Intimate Conversation Leads to Greater Social Bonding in Both Face-to-Face and Texting Exchanges

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Texting has become a common way for people to communicate with one another, yet its effects on social bonding are not well understood. It is important to understand how texting affects intimacy development because intimacy is important for fostering feelings of validation, understanding, and caring within a relationship (Reis & Shaver, 1998). Using the fast-friends paradigm developed by Aron and colleagues (1997), the present research (N = 568) examines if intimacy can be developed over text message, and how texting communication compares to face-to-face interactions. Results from this study suggest that, even though in-person conversation is generally better for social bonding than texting, having an intimate conversation over text promotes social bonding to a greater extent than small-talk over text. When comparing face-to-face and texting communication more directly, results from this study suggest that having an intimate texting conversation leads to a similar degree of social bonding as having a small-talk face-to-face conversation. These findings have important implications for understanding how people should engage in conversations in daily life. This study also provides evidence that the fast-friends paradigm can be successfully implemented through a text-based medium, which could be used to carry out text-based intimacy interventions.

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1.0 Introduction

Mobile phones have become a ubiquitous part of daily life and have changed how people interact with one another. Nearly all American adults own a cell phone (96%) or smartphone (81%; Pew Research Center, 2019). In one study, 88% of American adults stated that their cell phone helps them connect with friends and family to arrange plans (Lenhart, 2010). Researchers have referred to this reliance on mobile devices as "tethering," such that these devices are "always-on" and "always-on-you" (Turkle, 2011; 2013). Texting is the second most common mobile phone activity, performed by 80% of American adults who own a cell phone (Duggan, 2012). Among American adult cell phone owners, texting is a common activity across all demographic groups (with the exception of those 65 years and older) and is nearly universal (97%) among young adults between the ages of 18 and 29 years (Duggan, 2012). Texting is also prevalent among teens, such that those with a smartphone are more likely to contact their closest friends by texting (58%) than by social media (17%) or phone call (10%; Anderson, 2015). High school seniors spend about two hours a day texting (Twenge et al., 2018). As people spend a large amount of time texting, it raises a serious question regarding how this activity affects interpersonal communication and the quality of their social relationships.

The advent of mobile phone technologies has resulted in a dramatic increase in the percentage of interactions that occur via text message. However, the consequences of text communication on social bonding are not well understood. Text messaging has the advantage of allowing people to communicate with relationship partners even when they are not physically present. However, it is possible that reliance on text messaging may be eroding intimacy in close relationships. Concerns stem from the depleted set of information received via text message as

compared to face-to-face interactions. Texting removes important information such as gestures, posture, tone of voice, facial expressions, and touch, while also reducing synchronicity (Burgoon et al., 2002; Ramirez & Burgoon, 2004). Therefore, texting may lead to more superficial conversations than those that occur face-to-face. On the other hand, some researchers have suggested that communicating over text message may allow a person to have more intimate interactions because it may remove barriers to engaging in free self-expression (Bargh et al., 2002; McKenna et al., 2002). For example, a person may be more comfortable sharing something embarrassing over text message than face-to-face. Thus, an important research question is whether intimate conversations can and should be carried out while texting and whether doing so can promote social bonding.

To test this, participants in the present study will have an intimate conversation or engage in small-talk. Participants will carry out these conversations face-to-face or via text message. This experiment will help to understand whether conversations result in more social bonding when they are intimate, when they are face-to-face, or when they share both features. In other words, the present study will examine main effects of intimacy and conversation medium, as well as the possible interaction between the two on measures that indicate social bonding.

1.1 Self-Disclosure and the Fast-Friends Paradigm

Self-disclosure is considered essential for the development of intimacy and closeness in relationships (Altman & Taylor, 1973; Aron et al., 1997; Morton, 1978; Reis & Shaver, 1988). In their social penetration theory, Altman and Taylor (1973) discuss two complementary aspects of self-disclosure—breadth and depth. Breadth encompasses the number of different topics being

discussed, such as interests, hobbies, family, friends, and career trajectory. Depth accounts for how personal and intimate each topic is and may include discussing family problems, life ambitions, or one's deepest fears. While each aspect is necessary for exchanging information, depth is more important for the development of closeness and intimacy because it goes beyond discussing factual information. These aspects of self-disclosure provide the foundation for two different types of self-disclosure—descriptive and evaluative. Descriptive self-disclosure involves revealing factual information about the self, whereas evaluative self-disclosure is emotional and involves expressing one's inner feelings, values, and beliefs (Altman & Taylor, 1973; Morton, 1978; Reis & Shaver, 1988). Although both types of disclosure expose aspects of the self, the latter creates greater intimacy by providing an opportunity for the listener to accept, support, and affirm central aspects of the speaker's self-view (Reis & Shaver, 1988).

Reciprocity is another feature of self-disclosure that is necessary for the development of intimacy (Altman & Taylor, 1973). When a person self-discloses information, the other person should then reciprocate by also disclosing equally intimate information. These aspects of self-disclosure have been explained in the interpersonal process model of intimacy (Reis & Shaver, 1998), which states that intimacy is an interpersonal process that emphasizes the essential roles of self-disclosure and partner responsiveness, resulting in feelings of validation, understanding, and caring for one another. In social interaction, the intimacy process begins when one person (the speaker) reveals personally relevant information to another person (the listener). Once the speaker has revealed their emotions and beliefs, it is then the role of the listener to be responsive by also engaging in self-disclosure, as well as exhibiting nonverbal behaviors that indicate closeness (e.g., eye-contact, proximity, touch; Argyle & Dean, 1965; Reis & Shaver, 1988). This process then continues in a reciprocal fashion as both partners continue to disclose and respond to one another,

leading to greater levels of closeness and more intimate interaction (Lakey & Orehek, 2011; Reis & Shaver, 1988). The interpersonal process model of intimacy (Reis & Shaver, 1988) has received empirical support showing that self and partner disclosure are significant predictors of intimacy on an interaction-by-interaction basis (Collins & Miller, 1994; Derlega et al., 1993; Laurenceau et al., 1998).

Research has experimentally shown that increasing intimate self-disclosure in face-to-face interactions leads to interpersonal closeness. In a series of studies, Aron and colleagues (1997) developed the fast-friends paradigm to facilitate closeness and intimacy between strangers. In this initial study, unacquainted dyads were seated together and given instructions for their task, which consisted of having a conversation for 45-minutes using 36 topics provided by the experimenters (Aron et al., 1997). Dyads were randomly assigned to one of two conditions: small-talk or intimate (closeness). Dyads in the former condition were assigned less personal topics with minimal disclosure, similar to small-talk. Dyads in the latter condition were given topics designed to promote evaluative self-disclosure and intimacy-associated behaviors, which were intended to increase feelings of subjective closeness. The conversation topics were distributed in three sets of 12 topics and dyads spent 15-minutes discussing each set. For the high-intimacy condition, each set elicited more intimate self-disclosure than the previous set. Organizing the topics into three sets ensured that all dyads in the intimate condition would experience increasingly intimate conversations, even if their conversation moved at a slower pace. In post-interaction questionnaires, