations for other transitions, such as when a couple becomes first-time parents (Theiss, Estlein, & Weber, 2013) or when they launch their children to college (Nagy & Theiss, 2013). The theory, which emphasizes key transitory moments in relationships, also has relevance in the study of relational conflict. Individuals who engage in conflict when experiencing turbulence are likely to respond differently than will individuals experiencing little or no turbulence. Thus, applying the lens of relational turbulence theory to multicommunication during relational conflict has theoretical implications.

There are two primary mechanisms of relational turbulence, relational uncertainty and partner interference, and both influence how individuals judge their partners' communication (Knobloch, 2015). Relational uncertainty refers to the amount of confidence individuals have about the nature of their relationship (Knobloch & Solomon, 1999), and it is an umbrella term for

three distinct uncertainty processes. Self uncertainty is the amount of commitment or investment individuals have to their relationships, whereas partner uncertainty is how insecure or unconfident individuals are in how invested their partners are to the relationship. Relationship uncertainty concerns the questions individuals have about the relationship. Self, partner, and relationship uncertainty uniquely contribute to the broader construct of relational uncertainty (Knobloch, 2015).

Relational uncertainty has been shown to influence individuals' perceptions of conflict in their relationships. For instance, individuals with elevated levels of relational uncertainty perceive irritations in their romantic relationships as more severe (Theiss & Knobloch, 2009), whereas individuals with high self and relationship uncertainty are less direct in voicing their grievances about irritations in their relationship (Theiss & Solomon, 2006). The amount of relational uncertainty individuals experience also predicts avoidance behaviors during conflict (King & Theiss, 2016). Such findings illustrate that individuals' confidence in the future of their relationship and their perceptions of how much their partners are invested in the relationship have implications for how individuals' communicative behavior during a specific conflict episode.

The extant research demonstrates that relational uncertainty can trigger individuals' emotional reactions to their partners' behaviors, concerns about their relationship, and whether their communication is indirect. Likewise, it is possible that relational uncertainty may render individuals more reactive to their partners' use of communication technology during a FtF conflict conversation. Individuals with elevated doubts about the future of their relationship, their own involvement in their relationship, or their partners' involvement may be less satisfied with

their conflict conversations when their partner uses their mobile phone compared to individuals with low or moderate levels of uncertainty. For that reason, I propose the following hypothesis:

H5: The amount of relational uncertainty will attenuate the differences in (a) conversation satisfaction and (b) perceived resolvability between conflict interactions where one partner multicommunicates, has a phone present, and when neither partners have a phone present.

The second key mechanism outlined in the relational turbulence theory is partner interference. Influenced by interdependence theory (Berscheid, 1983), which outlines how close relationship partners' lives and behaviors are integrated and interdependent, partner interference refers to how an individual's goals may be disrupted, disturbed, or interrupted by their partner. In other words, interference occurs when individuals perceive that their partner is an obstacle or hindrance to their goals. Partner interference is the substance of turbulence in relationships (Solomon & Knobloch, 2001), causing individuals to be increasingly "vulnerable to reactivity" (Knobloch, 2015, p. 380). For example, partner interference is associated with a greater perception that a partner's messages were intentionally hurtful (McLaren & Solomon, 2014; Theiss & Knobloch, 2009). These findings illustrate how the overall perceptions that a partner impedes goal achievement can have a significant effect on how individuals react to their partners' multicommunication during relational conflict. Therefore, I pose the following hypothesis:

H6: The amount of overall perceived partner interference will attenuate the differences in (a) conversation satisfaction and (b) perceived resolvability between conflict interactions where one partner multicommunicates, has a phone present, and when neither partners have a phone present.

Perceptions of interference may also be important in situations where relational partners are having conflict and one partner is using his or her mobile phone. More specifically, individuals' perceptions that their partners' use of their mobile phone interferes with conversation is conceptually similar to partner interference in relational turbulence theory. The perceived misuse of mobile phones when communicating in-person is also related to McDaniel's (2015) technoference concept. The relationship between technoference, conflict, and satisfaction (McDaniel & Coyne, 2016) suggests that individuals may be less satisfied in their conversation when they perceive that their partner's use of communication technology is interfering with the conversation. With this in mind, I propose following research question:

RQ8: Is partner technological interference negatively associated with conversation satisfaction or perceived resolvability?

CHAPTER 3: METHODOLOGY

In this dissertation, I conducted an observational study of serial argument conversations between college students in dating relationships. Defined, a serial argument is "a set of argumentative episodes that focus on a particular issue" (Johnson & Roloff, 1998, p. 329). A serial argument is a specific type of relational conflict where partners have multiple conversations surrounding the same topic where they perceive incompatibilities (Trapp & Hoff, 1985). The benefit of examining serial arguments is two-fold. First, asking participants to have a conversation about a serial argument topic, which they have already had multiple conversations about, ensured that the topic was salient to them and one they realistically might discuss again outside of the laboratory. Serial arguments likely will continue to occur in relationships without absolute resolution (Bevan et al., 2007), and the likelihood of continued future discussion is often driven by the aspiration to achieve unmet goals from a previous conversation (Bevan, Finan, & Kaminsky, 2008). Second, a serial argument can range from a minor issue to a serious problem in relationships (Trapp & Hoff, 1985). Serial arguments are therefore an ideal topic to investigate in the present study because it provides a context with potentially great variation in topics.

First, I used self-report questionnaires to capture participants' appraisals of their relationship and one 10-minute serial argument conversation. Self-report questionnaires and retrospective reports of conflict conversations are quite common in the study of conflict in close relationships. This method of inquiry involves asking participants to report on their general communication patterns or specific behaviors, perhaps during their last conflict interaction with their partner. In self-reports, there is always a degree of subjectivity on the part of the participants (Metts, Sprecher, & Cupach, 1991), and these perceptions "may be clouded by

people's appraisals of the dyadic climate" (Knobloch, Solomon, & Theiss, 2006, p. 217). Put differently, self-report questionnaires invite potentially misrepresented or incorrectly aggregated perceptions of conflict occurrences or behaviors, and these perceptions may be distorted by the current state of the romantic relationship. Participants also immediately reported on their perceptions at the conclusion of a single conflict conversation, and in that way I minimized the likelihood that participants offered imprecise perceptions in their responses to self-report questionnaires.

I also used observational techniques to complement participants' self-report accounts of their conflict conversations. Observational methods are less common than self-report methods in the study of relational conflict. In an observational study of close relationship partners, the researcher wishes to simulate a typical conversation. As such, I recorded conflict conversations between dating couples to more thoroughly assess my hypothesized models. Observing how relationship partners communicate during conflict may reveal important information, and the data may support more tenable conclusions, especially if the findings from observational ratings and self-reports converge (Feeney & Noller, 2013). Video- or audio-taped interactions offer a rich space for researchers to classify verbal and nonverbal communication, connect the classifications to self-reports from the participants, and make conclusions that would otherwise not be apparent in other methods that lack access to the interactions.

Although there are benefits of using observational designs in the study of relational conflict, these methods are not immune to limitations. One issue with simulated conflict conversations in the research laboratory pertains to the representativeness of the observed conversations. This may manifest itself in several ways. For instance, participants may communicate in the laboratory in such a way that is not representative of their general behavioral

tendencies during conflict. Asking participants to discuss a serial argument may at least partially remedy this situation because relationship partners often repeat their pattern of interaction across multiple conversations (Johnson & Roloff, 1998). To this end, participants may interact in a way that more closely resembles their other serial argument conversations than they might have if they discussed a topic that had not previously been discussed. It is also possible participants may silence or avoid particular types of actions or they may behave in a way that is socially desirable. Participants in observational studies may elicit such behaviors as a product of knowingly being observed (Sillars, 1991). In other words, participants' verbal and nonverbal communication may differ from what might be considered normal communicative patterns because they are in a laboratory and not the comforts of their own living room. When considering the case of relational conflict in particular, observational studies may preclude individuals from withdrawing from a conflict conversation (Roberts, 2000). The laboratory setting may also restrict the type of avoidance individuals can perform (Caughlin et al., 2013).

I have chosen to link self-report data with observed behaviors of participants during their conflict conversations to account for the limitations of each method of inquiry. Using such a research design should enhance the findings and conclusions I draw from the data while testing the hypothesized models. In the paragraphs to follow, I outline the study procedure, a summary of the participants, the self-report measures, and the recorded observed behaviors in the present dissertation.

Study Procedure

Participants were recruited in two ways. First, I recruited participants in undergraduate communication courses in exchange for a small amount of extra credit. Due to the nature of the study, participants were asked to bring their current romantic partner with them to the laboratory.

Partners of participants recruited through communication courses were entered into an additional drawing for a \$25 Amazon eGift card. Second, I posted flyers on campus to advertise the study to any university student and his/her romantic partner to participate in exchange for a \$5 Amazon eGift card. Participants recruited in this way were also entered into a drawing for a \$25 Amazon eGift card (see Appendix L).

The inclusion criteria for the present study were as follows. Participants needed to be (a) 18 years of age or older, (b) currently in a romantic relationship of at least one month, and (c) own a smartphone. In addition, both members of the dyad needed to be available to come to a University laboratory together, and could complete the study entirely in English. According to a recent Pew Internet Report, smartphone ownership in the United States has grown from 35% in 2011 to 77% in 2018 (Pew Research Center, 2018). In addition, 92% of American adults between 18 and 29 years-old own a smartphone, suggesting that it is justifiable to draw from a traditional college student population.

Participants were randomly assigned to one of three conditions: a control condition where mobile phones were absent from the interaction, a cell-phone-present condition, or a multicommunication condition. In each of the three conditions, one randomly assigned member of the dyad was assigned the role of confederate. I describe the distinctions between the three conditions in the following paragraphs.

In the control condition where mobile phones were absent, participants were instructed to leave their belongings in the waiting room. To ensure that participants also left their mobile phones, they were instructed to leave their phones on a table in the laboratory waiting room. I asked the randomly assigned confederate for his/her phone number. Next, I instructed the confederate that s/he would receive a text message with information that is relevant to the current

study, but that s/he could read the text message once the study had concluded. The confederate was also instructed to at no time tell his/her partner that s/he had received a text message from the research team.

The cell-phone present condition required the confederate to receive audible notifications during the conflict interaction. The randomly assigned confederates were instructed to place their mobile phone on the table in front of them with the ringer at an audible level that is normal (i.e., not on silent). In addition, I requested the confederates' contact information (e.g., phone number) and asked that they save the phone number as a same-sex friend for participants in a heterosexual relationship and as an opposite-sex friend for participants in a same-sex relationship. This protocol eliminated potential clouded post-conversation ratings on the part of the naïve participants due in part to messages received from a potential extra-dyadic romantic interest (in the event that the naïve participants saw the sender's name on his/her partner's mobile phone). In this condition, the confederates received three separate text message notifications at the 2, 4.5, and 7-minute mark of the conversation, but they were instructed to not use their mobile phone at any point during the conversation. The confederates were also instructed before the interaction that they should not reveal their role as a confederate in the study in any way.

The multicommunication condition is the third condition in the present study. In this condition, one randomly assigned member of the dyad was assigned the role of confederate. The confederates in the multicommunication condition were also instructed to place their mobile phone on the table face-up in front of them with the ringer at an audible level that is normal (i.e., not on silent). I also requested the confederates' contact information in this condition, and I asked them to save my phone number as a mutual friend. Confederates in the multicommunication condition received the same instructions as confederates in the phone

present condition with one exception. At the 2, 4.5, and 7-minute mark of the conversation, I messaged the confederate to perform three different tasks on their mobile phone: (a) respond to and send text messages, (b) scroll through one or more social media account and interact with several communication artifacts on the platforms (e.g., Facebook like, Instagram comment, Twitter retweet), and (c) check email including responding to emails. I chose these three behaviors because the extant research suggests that these behaviors are commonly cited multicommunication behaviors (Seo, Kim, & David, 2015). In addition, these behaviors have the potential to be irritating to relationship partners when in the company of each other (Miller-Ott & Kelly, 2015). The message content was randomized to prevent any order effects of the experimental stimuli on outcome measures. Prior to the interaction, the confederates were instructed to at no time during the study tell their partner the research team has been contacting them on their mobile phone (see Appendix F for random assignment instructions and Appendix G for timeline of text message stimuli in phone present and multicommunication conditions).

After completing Institutional Review Board informed consent procedures (see Appendix J and Appendix K), participants completed a pretest survey about their relationship more generally and about conflict in their relationship specifically. Next, participants were asked to nominate up to five serial argument topics in their current relationship that they have had conversations about in the prior month (see Appendix D for instructions and Appendix E for form used by participants.). Prior to nominating serial argument topics, participants read the following definition of serial arguments:

"A serial argument exists when individuals argue or engage in conflict about the same topic over time, during which they participate in several (at least two arguments about the topic" (Johnson & Roloff, 1998, p. 333).

Once both participants selected topics, I identified topics that both partners nominated. If participants nominated two or more of the same topics, I chose the first topic listed by both members of the dyad. If the participants did not select a mutual topic, I randomly selected one topic from the combined list. This procedure has been used in prior laboratory research (e.g., Keck & Samp, 2007).

The confederate was then escorted to the other laboratory room to complete the interaction about the selected serial argument topic. I instructed participants that they should try to achieve a resolution to the argument and that they had 10 minutes to do so. Prior laboratory research indicates that 10 minutes is not too taxing for participants (e.g., Worley & Samp, 2015; Keck & Samp, 2007; Samp, 2013) and is an identical amount of time as used in previous studies testing the "mere presence" hypothesis (e.g., Allred & Crowley, 2016; Misra et al., 2016; Przybylski & Weinstein, 2013). The interactions were unobtrusively recorded with three video cameras from various angles. Immediately following the 10-minute interaction, the participants responded to survey questions about their interaction and their relationship. Then, they were debriefed about the purpose of the study and were provided materials for campus counseling resources given the nature of the conversation (see Appendix H for counseling information). The naïve participant in each dyad was also informed about their partner's role as a confederate at this point in the study (see Appendix I for debrief script).

Participants

The sample included 64 dating couples (N = 128 individuals).¹ The sample was comprised of 62 heterosexual dyads (n = 124 individuals) and two female same-sex couples (n =4 individuals). Participants ranged in age from 18 to 26 years old (M = 20.93, SD = 1.53).

¹ I dropped two couples from the analyses because the participants did not follow directions for their video-taped conversation.

Participants also self-reported as either Caucasian/White non-Hispanic (39.80%), Asian or Asian-American (36.70%), Hispanic or Latino/a (10.90%), Black non-Hispanic (10.20%), or other (2.30%). At the time of the study, couples had been in a romantic relationship for approximately 1.33 years (SD = 1.21; range = 1 month to 5.75 years). See Appendix C for a list of the demographic items measured.

Measures

I performed confirmatory factor analysis (CFA) with the *lavaan* package in the statistical software package R (Rosseel, 2012) on all measures with four or more items to confirm the factor structure and fit to the data. CFA is useful because it offers evidence that a multi-item scale measures one particular construct (Hunter & Gerbing, 1982). The CFA procedure is necessary if a researcher wishes "to meaningfully sum or average a set of items as a measure of some construct and to meaningfully interpret a reliability coefficient" (Levine, 2005, p. 336). Performing a CFA for unidimensional constructs offers evidence of internal consistency. Internal consistency refers to how well a measure "produce[s] the same measurements over time" (Reinard, 2006, p. 118). However, performing a CFA for a single construct does not offer evidence of external consistency. As such, I utilize the Marital Opinion Questionnaire (MOQ; Huston, McHale, & Crouter, 1986) as an external factor for the outcome measures included in my main analyses.²

The models for each multi-item measure were evaluated using the following goodnessof-fit parameters. A model demonstrated good fit to the data when it had a comparative fit index $(CFI) \ge .90$ (Beaudoin & Thorson, 2006; Hu & Bentler, 1999), a chi-square/degree of freedom

² The Marital Opinion Questionnaire functioned as an external factor (MOQ; Huston et al., 1986. The MOQ contains eight 7-point semantic differential scales (e.g., *miserable-enjoyable, disappointing-rewarding*) and one global item of relationship satisfaction.

ratio (γ^2/df) less than 3, and a standardized root mean square residual (*SRMR*) < .08 (Hu & Bentler, 1999). Although it is a common practice to report the root mean square error of approximation (*RMSEA*) in confirmatory factor analysis and latent variable modeling, I have omitted the RMSEA fit index from my assessment of my measurement models due to a relatively small sample size and small degrees of freedom (df). Kenny, Kaniskan, and McCoach (2014) found that models with small df often yield elevated RMSEA values beyond commonly used estimate cutoffs (i.e., RMSEA < .08 demonstrating good fit, but < .10 is also acceptable; Browne & Cudeck, 1993). This is relevant for CFA analyses with a single factor and few indicators, and such is the case for several of the measures in this dissertation. A small sample size may also influence the RMSEA, such that the likelihood of rejecting models with RMSEA > .10 increases as the sample size decreases (Chen et al., 2008). In addition, the increased rejection of poorly fitting models based on RMSEA > .10 is especially true of models with small df. As such, I follow the Kenny et al.'s (2014) recommendations to not use the RMSEA when reporting model fit. I employed full information maximum likelihood (FIML) in all confirmatory factor analyses to account for missing data. FIML is appropriate when the data is considered to be missing completely at random (MCAR) or missing at random (MAR). This type of estimation in CFA analyses produces "consistent and efficient" parameter estimates, standard errors, and test statistics (Brown, 2015, p. 337).

In instances where model fit was unacceptable, I conducted one of two procedures. For unidimensional scales and/or scales with six or more items, I conducted parceling. A parcel is a sum or average of several items that presumably measure the same construct (Brown, 2015, p. 377). A benefit of using the parceling technique is measurement reliability may be improved (Kishton & Widaman, 1994) and models are more parsimonious (Brown, 2015). Extant research

suggests that it is only appropriate to parcel unidimensional constructs (Bagozzi & Heatherton, 1994; Bandalos & Finney, 2001) because parceling may yield biased factor loadings. Model misspecification may occur in such cases because parceling may prevent a researcher from identifying an item that loads onto two different latent constructs (Bandalos, 1997). Following Little, Cunningham, Shahar, and Widaman's (2002) guidelines for parceling, I initially conducted CFA's with the items as indicators. I examined the factor loadings for the indicators, and I selected the items with the highest loadings to be the anchors for each parcel. I then added additional items to the parcel anchors in an inverted fashion (i.e., lowest factor loading is added to the indicator with the highest factor loading). I also inspected the means for each item and I concluded that each item for a parcel was of similar magnitude. This procedure illustrates how I did not engage in "data snooping" (Little et al., 2002, p. 166), which occurs when a researcher chooses indicators for parcels in a biased manner.

I also employed an alternative method for improving model fit with scales with five or fewer items because parceling into more than three indicators would not be possible. With these types of measures, I dropped items one by one if their standardized factor loadings were < .60. Cronbach alphas were also used to assess the improvement of scale reliability, relative to the scale prior to dropping an item.

After confirming the factor structure of all measures, I reverse scored items where necessary, and then summed and averaged each measure. In addition to assessing model fit, I also evaluated each scale's psychometric properties (e.g., mean, standard deviation, skewness, kurtosis, reliability). The measures described below are included in Appendix A and Appendix B. See Table 3.1 for a summary of the timing of the measures (i.e., before and after videorecorded interaction).

Table 3.1

Summary of Measures

Pre-Interaction	Post-Interaction
1. Relationship Satisfaction	1. Relationship Satisfaction
2. Relational Closeness	2. Relational Closeness
3. Conflict Frequency	3. Conversation Satisfaction
4. Relational Uncertainty	4. Perceived Resolvability
5. Relational Turbulence	5. Communicator Presence
6. Partner Interference	6. Technological Interference
7. Communication Competence (global rating)	

Conversation satisfaction. Participants' conversation satisfaction was assessed using five items that were adapted from Hecht's (1978) measure of interpersonal communication satisfaction. Participants responded to five statements (e.g., "How satisfied were you with the conversation you just had?", "How glad are you that you had the conversation?") on a Likert scale (1 = Not at all happy/glad, 5 = Extremely happy/glad). Using the MOQ as an external factor, results from a CFA yielded a well-fitting model (χ^2/df (76) = 1.54, *CFI* = .97, *SRMR* = .05). The items were summed and averaged with higher scores reflecting greater satisfaction with the conversation (M = 3.16, SD = 97). The scale achieved excellent reliability ($\alpha = .92$).

Perceived resolvability. Participants responded to Johnson and Roloff's (2000) 4-item measure of perceived resolvability, which assesses the extent to which participants believed their serial argument would be settled in the future. The four items were measured on 7-point Likert-type scale (1 = *Not at all*, 7 = *To a great extent*). Using the MOQ as an external factor, the measure achieved acceptable fit (χ^2/df (64) = 1.53, *CFI* = .96, *SRMR* = .045). Each participant's perceived resolvability score was calculated by taking a mean of the four items with greater scores reflecting higher perceived resolvability. The measure was also acceptably internally

consistent, and higher scores reflected greater perceived resolvability (M = 5.07, SD = 1.30, $\alpha = .72$).

Relationship satisfaction. Participants reported on their relationship satisfaction by responding to three 7-point Likert items ("How satisfied/happy/content are you in your relationship?"). I used an external factor to test model fit on the three-item relationship satisfaction metric. With MOQ as the external factor, the three-item measure of relationship satisfaction fit the data well before (χ^2/df (53) = 1.50, *CFI* = .98, *SRMR* = .03) and following (χ^2/df (53) = 1.51, *CFI* = .98, *SRMR* = .04) the serial argument conversation. The satisfaction measure also achieved excellent reliability at both data collection points (M_{TI} = 6.25, *SD* _{TI} = .81, α_{TI} = .88; M_{T2} = 6.25, *SD* _{T2} = .88, α_{T2} = .94).

Relational closeness. Participants also responded to a series of items about how close they felt to their partner prior to the serial argument conversation and immediately following the interaction. Vangelisti and Caughlin's (1997) measure of psychological closeness contains six items on a 7-point Likert-type scale (e.g., 1 = Not at all close, 7 = Extremely close). I also used the MOQ as an external factor in model fitting procedures. The model for relational closeness before the conversation fit the data well (χ^2/df (89) = 1.58, *CFI* = .96, *SRMR* = .05). Likewise, CFA results showed that the model fit the data well for the corresponding post-conversation assessment (χ^2/df (89) = 1.74, *CFI* = .95, *SRMR* = .05). I took the mean of the six-item measure assessed prior to (M_{TI} = 6.37, *SD*_{TI} = .72, α_{TI} = .86) and after the conversation (M_{T2} = 6.41, *SD* T_2 = .76, α_{T2} = .90).

Relational uncertainty. I measured relational uncertainty with Knobloch and Solomon's (1999) 20-item scale. Participants responded to 20 items that assessed self, partner, and relationship uncertainty on a 6-point Likert scale (1 = *completely or almost completely uncertain*,

6 = completely or almost completely certain). Prior to calculating indices of the three sources of relational uncertainty, the items were reverse scored so that greater values reflected more uncertainty. To prevent ordering effects, the 20 items that comprised the three sources of relational uncertainty were presented at random to participants.

Previous research indicates that the three sources of relational uncertainty do not form an empirically unidimensional second-order factor model (for review, see Knobloch, 2010). Despite the considerable covariation between self, partner, and relationship uncertainty, extant research demonstrates that the source of relational uncertainty are empirically distinct constructs (e.g., Knobloch & Solomon, 1999; Knobloch et al., 2007; Solomon & Theiss, 2008). As such, I performed separate confirmatory factor analyses for self, partner, and relationship uncertainty. CFA analyses demonstrated acceptable fit for self uncertainty (χ^2/df (14) = 1.99, *CFI* = .98, *SRMR* = .029), relationship uncertainty (χ^2/df (14) = 2.45, *CFI* = .96, *SRMR* = .04), and partner uncertainty (χ^2/df (9) = 2.94, *CFI* = .975, *SRMR* = .02). I took the means of self uncertainty (*M* = 5.38, *SD* = .81, α = .93), partner uncertainty (*M* = 5.29, *SD* = .79, α = .94), and relationship uncertainty (*M* = 5.18, *SD* = .81, α = .905).

Relational turbulence. In order to assess relational turbulence, participants also responded to four 7-point semantic differential items used in previous research (Knobloch, 2007; McLaren & Solomon, 2014). Participants rated the extent to which their relationship represents four different dimensions of relational turmoil (chaotic-stable, tumultuous-running smoothly, calm-turbulent, and peaceful-stressful). Results from the CFA showed poor model fit to the data. I examined the factor loadings and dropped one item (chaotic-stable). I do not report the results of the CFA with the remaining items because a three-item model is saturated or just-identified with zero *df*. Saturated models have an identical number of free parameters as known values, and

are therefore unidentified (Brown, 2015). As such, I only report the reliability estimate of the resultant three-item measure of relational turbulence. I calculated the means to estimate participants' self-reported turbulence in their relationship (M = 2.22, SD = 1.02, $\alpha = .87$).

Partner interference. Participants also responded to an adapted version of Solomon and Knobloch's (2001) measure of partner interference. The five-item Likert type scale (1 = Not at all, 5 = Very much so) represents the extent to which participants perceive that their partners get in the way of the things they do overall (e.g., to what extent does your partner interfere with the plans you make?). The results of the CFA showed poor model fit. I inspected the factor loadings, and I dropped two items one-by-one to improve model fit and internal consistency ("To what extent does your partner interfere with how much time you devote to your schoolwork?" and "To what extent does your partner interfere with the things you need to do each day?"). Removing one item on the measure did not substantially improve model fit. Similar to the measure of relational turbulence, the ensuing three-item measure of partner interference is also unidentified in a CFA framework. Therefore, I only report the internal consistency of the measure ($\alpha = .79$). I took the mean of the resultant three-item scale (M = 2.05, SD = .88).

Communication competence. Guerrero's (1994) global measure of communication competence was used to assess individuals' perceptions' of their own and their partners' overall communication competence. Participants responded to six identical items about their own and their partners' communication competence (e.g., "I am (my partner is) a good communicator) on a 5-point Likert-type scale (1= *Not at all true of me/my partner*, 5 = *Extremely true of me/my partner*). The original models for perceptions of self and partner communication competence demonstrated poor fit with the data. To improve model fit, I dropped the item with the lowest factor loading ("It is hard for me/my partner to communicate my/his/her feelings"). The trimmed

models fit the data well for self-ratings ($\chi^2/df(5) = .998$, CFI = 1.00, SRMR = .03) and partnerratings ($\chi^2/df(5) = 1.82$, CFI = .97, SRMR = .04). I summed and averaged each scale to form a composite score that represents self (M = 3.80, SD = .61, $\alpha = .67$) and partner (M = 3.84, SD = .71, $\alpha = .76$) communication competence.

Communicator presence. Communicator presence was measured with a four-item scale. This measure was used to assess all participants' perceptions of their partner's cognitive attention during the conversation (e.g., "To what extent did your partner have his/her attention elsewhere during the conversation?"). Participants rated the extent to which their partner was distracted from the conversation on five-point Likert-type scale (1 = Not at all, 5 = A great deal). The model fit the data well (χ^2/df (2) = .16, *CFI* = 1.00, *SRMR* = .03). I reverse-scored the items so that higher scores reflected greater perceived presence. I calculated the mean of the reverse-scored items (M = 4.18, SD = 1.01). The measure was internally consistent at an acceptable level ($\alpha = .83$).

Cell phone rules. Participants reported on the extent to which they and their partners have rules about the use of their cell phones while spending time together in-person. Both members of the dyad responded to a modified version of the Contact with Others subscale in Miller-Ott, Kelly, and Duran's (2012) Cell Phone Rules Scale (CPRS). The modified CPRS rules scale also included three additional items concerning cell phone use while having important conversations (e.g., "How important is it that you and your partner limit phone use when having important conversations?"). Participants rated how important it is that they limit phone calls, text messages, and overall phone use when spending time together on a 5-point Likert scale (1 = Not at all important, 5 = Extremely important). CFA results with each item as an indicator demonstrated poor fit to the data. To improve model fit, I parceled the original measure into four

parcels by examining factor loadings and item-level descriptive statistics. The parceled CPRS model fit the data well ($\chi^2/df(2) = .11$, *CFI* = 1.00, *SRMR* = .002), and it demonstrated excellent reliability ($\alpha = .95$). I took the mean of the parceled scale to calculate the composite CPRS measure (M = 3.27, SD = .88).

Partner technological interference. The naïve participants (n = 22) in the multicommunication condition also reported on the extent to which their confederate partners' use of communication technology interfered with the conversation. The four-item Likert-type scale ($1 = Not \ at \ all$, $5 = A \ great \ deal$) was adapted from Solomon and Knobloch's (2001) partner interference measure. Results from the CFA showed that the model had good fit with the data ($\chi^2/df(2) = 1.81$, *CFI* = .98, *SRMR* = .02). I summed and averaged the scale, and greater composite scores were indicative of more perceived partner technological interference (M = 3.31, SD = 1.24, $\alpha = .96$).

Conflict – **Negativity.** Participants' perceptions of overall amount of conflict in their relationship was assessed using four items from Braiker and Kelley's (1979) Relationships Questionnaire Conflict-Negativity (RQC-N) subscale. The RQC-N is measured on a Likert scale $(1 = Not \ at \ all, 5 = A \ great \ deal)$, and it measures the extent to which couples argue, communicate negative feelings, or try to change each other's behaviors. Participants were instructed to consider only the previous month of their relationship when responding to the RQC-N. The four-item model did not fit the data well. After inspecting the factor loadings and modification indices, I trimmed one item from the measure to improve model fit ("When you and your partner argue, to what extent are the problems or arguments serious?"). I do not report the results from the trimmed model CFA because it is a saturated with zero degrees of freedom. The

three items were summed and averaged (M = 2.59, SD = .70). The RQC-N achieved suitable reliability ($\alpha = .64$).

Problematic mobile phone use. I used Bianchi and Phillips' (2005) Mobile Phone Problem Use Scale (MPPUS) as a measure of phone dependency. The four-item Likert measure (I = Never, 5 = Always) assessed how often participants felt anxious when they have not (a) checked their phone for messages, (b) looked at their phone for social media notifications, and (c) received a call or messages in some time. Participants also indicated how often "you think about using your phone when you are not using it." The results from the CFA demonstrated good model fit to the data ($\chi^2/df(2) = 1.89$, CFI = .99, SRMR = .02). I took the mean of the four items, and higher scores indicated more problematic phone use (M = 2.27, SD = .875, $\alpha = .85$).

Covariates. I also measured several variables to be used as covariates in the main analyses. First, I used participant sex as a covariate, which was measured using a binary categorization scheme (male = 1, female = -1). Second, I used participant role in the study (confederate = 1, naïve participant = -1). Third, I used as a covariate was conversational realism. I evaluated the extent to which the conversation participants had in the laboratory was realistic. A measure of realism is necessary to account for the artificial laboratory setting. Two items assessed conversational realism by asking participants to respond to (a) "how realistic is it that you and your partner have a conversation like the one you just completed?" and (b) "how similar was the conversation you just completed to other conversations you and your partner have?". The two items were measured on a five-point Likert scale (1 = Not at all realistic/similar, 5 = Extremely realistic/similar), and the items were significantly and positively correlated (r = .68, p< .001). Therefore, I took a composite of the two items (M = 3.33, SD = .93). Finally, I entered relationship satisfaction measured prior to the interaction as a covariate in the models. **Observed cell phone behaviors.** In addition to evaluating the relationships between the observed indicators and latent factors of the measures, I also assessed the reliability of trained objective coders on the observational data (i.e., ratings of cell phone use and response latencies by the confederate participants). I and one undergraduate research assistant conducted the ratings. Per Institutional Review Board requirements, the undergraduate research assistant only coded a subset of the data because one or both members of a dyad asked that other undergraduate students not be allowed to view their interaction. I calculated intercoder reliability using the intraclass correlation coefficient (ICC) estimates using SPSS version 24 with 95% confidence intervals based on a single rater, 2-way mixed effects model for consistency (ICC; Shrout & Fleiss, 1979). I used ICC(2,1) because the ICC is being used to confirm the reliability of the ratings used in the present dissertation (Poole & Hewes, 2015), and I will not be taking a mean of the ratings across the two raters. Instead, I will only use my ratings because the undergraduate research assistant was only able to rate a subset of the data (n = 34 couples, or 82.92% of dyads in the phone present and multicommunication conditions).

Confederates' cell phone behaviors were assessed in two ways. First, confederate's cell phone use was measured in seconds during the serial argument conversation. I measured the phone use in seconds of confederates in the multicommunication condition. More specifically, we coded for how long the confederate was actively touching the touch screen on his/her phone or just looking down at the phone screen to read a message or notification on the phone. The ICC estimate for ratings of phone use for confederates in the multicommunication condition demonstrated moderately acceptable reliability, ICC(2,1) = .72, 95% CI [.53, .83], p < .001. On average, confederates in the multicommunication and cell phone present conditions used their

cell phones for 40.09 seconds (SD = 21.77 seconds). The mean reflects the average amount of cell phone use across the three incoming message stimuli in each condition.

Second, I also measured confederates' response latency in the phone present and multicommunication conditions when a notification came through on their cell phones. Response latency was measured in seconds, and it is calculated by recording the number of seconds that elapse between the arrival of a notification and the end of a complete spoken thought, excluding any verbal dysfluencies (e.g., um, uh). The ICC estimate for ratings of response latency for confederates in the phone present and multicommunication conditions demonstrated moderately acceptable reliability (ICC(2,1) = .61, 95% CI [.43, .74], p < .001). Confederates averaged a response latency of 13.72 seconds (SD = 8.31 seconds) after receiving the stimuli message. The mean response latency also reflects the average response latency across the three stimuli messages during the interaction.

CHAPTER 4: RESULTS

Preliminary Analyses

Prior to conducting any main analyses, I performed four preliminary tests on the data. First, I assessed the data for missingness at the item level using IBM SPSS 24. I evaluated the percentage of missingness in the data. All variables had less than 5% missingness, which is within the acceptable limits (Tabachnick & Fidell, 2013). I then calculated the pattern of missingness in the data by using the estimated means function with 1000 iterations. The results of the missing value analysis indicated that the data were missing completely at random (Little's MCAR test (χ^2 (4507) = 4626.53, p = .97). As such, I performed multiple imputation on the dataset using IBM SPSS 24. I chose to use the multiple imputation on the data for two reasons. First, calculating potential estimates based on a dataset that has undergone multiple imputation may reduce the standard errors (SE) around the estimates, particularly in a smaller sample (Little, Jorgensen, Lang, & Moore, 2014). Second, multiple imputation of the data may prevent potentially biased estimates if data is missing for the independent or dependent variables used in the main analyses (Snjiders & Bosker, 2012). The multiple imputation generated 10 datasets with predicted values added to the original missing values. The values that replace the original missing values are generated based on participants' responses to the other items. Finally, I aggregated the resultant datasets to create one dataset.

Second, I evaluated the data for normality and outliers on the outcome variables of interest (i.e., communication satisfaction, perceived resolvability). The skewness and kurtosis values were within the acceptable range for both outcome variables. Tabachnick and Fidell (2013) suggest that skewness and kurtosis values greater than 2 or less than -2 demonstrate patterns of non-normality. In addition to examining parameters of normality, I conducted

Grubb's (1969) test of significance for outliers in the outcome variables. No outliers were detected in the data. As such, I did not omit any participants from additional analyses.

Third, I evaluated differences between confederates and naïve participants on all independent and dependent variables. I chose to conduct preliminary analyses in this manner for two reasons. First, participants were randomly assigned to one of two roles in the present study. Prior to entering the lab, I randomly assigned one member of the dyad as the confederate and as the naïve participant. The results of randomization yielded slightly more male confederates (n = 34) compared to women (n = 29), whereas more women (n = 34) than men (n = 29) were naïve participants. Consequently, the distinction by participant role served as the foundation for the distinguishing variable used in the main analyses. When conducting dyadic analyses where individuals are nested within couples, it is necessary to use a "meaningful" factor that allows for a clear demarcation between nested members (Kenny, Kashy, & Cook, 2006, p. 6). Researchers commonly use participants' sex as a distinguishing variable; however, it is reasonable to also use participants' role in the present study because of the randomization procedures I employed.

I conducted paired-sample *t*-tests on the substantive variables to compare the means for confederates and naïve participants. Of the variables examined, only one statistically significant difference emerged. Naïve participants (M = 3.77, SD = 1.19) – compared to confederates (M = 4.59, SD = 0.56) – reported significantly less presence from their partner in the conversation, t(63) = 5.09, p < .001. The mean difference in ratings for cell phone rules only approached statistical significance. See Table 4.1 for a summary of descriptive statistics and results of the paired-sample *t*-tests.

Table 4.1

Descriptive Statistics, T-test Results, and Correlation Results for Confederate and Naïve Participants

	Conf	ederate	Na	ïve		
	М	SD	М	SD	t(df)	r
Relationship Satisfaction T1	6.22	0.88	6.28	0.73	-0.61 (63)	.57***
Relationship Satisfaction T2	6.20	0.95	6.30	0.83	-0.83 (62)	.47***
Relational Closeness T1	6.38	0.91	6.44	0.61	-0.58 (63)	.37**
Relational Closeness T2	6.38	0.91	6.44	0.61	-0.51 (58)	.37**
Self Uncertainty	1.64	0.85	1.60	0.79	0.32 (62)	.26*
Partner Uncertainty	1.72	0.74	1.67	0.84	0.39 (61)	.34**
Relationship Uncertainty	1.80	0.81	1.83	0.82	-0.20 (61)	.38**
Relational Turbulence	2.19	1.05	2.11	0.97	1.27 (59)	.69***
Partner Interference	2.17	0.82	1.96	0.93	1.45 (63)	.10
Conflict-Negativity	2.56	0.74	2.62	0.67	-0.58 (63)	.38**
CCOMPS	3.84	0.56	3.79	0.65	0.53 (60)	.20
CCOMPP	3.81	0.68	3.86	0.76	-0.48 (62)	.31*
Perceived Resolvability	5.03	1.25	5.05	1.35	-0.08 (61)	.33**
Conversation Satisfaction	3.17	0.97	3.16	0.59	0.06 (60)	.56***
Multicommunication - Self	2.30	0.80	2.22	0.82	0.71 (60)	.05
Multicommunication - Partner	2.49	0.72	2.51	0.82	-0.21 (60)	.18
Cell Phone Rules	3.18	0.84	3.38	0.86	-1.76 (61) [†]	.44***
Communicator Presence	4.59	0.56	3.77	1.19	5.09 (63)***	.07
MPPUS	2.29	0.92	2.23	0.79	0.41 (61)	.20
Relationship Length	16.15	14.62	15.84	14.57	0.99 (63)	.99***

Note. N = 128 individuals. Relationship length and serial argument length are measured in months. CCOMPS = Communication Competence – Self, CCOMPP = Communication Competence – Partner, MPPUS = Problematic Mobile Phone Use.

f p < .10, * p < .05, ** p < .01, *** p < .001

The fourth set of preliminary analyses examined differences between men and women on the substantive variables. I conducted paired sample t-tests to compare men and women on the focal independent and dependent variables. The analyses yielded statistically significant mean differences for four variables. First, men (M = 2.30, SD = 0.91) reported greater amount of partner interference than women (M = 1.84, SD = 0.81), t(61) = 3.19, p < .001. Second, men (M = 3.32, SD = 0.89) were more satisfied with their serial argument conversation than women (M = 3.05, SD = .1.06), t(58) = 2.32, p = .02. Third, women (M = 2.43, SD = 0.93) reported more problematic phone use by their partner than men did about their partner (M = 2.09, SD = 0.75), t(61) = -2.59, p = .01. Fourth, women (M = 2.71, SD = 0.77) reported more conflict in their relationship than men (M = 2.49, SD = 0.63), t(60) = -2.59, p < .05. The mean difference for men and women between perceived partner presence only approached statistical significance, t(61) = 1.87, p = .07. See Table 4.2 for a summary of the descriptive statistics and results of the paired-sample *t*-tests.

Table 4.2

Descriptive Statistics, T-test Results, and Correlation Results for Men and Women

	М	en	Wo	men		
	М	SD	М	SD	t(df)	r
Relationship Satisfaction T1	6.30	0.77	6.24	0.80	0.72 (61)	.60***
Relationship Satisfaction T2	6.38	0.73	6.18	0.93	1.77 (60)	.47***
Relational Closeness T1	6.39	0.63	6.40	0.73	-0.16 (61)	.30*
Relational Closeness T2	6.46	0.61	6.42	0.85	.0.35 (56)	.31*
Self Uncertainty	1.58	0.62	1.64	0.94	-0.49 (60)	.27*
Partner Uncertainty	1.68	0.68	1.68	0.84	0.03 (59)	.39***
Relationship Uncertainty	1.72	0.60	1.88	0.94	-1.40 (59)	.44***
Relational Turbulence	2.21	1.07	2.18	1.02	0.21(57)	.69***
Partner Interference	2.30	0.91	1.84	0.81	3.19 (61)**	.16
Conflict-Negativity	2.49	0.63	2.71	0.77	-2.28 (61)*	.42**
CCOMPS	3.87	0.59	3.74	0.62	1.43 (58)	.23 [†]
ССОМРР	3.89	0.67	3.80	0.76	0.84 (60)	.29*
Perceived Resolvability	5.18	1.31	4.93	1.31	1.28 (59)	.35**
Conversation Satisfaction	3.32	0.89	3.05	1.06	2.32 (58)*	.60***
Multicommunication - Self	2.20	0.77	2.34	0.65	-1.14 (58)	.05
Multicommunication - Partner	2.53	0.81	2.47	0.73	0.47 (58)	.18
Cell Phone Rules	3.28	0.83	3.25	0.84	0.20 (59)	.41**
Communicator Presence	4.34	0.90	3.98	1.10	1.87 (61)*	10
MPPUS	2.09	0.75	2.43	0.94	-2.59 (60)*	.26*
Relationship Length	16.12	14.68	16.47	14.79	-1.10 (61)	.99***

Note. N = 124 individuals. Relationship length and serial argument length are measured in months. CCOMPS = Communication Competence – Self, CCOMPP = Communication Competence – Partner, MPPUS = Problematic Mobile Phone Use.

 ${}^{t}p < .10, * p < .05, ** p < .01, *** p < .001$

For the fifth set of preliminary analyses, I conducted one-way ANOVAs comparing participants assigned to each condition on the independent and dependent variables, using separate ANOVAS for confederates and naïve participants. For naïve participants, two statistically significant differences were apparent. Results of the ANOVA showed statistically significant differences in self-ratings of global communication competence, F(2) = 4.83, p = .01. Post-hoc analyses revealed that naïve participants in the technology present (M = 3.48, SD =(0.57) and technology absent (M = 4.85, SD = 0.64) conditions were significantly different. Naïve participants also differed significantly by experimental conditions on their perceptions of their partner's cognitive presence during the serial argument conversation, F(2) = 34.74, p < .001. Results from post-hoc analyses showed that naïve participants in the multicommunication condition rated their partner as less present (M = 2.57, SD = 0.94) than naïve participants' ratings of their partners in the technology absent (M = 4.52, SD = 0.59) and the phone present conditions (M = 4.26, SD = 0.86). Post-hoc analyses showed that confederates differed in technology absent (M = 4.55 months, SD = 3.43 months) versus the technology present (M = 10.78 months, SD = 10.78 months)8.43 months) conditions. See Table 4.3 for a summary of the ANOVAs for confederate and naïve participants by experimental condition.

Table 4.3

			Confeder	ates						Naïve Pa	rticipants			
_	А		В		(2		А	L	В		С		_
Variable	М	SD	М	SD	М	SD	F(2)	М	SD	М	SD	М	SD	F (2)
RST1	6.07	0.95	6.07	0.77	6.52	0.88	2.84	6.17	0.92	6.19	0.66	6.47	0.53	1.12
RST2	5.94 ^x	1.08	6.07	0.68	6.60°	0.90	3.15*	6.32	0.88	6.39	0.55	6.20	0.95	0.28
RCQT1	6.04	1.09	6.52	0.54	6.49	0.60	3.23 [†]	6.41	0.76	6.34	0.55	6.43	0.51	0.11
RCQT2	6.07	1.22	6.57	0.50	6.53	0.65	1.61	6.45	0.74	6.40	0.58	6.49	0.49	0.11
SUNC	1.85	1.08	1.55	0.54	1.64	0.84	1.61	1.48	0.71	1.81	1.12	1.53	0.49	1.19
PUNC	1.91	0.81	1.74	0.61	1.56	0.75	1.40	1.64	0.74	1.78	1.22	1.62	0.57	0.13
RUNC	2.05	1.05	1.78	0.68	1.59	0.57	2.39	1.86	0.74	1.90	1.16	1.74	0.58	0.24
TURB	2.52	0.88	2.50	1.29	1.86	0.88	6.03 [†]	2.24	1.09	2.24	1.15	1.87	0.73	1.56
INT	2.01	0.66	2.28	0.96	2.21	0.85	.82	1.88	0.88	2.09	1.06	1.89	0.89	0.25
NEG	2.29	0.61	2.82	0.84	2.62	0.71	3.09 [†]	2.57	0.55	2.81	0.60	2.52	0.81	1.18
CCOMPS	3.81	0.59	3.66	0.51	3.94	0.59	.76	4.85 ^X	0.64	3.48 ^Y	0.57	3.75	0.61	4.83*
CCOMPP	3.86	0.76	3.60	0.60	3.95	0.64	1.30	3.96	0.74	3.66	0.82	3.95	0.71	0.87
RESOLVE	5.12	1.25	4.99	1.40	5.13	1.19	.25	4.93	1.41	5.18	1.26	5.05	1.44	0.18
CMNSAT	3.31	1.03	3.08	0.81	3.04	1.02	.92	3.40	1.00	3.33	1.05	2.80	0.87	2.62 [†]
MCMNS	2.31	0.84	2.41	0.79	2.20	0.76	.45	2.20	0.67	2.27	0.58	2.22	0.53	0.06
MCMNP	2.64	0.67	2.51	0.62	2.32	0.83	1.20	2.45	0.76	2.53	0.93	2.50	0.81	0.08
RULES	3.14	0.84	2.98	0.84	3.38	0.83	1.64	3.62	0.85	3.21	0.94	3.24	0.94	1.45
PRES	4.65	0.38	4.39	0.75	4.68	0.50	1.06	4.52 ^x	0.59	4.26 ^x	0.86	2.57 ^Y	0.94	34.74***
MPPUS	2.30	0.88	2.29	0.99	2.27	0.96	.01	2.22	1.07	2.21	0.76	2.32	0.62	0.15
RLENGTH	1.14	1.11	1.96	1.46	1.03	0.93	2.88^{+}	1.08	1.04	1.90	1.49	1.07	0.98	2.39

Analysis of Variance (ANOVA) Results for each Participant Role by Experimental Conditions

Note. N = 128 individuals. Different lettered superscripts (e.g., X, Y) indicate statistically significant differences within participant role by experimental conditions at an alpha set at p < .05. Relationship length and serial argument length are measured in months. RST1 = Relationship Satisfaction T1, RST2 = Relationship Satisfaction T2, RCQT1 = Relational Closeness T1, RCQT2 = Relational Closeness T2, SUNC = Self Uncertainty, PUNC = Partner Uncertainty, RUNC = Relationship Uncertainty, TURB = Relational Turbulence, INT = Partner Interference, NEG = Conflict – Negativity, CCOMPS = Communication Competence – Self, CCOMPP = Communication Competence – Partner, RESOLVE = Perceived Resolvability, CMNSAT = Communication Satisfaction, MCMNS = Multicommunication – Self, MCMNP = Multicommunication – Partner, RULES = Cell Phone Rules, PRES = Communicator Presence, MPPUS = Problematic Mobile Phone Use, RLENGTH = Relationship Length. A = Control; B = Phone Present; C = Multicommunication.

p < .10, p < .05, p < .01, p < .01

Sixth, I examined mean differences on the independent and dependent variables separately for men and women by experimental condition. Results of one-way analysis of variance (ANOVA) revealed a statistically significant difference for women's ratings of their partner's presence during the serial argument conversation, F(2) = 7.68, p < .01. Post-hoc analyses demonstrated that women in the multicommunication condition (M = 3.31, SD = 1.33) rated significantly less communicator presence from their partner than participants in the technology absent (M = 4.51, SD = 0.55) and technology present conditions (M = 4.18, SD =0.90). Results for men revealed a significant difference for self-ratings of communication competence, F(2) = 3.29, p = .04. Post-hoc analyses showed that men in the technology present condition (M = 4.08, SD = 0.52) reported themselves to be higher in communication competence than did the men in the technology absent condition (M = 3.61, SD = 0.58). See Table 4.4 for a summary of the ANOVAs for both men and women by experimental condition.

Table 4.4

_			Men				_			Wo	men			_
_	А		В		(С	_	А	L	В		С		_
Variable	М	SD	М	SD	М	SD	<i>F</i> (2)	М	SD	М	SD	М	SD	F (2)
RST1	6.29	0.74	6.12	0.69	6.47	0.85	1.05	6.03	1.00	6.14	0.76	6.52	0.61	2.24
RST2	6.37	0.69	6.26	0.53	6.48	0.89	0.48	6.05	1.04	6.19	0.73	6.30	1.00	0.38
RCQT1	6.34	0.69	6.33	0.54	6.48	0.67	0.34	6.25	1.07	6.53	0.54	6.45	0.41	0.79
RCQT2	6.47	0.60	6.40	0.58	6.50	0.66	0.13	6.18	1.27	6.58	0.49	6.53	0.64	0.80
SUNC	1.45	0.50	1.69	0.61	1.60	0.73	0.76	1.80	1.69	1.08	1.43	1.49	0.49	0.91
PUNC	1.66	0.54	1.70	0.80	1.70	0.81	0.02	1.83	0.94	1.82	1.13	1.45	0.43	1.17
RUNC	1.70	0.59	1.18	0.67	1.66	0.57	0.36	2.14	1.03	1.85	1.12	1.67	0.59	1.40
TURB	2.37	1.09	2.54	1.15	1.83	0.90	2.53	2.32	0.96	2.32	1.28	1.91	0.71	1.54
INT	2.19	0.85	2.47	0.96	.22	0.93	0.54	1.78	0.67	1.89	0.98	1.86	0.80	0.11
NEG	2.29	0.54	2.72	0.54	2.48	0.74	2.45	2.59	0.65	2.91	0.87	2.65	0.78	0.99
CCOMPS	4.08^{X}	0.52	3.61 ^y	0.58	3.85	0.59	3.29*	3.77	0.70	3.54	0.52	3.84	0.63	1.27
CCOMPP	4.06	0.66	3.67	0.68	3.92	0.63	1.74	3.77	3.80	0.79	3.59	3.75	3.97	1.32
RESOLVE	5.24	1.41	5.39	1.22	4.93	1.31	0.65	4.92	1.31	4.78	1.36	5.24	1.31	0.67
CMNSAT	3.59	0.86	3.25	0.80	3.15	0.98	1.36	3.28	1.15	3.16	1.07	2.70	0.88	1.87
MCMNS	2.07	0.66	2.51	0.87	2.06	0.70	2.30	2.51	0.86	2.17	0.38	2.35	0.58	1.63
MCMNP	2.41	0.76	2.81	0.82	2.47	0.85	1.30	2.71	0.68	2.24	0.63	2.38	0.80	2.30
RULES	3.36	0.81	3.16	0.86	3.30	0.86	0.30	3.37	0.84	3.04	0.93	3.32	0.91	0.77
PRES	4.63	0.47	4.47	0.68	3.94	1.22	3.05 [†]	4.51^{1}	0.55	4.18^{1}	0.90	3.31 ²	1.33	7.68**
MPPUS	2.05	0.67	2.12	0.88	2.07	0.73	.05	2.38	1.14	2.39	0.85	2.52	0.81	0.15
RLENGTH	1.45	1.15	1.92	1.44	1.34	0.93	3.29	1.18	1.07	1.94	1.51	1.07	0.97	3.14

Analysis of Variance (ANOVA) Results for Men and Women by Experimental Conditions

Note. N = 124 individuals. Different lettered superscripts (e.g., X, Y) indicate statistically significant differences within men and women by experimental conditions at an alpha set at p < .05. Different numbered superscripts (e.g., 1, 2) indicate statistically significant differences within men and women by experimental conditions at an alpha set at p < .05. Different numbered superscripts (e.g., 1, 2) indicate statistically significant differences within men and women by experimental conditions at an alpha set at p < .01. Relationship length and serial argument length are measured in months. RST1 = Relationship Satisfaction T1, RST2 = Relationship Satisfaction T2, RCQT1 = Relational Closeness T1, RCQT2 = Relational Closeness T2, SUNC = Self Uncertainty, PUNC = Partner Uncertainty, RUNC = Relationship Uncertainty, TURB = Relational Turbulence, INT = Partner Interference, NEG = Conflict – Negativity, CCOMPS = Communication Competence – Self, CCOMPP = Communication Competence – Partner, RESOLVE = Perceived Resolvability, CMNSAT = Communication Satisfaction, MCMNS = Multicommunication – Self, MCMNP = Multicommunication – Partner, RULES = Cell Phone Rules, PRES = Communicator Presence, MPPUS = Problematic Mobile Phone Use, RLENGTH = Relationship Length. A = Control; B = Phone Present; C = Multicommunication.

p < .10, p < .05, p < .01, p < .01, p < .001

In a seventh preliminary test of the data, I analyzed confederates' mobile phone use and response latency in several ways. First, I compared both variables for differences between the cell phone present and multicommunication conditions. Results of an independent sample t-test showed that response latency following a cell phone notification did not significantly differ by condition, t(39) = -1.35, p = .19. However, confederates in the multicommunication condition did have a longer response latency (M = 15.33 seconds, SD = 7.36 seconds) than did confederates in the phone present condition (M = 11.86 seconds, SD = 9.13 seconds). I also compared response latency by gender. Confederate men (M = 14.58 seconds, SD = 8.20 seconds) had a greater response latency than women (M = 12.63 seconds, SD = 8.56 seconds) across both experimental conditions, but this difference was not significant, t(39) = 0.74, p = .46. Next, I examined the gender differences for phone latency by condition. Confederate men and confederate women did not differ significantly in either condition. Nonetheless, the descriptive statistics revealed that confederate men had a greater response latency than did confederate women in the phone present condition ($M_M = 14.13$ seconds, $SD_M = 9.65$ seconds; $M_F = 9.33$ seconds, $SD_F = 8.32$ seconds), but confederate women had a greater response latency than did confederate men in the multicommunication condition ($M_M = 14.06$ seconds, $SD_M = 6.88$ seconds; $M_F = 15.93$ seconds, $SD_F = 7.87$ seconds). Finally, I compared mobile phone use by gender in the multicommunication condition. Results from an independent t-test showed that male confederates used their mobile phone longer when they were prompted than female confederates did (M_M = 42.25 seconds, SD_M = 25.97 seconds; M_F = 38.00 seconds, SD_F = 17.27 seconds), but that difference was not statistically significantly different, t(19) = 0.42, p = .68.

Finally, I calculated bivariate correlations in three ways. First, I estimated correlations among study variables for confederates, naïve participants, and within-couples. The within-dyad

correlations were statistically significant for 17 of the 23 variables. Naïve participants' ratings of the extent to which their partners' technology use interfered with the conversation was also included in the correlation matrix. Naïve participants' (n = 21) ratings of their partner's technological interference was statistically significantly correlated with conversation satisfaction (r = -.50, p = .02) and communicator presence (r = -.85, p < .001) during the conversation (see Table 4.5).

Table 4.5

Bivariate Correlations Among Study Variables for Confederates, Naïve Participants, and within Dyads

Variable	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12
Variable V1: RST1	.57***	.88***	.72***	.70***	74***	82***	69***	61***	20		.34**	.58***
V2: RST2	.62***	.48***	.78***	.82***	78***	80***	74***	54***	09		.43***	.52***
V3: RCQT1	.63***	55***	.37**	.93***	86***	74***	80***	33**	.05		.25*	.46***
V4: RCQT2	.62***	53***	.89***	.37**	90***	75***	79***	23	.02		.26*	.45***
V5: SUNC	51***	59***	70***	70***	.26*	.82***	.84***	.31*	01		34**	51***
V6: PUNC	54***	30*	61***	60***	.87***	.34**	.76***	.47***	.18		43***	57***
V7: RUNC	58***	59***	66***	62***	.90***	.90***	<u>.38**</u>	.38**	.13		47***	48***
V8: TURB	47***	30*	21	17	.12	.04	.25	<u>.69***</u>	.31*		37**	39**
V9: INT	09	.00	10	08	.09	11	05	.27*	<u>0.10</u>		18	20
V10: TMCINT	.08	26	.26	.26	34	23	15	.39 *	.03			
V11: CCOMPS	.45***	.23	.38**	39**	36**	33*	32*	09	16	.40 *	<u>0.20</u>	.34**
V12: CCOMPP	.64	.50***	.35**	.34**	33**	35***	40**	51***	12	12	.48***	<u>.31*</u>
V13: RESOLVE	.02	.22	.01	.07	03	05	07	11	.04	00	07	.09
V14: CMNSAT	.05	.40**	.13	.16	04	04	07	.01	07	50*	.10	.13
V15: MCMNS	01	02	.11	.09	15	23	16	.10	07	.50*	.06	05
V16: MCMNP	12	21	04	18	.00	04	.01	.41**	.17	.59**	.08	21
V17: RULES	25*	08	06	08	05	05	02	.05	11	.25	.11	.04
V18: PRES	27*	.13	10	03	.14	.11	.12	.09	.02	85***	11	04
V19: FREQ	27*	33**	15	08	.27*	.18	.31*	.42**	.01	.29	12	36**
V20: MPPUS	13	20	20	12	.19	.09	.19	.11	14	.00	11	25*
V21: REAL	01	.11	.09	.28*	21	10	12	.00	09	08	.30*	.12
V22: RLENGTH	.06	.18	.25	.29*	20	22	24	.17	.03	.22	10	29*
V23: AGE	11	.06	.03	05	.01	.03	03	02	.07	07	08	17

Note. Correlations for confederates are displayed above the diagonal, correlations for naïve participants are displayed below the diagonal, and the within dyads correlations (intraclass correlations) are underlined and bolded at the diagonal. N = 128 individuals for all variables except TMCINT (N = 21 individuals). Relationship length and serial argument length are measured in months. RST1 = Relationship Satisfaction T1; RST2 = Relationship Satisfaction T2; RCQT1 = Relational Closeness T2; SUNC = Self Uncertainty; PUNC = Partner Uncertainty; RUNC = Relationship Uncertainty; TURB = Relational Turbulence; INT = Partner Interference; TMCINT = Technological Interference; COMPS = Communication Competence – Self; COMPP = Communication Competence – Partner; RESOLVE = Perceived Resolvability; CMNSAT = Communication Satisfaction; MCMNS = Multicommunication – Self; MCMNP = Multicommunication – Partner; RULES = Cell Phone Rules; PRES = Communicator Presence – Partner; FREQ = Conflict Frequency; MPPUS = Problematic Mobile Phone Use; REAL = Conversation Realism; RLENGTH = Relationship Length.

 $p^{\dagger} p < .10, p < .05, p < .01, p < .001$

Table 4.5 (continued)

Bivariate Correlations Among Study Variables for Confederates, Naïve Participants, and within Dyads

Variable	V13	V14	V15	V16	V17	V18	V19	V20	V21	V22	V23
V1: RST1	.49***	.30*	.08	18	15	.21	27*	28*	07	.12	.12
V2: RST2	.51***	.42**	.07	27*	24	.13	16	19	03	.13	.11
V3: RCQT1	.34**	.26*	.15	20	17	.21	.08	14	22	.23	.01
V4: RCQT2	.34**	.32(.15	21	21	.20	.05	22	12	.30*	.03
V5: SUNC	40**	22	10	.15	.12	13	.03	.26*	.15	26*	05
V6: PUNC	44***	24	17	.14	.19	17	.27*	.23	.11	19	09
V7: RUNC	36**	35**	12	.19	02	14	.02	.22	.15	26*	08
V8: TURB	33**	22	.11	.21	04	03	.34**	.13	.01	.29	06
V9: INT	13	03	.27*	.11	01	22	.43***	.29*	05	.07	.17
V10: TMCINT											
V11: CCOMPS	.17	.30*	02	07	.16	.05	23	.04	09	20	18
V12: CCOMPP	.31*	.22	.24	.02	01	.18	23	17	.15	03	04
V13: RESOLVE	.33**	.55***	.06	12	.02	.19	27	10	.01	.08	.02
V14: CMNSAT	.53***	<u>.57***</u>	.13	.02	.00	.09	15	.06	.10	.17	08
V15: MCMNS	09	06	<u>0.05</u>	.51***	.06	28*	.34**	.34	02	.02	.15
V16: MCMNP	21	17	.48***	<u>0.18</u>	.38**	13	.12	.19	.07	04	02
V17: RULES	.07	.03	.14	.14	.45***	16	.15	.24	.19	12	23
V18: PRES	.10	.36**	05	14	.04	<u>0.07</u>	22	40**	23	07	08
V19: FREQ	18	29*	.09	.12	.09	05	<u>.38**</u>	.47***	.06	.16	.01
V20: MPPUS	03	.05	.33***	.17	.11	07	.26*	<u>0.20</u>	.13	14	13
V21: REAL	.01	.17	.00	18	.20	.20	05	.01	.43**	.02	.03
V22: RLENGTH	.12	.25	.01	13	23	.02	.21	.16	.02	.99***	.31*
V23: AGE	.12	.02	23	.03	.10	.06	.09	18	23	01	<u>.31*</u>

Note. Correlations for confederates are displayed above the diagonal, correlations for naïve participants are displayed below the diagonal, and the within dyads correlations (intraclass correlations) are underlined and bolded at the diagonal. N = 128 individuals for all variables except TMCINT (N = 21 individuals). Relationship length and serial argument length are measured in months. RST1 = Relationship Satisfaction T1; RST2 = Relationship Satisfaction T2; RCQT1 = Relational Closeness T1; SUNC = Self Uncertainty; PUNC = Partner Uncertainty; RUNC = Relationship Uncertainty; TURB = Relational Turbulence; INT = Partner Interference; TMCINT = Technological Interference; CCOMPS = Communication Competence – Partner; RESOLVE = Perceived Resolvability; CMNSAT = Communication Satisfaction; MCMNS = Multicommunication – Self; MCMNP = Multicommunication – Partner; RULES = Cell Phone Rules; PRES = Communicator Presence – Partner; FREQ = Conflict Frequency; MPPUS = Problematic Mobile Phone Use; REAL = Conversation Realism; RLENGTH = Relationship Length.

p < .10, p < .05, p < .01, p < .01

I also analyzed the correlations among variables for men, women, and within-couples. The within-couple correlation is a measure of non-independence, and in the present dissertation it is the Pearson product-moment correlation because the dyads are distinguishable (Kenny et al., 2006). The within-couple correlations were statistically significant for 19 of the 22 variables, including conversation satisfaction, perceived resolvability, and both pre- and post- conversation measures of relationship satisfaction and relational closeness (see Table 4.6).

Table 4.6

Bivariate Correlations Among Study Variables for Men, Women, and Within Couples

Variable	V1	V2	V3	V4	V5	V6	V7	V8	V9	V10	V11	V12
V1: RST1	.60***	.83***	.76***	.71***	70***	74***	64***	61***	26	.30*	.59***	.23
V2: RST2	.70***	.47***	.79***	.82***	80***	78***	75***	49***	27*	.34**	.51***	.27*
V3: RCQT1	.59***	.65***	<u>.30*</u>	.90***	85***	78***	76***	43***	17	.29*	.51***	.14
V4: RCQT2	.61***	.71***	.92***	<u>.31*</u>	87***	74***	69***	31*	17	.26*	.46***	.22
V5: SUNC	56***	56***	75***	76***	.27*	.79***	.78***	.41**	.18	29*	53***	20
V6: PUNC	57***	55***	56***	58***	.85***	<u>.39**</u>	.80***	.46***	.15	44***	52***	13
V7: RUNC	56***	57***	70***	69***	.89***	.84***	.44***	.53***	.26*	44**	54***	08
V8: TURB	53***	43**	15	12	.11	.13	.20	.69***	.35**	32*	60***	20
V9: INT	14	01	.02	01	.03	01	01	.26*	<u>.16</u>	28*	36**	07
V10: CCOMPS	.43**	.30*	.32*	.34*	36**	28*	33**	19	14	.23	.50***	05
V11: CCOMPP	.59***	.46***	.30*	.30*	32*	.38**	35**	34**	05	.33*	<u>.29*</u>	.20
V12: RESOLVE	.31*	.45***	.25	.26*	23	30*	29*	22	04	.12	.18	<u>.35***</u>
V13: CMNSAT	.19	.47***	.19	.25	07	12	16	12	06	.14	.08	.50***
V14: MCMNS	.04	05	.06	01	06	11	14	.19	.27*	08	.12	.02
V15: MCMNP	17	40**	14	31*	.11	.09	.12	.36**	.18	.04	10	16
V16: RULES	17	06	.01	11	07	06	09	.13	18	.25	.04	.21
V17: PRES	18	.10	04	05	.13	.09	.06	.02	11	15	.07	.13
V18: FREQ	29*	22	.03	.07	.12	.30*	.15	.49***	.23	09	31*	14
V19: MPPUS	05	.01	02	04	.13	.03	.10	.17	.24	.00	27*	10
V20: REAL	.10	.16	.00	.14	14	13	06	15	15	.25	.24	.14
V21: RLENGTH	.04	.17	.33*	.41**	28*	16	29	.25*	07	06	29*	.05
V22: AGE	16	05	05	13	.11	.03	.06	03	.06	22	27*	.06

.*Note:* Correlations for men are displayed above the diagonal and correlations for women are displayed below the diagonal. Correlations between men's and women's scores are underlined and bolded at the diagonal. N = 124 individuals. Relationship length and serial argument length are measured in months. RST1 = Relationship Satisfaction T1; RST2 = Relationship Satisfaction T2; RCQT1 = Relational Closeness T1; RCQT2 = Relational Closeness T2; SUNC = Self Uncertainty; PUNC = Partner Uncertainty; RUNC = Relationship Uncertainty; TURB = Relational Turbulence; INT = Partner Interference; TMCINT = Technological Interference; CCOMPS = Communication - Self; CCOMPS = Communication - Self; MCMNP = Multicommunication - Partner; RULES = Cell Phone Rules; PRES = Communicator Presence - Partner; FREQ = Conflict Frequency; MPPUS = Problematic Mobile Phone Use; REAL = Conversation Realism RLENGTH = Relationship Length. * p < .05, ** p < .001

Table 4.6 (continued)

Bivariate Correlations Among Study Variables for Men, Women, and Within Couples

				T 1 4		140				
Variable	V13	V14	V15	V16	V17	V18	V19	V20	V21	V22
V1: RST1	.18	.03	14	12	.02	26*	26*	22	.13	.11
V2: RST2	.32*	.12	10	12	.11	29*	28*	13	.10	.16
V3: RCQT1	.21	.19	11	09	.15	11	22	18	.11	.90***
V4: RCQT2	.23	.15	08	04	.23	12	23	06	.11	.07
V5: SUNC	22	22	.03	.02	12	.18	.23	.09	17	14
V6: PUNC	17	30*	02	.06	07	.12	.18	.15	26*	06
V7: RUNC	29*	16	.09	06	02	.16	.19	.11	22	11
V8: TURB	08	.05	.27*	14	.10	.29*	.09	.16	.24	05
V9: INT	16	.04	.10	.05	.06	.29*	.08	.00	.15	.01
V10: CCOMPS	.27*	.12	02	.06	.02	23	.05	.03	23	13
V11: CCOMPP	.26*	.10	08	.12	09	29*	05	01	04	03
V12: RESOLVE	.58***	02	20	16	.09	33*	.03	11	.14	.03
V13: CMNSAT	.60***	01	.03	.03	.16	29*	.20	.11	.17	12
V14: MCMNS	.15	<u>.05</u>	.54***	.08	17	.22	.44***	09	03	01
V15: MCMNP	18	.44***	<u>.18</u>	.08	18	.14	.31*	10	02	06
V16: RULES	.03	.13	.41**	.41**	27*	.11	.23	.22	15	04
V17: PRES	.26*	.04	10	.06	<u>10</u>	02	08	.02	03	03
V18: FREQ	16	.17	.15	.18	12	.42**	.10	12	.13	.15
V19: MPPUS	.03	.27*	.13	.08	17	.54***	.26*	.06	08	23
V20: REAL	.19	.06	05	.24	.16	.06	.06	.41**	.02	.03
V21: RLENGTH	.23	.05	16	20	.05	.22	.10	.01	.99***	.12
V22: AGE	04	.05	.02	09	11	.06	.05	26*	0.18	.44***

Note. Correlations for men are displayed above the diagonal and correlations for women are displayed below the diagonal. Correlations between men's and women's accores are underlined and bolded at the diagonal. N = 124 individuals. Relationship length and serial argument length are measured in months. RST1 = Relationship Satisfaction T1; RST2 = Relationship Satisfaction T2; RCQT1 = Relational Closeness T1; RCQT2 = Relational Closeness T2; SUNC = Self Uncertainty; PUNC = Partner Uncertainty; RUNC = Relationship Uncertainty; TURB = Relational Turbulence; INT = Partner Interference; TMCINT = Technological Interference; CCOMPS = Communication Competence - Self; CCOMPP = Communication Competence - Partner; RESOLVE = Perceived Resolvability; CMNSAT = Communication Satisfaction; MCMNS = Multicommunication - Self; MCMNP = Second = Seco

I also conducted bivariate correlations between confederate's mobile phone use and response latency following the receipt of a cell phone notification with their own and their partner's ratings of the dependent variables in the main analyses. Neither phone use nor response latency following a mobile phone notification were significantly correlated with confederates' ratings nor the naïve participants' ratings (see Table 4.7 and Table 4.8).

Table 4.7

Correlations for Naïve Participants' Dependent Variables and Confederates' Cell Phone Use (in seconds) and Response Latency (in seconds)

	Phone	e Use	Phone latency		
	r	п	r	n	
Relationship Satisfaction T2	.15	21	.04	41	
Relational Closeness T2	.21	20	.00	39	
Partner Interference	18	21	13	41	
Technological Interference	.05	21	11	22	
Perceived Resolvability	.31	20	.03	40	
Conversation Satisfaction	33	20	.09	40	
Communicator Presence	.19	21	23	41	

Note. Technological interference was only measured from naïve participants' responses in the multicommunication condition.

Table 4.8

Correlations for Confederates Dependent Variables with Confederates' Cell Phone Use (in

seconds) and Response Latency (in seconds) with Dependent Variables

	Phone	e Use	Phone latency		
	r	n	r	n	
Relationship Satisfaction T2	17	20	03	40	
Relational Closeness T2	07	20	31	39	
Perceived Resolvability	16	21	.21	41	
Conversation Satisfaction	21	21	.16	41	
Communicator Presence	.17	21	.03	41	

Main analyses

I used multilevel modeling in all main analyses to test my hypotheses and research questions. Multilevel modeling is a type of regression-based analytical tool for examining hierarchical non-independent data from individuals in dyads or groups (Kenny & Kashy, 2011), and it focuses on "nested sources of variability" (Snijders & Bosker, 2012, p.1). Hierarchical data are organized into multiple levels, such as group data (e.g., individuals nested within dyads), or longitudinal data (i.e., observations nested within individuals). Unlike ordinary least squares (OLS) regression, which cannot account for random error if the assumption of independence is violated, multilevel regression is a useful tool because it allows a researcher to model the intercepts and slopes as random effects in nested data (Kenny & Kashy, 2011). More specifically, multilevel regression allows parameters to vary (i.e., a random effect), whereas OLS regression parameters are fixed (i.e., a fixed effect). Because the data from the dyads within this study are not independent, multilevel modeling is an ideal method of analysis.

I performed all multilevel modeling analyses with the linear and nonlinear mixed-effects model (*nlme*) package in the statistical software package R (Pinheiro, Bates, Deboy, Sarkar, & R Development Core Team, 2018). An advantage of the *nmle* package over other packages is that it allows researchers to model the covariance structure (Field, Miles, & Field, 2012). I used maximum likelihood (ML) estimation for all multilevel analyses, and all predictor variables were grand-mean centered. Centering predictor variables is particularly useful for dealing with issues of multicollinearity between predictor variables (Aiken & West, 1991; Kreft & de Leeuw, 1998), or when predictor variables have no true zero point (Field, et al., 2012). I chose to use grand mean centering (as opposed to group mean centering) because my primary interest was in the effect of a level-2 predictor (i.e., experimental condition) on a level-1 variable while holding

constant theoretically meaningful level-1 covariates. I used effect coding to examine the effects categorical predictor variables (e.g., experimental condition, biological sex, participant role) on the outcome measures in all multilevel models. I entered biological sex, conversation realism, and relationship satisfaction measured prior to the interaction as level-1 covariates in all models. Previous research testing the effect of cell phones on face-to-face conversations has treated biological sex as a covariate (e.g., Przyblyski & Weinstein, 2013). I also included participant role as a covariate in models with the full dataset. Interaction terms for covariates were only included in models when significant and when model fit was improved.

Another advantage of performing multilevel model analyses in R is that a number of computationally demanding supplementary estimates can be generated during model testing. I calculated four such estimates during model building and selection. First, I calculated the Nakagawa and Schielzeth's (2013) marginal coefficient of determination (R^2) statistic with recommended 95% confidence intervals to demonstrate the amount of variance explained by the fixed effects in the model. The marginal R^2 statistic is a single goodness-of-fit measure for all fixed effects in the model, which alleviates concerns about which measure of explained variance to report in linear mixed effects models (for review, see Lahuis, Hartman, Hakoyama, & Clark, 2014). Next, I also estimated 95% confidence intervals for the fixed estimates using the *intervals* function in the *nlme* package (Pinheiro et al., 2018).

I probed 2-way interactions by estimating the simple slopes (Preacher, Curran, & Bauer, 2004). Simple slope analysis affords researchers the ability to test the effect of one variable (i.e., the focal predictor) on an outcome measure as a function of a second variable (i.e., the moderator; Bauer & Curran; 2005). I elected to compute the slopes for the continuous variables at one half standard deviation (0.5 *SD*) below the mean of the moderator, at the mean of the

moderator, and one half standard deviation above the mean of the moderator. The slopes were computed at a half standard deviation as opposed to a full standard deviation because using a full standard deviation would bring the value below the minimum reported value for some of the variables (e.g., relational uncertainty).

Experimental Condition Predicting Conversation Outcomes (H1)

My first hypothesis states that individuals in the multicommunication condition would rate their serial argument conversations as less satisfying (H1A) and less resolvable (H1B) than participants in the phone present and phone absent conditions. Therefore, I ran a progression of multilevel models with conversation satisfaction and perceived resolvability, respectively, as the dependent variables. I entered the experimental condition as the independent variables and covariates in each of the models. I only included interaction terms between covariates and main effects when the interactions were significant and model fit improved.

Multicommunication, phone present, and conversation satisfaction. For conversation satisfaction, I calculated a series of multilevel models. I first calculated an intraclass correlation coefficient (*ICC* = .58) for the unconditional model, which included only the random effect on conversation satisfaction and no other covariates or predictor variables. The non-zero ICC indicated that there was a substantial amount of variance in conversation satisfaction across individuals. The substantial amount of variance supported testing full models with covariates and predictor variables. Of the covariates, only relationship satisfaction was significantly associated with the conversation satisfaction. Participants in the multicommunication condition were significantly less satisfied with the conversation than were participants in the phone present condition were less satisfied with the conversation than were those in the control group, but the difference

was not statistically significant, b = -0.09, t(61) = -.74, p = .46, 95% CI [-.32, .14]³. The final model accounted for 19% of the total variance: marginal $R^2 = .19$, 95% CI [.11, .34]. See Table 4.9 for a summary of the results for H1A.

Multicommunication, phone present, and perceived resolvability. To test H1B, I also analyzed the effects of the experimental conditions on perceived resolvability of the serial argument conversation. As with the analyses for H1A, I first calculated an ICC for the unconditional model, which included only the random effect on perceived resolvability and no other covariates or predictor variables. Results revealed a non-zero coefficient (ICC = .31), demonstrating that there is sufficient variance between individuals for perceived resolvability to run a full model with covariates and predictor variables was acceptable. The only covariate that was significantly associated with perceived resolvability was relationship satisfaction. There were no significant effects for either experimental condition on perceived resolvability. Nonetheless, participants in the multicommunication group rated their argument as less resolvable, b = -0.07, t(61) = -.50, p = .62, 95% CI [-.36, .21]. Participants in the phone present condition also perceived that their argument was less resolvable, b = -0.02, t(61) = -0.11, p = -0.02.916, 95% CI [-.32, .27]. The model accounted for 12% of the variance for perceived resolvability: $R^2 = .12,95\%$ CI [.06, .27]. Because none of these differences were statistically significant, the results from the model do not support H1B.

³ In subsequent comparisons such as these, stating a comparison implies a comparison to the control group.

Multilevel Models with Experimental Conditions Predicting Conversation Outcomes (H1)

	Cor	Conversation satisfaction			Pe	erceived resolv	ability	1
	b (SE)	95% CI	df	t	<i>b</i> (<i>SE</i>)	95% CI	df	t
Intercept	3.03 (0.12)	2.80, 3.27	61	25.08***	5.03 (0.15)	4.73, 5.33	61	32.79***
Slopes for Covariates								
Biological Sex	0.08 (0.06)	03, .19	60	1.46	0.04 (0.10)	15, .23	60	0.38
Participant Role	0.03 (0.06)	08, .13	60	0.49	0.04 (0.09)	15, .23	60	0.43
Relationship Satisfaction	0.39 (0.09)	.21, .56	60	4.29***	0.51 (0.13)	.25, .77	60	3.85***
Realism	0.02 (0.08)	14, .19	60	0.30	-0.03 (0.12)	28, .21	60	-0.26
Slopes for Main Effects								
Multicommunication	-0.28 (0.11)	50,05	61	-2.39*	-0.07 (0.15)	36, .21	61	-0.50
Phone Present	-0.09 (0.12)	32, .14	61	-0.74	-0.02 (0.15)	32, .28	61	-0.11

Note. N = 128 individuals. Multicommunication and phone present conditions were effect coded; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female).

* *p* < .05, *** *p* < .001

Experimental Condition Predicting Response Latency (RQ1)

I queried in research question 1 (RQ1) whether individuals in the multicommunication condition would have a greater response latency than individuals in the phone present condition. To conduct these analyses, I only analyzed data from participants in the multicommunication and phone present conditions.⁴ Recall that the results from the preliminary analyses revealed no statistically significant differences in response latencies for confederates in the two experimental conditions (see Table 4.4). I first calculated the ICC for the unconditional model (*ICC* = .88), which included only the random effect on response latency and no other covariates or predictor variables. The non-zero ICC indicated that there was a substantial amount of variation between individuals; therefore, a model with the covariates and independent variables was acceptable. Neither covariate included in the model was significantly associated with response latency.

The effect of the multicommunication condition on response latency demonstrated that confederates had a greater response latency when instructed to use their mobile phone, but the difference was not significant, b = 1.72, t(37) = 1.30, p = .201, 95% CI [-.82, 4.26]. The model including all covariates and main effects accounted for 6% of the variance in response latency: $R^2 = .06$, 95% CI [.01, .30]. The results from the preliminary and substantial analyses show that although confederates in the multicommunication condition had a greater lapse in time between the receipt of a notification and verbally interacting with their partner, the differences were not significant. Thus, there is not conclusive evidence that response latency differs as a function of phone use (i.e., between the multicommunication and phone present conditions). See Table 4.10 for a summary of the results.

⁴ Cell phone response latency was entered as a level-2 predictor for both confederates and naïve participants. That is, the amount of time confederates took to respond to their naïve participant partner was entered for both members of the dyad.

	Response Latency						
	b (SE)	95% CI	df	t			
Intercept	13.47 (1.32)	10.92, 16.02	37	10.18***			
Slope for Covariates							
Biological Sex	0.81 (1.33)	-1.74, 3.37	37	0.61			
Realism	0.61 (1.67)	-2.62, 3.83	37	0.36			
Slopes for Main Effects							
Condition	1.72 (1.32)	82. 4.26	37	1.30			

Multilevel Model with Experimental Conditions Predicting Cell Phone Response Latency (RQ1)

Note. N = 41 individuals. Condition was effect coded (1 = multicommunication; -1 = phone present); Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). *** p < .001

Response Latency (RQ2) and Mobile Phone (H2) Use Predicting Conversation Outcomes

In research question 2 (RQ2), I questioned whether the amount of time confederates took to respond to their partners after receiving a notification on their mobile phone would be associated with participants' conversation satisfaction and perceived resolvability. To analyze RQ2, I performed a progression of multilevel models with only the data from participants in the in the multicommunication and phone present conditions (n = 41 dyads).

Response latency predicting conversation satisfaction. Prior to running the full models with covariates and predictor variables with the trimmed dataset, I calculated the ICC with an unconditional model for conversation satisfaction. Results showed that a sufficient amount of variance was between individuals (ICC = .53). The non-zero ICC merited additional models with covariates and predictor variables. Relationship satisfaction, biological sex, participant role, and conversation realism were entered as covariates in the model. Relationship satisfaction was the only covariate that was significantly associated with conversation satisfaction (see Table 4.11 for a summary of the relationships between the covariates and the dependent variable).

The results yielded no statistically significant effects on conversation satisfaction. The amount of time confederates took to respond to their partner after receiving a notification on their mobile phone was positively associated with conversation satisfaction, b = 0.02, t(36) = 1.36, p = .182, 95% CI [-.01, .04]. Participants in the multicommunication condition were less satisfied with the conversation, but the difference only approached statistical significance, b = -0.22, t(39) = -1.88, p = .067, 95% CI [-.44, .01]. The model explained 20% of variance in conversation satisfaction: $R^2 = .20$, 95% CI [.11, .39]. See Table 4.11 for a summary of the results.

Multilevel Models with Cell Phone Response Latency (in seconds) and Experimental Condition Predicting Conversation Outcomes (RQ2)

		Conversation satisfaction				Perceived resolvability			
	<i>b</i> (<i>SE</i>)	95% CI	df	t	<i>b</i> (<i>SE</i>)	95% CI	df	t	
Intercept	3.05 (0.11)	2.83, 3.27	39	26.82***	5.07 (0.15)	4.77, 5.34	39	32.75***	
Slopes for Covariates									
Biological Sex	0.09 (0.07)	04, .23	36	1.32	0.01 (0.12)	23, .25	36	0.07	
Participant Role	-0.01 (0.07)	14, .14	36	-0.05	-0.01 (0.12)	25, .23	36	-0.12	
Relationship Satisfaction T1	0.41 (0.12)	.17, .25	36	3.37**	0.48 (0.18)	.12, .25	36	2.62*	
Realism	0.06 (0.10)	14, .25	36	0.58	-0.05 (0.15)	34, .25	36	-0.32	
Slopes for Main Effects									
Latency	0.02 (0.01)	01, .04	36	1.36	0.03 (0.02)	01, .06	36	1.53	
Condition	-0.22 (0.11)	44, .01	39	-1.88^{t}	-0.09 (0.15)	40, .21	39	-0.59	

Note. N = 82 individuals. Condition was effect coded (1 = multicommunication; -1 = phone present); Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). ^{*t*} p < .10, * p < .05, ** p < .01, *** p < .001

Response latency predicting perceived resolvability. The second component of RQ2 concerned whether there would be an effect of response latency on perceived resolvability. The ICC for the null model indicated that there is sufficient variance between individuals to justify a full model with covariates and main effects (ICC = .32). Therefore, I ran models with covariates and main effects. Only relationship satisfaction measured prior to the interaction was significantly associated with perceived resolvability (see Table 4.11 for a summary of the associations between covariates and the outcome measure).

The results showed no significant effects for response latency or experimental condition on perceived resolvability. Response latency was positively associated with the perceived resolvability, but the relationship was not significant, b = 0.03 t(36) = 1.53, p = .135, 95% CI [-.01, .06]. Likewise, participants in the multicommunication condition rated their argument as less resolvable, but the difference was not significant, b = -0.09, t(39) = -.35, p = .556, 95% CI [-.39, .26]. The full model with covariates and main effects explained 12% of the variance on perceived resolvability: $R^2 = .12$, 95% CI [.06, .31].

Summarizing RQ2. Overall, these results for RQ2 indicate that the effect of response latency on conversation outcomes is minimal. The amount of time confederates took to respond to their partner after receiving a text message on their phone was positively associated with both conversation satisfaction and perceived resolvability. However, the non-significant effects of response latency on the two outcome measures fail to definitively answer RQ2 in the affirmative.

Phone use predicting conversation satisfaction (H2A). In hypothesis 2 (H2), I predicted that the amount of time participants used their mobile phone during a FtF conflict conversation would be negatively associated with conversation satisfaction (H2A). The null model for H2A showed that there was sufficient variation between individuals to warrant a full

model with covariates and main effects (ICC = .39). To test H2A, I analyzed the data from participants in the multicommunication condition (n = 22 dyads), and I included both phone use and response latency as main effects. Of the four covariates, only relationship satisfaction was significantly associated with conversation satisfaction.

The full model had no significant effects on conversation satisfaction for either phone use or response latency. The amount of time in seconds confederates spent on their phone was negatively associated with conversation satisfaction; however, that effect only approached statistical significance, b = -0.01, t(19) = -1.78, p = .091, 95% CI [-.03, .00]. The amount of time it took confederates to respond to their partner after receiving a notification on their mobile phone was positively associated with conversation satisfaction, but it was also not significant, b= 0.02, t(18) = 1.01, p = .286, 95% CI [-.02, .06]. Therefore, the model did not support H2A. The final H2A model with relationship satisfaction as a covariate accounted for 27% of the variance: $R^2 = .27$, 95% CI [.15, .53]. See Table 4.12 for a summary of the results.

Table 4.12

Multilevel Model with Phone Use and Response Latency Predicting Conversation Satisfaction (H2A)

	Conversation satisfaction					
	b(SE)	95% CI	$d\!f$	t		
Intercept	2.83 (.15)	2.54, 3.12	19	18.56***		
Slopes for Covariates						
Biological Sex	0.16 (.11)	05, .37	18	1.43		
Participant Role	0.04 (.11)	18, .26	18	0.35		
Relationship Satisfaction T1	0.36 (.15)	.06, .65	18	2.33*		
Realism	0.01 (.17)	31, .33	18	0.06		
Slopes for Main Effects						
Phone Use	-0.01 (.01)	03, .00	19	-1.78		
Response latency	0.02 (.02)	02, .06	19	1.10		

Note. N = 44 individuals. Condition was effect coded for experimental condition (1 = multicommunication; -1 = phone present); Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). * p < .05, *** p < .001 Phone use predicting perceived resolvability (H2B). In H2B, I predicted that the amount of time confederates used their cell phone would be associated with perceived resolvability. The full model showed that no significant effects emerged for the covariates or main effects. The amount of time confederates used their phone was negatively associated with perceived resolvability, b = -0.01, t(18) = -1.50, p = .15, 95% CI [-.03, .00]; however, that effect only approached statistical significance. Response latency for confederates was positively associated with perceived resolvability, but the effect was similarly not significant, b = 0.02, t(19) = 0.80, p = .435, 95% CI [-.02, .06]. The model accounted for 3% of the variance on perceived resolvability: $R^2 = .03$, 95% CI [.02, .21]). See Table 4.13 for a summary. Thus, the data did not support H2B.

Table 4.13

Multilevel Model with Phone Use and	d Response L	atency Predicting	Perceived Resolvabl	ility (H2B).

	<i>b</i> (<i>SE</i>)	95% CI	df	t
Intercept	4.99 (.21)	2.54, 3.12	19	23.54***
Slopes for Covariates				
Biological Sex	-0.22 (.18)	05, .37	18	1.24
Participant Role	0.02 (.18)	18, .26	18	0.09
Relationship Satisfaction	0.44 (.23)	.06, .65	18	1.94
Realism	-0.12 (.25)	31, .33	18	-0.48
Slopes for Main Effects				
Phone Use	-0.01 (.01)	03, .00	19	1.50
Response Latency	0.02 (.02)	02, .06	19	0.80

Note. N = 44 individuals. Condition was effect coded for experimental condition (1 = multicommunication; -1 = phone present); Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). *** p < .001

Cell Phone Rules and Conversation Outcomes (RQ3)

In research question 3 (RQ3), I considered whether dating partners' cell phone rules

would moderate the differences between conversation satisfaction and perceived resolvability in

the multicommunication, phone present, and control conditions. To test RQ3, I entered biological sex, participant role, conversational realism, and relationship satisfaction measured prior to the interaction as covariates. The effect coded experimental conditions and cell phone rules were entered as main effects. I also included the interaction between the effect coded experimental conditions and cell phone rules to determine if rules impacted the differences in outcome variables between the three conditions in the present study. Only relationship satisfaction was significantly associated with conversation satisfaction and perceived resolvability. A summary of the results, including the relationships for covariates and dependent variables, can be found in Table 4.14.

Cell phone rules and conversation satisfaction. First, I analyzed whether there was an interaction effect between cell phone rules and experimental condition on conversation satisfaction with relationship satisfaction included as one of the covariates. There was a main effect for multicommunication, such that participants in the multicommunication condition were significantly less satisfied with their conversation, b = -0.27, t(61) = -2.26, p = .027, 95% CI [-.49, -.04]. Participants in the phone present condition were also less satisfied, but not at a significant level, b = -0.07, t(61) = -.60, p = .549, 95 CI [-.31, .16]. Participants with more cell phone rules were more satisfied with the conversation; however, the effect was not significant, b = 0.03, t(57) = 0.25, p = .799, 95% CI [-.17, .22].

I also included two interaction terms for cell phone rules with the effect-coded experimental conditions. Neither interaction term significantly predicted conversation satisfaction. The interaction between cell phone rules and multicommunication was negatively associated with conversation satisfaction, b = -0.11, t(61) = -1.10, p = .274, 95% CI [-.32, .09]. A similar negative association emerged for the interaction between cell phone rules and the phone

present condition, but it was also not significant, b = -0.07, t(61) = -.70, p = .485, 95% CI [-.26, .12]. The final model with the interaction terms explained 19% of the variance on conversation satisfaction: $R^2 = .19$, 95% CI [.12, .15].

Cell phone rules and perceived resolvability. I also tested whether cell phone rules would modify the differences in perceived resolvability by experimental condition. The full model showed no statistically significant main effects on perceived resolvability. Also, no statistically significant interaction effect between cell phone rules and the two experimental conditions were present in the model. The interaction term between cell phone rules and multicommunication was negative and not significant, *b* = -0.01, *t*(61) = -0.04, *p* = .964, 95% CI [-.31, .29]. Likewise, the interaction term between cell phones rules and the phone present condition did not significantly predict perceived resolvability, *b* = -0.01, *t*(61) = -0.36, *p* = .79, 95% CI [-.37, .25]. The full model explained 13% variance of perceived resolvability: R^2 = .13, 95% CI [.09, .30].

Summarizing RQ3. The data for RQ3 yielded null findings for both conversation outcomes. Cell phone rules had a marginal positive main effect for conversation and perceived resolvability, respectively. However, the effects were not significant. The interaction terms for cell phone rules with the two experimental conditions were not significantly associated with either conversation satisfaction or perceived resolvability. As such, I am unable to definitively conclude that rules about cell phones meaningfully moderate the effects of the two experimental conditions on the dependent variables.

Multilevel Models with Cell Phone Rules and Experimental Condition Predicting Conversation Outcomes (RQ3)

	С	onversation sati	sfaction	l]	Perceived resol	vability	
	b(SE)	95% CI	df	t	b(SE)	95% CI	df	t
Intercept	3.04 (0.12)	2.80, 3.27	61	24.81***	5.03 (0.15)	4.74, 5.33	61	32.76***
Slopes for Covariates								
Biological Sex	0.08 (0.06)	03, .19	57	1.41	0.03 (0.10)	16, .23	57	0.33
Participant Role	0.05 (0.06)	06, .15	57	0.83	0.06 (0.10)	13, .25	57	0.60
Relationship Satisfaction	0.38 (0.09)	.21, .56	57	4.19***	0.53 (0.13)	.27, .79	57	3.97***
Realism	0.02 (0.08)	14, .18	57	0.25	-0.05 (0.13)	30, .19	57	-0.42
Slopes for Main Effects								
Multicommunication	-0.27 (0.12)	49,04	61	-2.26*	-0.07 (0.15)	36, .21	61	-0.48
Phone Present	-0.07 (0.12)	31, .16	61	-0.60	-0.01 (0.15)	30, .29	61	-0.03
Cell Phone Rules	0.03 (0.10)	17, .22	57	0.25	0.15 (0.16)	15, .46	57	0.96
Slopes for Interaction Effects								
Cell Phone Rules x								
Multicommunication	-0.11 (0.10)	32, .09	57	-1.10	-0.01 (0.16)	31, .29	57	-0.04
Cell Phone Rules x Phone								
Present	-0.07 (0.10)	27, 12	57	-0.72	-0.01 (0.16)	37, .25	57	-0.36

Note. N = 128 individuals. Condition was effect coded for experimental condition (1 = multicommunication; -1 = phone present); Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). * p < .05, *** p < .001

Relationship Length and Cell Phone Rules (RQ4)

The purpose of research question 4 (RQ4) was to examine whether relationship length was associated with cell phone rules. The null model for cell phone rules indicated that cell phone rules varied substantially between individuals (ICC = .28), necessitating a full model with covariates and main effects. Next, I entered biological sex and participant role as covariates, with relationship length as a main effect in the model. Neither biological sex nor participant role was significantly associated with cell phone rules. Relationship length was also not significantly associated with cell phone rules, b = -0.01, t(61) = -1.56, p = .124, 95% CI [-.02, .01]. Hence, I do not have conclusive evidence that individuals in longer relationships have more cell phone rules. The model explained 2% of the variance of perceived resolvability: $R^2 = .02$, 95% CI [.01, .11]. See Table 4.15 for a summary of the results for RQ4.

Table 4.15

	Cell Phone Rules							
	<i>b</i> (<i>SE</i>)	95% CI	df	t				
Intercept	3.27 (0.09)	3.10, 3.45	63	37.24***				
Slopes for Covariates								
Biological Sex	0.01 (0.07)	12, .14	61	0.21				
Participant Role	-0.09 (0.01)	22, .04	61	1.41				
Slopes for Main Effects								
Relationship Length	-0.01 (0.01)	02, .01	61	-1.56				

Multilevel Model with Relationship Length Predicting Cell Phone Rules (RQ4)

Note. N = 128 individuals. Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). *** p < .001

Relationship Length, Conversation Outcomes, and Relationship Perceptions (RQ5)

Research question 5 (RQ5) explored whether relationship length impacted the differences in conversation perceived resolvability, and relationship perceptions for participants in the multicommunication, phone present, and control conditions. To test these associations, I ran a series of multilevel models. Five of the 16 covariates included in the models for conversation outcomes and relationship perceptions following the interaction were significantly associated with the outcome variables. An overview of the results for RQ5 can be found in Table 4.16 for conversation outcomes, and an overview for relationship perceptions can be found in Table 4.17 and Table 4.18.

Relationship length's moderating effect on conversation satisfaction. I assessed the impact of relationship length on conversation satisfaction using relationship satisfaction as a covariate. Only one main effect was significantly associated with conversation satisfaction. Participants in the multicommunication condition were significantly less satisfied with the conversation than those in the control condition at a significant level, b = -0.31, t(61) = -2.67, p = .009, 95% CI [-.02, .01].

I also included two interaction terms to determine whether relationship length moderated the effects of the experimental conditions on conversation satisfaction. The interaction between relationship length and the effect coded multicommunication term diminished the negative effect of the condition on conversation satisfaction. However, the association was not statistically significant, b = -0.02, t(57) = -1.81, p = .076, 95% CI [-.03, .00]. The second interaction term in the model between relationship length and the effect coded phone present term similarly decreased the main effect of the phone present condition on conversation satisfaction. As with the interaction term for multicommunication and relationship length, the association was not significant, b = -0.01, t(57) = -1.29, p = .201, 95% CI [-.02, .01]. The model with relationship satisfaction included as a covariate and the two interaction terms explained 25% of the variance for conversation satisfaction: $R^2 = .25$, 95% CI [.01, .11]. Thus, the data do not support the query

in RQ5 that relationship length may dampen the effect of the experimental conditions on conversation satisfaction.

Relationship length's moderating effect on perceived resolvability. In addition to examining conversation satisfaction as an outcome measure, I analyzed whether relationship length influenced the differences in perceived resolvability by experimental condition. None of the covariates were significantly associated with perceived resolvability. Participants in the multicommunication condition perceived that the serial argument was less resolvable, but the difference was not significant, b = -0.06, t(61) = -35, p = .724, 95% CI [-.35, .24]. A similar non-significant negative difference for participants in the phone present condition was present in the model, b = -0.01, t(61) = -.08, p = .939, 95% CI [-.33, .31]. See Table 4.16 for a summary of the results.

The interaction terms I included in the model also did not significantly predict perceived resolvability. The interaction term for relationship length and multicommunication was positive and not significant, b = 0.01, t(57) = .15, p = .879, 95% CI [-.02, .03]. Likewise, the interaction between relationship length and the phone present condition did not significantly predict perceived resolvability. However, the association was negative for the interaction term between relationship length and the phone present condition, b = -0.01, t(57) = -.64, p = .524, 95% CI [-.03, .01]. In total, the model with explained 3% of variance for perceived resolvability: $R^2 = .03$, 95% CI [.08, .29].

Multilevel Models with the Interaction between Relationship Length and Experimental Conditions Predicting Conversation Outcomes (RQ5)

	Co	onversation sati	sfaction	1		Perceived res	solvability	
	b(SE)	95% CI	df	t	b (SE)	95% CI	df	t
Intercept	3.00 (0.13)	2.75, 3.24	61	23.66***	5.07 (0.17)	4.75, 5.39	61	30.29***
Slopes for Covariates								
Biological Sex	0.08 (0.06)	03, .19	57	1.47	0.04 (0.10)	15, .23	57	0.41
Participant Role	0.02 (0.06)	09, .13	57	0.38	0.04 (0.10)	15, .23	57	0.41
Relationship Satisfaction	0.37 (0.09)	.1954	57	4.06***	0.49 (0.14)	.22, .75	57	3.59***
Realism	0.02 (0.08)	15, .18	57	0.19	-0.01 (0.13)	26, .24	57	-0.07
Slopes for Main Effects								
Multicommunication	-0.32 (0.12)	55,10	61	-2.77***	-0.06 (0.16)	35, .24	61	-0.35
Phone Present	-0.15 (0.12)	39, .09	61	-1.18	-0.01 (0.17)	33, .31	61	-0.08
Relationship Length	-0.01 (0.01)	02, .02	57	-0.08	0.01 (0.01)	02, .03	57	0.51
Slopes for Interaction Effects								
Relationship Length x								
Multicommunication	-0.02 (0.01)	03, .00	57	1.81 *	0.01 (0.01)	02, .03	57	0.15
Relationship Length x								
Phone Present	-0.01 (0.01)	02, .01	57	1.29	-0.01 (0.01)	03, .01	57	-0.64

Note. N = 128 individuals. Experimental conditions were effect coded for experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female).

 $^{t}p < .10, *** p < .001$

Relationship length's moderating effect on relationship perceptions. A secondary purpose of RQ5 was to examine whether relationship length modified differences in relationship perceptions following the interaction between the experimental conditions. To address this, I entered relationship satisfaction and relational closeness as dependent variables in the models. The non-zero intraclass correlations for the null models with relationship closeness and relationship satisfaction as the dependent variables indicated that there was sufficient variance between individuals (relationship satisfaction: ICC = .56; relational closeness ICC = .31).

Relationship length's moderating effect on relationship satisfaction. First, I tested a model with relationship satisfaction measured following the interaction as the dependent variable. The main effects included in the model did not significantly predict relationship satisfaction after the interaction. Participants in the multicommunication condition reported greater increases in relationship satisfaction than other participants, but the difference was not significant, b = 0.07, t(61) = 1.06, p = .293, 95% CI [-.06, .19]. For participants in the phone present condition, there was also a non-significant decrease in relationship satisfaction, b = -0.05, t(61) = -0.76, p = .446, 95% CI [-.19, .08]. Individuals in longer relationships reported lower levels of relationship satisfaction, but this effect was small and not significant, b = -0.01, t(57) = -0.14, p = .886, 95% CI [-.01, .01]. See Table 4.17 for a summary of the results.

I also examined a set of 2-way interaction terms between relationship length and the two experimental conditions. Relationship length did not significantly moderate the differences between participants in the multicommunication condition, b = -0.01, t(57) = -0.53, p = .592, 95% CI [-.01, .01]. Likewise, relationship length did not significantly moderate the effect of the phone present condition on relationship satisfaction, b = -0.01, t(57) = -0.69, p = .49, 95% CI [-

.01, .01]. The final model explained 61% of the variance on relationship satisfaction measured:

 $R^2 = .61, 95\%$ CI [.53, .70].

Table 4.17

Multilevel Model with Relationship Length and Experimental Conditions Predicting Post-Conversation

Relationship Satisfaction (RQ5)

	<i>b</i> (<i>SE</i>)	95% CI	df	t
Intercept	6.26 (.07)	6.12, 6.39	61	89.25***
Slopes for Covariates				
Biological Sex	-0.03 (.04)	12, .04	57	-0.94
Participant Role	0.01 (.04)	07, .08	57	0.08
Relationship Satisfaction T1	0.68 (.06)	.57, .78	57	12.04***
Realism	-0.08 (.05)	18, .03	57	-1.45
Slopes for Main Effects				
Multicommunication	0.07 (.06)	06, .19	61	1.06
Phone Present	-0.05 (.07)	1908	61	-0.76
Relationship Length	-0.01 (.01)	01, .01	57	-0.14
Slopes for Interaction Effects				
Relationship Length x				
Multicommunication	-0.01 (.01)	0101	57	-0.53
Relationship Length x Phone Present	-0.01 (.01)	0101	57	-0.69

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). *** p < .001

Relationship length's moderating effect on relational closeness. Next, I analyzed a

model with relational closeness measured at the completion of the interaction as the dependent variable. None of the three main effects significantly predicted relational closeness. Participants in the multicommunication condition felt diminished closeness to their partner following the interaction, but the difference was not significant, b = 0.04, t(61) = 1.08, p = .285, 95% CI [-.03, .10]. Participants also reported more relational closeness in the phone present condition, but the difference was also not significant, b = 0.04, t(61) = 1.15, p = .253, 95% CI [-.03, .11].

Participants in longer relationships felt closer to their partner following the interaction but this

association was also not significant, b = 0.01, t(57) = 1.27, p = .209, 95% CI [-.01, .01] (see Table 4.18). The interaction terms for relationship length yielded non-significant effects on relational closeness measured following the interaction. Hence, the results do not support that relationship length moderates the effect of the experimental conditions on relational closeness. The full model with interaction terms explained 86% of the variance on relational closeness measured after the interaction: $R^2 = .86$, 95% CI [.82, .89].

Table 4.18

Multilevel Model with Interaction Effects between Relationship Length and Experimental Conditions Predicting Post-Conversation Relational Closeness (RQ5)

	<i>b</i> (<i>SE</i>)	95% CI	df	t
Intercept	6.46 (.04)	6.39, 6.53	61	176.68***
Slopes for Covariates				
Biological Sex	0.02 (.03)	03, .07	57	0.62
Participant Role	-0.02 (.03)	0703	57	-0.76
Relational Closeness T1	0.95 (.04)	.87, 1.02	57	24.14***
Realism	0.11 (.03)	.05, .17	57	3.60***
Slopes for Main Effects				
Multicommunication	0.04 (.03)	03, .10	61	1.08
Phone Present	0.04 (.04)	03, .11	61	1.15
Relationship Length	0.01 (.01)	01, .01	57	1.27
Slopes for Interaction Effects				
Relationship Length x Multicommunication	0.00 (.01)	00, .01	57	0.28
Relationship Length x Phone Present	-0.00 (.01)	01, .01	57	-0.15

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female).

*** *p* < .001

Communication Competence and Conversation Outcomes (H3, H4)

In hypotheses 3 and 4, I predicted that participants' perception of their partners'

communication competence would be associated with conversation outcomes (H3), and that

communication competence would dampen the effects of the experimental conditions on

conversation outcomes (H4). To test H3, I included communication competence as a main effect along with two effect coded experimental condition variables. Two of the eight covariates included in the models for H3 were significantly associated with the outcome variables. For H4, I also included interaction terms between communication competence and the two experimental conditions. Two of the eight covariates in the models for H4 were significantly associated with the dependent variables. Table 4.19 summarizes the results of H3, and Table 4.20 summarizes the results for H4.

Communication competence and conversation satisfaction (H3A). The full model testing the effect of communication competence on conversation satisfaction yielded one statistically significant effect. Participants in the multicommunication condition were less satisfied with the conversation, b = -0.28, t(61) = -2.41, p = .019, 95% CI [-.50, -.05]. Participants in the phone present condition were also less satisfied with the conversation, but the difference was not statistically significant, b = -0.10, t(59) = -0.84, p = .403, 95% CI [-.33, .13]. Participants' perceptions of their partners' communication competence was also negatively associated with conversation satisfaction. The association was not significant, however, b = -0.09, t(59) = -0.79, p = .435, 95% CI [-.31, .13]. The independent variables explained 19% of the variance for conversation satisfaction: $R^2 = .19$, 95% CI [.11, .34].

Communication competence and perceived resolvability (H3B). In H3B, I

hypothesized that perceptions of partners' communication competence would be positively associated with perceived resolvability. None of the three main effects in the model significantly predicted perceived resolvability. Greater perceptions of partners' communication competence was associated with greater perceived resolvability, but the relationship was not significant, b =0.10, t(59) = 0.56, p = .60, 95% CI [-.24, .45]. Participants in the multicommunication perceived the argument as less resolvable, but the difference was not statistically significant, b = -0.07, t(61) = -0.48, p = .636, 95% CI [-.36, .22]. Likewise, participants in the phone present condition perceived the argument as less resolvable than participants in the control condition, but the difference was also not statistically significant, b = -0.01, t(61) = -0.01, p = .991, 95% CI [-.31, .30]. The final model explained 12% of the variance on perceived resolvability: $R^2 = .12$, 95% CI [.07, .28].

Multilevel Models with Communication Competence and Experimental Conditions Predicting Post-Conversation Relational Closeness (H3)

		Conversation	satisfaction			Perceived res	solvability	
	b(SE)	95% CI	df	t	b (SE)	95% CI	df	t
Intercept	3.03 (.12)	2.79, 3.26	61	25.07***	5.04 (.15)	4.74, 5.34	63	32.38***
Slopes for Covariates								
Biological Sex	0.08 (.06	03, .19	59	1.48	0.04 (.10)	15, .23	59	0.37
Participant Role	0.02 (.05)	08, .13	59	0.46	0.04 (.10)	14, .23	59	0.44
Relationship Satisfaction	0.42 (.06)	.23, .61	59	4.29***	0.47 (.15)	.18, .76	59	3.16**
Realism	0.03 (.08)	13, .19	59	0.31	-0.03 (.13)	28, .21	59	-0.28
Slopes for Main Effects								
CCOMPP	-0.09 (.11)	31, .13	59	-0.79	0.10 (.18)	24, .45	59	0.56
Multicommunication	-0.28 (.12)	50,05	61	-2.41*	-0.07 (.15)	36, .22	61	-0.48
Phone Present	-0.10 (.12)	33, .13	61	-0.84	-0.01 (.16)	31, .30	61	-0.01

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). CCOMPP = Communication Competence – Partner.

* p < .05, ** p < .01, *** p < .001

Communication competence's moderating effect on conversation satisfaction (H4A).

In the first model for H4A, I included relationship satisfaction as one of the covariates. Of the main effects I entered in the model, only participants in the multicommunication were significantly less satisfied with the conversation, b = -0.30, t(61) = -2.52 p = .014, 95% CI [-.53, -.07]. Participants in the phone present condition were less satisfied with the conversation, b = -0.12, t(61) = -0.94 p = .350, 95% CI [-35, .12]. Participants' ratings of their partners' communication competence was negatively associated with conversation satisfaction, but it was not significant, b = -0.01, t(57) = -0.06, p = .95, 95% CI [-.27, .26].

I also entered two interaction terms into the model to test H4A. The interaction terms for communication competence with the two experimental conditions were not significantly associated with conversation satisfaction. The interaction between communication competence and multicommunication was positively associated with conversation satisfaction, b = 0.17, $t(57) = 1.33 \ p = .188$, 95% CI [-.07, .41]. The interaction term for communication competence and the phone present condition was also positively associated with conversation satisfaction, b = 0.02, $t(57) = 0.16 \ p = .87$, 95% CI [-.22, .26]. The full model accounted for 20% of variance for conversation satisfaction: $R^2 = .20$, 95% CI [.13, .36]. See Table 4.20 for a summary of the results for H4.

Communication competence's moderating effect on perceived resolvability (H4B).

As with H4A, I examined whether global participants' perceptions of their partners' communication competence moderated the effect of the experimental condition on perceived resolvability in H4B. The three main effects included in the model were not significantly related to perceived resolvability. Greater perceptions of partner communication competence was positively associated with perceived resolvability, b = 0.04, t(57) = 0.18, p = .86, 95% CI [-.37,

.45]. Participants in the multicommunication condition indicated that the argument was slightly less resolvable, b = -0.07, t(61) = -0.46, p = .646, 95% CI [-.37, .23]. A non-significant difference was also present for participants in the phone present condition, b = -0.02, t(61) = -0.14, p = .89, 95% CI [-.33, .29].

I also entered two 2-way interaction terms in the model, but neither interaction term for communication competence with an experimental condition was significantly associated with perceived resolvability. The interaction term for communication competence with multicommunication was negatively associated with perceived resolvability, b = -0.02, t(57) = -0.40, p = .897, 95% CI [-.40, .35]. The interaction term between communication competence and the phone present condition was also negative, b = -0.19, t(57) = -0.98, p = .33, 95% CI [-.57, .19]. The final model with the interaction terms explained 13% of the variance on perceived resolvability: $R^2 = .13$, 95% CI [.08, .29].

Summarizing H3 and H4. In H3 and H4, I predicted that global ratings of partners' communication competence would have a main and moderating effect on conversation outcomes. Results from H3 showed that communication competence did not significantly predict conversation satisfaction or perceived resolvability. Communication competence also did not significantly moderate the effect of the multicommunication or phone present conditions on the conversation ratings. Therefore, the results supported neither H3 nor H4.

Multilevel Models with Interaction Effects between Communication Competence and Experimental Conditions Predicting Conversation Outcomes

(H4)

	Co	onversation satisfa	action			Perceived res	olvabilit	У
	b (SE)	95% CI	df	t	b(SE)	95% CI	df	t
Intercept	3.00 (0.12)	2.76, 3.24	61	24.14***	5.01 (0.16)	4.70, 5.32	61	30.90***
Slopes for Covariates								
Biological Sex	0.09 (0.06)	01, .21	57	1.65	0.03 (0.10)	15, .23	57	0.36
Participant Role	0.02 (0.05)	08, .13	57	0.40	0.04 (0.10)	14, .23	57	0.44
Relationship Satisfaction	0.41 (0.10)	.22, .60	57	4.15***	0.43 (0.15)	.14, .73	57	2.86**
Realism	0.01 (0.08)	15, .17	57	0.15	-0.05 (0.13)	29, .19	57	-0.39
Slopes for Main Effects								
CCOMPP	-0.01 (0.13)	27, .26	57	-0.06	0.04 (0.21)	37, .45	57	0.18
Multicommunication	-0.30 (0.12)	5307	61	-2.52*	-0.07 (0.15)	37, .23	61	-0.46
Phone Present	-0.12 (0.12)	35, .12	61	-0.94	-0.02 (0.16)	33, .29	61	-0.14
Slopes for Interaction Effects								
CCOMPP x								
Multicommunication	0.17 (0.13)	0741	57	1.33	-0.02 (0.19)	40, .35	57	-0.13
COMPP x Phone Present	0.02 (0.13)	22, .26	57	0.16	-0.19 (0.20)	57, .19	57	-0.98

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). CCOMPP = Communication Competence – Partner.

* *p* < .05, ** *p* < .01, *** *p* < .001

Communicator Presence Predicting Conversation Outcomes and Relationship Perceptions

My next set of research questions examined whether communicator presence would be positively associated with conversation satisfaction (RQ6), relational closeness (RQ6), relationship satisfaction (RQ6), and perceived resolvability (RQ7). Only four of the 16 covariates were significantly associated with the dependent variables in the models assessing RQ6 and RQ7. Two-way interactions between covariates and independent variables are only included in the models when the term was significant for the sake of maintaining acceptable model fit and a more parsimonious model.

Communicator presence predicting conversation satisfaction (RQ6). Results from the full model revealed no significant effects on conversation satisfaction for the three main effects. Only communicator presence was positively associated with conversation satisfaction; however, the relationship was not significant, b = 0.12, t(59) = 1.55, p = .13, 95% CI [-.03, .28]. The other two main effects I included in the model were for the experimental conditions. Participants in the multicommunication rated the conversation as less satisfying but this was not significant, b = -0.21, t(61) = -1.71, p = .09, 95% CI [-.45, .03]. Participants in the phone present also rated their conversation as less satisfying but the result was not significant, b = -0.07, t(61) = -0.58, p = .56, 95% CI [-.31, .16]. The final model explained 19% of the variance on conversation satisfaction: $R^2 = .19$, 95% CI [.02, .34]. See Table 4.21 for a summary of the results.

Multilevel Model Communicator Presence and Experimental Conditions Predicting Conversation

Satisfaction (RQ6)

	<i>b</i> (<i>SE</i>)	95% CI	df	t
Intercept	3.06 (.12)	2.82, 3.30	61	24.98***
Slopes for Covariates				
Biological Sex	0.07 (.06)	04, .18	59	1.19
Participant Role	0.02 (.06)	15, .10	59	0.38
Relationship Satisfaction	0.36 (.09)	.18, .53	59	3.86
Realism	0.02 (.08)	13, .18	59	0.31
Slopes for Main Effects				
Multicommunication	0.21 (.12)	45, .03	61	-1.71 [*]
Phone Present	-0.07 (.12)	31, .16	61	-0.58
Communicator Presence	0.12 (.08)	03, .28	59	1.55

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). ^{*t*} p < .10, *** p < .001

Communicator presence, relationship satisfaction, and relational closeness (RQ6). I

also ran two models testing the effect of communicator presence on relational closeness and relationship satisfaction following the interaction. In the first model, the three main effects entered in the model for relationship satisfaction were not significantly associated with the outcome measure. Communicator presence was negatively associated with relationship satisfaction, b = -0.03, t(58) = -0.57, p = .57, 95% CI [-.15, .08]. Participants in the multicommunication condition reported a decrease in relationship satisfaction following the conversation, b = -0.04, t(61) = -0.54, p = .59, 95% CI [-.15, .04]. In addition, participants in the phone present condition felt less satisfied with their relationship after their conversation, b = -0.05, t(61) = -0.05, p = .431, 95% CI [-.17, .07].

I also included one significant interaction term between participant role and communicator presence. Further probing of the simple slopes showed that communicator presence was negatively associated with relationship satisfaction for naïve participants, b = - 0.18, t(58) = -2.15, p = .036. However, the slope was positive for confederates, b = 0.21, t(58) = 3.56, p < .001 (See Figure 1). In total, the model explained an additional 62% of the variance on relationship satisfaction measured after the interaction: $R^2 = .65$, 95% CI [.54, .71]. See Table 4.22 for a model summary.

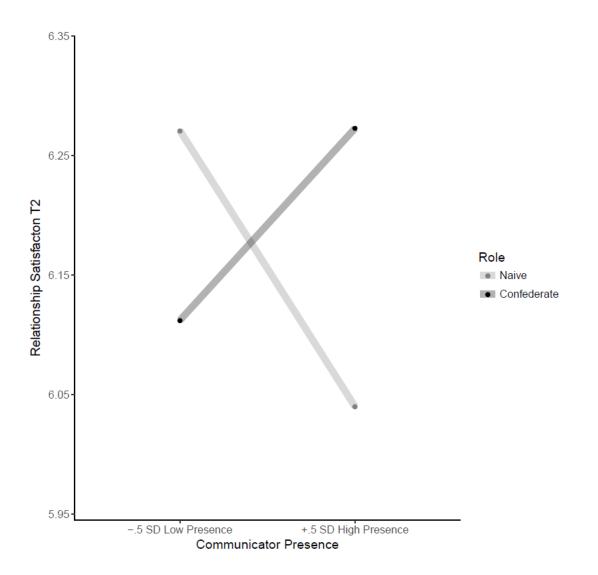
Table 4.22

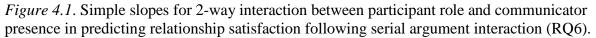
Multilevel Model Communicator Presence and Experimental Conditions Predicting Relationship

Satisfaction (RQ6)

	b(SE)	95% CI	df	t
Intercept	6.14 (.07))	6.01, 6.27	61	90.13***
Slopes for Covariates				
Biological Sex	-0.02 (.04)	09, .05	58	-0.58
Participant Role	0.02 (.05)	06, .10	58	0.42
Relationship Satisfaction T1	0.71 (.05)	.60, .81	58	13.39***
Realism	-0.06 (.05)	15, .04	58	-1.16
Slopes for Main Effects				
Multicommunication	-0.04 (.07)	16, .09	61	-0.54
Phone Present	-0.05 (.06)	17, .07	61	-0.79
Communicator Presence	-0.03 (.06)	15, .08	58	-0.57
Slopes for Interaction Effects				
Participant Role x				
Communicator Presence	0.19 (.06)	.08, .31	58	-3.23**

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). ** p < .01, *** p < .001





Next, I analyzed whether communicator presence would be significantly associated with relational closeness measured after the interaction. In this model, I included relational closeness measured before the interaction (as opposed to relationship satisfaction) as one of the covariates in the model. None of the three main effects entered in the model were significantly associated with relational closeness. Communicator presence was positively associated with relational closeness following the conversation, but it was not significant (b = 0.03, t(59) = 0.81, p = .42, 95% CI [-.04, .09]. Participants in the multicommunication condition felt closer after the

interaction but this was not significant, b = 0.04, t(61) = 1.22, p = .22, 95% CI [-.03, .11]. Finally, participants in the phone present condition also felt closer following the interaction but again this was not significant, b = 0.05, t(61) = 1.61, p = .11, 95% CI [-.01, .12] felt closer to their partners after the conversation, but the post-conversation improvement was not significant. The final model explained 85% of the variance for relational closeness measured after the interaction: $R^2 = .85$, 95% CI [.82, .89]. See Table 4.23 for a summary of the results.

Table 4.23

Multilevel Model with Interaction Effects between Communicator Presence and Experimental Conditions

Predicting Relational Closeness (RQ6)

	<i>b</i> (<i>SE</i>)	95% CI	df	t
Intercept	6.46 (.03)	6.40, 6.53	61	189.50***
Slopes for Covariates				
Biological Sex	-0.01 (.03)	04, .06	59	0.47
Participant Role	-0.03 (.03)	09, .03	59	-1.02
Relational Closeness T1	0.96 (.04)	.88, 1.03	59	25.72***
Realism	0.11 (.03)	.05, .17	59	3.74***
Slopes for Main Effects				
Multicommunication	0.04 (.04)	03, .11	61	1.22
Phone Present	0.05 (.03)	01, .12	61	1.61
Communicator Presence	0.03 (.03)	04, .09	59	0.81

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). *** p < .001

Communicator presence and perceived resolvability (**RQ7**). I also assessed whether communicator presence would be associated with perceived resolvability. The three main effects entered into the model did not significantly predict perceived resolvability. More communicator presence from a partner was associated with greater perceived resolvability but this was not significant, b = 0.10, t(59) = 0.75, p = .46, 95% CI [-.16, .36]. Participants rated the argument as less resolvable in both the multicommunication condition, b = -0.02, t(61) = -0.14, p = .89, 95%

CI [-.34, .29], and in the phone present condition, b = -0.01, t(61) = -0.01, p = .988, 95% CI [-

.30, .30] but neither was significant. The final model explained 13% of the variance on

conversation satisfaction: $R^2 = .13, 95\%$ CI [.07, .28]. See Table 4.24 for a model summary.

Table 4.24

Multilevel Model with Communicator Presence and Experimental Conditions Predicting Perceived

Resolvability (RQ7)

	b(SE)	95% CI	df	t
Intercept	5.05 (.16)	4.75, 5.35	61	32.39***
Slopes for Covariates				
Biological Sex	0.02 (.10)	17, .22	59	0.25
Participant Role	0.01 (.11)	2122	59	0.01
Relationship Satisfaction T1	0.49 (.13)	.23, .75	59	3.63***
Realism	-0.03 (.12)	28, .21	59	-0.27
Slopes for Main Effects				
Multicommunication	-0.02 (.16)	34, .29	61	-0.14
Phone Present	-0.01 (.15)	30, .30	61	-0.01
Communicator Presence	0.10 (.13)	16, .36	59	0.75

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). *** p < .001

Relational Uncertainty and Partner Interference Predicting Conversation Outcomes (H5,

H6)

My next set of hypotheses proposed that relational uncertainty and partner interference interact with experimental conditions such that more relational uncertainty and more partner interference will be associated with diminished conversation satisfaction (H5) and perceived resolvability (H6). I tested these hypotheses with models that included an interaction between one source of relational uncertainty (i.e., self, partner, relationship) and the two effect-coded experimental condition variables. Self, partner, and relationship uncertainty were entered into separate models to avoid multicollinearity between the three sources of relational uncertainty (Knobloch & Solomon, 2005).

In the tests for the interactions between relational uncertainty, partner interference, and the two conversation outcome measures, the significance of the relationship with covariates varied. Only relationship satisfaction measured prior to the interaction was significantly associated with either conversation satisfaction or perceived resolvability in the models testing H5 and H6. See Table 4.25 and Table 4.26 for models with relationship uncertainty. See Table 4.27 and Table 4.28 for a summary of the models with self uncertainty. See Table 4.29 and Table 4.30 for the model summaries that include partner uncertainty.

Relationship uncertainty, partner interference, and conversation satisfaction. I tested the interaction effects between relationship uncertainty, partner interference, and conversation satisfaction, and only one main effect emerged in the model. Participants in the multicommunication condition were significantly less satisfied with the conversation, b = -0.28, t(61) = -2.35, p = .002, 95% CI [-.51, -.05]. The main effects for partner interference, relationship uncertainty, and the phone present condition did not significantly predict conversation satisfaction. The four 2-way interaction terms included in the model were also not significantly associated with conversation satisfaction. The model explained 20% of the variance for perceived resolvability: $R^2 = .20$, 95% CI [.15, .38]. See Table 4.25 for a summary of the results.

Table 4.25

Multilevel Model with Interactions between Relationship Uncertainty, Partner Interference, and

Experimental Conditions Predicting Conversation Satisfaction (H5A, H6A)

	b(SE)	95% CI	df	t
Intercept	3.03 (.13)	2.79, 3.27	61	24.01***
Slopes for Covariates				
Biological Sex	0.10 (.06)	01, .21	54	$1.72^{t\!$
Participant Role	0.03 (.06)	08, .13	54	-0.48
Relationship Satisfaction T1	0.39 (.12)	.16, .63	54	3.19**
Realism	0.04 (.09)	1220	54	0.48
Slopes for Main Effects				
Relationship Uncertainty	0.02 (.16)	29, .32	54	0.10
Partner Interference	-0.07 (.10)	25, .12	54	0.48
Multicommunication	-0.28 (.12)	51,05	61	-2.35*
Phone Present	-0.07 (.13)	31, .16	61	-0.58
Slopes for Interaction Effects Relationship Uncertainty				
x Multicommunication Relationship Uncertainty	-0.13 (.15)	41, .14	54	-0.92
x Phone Present Partner Interference x	0.07 (.11)	14, .29	54	0.66
Multicommunication	0.01 (.10)	17, .20	54	0.12
Partner Interference x Phone Present	-0.06 (.10)	25, .12	54	-0.65

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). $^{\dagger} p < .10, * p < .05, ** p < .01, *** p < .001$

Relationship uncertainty, partner interference, and perceived resolvability. I also

tested the effects of interaction terms for relationship uncertainty, partner interference, and the experimental conditions on perceived resolvability. This model contained no significant main effects on perceived resolvability. The four main effects were negatively associated with perceived resolvability; however, they were not statistically significant.

Examination of the 2-way interaction effects included in the model revealed one

statistically significant interaction between partner interference and multicommunication.

Probing of the simple slopes showed that global ratings of partner interference was negatively associated with perceived resolvability in the multicommunication condition, b = -0.41, t(58) = -1.90, p = .063. The slope for partner interference was positive and not significant for participants in the phone absent condition, b = 0.25, t(58) = 1.21, p = .23 (See Figure 2). The model with interaction terms explained an additional 15% of the variance for perceived resolvability: $R^2 = .15$, 95% CI [.11, .32]. See Table 4.26 for a model summary.

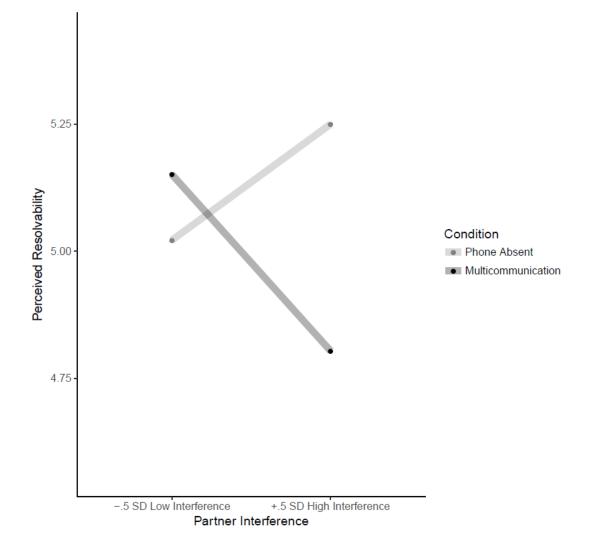
Table 4.26

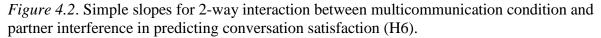
Multilevel Model with Interactions between Relationship Uncertainty, Partner Interference, and Experimental Conditions Predicting Perceived Resolvability (H5B, H6B)

		<i>b</i> (<i>SE</i>)	95% CI	df	t
Intercept		5.04 (.16)	4.74, 5.34	61	31.73***
Slopes for Co	ovariates				
	Biological Sex	0.03 (.10)	-17, .22	54	0.26
	Participant Role	0.06 (.10)	13, .25	54	0.59
	Relationship Satisfaction T1	0.60 (.19)	.24, .97	54	3.15**
	Realism	-0.06 (.13)	31, .18	54	-0.50
Slopes for M	ain Effects				
-	Multicommunication	-0.08 (.15)	37, .21	61	-0.52
	Phone Present	-0.04 (.16)	3426	61	-0.27
	Relationship Uncertainty	0.23 (.25)	24, .70	54	0.92
	Partner Interference		42, .16	54	-0.84
Slopes for In	teraction Effects				
	Relationship Uncertainty x				
	Multicommunication	0.08 (.21)	32, .49	54	0.38
	Relationship Uncertainty x Phone Present	-0.01 (.16)	3332	54	-0.01
	Partner Interference x Multicommunication	-0.33 (.16)	6302	54	-2.05*
	Partner Interference x Phone Present	-0.15 (.16)	45, .14	54	-0.99

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female).

* p < .05, ** p < .01, *** p < .001





Self uncertainty, partner interference, and conversation satisfaction. The first model

testing the interaction effects for self uncertainty and partner interference with the experimental

conditions produced a main effect for participants in the multicommunication condition.

Participants rated their conversation as less satisfying when one member of the dyad

multicommunicated, b = -0.28, t(61) = -2.40. p = .022, 95% CI [-.50, -.06]. The four 2-way

interaction terms were not significant predictors of conversation satisfaction. The model

explained an additional 22% of variance for conversation satisfaction: $R^2 = .22, 95\%$ CI [.16,

.39]. See Table 4.27 for a summary of the results.

Table 4.27

Interactions of Self Uncertainty and Partner Interference with Experimental Conditions Predicting

Conversation Satisfaction (H5A, H6A)

	b (SE)	95% CI	df	t
Intercept	3.03 (.12)	2.80, 3.26	61	25.04***
Slopes for Covariates				
Biological Sex	0.09 (.06)	03, .21	54	1.48
Participant Role	0.04 (.06)	07.,.15	54	0.63
Relationship Satisfaction T1	0.49 (.13)	.24, .75	54	3.74***
Realism	0.03 (.08)	1319	54	0.33
Slopes for Main Effects				
Self Uncertainty	0.21 (.15)	0749	54	1.43
Partner Interference	-0.07 (.10)	2612	54	-0.69
Multicommunication	-0.28 (.12)	50, '06	61	-2.40*
Phone Present	-0.09 (.12)	32, .14	61	-0.74
Slopes for Interaction Effects				
Self Uncertainty x				
Multicommunication	-0.01 (.13)	25, .24	54	-0.03
Self Uncertainty x Phone Present	0.05 (.11)	16, .27	54	0.46
Partner Interference x	~ /	,		
Multicommunication	-0.01 (.10)	2018	54	-0.10
Partner Interference x Phone				
Present	-0.04 (.10)	24, .15	54	-0.45

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female). * p < .05, *** p < .001

Self uncertainty, partner interference, and perceived resolvability. I also

hypothesized that self uncertainty (H5B) and partner interference (H6B) would moderate the differences between participants' ratings of perceived resolvability by experimental condition. In the first model, I included relationship satisfaction as one of the covariates. The four main effects included in the model did not significantly predict perceived resolvability. Similarly, the four 2-way interaction terms in the model were not significant predictors. Only the interaction term for partner interference and multicommunication approached statistical significance, b = -0.29, t(54)

= -1.83, p = .072, 95% CI [-.59, .01]. In total, the model explained an additional 15% of the

variance for perceived resolvability: $R^2 = .15, 95\%$ CI [.10, .32].

Table 4.28

Interactions of Self Uncertainty and Partner Interference with Experimental Conditions Predicting

Perceived Resolvability (H5B, H6B)

	b(SE)	95% CI	df	t
Intercept	5.02 (.16)	4.72, 5.32	61	31.55***
Slopes for Covariates				
Biological Sex	0.03 (.10)	16, .23	54	0.33
Participant Role	0.05 (.10)	14, .23	54	0.49
Relationship Satisfaction T1	0.50 (.20)	.12, .88	54	2.53*
Realism	-0.02 (.13)	27, .22	54	-0.17
Slopes for Main Effects				
Self Uncertainty	0.03 (.23)	41, .47	54	0.13
Partner Interference	-0.10 (.15)	39, .20	54	-0.63
Multicommunication	-0.09 (.15)	39, .19	61	-0.62
Phone Present	-0.04 (.16)	34, .26	61	-0.24
Slopes for Interaction Effects				
Self Uncertainty x				
Multicommunication	-0.11 (.19)	48, .26	54	-0.57
Self Uncertainty x Phone Present	0.08 (.17)	25, .41	54	0.46
Partner Interference x		,		
Multicommunication	-0.29 (.16)	59, .01	54	-1.83 [#]
Partner Interference x Phone		,		
Present	-0.15 (.16)	45, .14	54	-0.97

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female).

f p < .10, * p < .05, *** p < .001

Partner uncertainty, partner interference, and conversation satisfaction. I tested two

models with interaction effects for partner uncertainty and partner interference. The first model

with relationship satisfaction as a covariate had a significant main effect only for

multicommunication, b = -0.27, t(61) = -2.35, p = .022, 95% CI [-.49, -.05]. The main effects for partner interference, partner uncertainty, and the phone present condition were not significantly associated with conversation satisfaction.

The 2-way interactions were also not significantly associated with conversation

satisfaction. The interaction between partner uncertainty and multicommunication was negative

and not significant, b = -0.01, t(54) = -0.03, p = .97, 95% CI [-.26, .25]. The interaction between partner uncertainty and phone present was also negative and not significant, b = -0.05, t(54) = -0.43, p = .671, 95% CI [-.27, .17]. Likewise, the interaction term for partner interference with multicommunication was negative and not significant, b = -0.01, t(54) = -0.10, p = .92, 95% CI [-.20, .18]. Finally, the 2-way interaction between partner interference and phone present was negative and not significant, b = -0.03, t(54) = -0.32, p = .752, 95% CI [-.22, .16]. In total, the model explained 21% of variance on conversation satisfaction: $R^2 = .21$, 95% CI [.16, .38]. See Table 4.29 for a summary of the results.

Table 4.29

Interactions of Partner Uncertainty and Partner Interference with Experimental Conditions Predicting

Conversation Satisfaction (H5A, H6A)

	b(SE)	95% CI	df	t
Intercept	3.04 (0.12)	2.81, 3.27	61	25.16***
Slopes for Covariates				
Biological Sex	0.08 (0.06)	03, .20	54	1.34
Participant Role	0.03 (0.06)	08, .14	54	0.47
Relationship Satisfaction T1	0.53 (0.13)	.29, .77	54	4.17***
Realism	0.02 (0.08)	14, .18	54	0.24
Slopes for Main Effects				
Partner Uncertainty	0.21 (0.14)	0548	54	1.52
Partner Interference	-0.06 (0.10)	2513	54	-0.60
Multicommunication	-0.27 (0.12)	4905	61	-2.35*
Phone Present	-0.08 (0.12)	31, .15	61	-0.68
Slopes for Interaction Effects				
Partner Uncertainty x				
Multicommunication	-0.01 (0.14)	26, .25	54	-0.03
Partner Uncertainty x				
Phone Present	-0.05 (0.12)	27, .17	54	-0.43
Partner Interference x				
Multicommunication	-0.01 (0.10)	20, .18	54	-0.10
Partner Interference x				
Phone Present	-0.03 (0.11)	22, .16	54	-0.32

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female).

* p < .05, *** p < .001

Partner uncertainty, partner interference, and perceived resolvability. I also tested a model with interaction terms for partner uncertainty and partner interference with the experimental conditions on perceived resolvability. The four main effects were also not significantly associated with perceived resolvability. See Table 4.30 for a model summary.

I also included four 2-way interactions in the model between the two experimental conditions, partner uncertainty, and partner interference. The four interaction terms were negatively associated with perceived resolvability; however, the interaction terms were not significant. The interaction term for partner uncertainty and multicommunication was marginally negative and not significant, b = -0.01, t(54) = -0.05, p = .98, 95% CI [-.39, .37]. Likewise, the 2-way interaction between partner uncertainty and phone present was also negative but not significant, b = -0.02, t(54) = -0.02, p = .91, 95% CI [-.41, .18]. The interaction between partner interference and multicommunication as also negative, and the association approached statistical significance, b = -0.30, t(54) = -1.90, p = .063, 95% CI [-.60, -.00]. Finally, the 2-way interaction for partner interference and phone present was negative but not significant, b = -0.16, t(54) = -

Table 4.30

Interactions of Partner Uncertainty and Partner Interference with Experimental Conditions Predicting

	b (SE)	95% CI	df	t
Intercept	5.03 (0.16)	4.73, 5.33	61	31.94***
Slopes for Covariates				
Biological Sex	0.03 (0.11)	17, .23	54	0.26
Participant Role	0.05 (0.10)	14, .23	54	0.47
Relationship Satisfaction T1	0.49 (0.20)	.12, .86	54	2.49*
Realism	-0.04 (0.13)	29, .20	54	-0.35
Slopes for Main Effects				
Partner Uncertainty	-0.03 (0.22)	45, .39	54	-0.13
Partner Interference	-0.12 (0.15)	41, .18	54	-0.75
Multicommunication	-0.09 (0.15)	38, .19	61	-0.61
Phone Present	-0.04 (0.16)	34, .26	61	-0.24
Slopes for Interaction Effects				
Partner Uncertainty x				
Multicommunication	-0.01 (0.20)	39, .37	54	-0.05
Partner Uncertainty x				
Phone Present	-0.02 (0.18)	36, .32	54	-0.11
Partner Interference x				
Multicommunication	-0.30 (0.16)	60,00	54	-1.90*
Partner Interference x				
Phone Present	-0.16 (0.16)	4614	54	-0.99

Perceived Resolvability (HB, H6B)

Note. N = 128 individuals. Experimental conditions were effect coded for labeled experimental condition; Participant role was effect coded (1 = confederate, -1 = naïve); Biological sex was effect coded (1 = male, -1 = female).

f p < .10, * p < .05, *** p < .001

Technological Interference Predicting Conversation Outcomes (RQ8)

I also inquired whether naïve participants' perception that their confederate partner's phone use interfered with their conversation was associated with conversation satisfaction and perceived resolvability. To test RQ8, I only used data from naïve participants in the multicommunication condition (n = 22) because confederates in the phone present condition did not use their mobile phone during the interaction. I analyzed two models with biological sex, conversation realism, and relationship satisfaction to test the effects on the conversation outcomes. None of the covariates were significantly associated with conversation satisfaction or perceived resolvability. See a summary of the relationships between covariates and main effects in Table 4.31.

Technological interference and conversation satisfaction. The full model contained a significant negative effect for technological interference on conversation satisfaction, b = -0.29, t(17) = -2.31, p = .034, 95% CI [-.50, .06]. The model explained 50% of the variance for conversation satisfaction: $R^2 = .50$, 95% CI [.28, .75]). Thus, there is evidence that technological interference has a significant negative effect on conversation satisfaction.

Technological interference perceived resolvability. I also tested whether technological interference would be associated with perceived resolvability. Technological interference was positively and not significantly associated with perceived resolvability, b = 0.07, t(17) = 0.23, p = .81, 95% CI [-.47, .60]. This model explained 3% of the variance for perceived resolvability: $R^2 = .03$, 95% CI [.03, .43]. Hence, technological interference is not associated with decreased perceived resolvability.

Table 4.31

Multilevel Models with Technological Interference Predicting Conversation Outcomes (RQ8)

	Conversation satisfaction			Perceived resolvability				
	b(SE)	95% CI	df	t	<i>b</i> (<i>SE</i>)	95% CI	df	t
Intercept	2.83 (.15)	2.55, 3.11	17	18.78***	5.00 (.34)	4.37, 5.64	17	14.65***
Slopes for Covariates								
Biological Sex	0.20 (.16)	09, .49	17	1.27	0.10 (.36)	57, .76	17	0.50
Relationship Satisfaction T1	0.26 (.17)	06, .58	17	1.53	0.19 (.39)	53, .92	17	-0.25
Realism	0.21 (.18)	13, .55	17	1.29	-0.10 (.42)	88, .67	17	-0.24
Slopes for Main Effects								
TMC interference	-0.29 (.13)	53,06	17	-2.30*	0.07 (.29)	47, .60	17	0.23

* *p* < .05, *** *p* < .001

CHAPTER 5: DISCUSSION

This dissertation explores the effects of smartphone use and smartphone presence on conflict interactions. The small but mounting evidence of mobile phones on conversation outcomes indicates that mobile phones can be a source of displeasure in romantic relationships (Misra et al., 2016; Przybylski & Weinstein, 2013) and friendships (Allred & Crowley, 2016). Prior research on the "mere presence" hypothesis shows that the placement of mobile phones in clear sight of interacting parties is associated with declines in conversation quality, and that this effect may be more pronounced during serious conversations (Misra et al., 2016; Przybylski & Weinstein, 2013). Other studies show that dating partners may be dissatisfied by their partners' mobile phone use when spending significant time together (e.g., Miller-Ott et al., 2012), which may be especially displeasing when individuals perceive their partners are intentionally ignoring them and are instead paying attention to the content on their phones (Chotpitayasundondh & Douglas, 2016; Roberts & David, 2016). The literature on multicommunication explains that individuals engage in two or more conversations at the same time because they are trying to achieve one or more goals (Reinsch et al., 2008); however, relationship partners who attempt to achieve goals peripheral to a conflict conversation may make it difficult to progress towards resolution with their partner. Yet, the obstruction to resolution that multicommunication presents may be shaped by features of the relationship, including relational turbulence, communication competence, communicator presence, and mobile phone rules. Accordingly, I integrated the literatures on computer-mediated communication, interpersonal communication, and organizational communication to examine the effects of smartphone use and mobile phone presence on face-to-face conflict interactions. I tested this in an observational experimental study, and the results largely showed that participants were less satisfied with their conflict

interaction when one partner texted, emailed, and used social media during the conversation (i.e., when one partner multicommunicated). In the following pages, I will present a summary of the results, with prominence given to the significant findings. Next, I will explain the theoretical and practical implications of the results. I conclude with a discussion of the limitations of this dissertation and directions for future research.

Summary of Results

Multicommunication, mobile phone presence, and conversation outcomes (H1). The first hypothesis explored whether the use of one's mobile phone during relational conflict was more impactful than the "mere presence" of the mobile phone on conversation satisfaction (H1A) and perceived resolvability (H1B). Research has demonstrated that the "mere presence" of mobile phones during face-to-face (FtF) conversations with friends and strangers can have detrimental effects on conversation enjoyment (Dwyer et al., in press; Przybylski & Weinstein, 2013). The first hypothesis was partially supported for conversation satisfaction (H1A).

Participants in the multicommunication condition rated their conversation as less satisfying than participants in the phone absent condition (H1A). However, the data in the current study showed no statistically significant differences between the phone present and phone absent conditions. In other words, these data fail to replicate the "mere presence" hypothesis, which is consistent with another recent attempt to replicate earlier investigations (Crowley, Allred, Follon, & Volkmer, 2018). Although participants in the phone present condition also rated their conversation as less satisfying than the phone absent condition, the differences were not significant. Further, examining the descriptive statistics for conversation satisfaction between conditions shows that both confederates and naïve participants in the study reported lower levels of conversation satisfaction in the multicommunication condition versus

the phone present and phone absence conditions, respectively (see Table 4.3). This suggests that, at least for conversation satisfaction, divided attention due to the presence of a mobile phone may not be as strong of a deterrent for conversation enjoyment as active engagement or interaction via the mobile phone with one or more social network members through email, text message, or social media use. Furthermore, the active use of mobile phones during relationally important conversations (e.g., conflict) appears to impact both partners' enjoyment, regardless of who is using their phone.

One plausible explanation for the results for H1A is that individuals who ignore or screen out notifications from their social network when communicating with their partner may promote greater conversational satisfaction. Confederates in the phone present condition may have been perceived by their partners as more skilled at managing their "reachability" (Green & Haddon, 2009, p. 103) than confederates in the multicommunication condition. A consequence of the instructions given to confederates in the phone present condition to ignore the audible notifications sent during the 10-minute conversation is that their partners may have viewed their behavior more favorably than confederates who were instructed to use their mobile phone when prompted. Relationship partners who manage their reachability by ignoring audible notifications may promote satisfaction because it may communicate that they are prioritizing the relationship or the conversation at hand, particularly if the conversation is meaningful. On the other hand, "phubbing" (Chotpitayasundondh & Douglas, 2016), which occurs when individuals ignore their partner and pay more attention to the notifications they receive on their mobile phone, may be a barrier to satisfying interactions. In this study, individuals who multicommunicated may have conveyed nonverbally that their priority was not on resolving the argument. The extant research on conflict suggests that relationship partners should consider both their verbal and nonverbal

communication during a conflict conversation (Roloff & Chiles, 2011). It is possible that the use of a mobile phone is an extension of the body much like the mobile phone itself may represent the potential connections to others. If the presence of a mobile phone represents other potential distractions from the FtF conversation, then the active use of the mobile phone must be a stronger catalyst for divided attention (Gergen, 2002) and dissatisfaction than is the mere presence of the phone.

Relational turbulence, multicommunication, and phone presence (H5 and H6)

In the fifth and sixth hypotheses, I posited that the sources of relational turbulence would moderate the effects of multicommunication and phone presence on conversation outcomes. The results for this pair of hypotheses were mixed. The fifth hypothesis did not demonstrate a significant main effect or moderating effect for the three sources of relational uncertainty on conversation satisfaction or perceived resolvability. Although the interaction terms for self, partner, and relationship uncertainty with the two experimental conditions showed a dampening effect on the outcome measures (in comparison to the main effects for the multicommunication and phone present conditions), the nonsignificant coefficients do not lend support for H5A or H5B.

An explanation for this finding is that the experience of relational uncertainty does not necessarily impact the outcomes of conflict conversations as much as how partners communicate verbally and nonverbally during the interaction. Relational uncertainty "undermines comprehension of specific episodes" (Solomon, Knobloch, Theiss, & McLaren, 2016, p. 512), which may cause individuals to avoid or engage in communication in positively or negatively valenced ways. Indeed, individuals experiencing more relational uncertainty perceive irritations in their romantic relationships as more severe (Theiss & Knobloch, 2009), but they may not

necessarily voice their grievances when experiencing high levels of one type of relational uncertainty (i.e., self uncertainty; Theiss & Solomon, 2006). In addition, empty nest couples experiencing heightened amounts of relational uncertainty enacted more conflict avoidant behaviors (King & Theiss, 2016). Thus, relational uncertainty may shape the way individuals engage or avoid in conflict when their partner uses their mobile phone (or at minimally has it present), but that was not noticeable in ratings of conversation satisfaction or perceived resolvability in the current study.

The sixth hypothesis also had mixed results. None of the three interaction terms between partner interference and the experimental conditions yielded significant effects for conversation satisfaction (H6A). Although the interaction terms dampened the influence of the multicommunication and phone present conditions on participants' ratings of conversation satisfaction, global ratings of partner interference did not influence their enjoyment. However, one of the three tests for the interaction between partner interference and the experimental conditions on perceived resolvability was statistically significant (H6B). The model with relationship uncertainty and partner interference demonstrated that participants in the multicommunication condition rated their argument much less resolvable as their ratings of global partner interference increased.

The pronounced moderating effect of partner interference on perceived resolvability is consistent with previous research in at least three ways. First, individuals' increased "reactivity" (Knobloch, 2015, p. 380) could explain the decrease in perceived resolvability in the multicommunication condition as partner interference increases. Under conditions of high global ratings of partner interference, multicommunication may be perceived as more irritating because the use of a mobile phone could undermine any progress towards conflict resolution. Whereas

such an irritation may not affect an overall assessment of whether a conflict can be resolved for most people, individuals who are particularly reactive, such as those who perceive substantial partner interference, may be negatively influenced by even a single irritating encounter.

A second explanation for this finding is that existing research on the relational turbulence model and conflict indicates that partner interference is associated with more topic avoidance, indirectness, and withdrawal during conflict (Theiss & Nagy, 2012; King & Theiss, 2016). It is possible that confederates in the multicommunication condition who reported greater partner interference also withdrew more during the conflict. Stated differently, the effects of multicommunicating under conditions of high partner interference may have influenced the perceptions of their own communicative behavior during the conflict interaction, which, in turn, was associated with ratings of perceived resolvability.

A third explanation for the diminished perceived resolvability as partner interference increased for participants in the multicommunication condition is that a negative violation of expectations occurred. According to expectancy violations theory (EVT), expectancies are anticipated behaviors grounded in the individual communicating, the relationship, and the interaction context (Burgoon & Hale, 1988). Individuals will evaluate a violation of an expectancy as either positive or negative, and negative violations are viewed unfavorably. In addition, these negative violations of expectations may increase uncertainty (Afifi & Metts, 1998). Partners may use more indirect communication as a product of violated expectations (Theiss, 2011). Participants in Miller-Ott and Kelly's (2015) study remarked that they generally did not take exception to the presence of a partner's mobile phone, but the use of a mobile phone for social media purposes generated a negative violation. That is, individuals may rate certain activities on mobile phones during a FtF interaction as more problematic (or in the case of this

study, interfering), especially because it may impede their own communicative or relational goals. Naïve participants in the current study may have used more indirect communication when their confederate partners unexpectedly used their mobile phone during the conflict interaction, which echoes how participants in Miller-Ott's and Kelly's study indicated that they would use their own mobile phone or make indirect statements such as "Oh, you're on your phone a lot" (p. 261) as a reaction to their partners' mobile phone use. Thus, intensified partner interference may have contributed to the amplification effect of multicommunication on perceived resolvability when partner interference was high.

Technological interference and multicommunication (RQ8)

In RQ8, I questioned whether technological interference would influence conversation outcomes. To accomplish this, I tested the influence of a conversation – specific rating of partner technological interference on conversation satisfaction and perceived resolvability. Results showed a significant and negative effect for naïve participants' ratings of their partners' use of mobile phones on conversation satisfaction. A negative association between technological interference and perceived resolvability emerged from the data as well, but the association was not statistically significant.

The results for technological interference and conversation satisfaction contributes to the small but growing body of research on the effects of phone use on individual and relationship well-being (e.g., McDaniel, 2015; McDaniel & Coyne, 2016; Roberts & David, 2016). For example, McDaniel and Coyne (2016) found that the extent to which individuals experienced their partners' use of their technology interfered with interactions during meals, leisure time, and FtF conversations in general – or technoference – was associated with more depression, less life satisfaction, and less relationship satisfaction. However, the effect of technoference was fully

mediated by the extent to which partners had disagreements about technology use. The intentionality behind phone use and ignoring a partner is also of significance, and perceived intentionality may be implicated in goal interference more broadly, or conflict specifically. In fact, conflict about mobile phones mediated the relationship between individuals' belief that their partner was intentionally ignoring them while on their mobile phone and relationship satisfaction (Roberts & David, 2016).

Although examining the mediating role of mobile phone conflict is beyond the purview of the current study, the data signifies that perceptions about how technology use may be an obstruction during FtF conversations can have an immediate effect on conversation ratings. It is conceivable that the accumulation of dissatisfying conversations when dating partners' use their mobile phones in a disruptive manner would explain decreases in relationship perceptions over time. Indeed, "conflict inherently involves the interpretation of actions, and individuals use their past experiences to understand these actions" (Roloff & Wright, 2013, p. 155). In the present study, I examined a single instance of technological interference during one conflict conversation; however, the observed associations between technoference (McDaniel & Coyne, 2016) or partner phubbing (Roberts & David, 2016) and relationship satisfaction may be more indicative of the overall relationship climate over time, including during conflict. Individuals who attempt to diminish the effects of technological interference during conflict (and other relationally important conversations) by eliminating unnecessary mobile phone use could establish a more satisfying pattern of conflict in their relationship, and more satisfying relationships overall.

Effects of mobile phone use (RQ1, RQ2, H2)

I also tested the effect of phone use following the receipt of a mobile phone notification (H2) and the delay between receiving a notification and completing a speaking turn had on conversation outcomes (RQ1, RQ2). The data showed no significant effects for mobile phone use or response latency on conversation outcomes. Nonetheless, taken together the results may shed light on the divergent effects of mobile phone use and response latency.

Unsurprisingly, the response latency for confederates was greater in the multicommunication condition than confederates in the phone present condition, although those differences were not significant in the preliminary or main analyses. The difference in response latency by experimental condition may have been small and not statistically significant, but the tendency toward longer response latency in the multicommunication condition is consistent with Turner and Reinsch's (2010) proposition that multicommunicating impedes message processing and production. Roloff and Chiles (2011) explain that it is relevant to consider verbal and nonverbal statements during relational conflict. It is reasonable to extend that logic to mobile phone use, and, equally important, the gaps in a speaking turn or between speaking turns caused by a mobile communication device in the immediate environment. Individuals who delay a response to their partner while they check a mobile phone notification may be perceived as dismissive or avoidant, and this may have effects on the outcome of a conflict interaction.

Yet, the gaps between speaking turns after receiving a mobile phone notification for confederates in this study had no bearing on conversation satisfaction or perceived resolvability. It may be the case that more mobile phone use is dissatisfying or impedes conflict resolvability, whereas response latency taps into cognitive functioning and is inconsequential for conversation outcomes. That is, multicommunication may nonverbally communicate to individuals that their

partners' attention is prioritizing another conversation (i.e., their attention is divided; Gergen, 2002), which may elicit more dissatisfaction. This finding coincides with research on the inverse relationship between the amount of time conversation partners use their phone in an interaction and conversation quality (Brown et al., 2016). However, the small, non-significant effects should be interpreted with caution.

Cell phone rules, relationship length, and multicommunication (RQ3, RQ4, RQ5)

In a trio of research questions, I examined whether cell phone rules about contact with others and relationship length impacted the effects of the experimental conditions on conversation outcomes and relationship perceptions following the interaction. Cell phone rules did not have a significant main effect or moderating effect for the experimental conditions on conversation satisfaction or perceived resolvability (RQ3). Research on cell phone rules would suggest that dating partners may have agreed upon situations or conversations where contact with others should be minimized (Miller-Ott et al., 2012), and that failing to do so may elicit dissatisfaction (Miller-Ott & Kelly, 2016). One explanation for the null findings is that I used an adapted cell phone rules measure, and this measure included items about phone use during important conversations, which may make direct comparisons to other cell phone rules research challenging (e.g., Miller-Ott et al, 2012). On the other hand, norms about cell phone use in general or during relationally important conversations may be shifting as mobile technology, and smartphones in particular, become more and more commonplace among adults in the United States (Crowley et al., 2018). The shifting norms about cell phone use may suggest that rules about cell phone use are also loosening.

Interestingly, relationship length did not predict the extent to which dating partners had rules about cell phone use while interacting with each other in-person (RQ4), and relationship

length did not moderate the effect of the experimental conditions on relationship perceptions following the interaction (RQ5). The small negative and non-significant association between relationship length and reports of cell phone rules does not support earlier research showing that dating couples develop these rules over time (Miller-Ott & Kelly, 2015). Although romantic partners may have agreed-upon standards for appropriate cell phone use when interacting inperson, these rules may be less idiosyncratic than other relational norms that require time to develop (Burgoon & Hale, 1988). This may be especially true in situations where families have established rules about proper cell phone use (Hiniker et al., 2016). Individuals may learn social norms about proper cell phone use at an early age from family and friends, and these may inform their rules within dating relationships. Recent Pew Internet data shows that 73% of American teenagers have access to a smartphone (Lenhart, 2015). It is possible that individuals learn from a young age about cell phone etiquette while in the presence of others from interactions with their parents. Indeed, there is evidence of a connection between college children's perceptions of their parents' mediated communication skills and their own perceived communication skills (Wang, Roaché, & Pusateri, in press). This finding indicates that there may be an intergenerational transfer of skills, and a component of that may include how to properly use cell phones during FtF interactions. In contrast to a learned skill perspective, individuals may instead learn proper cell phone etiquette through trial and error with friends, family, and dating partners. Certainly, the effects of cell phone presence on conversation outcomes may be context dependent (Przybylski & Weinstein, 2013), and cell phone rules may be stricter for important conversations or dates (Miller-Ott et al., 2012). However, the near ubiquity of mobile communication technology among American adults may suggest that individuals may come to dating

relationships already having implicit expectations about cell phone use in those relationships, and they may not need to develop such expectations over time.

Communication competence and multicommunication (H3, H4)

The third and fourth hypotheses showed neither a significant main effect for communication competence (H3) nor a significant interaction effect for communication competence and the experimental conditions (H4) on conversation outcomes. Taken together, the results show no evidence that overall ratings of communication competence shape conversation satisfaction or perceived resolvability when one partner multicommunicates or has their mobile phone present during a conflict interaction. The results for this pair of hypotheses suggests that other individual or relational factors may shape the effects of multicommunication on conversational ratings.

Communicator presence and multicommunication (RQ6, RQ7)

RQ6 and RQ7 stipulated that communicator presence would be positively associated with conversation satisfaction, relationship satisfaction, relational closeness, and perceived resolvability. Communicator presence was positively associated with conversation satisfaction, but only marginally (b = 0.12, p = .13), whereas communicator presence was not significantly associated with relational closeness or perceived resolvability. Thus, there is not substantial support for RQ6 or RQ7 for conversation ratings and one measure of relational quality.

Unlike the other outcome measures for RQ6 and RQ7, communicator presence contributed to relationship satisfaction following the interaction. This effect was qualified by participant role, however. Naïve participants felt less satisfied following the interaction as their partners' presence increased, whereas confederate participants felt more satisfied as their partners' presence increased. This result is not entirely unexpected, despite existing research showing that communicator presence is associated with greater conversational ratings in the workplace (Turner & Reinsch, 2007). Examining ratings of perceived partner communicator presence shows that confederates rated their partner as significantly more present than naïve participants' ratings of their partner (see Table 4.1). In addition, recall that naïve participants in the multicommunication condition rated their partners as significantly less present (see Table 4.3). It is possible that confederates' ratings accounted for this result. A ceiling effect for communicator presence may be operating in this study, with average ratings by confederates about their partners (i.e., naïve participants) near the maximum value (M = 4.59 on a 1 = Not at all, 5 = A great deal scale). The significant difference between confederates and naïve participants may partially explain the interaction effect (see Table 4.1). From a theoretical and practical standpoint, attempts by confederates in the multicommunication and phone present conditions to remaining present while multicommunicating or glancing at a phone when receiving a notification may be made in vain. The presence of mobile phones and multicommunication during relational conflict may have an immediate negative effect on the relationship even if attempts are made to be hyperpresent in the conversation with their partner. Laboring to be extra present during a conversation when multicommunicating may be viewed negatively, perhaps because the verbal and nonverbal behaviors may be perceived as ingenuine or even fabricated. The distractions by other social network members – and the divided attention a mobile phone presents (Gergen, 2002) – may render attempts to be more present as superficial to partners.

Theoretical Implications

The findings in the present study have four noteworthy implications for the CMC and relationships literatures, respectively. A first implication for the results of this dissertation offers

an extension of Reinsch and colleagues' (2008) multicommunication concept to the domain of close relationships. A central aspect of research on multicommunication demonstrates that participating in two or more conversational tasks simultaneously – often involving at least one type of mediated communication – is associated with diminished task effectiveness at work because of the required divided attention (Reinsch et al., 2008). The divided attention may likewise yield reduction in message processing and message production (Turner & Reinsch, 2010). Yet, the effects of the potential reduction in communication effectiveness have not been examined in the workplace; and these effects certainly have yet to be tested in communication between close relationship partners. Results from this dissertation demonstrate that multicommunication during conflict interactions yields a sizable reduction in conversations on a cell phone is detrimental for conversation satisfaction.

Second, this dissertation provides some evidence for the potential problems with the presence and/or use of communication technology during face-to-face interactions. The results have implications for the "mere presence" hypothesis (Przybyksi & Weinstein, 2013), which states that the presence of cell phones during face-to-face interactions is dissatisfying and can have a negative effect on relational quality (Dwyer et al., in press; Misra et al., 2016). Research has shown that this effect may be more pronounced during important conversations between strangers (Przybyksi & Weinstein, 2013); however, this effect has not been duplicated in more recent research. For example, the more pronounced effect of cell phone presence during more important conversations did not replicate in another study (Crowley et al., 2018). In addition, Allred and Crowley (2016) found that the influence of cell phone presence was only apparent when participants noticed the cell phone during their interaction. Likewise, the results in the

current study did not support the "mere presence" hypothesis in conflict, which is widely considered a relationally important type of conversation for close relationship partners (Roloff & Chiles, 2011). The presence of a cell phone during a conflict conversation did not yield significantly less satisfying conversations, decreased perceptions of resolvability, or relationship quality.

There is evidence in this study that using a cell phone that was obvious to naïve participants had a greater impact on conversation satisfaction than it did for participants who had a cell phone present during the face-to-face interaction. I further explored direct comparisons between participants in the multicommunication and phone present conditions in a post – hoc analysis. There was a marginal negative effect for multicommunication compared to the mere presence of a cell phone on conversation satisfaction (b = -0.19, p = .12). Even though the difference between multicommunication and mere presence conditions for conversation satisfaction is marginal, these data suggest that multicommunicating is likely more problematic than the mere presence of cell phones.

Another theoretical implication from the results is for the role of relational turbulence in conflict interactions. The results of this study support Solomon and colleagues' (2016) initial specification of partner interference in relational turbulence theory. Prior research shows that close relationship partners may be more reactive during turbulent times, and that may manifest communicatively through conflict avoidance (King & Theiss, 2016; Theiss & Knobloch, 2009; Theiss & Solomon, 2006). One source of turbulence in relationships is partner interference, and the results of this study highlighted its significant role in the relationship between multicommunication and perceived resolvability. The effect of multicommunication on perceived resolvability was amplified by the amount of partner interference. Participants in the

condition where a confederate multicommunicated rated the argument as less resolvable as partner interference increased. It is possible that when partner interference is low, partners may be able to communicate directly even when multicommunication occurs. As interference increases, the negative impact of multicommunication on resolvability is quite noticeable, either because the partners are particularly reactive or they lack the behavioral history of successfully engaging in conflict that could help them overcome technological obstacles. That is, the accumulation of experiences in romantic relationships where individuals undermine their partners' goals may impact specific perceptions in a conflict interaction (Solomon et al., 2016), such as perceived resolvability in the present study. It is also possible that ratings of partner interference may foster a turbulent relational climate that restricts optimistic thoughts about the future resolution of conflict, and individuals may think the likelihood of resolving an argument is undercut when multicommunication occurs. Theoretically, the relationship between global ratings of partner interference and perceived resolvability of conflict is significant. Future research should continue to refine the relationship between partner interference and conflict resolvability issues.

A related theoretical implication is the specification of the role of technological interference (compared to the relational turbulence theory's measure of global partner interference). Naïve participants in the multicommunication condition who reported more technological interference from their partner during the interaction were significantly less satisfied, but they did not rate their argument as less resolvable. These results are consistent with research on technoference, which shows how the perception that technology is getting in the way of interactions is dissatisfying (McDaniel & Coyne, 2016; McDaniel, 2015). The findings in this study elucidate the need for conversation specific ratings of partner interference, including

interference due to technology use or another communication behavior. To be sure, the results for technological interference and conversation satisfaction highlight the need to examine more than cell phone presence or how much multicommunication occurs during an interaction. Indeed, perceptions of how technology use is an obstruction to conversation goals may be theoretically relevant for research on multicommunication and relational turbulence in close relationships. Theorizing about multicommunication would benefit by including perceived technological interference as a mechanism that shapes the effects of multicommunication during FtF conversations. This study shows that multicommunication is of consequence for conversation satisfaction. However, even within the group of individuals in the multicommunication condition, the variation in the extent to which naïve participants felt the use of cell phones interfered with the conversation made a remarkable difference in conversation satisfaction.

Practical Implications

In addition to theoretical implications, this dissertation also has practical implications for satisfying close relationships. Satisfying and well-functioning relationships require successful and effective conflict management (Caughlin et al., 2013), and the results from this study suggest that romantic partners may wish to minimize their cell phone use while attempting to resolve a disagreement. The results from the current study suggest that using a phone during a conflict discussion can be problematic. This adds to growing evidence that there are times when using a cell phone may undermine satisfaction (e.g., Dwyer et al., in press; McDaniel & Coyne, 2016). Although one may need to field a phone call or message from a contact during a conflict interaction, it may be important to eliminate these distractions by silencing the cell phone or responding only to family or close friends. In short, one practical implication of the current study is to triage cell phone notifications during conflict conversations. Asking one's self whether a

phone call, text message, email, or some other notification must be answered, thereby interrupting progress towards resolution, is necessary. In the event that one must answer a call or a message immediately in the middle of a face-to-face interaction, it would likely be important that individuals stress to their partner that the conflict interaction is important and that the cell phone use will be brief.

Whereas the first practical implication advises individuals who multicommunicate, the second practical implication is for individuals who witness their partner multicommunicating (e.g., picking up a cell phone and responding to a notification). The findings here show that phone use during a conflict interaction is dissatisfying, but what may be more important is to consider whether their partner's cell phone use is interfering with the goals for the conversation. Participants in this study who perceived more technological interference from their partners were also less satisfied with the conversation. Thus, individuals should consider what cell phone behaviors are more meddlesome than others in a face-to-face interaction. Relationship partners should also consider having discussions about what cell phone behaviors are irritating or interfere with conversations so that they can avoid such behaviors in the future.

A third practical implication reflects how the same advice for constructive conflict in the absence of cell phones. Broadly speaking, how constructively close relationship partners manage conflict is important for relational functioning (Caughlin et al., 2013), and cell phones may produce new challenges for maintaining a constructive stance during conflict. Indeed, the presence of a cell phone invites irritations and friction in relationships (Lenhart & Duggan 2005; Miller-Ott et al., 2012), and the results in this study demonstrate that the use of a cell phone during a FtF conflict interaction is dissatisfying. When a relationship partner uses his or her cell phone, an individual should consider whether criticizing the partner or demanding immediate

attention will expedite goal achievement and foster a more satisfying communication environment. It is also possible that such demands would yield additional withdrawal from a partner, such as increased attention to the cell phone. Individuals should be cautious about making demands about cell phone behavior as doing so might invite a pattern of communication that resembles demand/withdraw, which is a pattern of communication that is inversely associated with relational well-being and satisfaction (Caughlin & Huston, 2002; Eldridge & Christensen, 2002), It occurs "when one partner pressures the other through emotional demands, criticism, and complaints, while the other retreats through withdrawal, defensiveness, and passive inaction" (Christensen & Heavey, 1993, p. 730). Instead, individuals should adopt an integrative approach to communicating their perceptions of their partners' cell phone use when trying to resolve an argument. The integrative conflict style prioritizes both relational and identity goals (Canary & Cupach, 1988), but it also may promote a positive emotional tone (Sillars, 1980). In addition, an integrative conflict style is generally associated with greater relational quality (Karney & Bradbury, 1995). Hence, adopting an integrative approach to discussing a partner's problematic or irritating cell phone use during conflict may foster a more satisfying conversation climate, more progress towards resolution, and an improved relationship. It is likely that the same kinds of advice for constructive conflict that would be prescribed generally (e.g., using integrative verbal tactics) would still hold when either a cell phone is present or when a partner is actively using his or her cell phone.

Limitations and Directions for Future Research

Limitations. Although there were several strengths in the current study, there were also some limitations. First, the external validity of the experimental stimuli used in the multicommunication and phone present conditions may be limited. In particular, the instructions

to confederates in the multicommunication condition to send a text message to friend or family member, check their email, or scroll through their social media accounts may not accurately represent individuals' typical cell phone usage patterns when interacting face-to-face with a romantic partner. As a result, the effects of the multicommunication condition on conversation outcomes and relationship measures may have been dampened. Second, the experimental nature of the study may have altered participants' experiences during the serial argument conversation. Confederates were given specific instructions for use or non-use of their mobile phone, and being taken into confidence may have had an effect on their own communication or their ratings of the conversation and/or their relationship. A third limitation of this study concerns the conversation topic. Although previous research suggests that whether a conversation is relationally meaningful may impact the effect of the "mere presence" effect (Misra et al., 2016; Przybylski & Weinstein, 2013), I did not examine the serial argument topics or how relationally serious the topics were to participants. A fourth limitation of the present study is the generalizability of the findings to other samples. Sampling from college students in romantic relationships was strategic in that the age group reports the highest smartphone usage percentages (see Pew Research, 2018). However, the results and conclusions drawn from this study may not apply to older adults or adolescents. It is possible that older adults may find multicommunication more irritating, whereas adolescents may consider the behavior as more normative given that they may have grown up with mobile communication technology (i.e., they are "digital natives"; Livingstone, 2008). Finally, only confederates either had their cell phone present or actively used their cell phone during the interaction. It may be more the norm today that both dyad members have their cell phones out during face-to-face interactions, and the

outcomes of phone presence or multicommunication may be different in such instances than what was observed in the present study.

Directions for future research. Despite the promising findings in the current study, questions about the effects of cell phone use during face-to-face conflict remain. Future research examining the impact of mobile phone use on face-to-face conflict interactions should consider four topics. A first opportunity for future research concerns which cell phone behaviors elicit the most dissatisfaction. Extant research demonstrates that individuals may need to manage their "reachability" to other members of their social network (Green & Haddon, 2009, p. 103), and couples may have guidelines that specify appropriate mobile phone behavior (e.g., Miller-Ott & Kelly, 2015). However, reachability via audible mobile phone notifications from text messages, phone calls, or applications such as Snapchat or Facebook may not explain why partners grow dissatisfied. The findings from the current study indicate that it is the response to the notifications that elicit dissatisfaction, but it is unclear which types of mobile phone behaviors are rated as the most problematic or displeasing. Future research should examine whether sending/receiving text messages, using social media, checking email, or other potential mobile phone behaviors generates the most frustration.

A second possible avenue for future research concerns the type of conflict dating couples are discussing when one partner uses his or her mobile phone. Prior research on the "mere presence" hypothesis has shown that the effect of the cell phones on conversation perceptions may depend on the type of topic (i.e., casual vs. meaningful; Misra et al., 2014; Przybylski & Weinstein, 2013). Such results may also have important implications for the effect of multicommunicating during relational conflict. Future research should examine whether the features of a conflict episode or topic influence the negative effect of multicommunicating on

conversation ratings. For instance, Cionea and Hample's (2015) analysis of serial argument topics across several studies showed that individuals are more civil in their serial argument discussions about public issues compared to personal issues. This may raise intriguing questions about whether the serial argument topic may influence communication between partners in the face of multicommunicating.

A third possible future research opportunity is to examine the cumulative effects of mobile phones in a single conflict interaction. Examining how multiple instances of multicommunication in a single interaction may shed light on a "tipping point" for individuals. That is, dating partners may be more inclined to be forgiving of an initial text message during a conflict conversation; however, subsequent instances of partner multicommunication behaviors may reach a point where dissatisfaction rapidly diminishes. The use of a mobile phone during serial argument conversations may signal that one is not actively listening, which can have negative effects for partners post-conversation (Reznik, Roloff, & Miller, 2012). On the other hand, ignoring multiple mobile phone notifications may signal commitment to the conversation. Confederates in the phone present condition who did not respond to the three experimental stimuli may have reduced the effects of the "mere presence" hypothesis. Future research on multicommunication and the "mere presence" hypothesis should take care to examine individuals' ratings of their partners' use or non-use their cell phones.

A fourth avenue for future research involves the connection between cell phones and conflict patterns. Research on conflict patterns examines the combinations of behaviors between interacting parties. Often individuals react to others' communicative messages, such that distributive, integrative, or avoidant behavior enacted by one partner may prompt a response in the other (Sillars, 2010). Multicommunicating may be another communicative message

individuals send when communicating about a conflict topic. Allred and Crowley (2016) suggest that the presence of mobile phones triggers changes in nonverbal behaviors (e.g., eye gaze, posture), and these changes may account for differences in conversation. Averted eye gaze to a mobile phone screen may trigger specific verbal and nonverbal behaviors in partners, such as the demand/withdraw pattern of interaction (Christensen & Heavey, 1993). Individuals' attention to another conversation on a mobile phone may signal avoidance, and partners may complain about the inattention or demand more of their partner in the interaction. Future research should continue to explore the role of mobile phone use in the demand/withdraw conflict interaction patterns.

A fifth avenue for future research considers intentionality and mobile phone use during conflict. Individuals' attributions about intentionally interfering mobile phone behaviors during conflict may shape the effect on conversation and relational outcomes. Attributions are consequential for how individuals evaluate conflict and interact during a conflict with their partner (Sillars & McLaren, 2015). Examining attributions regarding technology use during a conflict interaction could inform researchers about whether individuals perceive that their partners are intentionally disregarding them by using their mobile phones during a conflict conversation. The results from the current study did not consider intentionality when examining the relationship between technological interference and conversation satisfaction. Yet, research examining the connections between "phubbing," or ignoring their partner while using a mobile phone, and relationship outcomes intimates a degree of intentionality (Roberts & David, 2016). Although intentionally ignoring a partner by using a mobile phone may be possible, another possibility is that individuals are not intentionally disregarding their partner and their conflict conversation. Individuals are expected to always be "online" because of the mobility of

communication technology, particularly because of smartphones (Gergen, 2002). Such an expectation may prompt individuals to immediately react and respond to notifications from close friends, family, or colleagues; however, that does not necessarily indicate that the intention behind replying to a text message, email, or other application notification is to hurt one's partner in the immediate face-to-face context. Additional research is necessary to determine whether perceptions of intentional interference influence the effects of multicommunication on conversation satisfaction.

Conclusion

In conclusion, the role of mobile communication technologies in contemporary close relationships more generally, and conflict interactions specifically, is rapidly evolving. The mobile phone specifically has taken on a prominent role in the maintenance of close relationships. However, the mobile phone may also symbolize existing issues partners have in their relationship, especially when used during important conversations such as conflict. In some cases, mobile phone use during conflict may not be consequential for argument resolution, interaction quality, or relational well-being. In other situations, texting, using social media, or checking other mobile applications may be especially problematic. The findings from the current study extend the understanding of the conversational and relational effects of mobile phones in face-to-face interactions. The results highlight the theoretical and practical implications of mobile phone presence and use during relationally important conversations, which may have farreaching effects on relational quality.

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APPENDIX A: PRE-CONFLICT INTERACTION SURVEY MEASURES

Directions: Thank you for agreeing to participate in our study! The first set of questions in this survey are about your relationship in general. There are no incorrect answers, so please select the response option that most accurately represents how you feel about your relationship, yourself, or your partner.

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Relationship Quality – Marital Opinion Questionnaire (Huston, McHale, & Crouter, 1986) *Directions:* Below are some words and phrases which we would like you to use to describe how you feel about your satisfaction in your romantic relationship over the previous month. Please indicate your impressions of your relationship by selecting the appropriate number between the adjectives below. The closer the number is to an adjective, the more certain you are of your evaluation.

Boring						Interesting
1	2	3	4	5	6	7

Miserable						Enjoyable
1	2	3	4	5	6	7
			1			
Useless						Worthwhile
1	2	3	4	5	6	7
Lonely						Friendly
1	2	3	4	5	б	7
Discouraging						Hopeful
1	2	3	4	5	6	7
						·
Empty						Full
1	2	3	4	5	6	7
Disappointing						Rewarding
1	2	3	4	5	6	7

Doesn't give me much chance						Brings out the best in me
1	2	3	4	5	6	7

Completely dissatisfied						Completely satisfied
1	2	3	4	5	6	7

PAGE BREAK

Relationship Satisfaction

1. How satisfied are you with your relationship?

Extremely dissatisfied	Moderately dissatisfied	Slightly dissatisfied	Neither satisfied nor dissatisfied	Slightly satisfied	Moderately satisfied	Extremely satisfied
1	2	3	4	5	6	7

2. How content are you with your relationship?

Extremely discontent	Moderately discontent	Slightly discontent	Neither content nor discontent	Slightly content	Moderately content	Extremely content
1	2	3	4	5	6	7

3. How happy are you with your relationship?

Extremely unhappy	Moderately unhappy	Slightly unhappy	Neither happy nor unhappy	Slightly happy	Moderately happy	Extremely happy
1	2	3	4	5	6	7

Relational Closeness Questionnaire (Vangelisti & Caughlin, 1997)

1. How close are you to your romantic partner?

Not at all close						Extremely close
1	2	3	4	5	6	7

2. How much do you like your romantic partner?

Not at all						A great deal
1	2	3	4	5	6	7

3. How often do you talk about personal things with your romantic partner?

Very rarely						Very frequently
1	2	3	4	5	6	7

4. How important is your romantic partner's opinion to you?

Not at all important						Very important
1	2	3	4	5	6	7

5. How much do you enjoy spending time with your romantic partner?

Not at all				L		A great deal
1	2	3	4	5	6	7

6. How important is your relationship with your romantic partner?

Not at all important						Very important
1	2	3	4	5	6	7

Relational Uncertainty (Knobloch & Solomon, 1999)

Directions: Please rate how certain you are about the degree of involvement that you have in your relationship with your romantic partner CURRENTLY. Please note, you are not being asked to rate how much involvement there is in your relationship, but rather how certain you are about whatever degree of involvement you perceive. It might help if you first consider how much of each form of involvement is present in your relationship, and then evaluate how certain you are about that perception.

Completely or almost completely certain	Mostly uncertain	Slightly more uncertain than certain	Slightly more certain than uncertain	Mostly certain	Completely or almost completely certain
1	2	3	4	5	6

How certain are you about...

- 1. Your partner's feelings?
- 2. How much your partner likes you?
- 3. How much your partner wants a relationship with you?
- 4. How your partner feels about the relationship?
- 5. How important this relationship is to your partner?
- 6. Your partner's views on this relationship?
- 7. What you can or cannot say to each other in this relationship?
- 8. The boundaries for appropriate and inappropriate behavior in this relationship?
- 9. The norms for this relationship?
- 10. How you can or cannot behave around your partner?
- 11. Whether or not you and your partner feel the same way about each other?
- 12. Your feelings for your partner?
- 13. How much you like your partner?
- 14. How much you want a relationship with your partner right now?
- 15. How you feel about your relationship with your partner?
- 16. Whether or not you are committed to your partner?
- 17. How important this relationship is to you?
- 18. The current status of this relationship?
- 19. The definition of this relationship?
- 20. Your goals for the future of this relationship?

Relational turbulence (Knobloch, 2007; McLaren & Solomon, 2014)

Directions: Please consider your CURRENT relationship when answering the next set of questions.

Stable						Chaotic
1	2	3	4	5	6	7
1					-	<u>.</u>
Running smoothly						Tumultuous

Calm						Turbulent
1	2	3	4	5	6	7

Peaceful						Stressful
1	2	3	4	5	6	7

Partner interference (adapted from Solomon & Knobloch, 2001)

Directions: Please consider the extent to which your partner interferes with your tasks or goals.

Not at all	A little	A moderate amount	A lot	A great deal
1	2	3	4	5

To what extent does your partner interfere with...

- 1. the plans you make?
- 2. Your plans to attend parties and other social events?
- 3. With the amount of time you spend with your friends?
- 4. How much time you devote to your schoolwork?
- 5. The things you need to do each day?

Relationships Questionnaire 4: Conflict-Negativity (Braiker & Kelley, 1979)

Not at all	A little	A moderate amount	A lot	A great deal
1	2	3	4	5

Directions: Please respond to the following questions about your relationship with your partner.

- 1. To what extent do you and your romantic partner argue with one another?
- 2. To what extent do you try to change things about your romantic partner that bother you, such as behaviors, attitudes, and things like that?
- 3. When you and your partner argue, to what extent are the problems or arguments serious?
- 4. To what extent do you communicate negative feeling toward your partner, such as anger, dissatisfaction, frustration, and things like that?

Communication Competence – Self (adapted from Guerrero, 1994)

Directions: Please respond to the following questions about your own communication.

Not at all true of me	Slightly true of me	Moderately true of me	Very g true of me	Extremely true of me
1	2	3	4	5

- 1. I am a good communicator
- 2. I am a good listener
- 3. I do not solve problems effectively*
- 4. My communication is usually appropriate to the situation at hand.
- 5. I have a wide variety of social skills.
- 6. It is hard for me to communicate my feelings effectively.*

*Indicates a reverse-scored item.

Communication Competence – Partner (adapted from Guerrero, 1994)

Directions: Please respond to the following questions about your partner's communication.

Not at all	Slightly	Moderately	Very true	Extremely
true of my	true of my	true of my	of my	true of my
partner	partner	partner	partner	partner
1	2	3	4	5

- 1. My partner is a good communicator
- 2. My partner is a good listener
- 3. My partner does not solve problems effectively*
- 4. My partner's communication is usually appropriate to the situation at hand.
- 5. My partner has a wide variety of social skills.
- 6. It is hard for my partner to communicate his/her feelings effectively.*

*Indicates a reverse-scored item.

APPENDIX B: POST-CONFLICT INTERACTION SURVEY MEASURES

Directions: For the following questions, we would like you to consider the interaction you *just had* with your romantic partner.

Conversation Satisfaction (Hecht, 1978)

1. How satisfied were you with the conversation you just had?

Not at all satisfied	Slightly satisfied	Moderately satisfied	Very satisfied	Extremely satisfied
1	2	3	4	5

2. How well did the conversation you just had go?

Not at all	Slightly	Moderately	Very well	Extremely
well	well	well		well
1	2	3	4	5

3. How much was accomplished with the conversation you just had?

Nothing at all	A little	A moderate amount	A lot	A great deal
1	2	3	4	5

4. How pleased were you with the conversation?

Not at all pleased	Slightly pleased	Moderately pleased	Very pleased	Extremely pleased
1	2	3	4	5

5. How glad are you that you had the conversation?

Not at all	Slightly	Moderately	Very glad	Extremely
glad	glad	glad		glad
1	2	3	4	5

PAGE BREAK

Measure of Communicator Presence (MOCP)

Not at all	A little	A moderate amount	A lot	A great deal
1	2	3	4	5

Directions: For the next set of items, please consider <u>your partner's</u> behavior during the conversation you just completed.

To what extent did your partner...

- 1. have his/her attention elsewhere during the conversation?
- 2. give you his/her full attention?*
- 3. seem preoccupied with something else?
- 4. seem to pay not be paying attention?
- 5. seem more interested in what s/he was doing on his/her device than what you were saying?
- 6. miss things you said while s/he was on his/her mobile phone?
- 7. ask you to repeat what you said when s/he was on his/her mobile phone?
- 8. mishear what you said while s/he was on his/her mobile phone?
- 9. ignore something you said while s/he was on his/her mobile phone?

*Indicates a reverse-scored item.

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Perceived Resolvability (Johnson & Roloff, 1998)

Directions: Please select the number that most closely describes your feelings about the serial argument you and your partner just talked about.

Not at all						To a great extent
1	2	3	4	5	6	7

1. I believe that it will never be resolved.*

- 2. I believe that it will be resolved in the future.
- 3. I don't think that my partner will ever agree on this issue.*
- 4. I anticipate that it will always be a problem.*

*Indicates a reverse-scored item.

PAGE BREAK

Relationship Satisfaction

1. How satisfied are you with your relationship?

Extremely dissatisfied	Moderately dissatisfied	Slightly dissatisfied	Neither satisfied nor dissatisfied	Slightly satisfied	Moderately satisfied	Extremely satisfied
1	2	3	4	5	6	7

2. How content are you with your relationship?

Extremely discontent	Moderately discontent	Slightly discontent	Neither content nor discontent	Slightly content	Moderately content	Extremely content
1	2	3	4	5	6	7

3. How happy are you with your relationship?

Extremely unhappy	Moderately unhappy	Slightly unhappy	Neither happy nor unhappy	Slightly happy	Moderately happy	Extremely happy
1	2	3	4	5	6	7

PAGE BREAK

Relational Closeness Questionnaire (Vangelisti & Caughlin, 1997)

1. How close are you to your romantic partner?

Not at all close						Extremely close
1	2	3	4	5	6	7

2. How much do you like your romantic partner?

Not at all						A great deal
1	2	3	4	5	6	7

3. How often do you talk about personal things with your romantic partner?

Very rarely						Very frequently
1	2	3	4	5	6	7

4. How important is your romantic partner's opinion to you?

Not at all important						Very important
1	2	3	4	5	6	7

5. How much do you enjoy spending time with your romantic partner?

Not at all						A great deal
1	2	3	4	5	6	7

6. How important is your relationship with your romantic partner?

Not at all important						Very important
1	2	3	4	5	6	7

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Directions: For the following questions, please consider how you and your partner use communication technology in your relationship.

Cell Phone Rules Scale (CPRS; adapted from Miller-Ott, Kelly, & Duran, 2012)

Directions: Please record the extent to which you and your partner have had discussions about acceptable cell phone usage in your current romantic relationship.

Not at all Slightly important		Moderately important	Very important	Extremely important	
1	2	3	4	5	

How important is it that you and your partner...

- 1. Limit texts to others when you are together
- 2. Limit calls to others when you are together.
- 3. Do not text others when you are together.
- 4. Do not call others when you are together.
- 5. Do not have long phone conversations when you are together.
- 6. Do not text others when at dinner together.
- 7. Do not call others when at dinner together.
- 8. Limit social media activity when you are together.*
- 9. Limit checking emails when you are together.*
- 10. Limit checking phone notifications when you are together.*
- 11. Do not text others when having important conversations.*
- 12. Do not call others when having important conversations.*
- 13. Limit phone use when having important conversations.*

*Added to original items

Multicommunication (Seo et al., 2015)

Directions: Please record the extent to which you and your partner perform other communication activities during face-to-face conversations with each other.

Never	Never Sometimes		Most of the time	Always	
1	2	3	4	5	

When interacting with your partner in-person, how often do you communicate with others via...

- 1. Social media (e.g., Facebook, Twitter, Instagram)?
- 2. Email?
- 3. Text message or instant message?
- 4. Mobile messaging applications (e.g., Snapchat)?

5. Voice calls (i.e., on the phone)?

When interacting with you in-person, how often does your partner communicate with others via...

- 1. Social media (e.g., Facebook, Twitter, Instagram)?
- 2. Email?
- 3. Text message or instant message?
- 4. Mobile messaging applications (e.g., Snapchat)?
- 5. Voice calls (i.e., on the phone)?

PAGE BREAK

- 1. Did your partner use his/her mobile phone during the conversation you just finished?
 - _____Yes _____No

Note. Participants will answer next four questions only if a yes response is provided.

Partner technological interference (adapted from Solomon & Knobloch, 2001)

Directions: Please think about the conversation you just had and indicate the degree the following statements reflect the conversation you just had with your partner.

Not at all	A little	A moderate amount	A lot	A great deal	
1	2	3	4	5	

How much did your partner's use of technology...

- 1. Interfere with your conversation?
- 2. Get in the way of the things you wanted to say?
- 3. Affect the way your s/he listened to you during your conversation?
- 4. Interfere with the quality of your conversation?

Modified Mobile Phone Problem Use Scale (MPPUS; Bianchi & Phillips, 2005)

Never	Never Sometimes		Most of the time	Always
1	2	3	4	5

Directions: Please record how your typical cell phone behaviors.

- 1. How often do you feel anxious when you have not checked your phone for messages?
- 2. How often do you feel anxious if you have not looked at your phone for social media notifications?
- 3. How often do you feel anxious if you have not received a call or message in some time?
- 4. How often do you think about using your phone when you are not using it?
- 5. How often do you leave your phone in another room?

Realism check:

1. How realistic is it that you and your partner have a conversation like the one you just completed?

Not at all realistic	Slightly realistic	Moderately realistic	Very realistic	Extremely realistic
1	2	3	4	5

2. How similar was the conversation you just completed to other conversations you and your partner have?

Not at all similar	Slightly similar	Moderately similar	Very similar	Extremely similar
1	2	3	4	5

Novelty of manipulation

Extremely uncommon	Moderately uncommon	Slightly uncommon	Neither common nor uncommon	Slightly common	Moderately common	Extremely common
1	2	3	4	5	6	7

How common or uncommon is it for you to have a conversation...

- 1. Without your cell phone?
- 2. With your phone sitting on a table with the ringer on?
- 3. During which you also check your email?
- 4. During which you also send or respond to text messages?
- 5. During which you use social media?

APPENDIX C: DEMOGRAPHIC ITEMS

Please tell us about yourself.

1. What is your sex?

_____ Female _____ Male

- 2. What is your age (in years)? _____
- 3. Do you consider yourself to be...

_____Heterosexual or straight

____ Gay

_____ Lesbian

_____Bisexual

4. Do you consider yourself to be transgender?

5. If you are transgender, are you...

_____ Transgender, male to female

_____ Transgender, female to male

_____ Transgender, non-conforming

_____ No, not transgender

- 6. How long have you been in your current relationship?
 - _____Years

_____ Months

- 7. What is your ethnicity?
 - _____ Caucasian/White non-Hispanic

_____ Black non-Hispanic

_____ Hispanic/Latino or Latina

_____ Asian/Asian American

_____ Pacific Islander

_____Native American

_____ Other (please specify)

APPENDIX D: IDENTIFYING SERIAL ARGUMENT TOPICS

After completing the pre-interaction survey, members of the dyad will be informed to stay in the room. An investigator will instruct each participant to identity up to five topics of conflict in their relationship.

A member of the research team will read the following script before handing the participant a form to write topics:

"It is very common that people in a dating relationship have disagreement and arguments. Sometimes partners may argue or engage in conflict about the same topic more than once at different times. We would like you to list up to five topics of conflict you have with your partner in the current dating relationship that you have had at least two arguments about over the last month. We will give you up to five minutes to think about topics, but please open the door as soon as you have identified your topics. If you need more time, let us know"

After confirming that the participant knows what to do, the investigator will leave the participant alone to identify up to five topics for discussion. Afterward, the investigator will collect the sheet from each participant. The investigator will determine the topic the participants will discuss by identifying which, if any, topics they agreed on and select the first topic of mutual agreement. If participants did not agree on any topic, a topic will be randomly selected.

APPENDIX E: SERIAL ARGUMENT IDENTIFICATION FORM

Please identify up to five (5) *current* serial argument topics that you and your partner will likely argue about in the future. For your convenience, we have included a definition of a serial argument below. Please review the definition before listing your topics below.

Definition: "A *serial argument* exists when individuals engage or argue in conflict about the same topic over time, during which they participate in several (at least two) arguments about the topic."

These topics can be serious or relatively minor arguments, but they should be issues that you are not fully resolved.

Topic #1: Topic #2:		
Topic #3:		
Topic #4:		
Topic #5:	 	

APPENDIX F: RANDOM ASSIGNMENT CONDITION INSTRUCTIONS

Instruction for the Condition A that does not allow technology:

Before participants arrive at the lab, the researchers will place a television remote control on the table where the recorded conversations will take place.

"Please turn off or silence your cell phone and other technological devices, and leave them here on this waiting room table. You can put your backpacks (or purses) here. This lab is secure and locked, so your belongings will be safe here."

The researchers will then escort participants to separate rooms to complete informed consent procedures.

Following informed consent, the researcher will randomly select one of the participants to be a confederate in the study.

"At this time we'd like to send you a link to some supplementary information relevant to the current study. With your permission, we would like your phone number so that was can send you a text message with the link to the information. You do not need to read the information now, but it may be useful for you after you finish the study. Please do not inform your partner that you received a message from the research team with supplementary information."

Text message to confederate: "For more information that is relevant to the study you are participating in, please review the content in the following link: bit.ly/2kTPw73."

Do you have any questions for us?"

Instruction for Condition B that asks confederate to not use cell phone

The researchers will escort participants from the waiting room to two individual rooms to complete informed consent procedures. Following consent procedures, one randomly selected participant will be instructed of their role as a confederate in the study.

"Sometimes researchers will ask participants in studies to be a confederate and perform specific behaviors. In the present study, we have selected you to be our confederate. What this requires of you is that you receive messages from the research team on your cell phone during the conversation you will soon be having with your partner. With your permission, we would like your phone number so that we can send text messages throughout the conversation. If your partner asks about your phone, you should not tell him/her about your role as a confederate in our study.

For your participation as a confederate, we will enter you into an additional drawing for a \$25 Amazon gift card. More specifically, you will receive an additional entry into the drawing for each message from the research team that you do not respond to.

Do you have any questions for us?"

Instruction for Condition C that asks confederate to use cell phone:

The researchers will escort participants from the waiting room to two individual rooms to complete informed consent procedures. Following consent procedures, one randomly selected participant will be instructed of their role as a confederate in the study.

"Sometimes researchers will ask participants in studies to be a confederate and perform specific behaviors. In the present study, we have selected you to be our confederate. What this requires of you is that you actively use your cell phone during the conversation you will soon be having with your partner. With your permission, we would like your phone number so that we can send text messages to you with instructions to complete loosely defined tasks on your phone. These tasks will involve checking text messages, sending text messages, checking/sending emails, or going on whichever social media accounts you most frequently use. You should turn your phone on audibly as you normally would when at home when with your partner. We will send you three text messages throughout your interaction and you should start the task within one minute of receiving the message. If your partner asks what you are doing on your phone, you may tell him/her what you are doing but do not tell your partner about your role as a confederate in our study.

For your participation as a confederate, we will enter you into an additional drawing for a \$25 Amazon gift card. More specifically, you will receive an additional entry into the drawing for each task you start on your phone within one minute of our original text message.

Do you have any questions for us?"

APPENDIX G: TIMELINE OF TEXT MESSAGES TO CONFEDERATES

Condition B

Time	Message
2:00	Hey! Do you want to grab lunch tomorrow?
4:30	Why aren't you answering?
7:00	Hello?

Condition C

Time	Message
2:00	Please check your text messages and either respond to outstanding text messages or start new conversations with your friends.
4:30	Please check your email and respond to at least one outstanding email.
7:00	Please scroll through Facebook, Twitter, Instagram and comment, like, or favorite content as you scroll.

Note. Tasks derived from Miller-Ott & Kelly (2015).

APPENDIX H: COUNSELING INFORMATION SHEET

This is a list of support groups and counseling services on the University of Illinois campus. **Counseling Center**

610 E. John St., Champaign, IL 61820 (217) 333-3704 www.counselingcenter.illinois.edu

McKinley Mental Health Clinic:

1109 S. Lincoln Ave., 3rd floor, Urbana, IL 61801 (217) 333-2705 http://www.mckinley.illinois.edu/Clinics/mental_health.htm

Psychological Services Center:

505 E. Green St., 3rd floor, Champaign, IL 61820 (217) 333-0064 http://www.psc.illinois.edu/

APPENDIX I: DEBRIEF SCRIPT

The debrief script varies by the randomly assigned condition. The key difference between conditions is the explanation of the confederate's behavior in Conditions A and B. All scripts contain text that explains (a) where participants can go for counseling services and (b) who to contact if they would like more information about the results of the study.

Condition A:

Thank you again for participating in our study. As you already know, the purpose of this study was to better understand how romantic partners communicate during conflict. In this study, [NAME OF CONFEDERATE] acted as a confederate. S/he received a text message from the research team to a link to information that is relevant to the study, but s/he was instructed to not discuss this with you during the study.

Of course, engaging in conflict can be stressful. If you continue to feel upset or anxious following your participation in this study, there are a number of resources on the University of Illinois campus that are free of charge and can help you deal with difficult emotions. We prepared a handout with three such services (the Counseling Center, McKinley Mental Health Clinic, and the Psychological Services Center) that you could contact if you continue to be upset about the conversations you had today.

If you are interested in finding out more about the results of this study, you can email David Roaché (roache2@illinois.edu), and he would be happy to update you once we finish collecting and analyzing this data.

Condition B:

Thank you again for participating in our study. As you already know, the purpose of this study was to better understand how romantic partners communicate during conflict. In particular, we were interested in understanding how the active use of mobile phones may (or may not) impact romantic partners' communication patterns during conflict conversations. In this study, [NAME OF CONFEDERATE] acted as a confederate. S/he gave us his/her phone number so that we could text message him/her throughout your interaction.

Of course, engaging in conflict can be stressful. If you continue to feel upset or anxious following your participation in this study, there are a number of resources on the University of Illinois campus that are free of charge and can help you deal with difficult emotions. We prepared a handout with three such services (the Counseling Center, McKinley Mental Health Clinic, and the Psychological Services Center) that you could contact if you continue to be upset about the conversations you had today.

If you are interested in finding out more about the results of this study, you can email David Roaché (roache2@illinois.edu) and he would be happy to update you once we finish collecting and analyzing this data.

Condition C:

Thank you again for participating in our study. As you already know, the purpose of this study was to better understand how romantic partners communicate during conflict. In particular, we were interested in understanding how the active use of mobile phones may (or may not) impact romantic partners' communication patterns during conflict conversations. In this study, [NAME OF CONFEDERATE] acted as a confederate. S/he was instructed to perform specific tasks on his/her cell phone to simulate real-life behaviors during everyday conversations.

Of course, engaging in conflict can be stressful. If you continue to feel upset or anxious following your participation in this study, there are a number of resources on the University of Illinois campus that are free of charge and can help you deal with difficult emotions. We prepared a handout with three such services (the Counseling Center, McKinley Mental Health Clinic, and the Psychological Services Center) that you could contact if you continue to be upset about the conversations you had today.

If you are interested in finding out more about the results of this study, you can email David Roaché (roache2@illinois.edu) and he would be happy to update you once we finish collecting and analyzing this data.

APPENDIX J: INFORMED CONSENT DOCUMENTS

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



Department of Communication

College of Liberal Arts and Sciences 3001 Lincoln Hall 702 South Wright Street Urbana, IL 61801

Responsible Principal Investigator: John Caughlin, Ph.D., University of Illinois at Urbana-Champaign, Department of Communication

Other investigator: David Roaché, M.A., University of Illinois at Urbana-Champaign, Department of Communication

Purpose of study: The objective of this research is to better understand romantic partners' communication about conflict.

Eligibility: To be eligible for participation, you must be (a) currently in a romantic relationship of at least one month, (b) both you and your romantic partner should be willing to participate in a videotaped discussion about current conflict topics in your relationship, and (c) you must both own a smart phone. You must be willing to answer survey questions about your relationship and the conversation itself. You must also allow faculty, graduate student, and undergraduate student members of the research team to view the video recording of their conversation for transcription and analysis purposes. Males and females of any race or ethnicity may participate as long as they are 18 years of age or older.

Procedures: To participate in this study, you are asked to engage in an interaction with your romantic partner about a current conflict topic. Before your interaction, both you and your partner will individually identify topics of conflict in your relationship. You and your partner will then spend ten minutes discussing each topic, as directed by a researcher who will leave the room during both interactions. Before and after your interaction, both you and your partner will independently complete surveys. These surveys will take approximately 10-15 minutes. The last survey you will take will require you to watch the conflict conversation while answering the questions. Following the completion of your second survey, you and your partner will be debriefed on the content of the study. Your participation in this study will be approximately 60 minutes total.

Discomforts and risks: The risks you will encounter by participating in this research are comparable to those you would experience in everyday life. Since you will be discussing possibly difficult topics of conflict with your partner, however, the nature of the study may cause distress or discomfort within your romantic relationship. You may end your participation at any time, and you may skip any question you do not feel comfortable answering. Although your

interaction will be video recorded, you may rescind your consent at any time, and your video file will be deleted and not used for further research.

Benefits: Participation might allow you and your partner to explore and to discuss difficult topics in your relationship. Furthermore, participation in this study might benefit others by providing a framework for understanding partner conflict.

Remuneration: In exchange for your time and participation in this study, you will receive course extra credit in the amount as determined by your instructor. Extra credit will be worth not more than 2% of your final course grade.

Statement of confidentiality: Our research team will take steps to protect the confidentiality of what you share in your interaction. Faculty, staff, students, and others with permission or authority to see your study information will maintain its confidentiality to the extent permitted and required by laws and university policies. Although your interaction will be recorded, audio and video files will be stored on Box.com and retained for five years after the final publication of the study. All data, including the video recording and your survey answers, will be destroyed five years after the publication of the study. In addition, your personal information will not be associated with your survey answers. Only investigators will have access to the recorded interviews, survey data, and transcripts. Furthermore, your survey answers will be kept completely confidential from your romantic partner. Finally, you have the right to grant permission to allow your video recording to be disseminated for use in scholarly meetings. If you do not consent to the dissemination of your video, then only members of the research team will review and analyze the recording.

Who to contact: If at any point you have questions or if you feel you have been harmed by this research and/or if you feel you require counseling or other professional help, please contact David Roaché at roache2@illinois.edu. If you have any questions about your rights as a participant in this study or any concerns or complaints, please contact the University of Illinois Institutional Review Board at 217-333-2670 or via email at irb@illinois.edu.

Cost of participating: There are no costs for participating in this study.

Voluntariness: Participation in this study is voluntary and you may discontinue participation at any time without forfeiting your compensation.

Dissemination: Information from this project may be summarized in a report for a class project, conference presentations, dissertation work, journal publications, or other academic writings. The summaries will not contain any personally identifiable information.

By signing below, I assert that I meet the following requirements:

- I am 18 years of age or older;
- I have read and understand the above consent document;
- I voluntarily agree to participate in the study; and
- I am willing to be video and audio-recorded.

Please print your name

Please sign your name

Date (MM/DD/YYYY)

UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN



Department of Communication

College of Liberal Arts and Sciences 3001 Lincoln Hall 702 South Wright Street Urbana, IL 61801

Responsible Principal Investigator: John Caughlin, Ph.D., University of Illinois at Urbana-Champaign, Department of Communication

Other investigator: David Roaché, M.A., University of Illinois at Urbana-Champaign, Department of Communication

Purpose of study: The objective of this research is to better understand romantic partners' communication about conflict.

Eligibility: To be eligible for participation, you must be (a) currently in a romantic relationship of at least one month, (b) both you and your romantic partner should be willing to participate in a videotaped discussion about current conflict topics in your relationship, and (c) you must both own a smart phone. You must be willing to answer survey questions about your relationship and the conversation itself. You must also allow faculty, graduate student, and undergraduate student members of the research team to view the video recording of their conversation for transcription and analysis purposes. Males and females of any race or ethnicity may participate as long as they are 18 years of age or older.

Procedures: To participate in this study, you are asked to engage in an interaction with your romantic partner about a current conflict topic. Before your interaction, both you and your partner will individually identify topics of conflict in your relationship. You and your partner will then spend ten minutes discussing each topic, as directed by a researcher who will leave the room during both interactions. Before and after your interaction, both you and your partner will independently complete surveys. These surveys will take approximately 10-15 minutes. The last survey you will take will require you to watch the conflict conversation while answering the questions. Following the completion of your second survey, you and your partner will be debriefed on the content of the study. Your participation in this study will be approximately 60 minutes total.

Discomforts and risks: The risks you will encounter by participating in this research are comparable to those you would experience in everyday life. Since you will be discussing possibly difficult topics of conflict with your partner, however, the nature of the study may cause distress or discomfort within your romantic relationship. You may end your participation at any time, and you may skip any question you do not feel comfortable answering. Although your interaction will be video recorded, you may rescind your consent at any time, and your video file will be deleted and not used for further research.

Benefits: Participation might allow you and your partner to explore and to discuss difficult topics in your relationship. Furthermore, participation in this study might benefit others by providing a framework for understanding partner conflict.

Remuneration: In exchange for your time and participation in this study, you will also receive a \$5 gift card to a national retailer.

Statement of confidentiality: Our research team will take steps to protect the confidentiality of what you share in your interaction. Faculty, staff, students, and others with permission or authority to see your study information will maintain its confidentiality to the extent permitted and required by laws and university policies. Although your interaction will be recorded, audio and video files will be stored on Box.com and retained for five years after the final publication of the study. All data, including the video recording and your survey answers, will be destroyed five years after the publication of the study. In addition, your personal information will not be associated with your survey answers. Only investigators will have access to the recorded interviews, survey data, and transcripts. Furthermore, your survey answers will be kept completely confidential from your romantic partner. Finally, you have the right to grant permission to allow your video recording to be disseminated for use in scholarly meetings. If you do not consent to the dissemination of your video, then only members of the research team will review and analyze the recording.

Who to contact: If at any point you have questions or if you feel you have been harmed by this research and/or if you feel you require counseling or other professional help, please contact David Roaché at roache2@illinois.edu. If you have any questions about your rights as a participant in this study or any concerns or complaints, please contact the University of Illinois Institutional Review Board at 217-333-2670 or via email at irb@illinois.edu.

Cost of participating: There are no costs for participating in this study.

Voluntariness: Participation in this study is voluntary and you may discontinue participation at any time without forfeiting your compensation.

Dissemination: Information from this project may be summarized in a report for a class project, conference presentations, dissertation work, journal publications, or other academic writings. The summaries will not contain any personally identifiable information.

By signing below, I assert that I meet the following requirements:

- I am 18 years of age or older;
- I have read and understand the above consent document;
- I voluntarily agree to participate in the study; and
- I am willing to be video and audio-recorded.

Please print your name

Please sign your name

Date (MM/DD/YYYY)

APPENDIX K: ADDITIONAL PERMISSIONS FOR VIDEO RECORDINGS

Permission to Display Videos in Scholarly Meetings

PARTICIPANT'S COPY

The video recordings collected in this research may be displayed in presentations of our findings during scholarly meetings (e.g., academic conferences, seminars), but only if both you and your romantic partner grant written permissions for these activities. We will not use your videos if only one of you gives permission. Your video recordings will NOT be shown in undergraduate classes or other non-academic events in any way. Please also note that <u>you can still participate in the study and get remuneration even if you do not give permission to display your videos</u>. If you give permission today, but change your mind later, you are free to rescind your consent by contacting us at <u>roache2@illinois.edu</u>. Since only numerical codes will be used to name the video recordings, we will write the numerical code that has been assigned to you and your partner on a copy of this permission letter. *We highly recommend that you keep your copy and the numeric code*, because you will be asked to provide the numerical code if they hope to have their video recordings removed from the pool of videos we may disseminate. Your video will not be used in the abovementioned activities if one or both of you and your partner rescind your consent later.

Please check the appropriate box below:

- □ I DO give permission to display video recordings of me and my partner's interaction in scholarly meetings.
- □ I DO NOT give permission to display video recordings of me and my partner's interaction in scholarly meetings.

Name (PRINT):	 	
Signature:	 	
Date:		

COUPLE #:

RESEARCHER'S COPY

The video recordings collected in this research may be displayed in presentations of our findings during scholarly meetings (e.g., academic conferences, seminars), but only if both you and your romantic partner grant written permissions for these activities. We will not use your videos if only one of you gives permission. Your video recordings will NOT be shown in undergraduate classes or other non-academic events in any way. Please also note that <u>you can still participate in the study and get remuneration even if you do not give permission to display your videos</u>. If you give permission today, but change your mind later, you are free to rescind your consent by contacting us at <u>roache2@illinois.edu</u>. Since only numerical codes will be used to name the video recordings, we will write the numerical code that has been assigned to you and your partner on a copy of this permission letter. *We highly recommend that you keep your copy and the numeric code*, because you will be asked to provide the numerical code if they hope to have their video recordings removed from the pool of videos we may disseminate. Your video will not be used in the abovementioned activities if one or both of you and your partner rescind your consent later.

- □ I DO give permission to display video recordings of me and my partner's interaction in scholarly meetings.
- □ I DO NOT give permission to display video recordings of me and my partner's interaction in scholarly meetings.

Name (PRINT):	
Signature:	
Date:	

Additional Permissions for Transcribing/Coding by Undergraduates Students

PARTICIPANT'S COPY

The video recordings collected in this research will be transcribed and analyzed. To accomplish this, the research team will employ undergraduate research assistants to assist with transcribing and coding. Given the sensitive nature of the conversations, the research team will make every effort to ensure that students who have *no relationship with you or your partner* or *knows you or your partner* (i.e., has had classes with you) will not view, transcribe, or analyze your recordings. We will not use undergraduate research assistants unless both you and your partner give consent. If you give permission today, but change your mind later, you are free to rescind your consent by contacting us at <u>roache2@illinois.edu</u>. Since only numerical codes will be used to name the video recordings, we will write the numerical code that has been assigned to you and your partner on a copy of this permission letter. *We highly recommend that you keep your copy and the numeric code*, because you will be asked to provide the numerical code if they hope to have their video recordings removed from the pool of videos we may disseminate. Your video will not be used in the abovementioned activities if one or both of you and your partner rescind your consent later.

Please check the appropriate box below:

- □ I DO give permission for undergraduate research assistants to analyze me and my partner's interaction.
- □ I DO NOT give permission for undergraduate research assistants to analyze me and my partner's interaction.

Name (PRINT	'):	 	
Signature:		 	
Date:			

COUPLE #: _____

RESEARCHER'S COPY

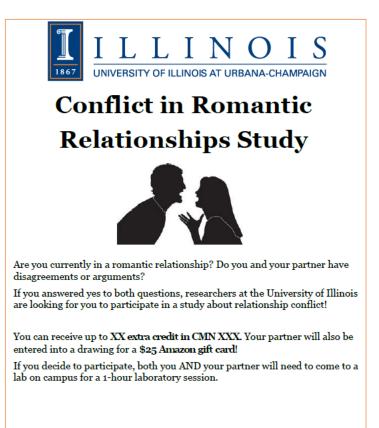
The video recordings collected in this research will be transcribed and analyzed. To accomplish this, the research team will employ undergraduate research assistants to assist with transcribing and coding. Given the sensitive nature of the conversations, the research team will make every effort to ensure that students who have *no relationship with you or your partner* or *knows you or your partner* (i.e., has had classes with you) will not view, transcribe, or analyze your recordings. We will not use undergraduate research assistants unless both you and your partner give consent. If you give permission today, but change your mind later, you are free to rescind your consent by contacting us at <u>roache2@illinois.edu</u>. Since only numerical codes will be used to name the video recordings, we will write the numerical code that has been assigned to you and your partner on a copy of this permission letter. *We highly recommend that you keep your copy and the numeric code*, because you will be asked to provide the numerical code if they hope to have their video recordings removed from the pool of videos we may disseminate. Your video will not be used in the abovementioned activities if one or both of you and your partner rescind your consent later.

Please check the appropriate box below:

- □ I DO give permission for undergraduate research assistants to analyze me and my partner's interaction.
- □ I DO NOT give permission for undergraduate research assistants to analyze me and my partner's interaction.

Name (PRINT): _	
Signature:	
Date:	

APPENDIX L: RECRUITMENT MATERIALS



IF INTERESTED, PLEASE CONTACT UofIConflictStudy@gmail.com



Conflict in Romantic Relationships Study



Are you currently in a romantic relationship? Do you and your partner have disagreements or arguments?

If you answered yes to both questions, researchers at the University of Illinois are looking for you to participate in a study about relationship conflict!

Both you and your partner will receive **\$5 gift Amazon gift cards**. We will also be giving away one **\$25 Amazon gift card** in a lottery.

If you decide to participate, both you AND your partner will need to come to a lab on campus for a 1-hour laboratory session.

IF INTERESTED, PLEASE CONTACT UofIConflictStudy@gmail.com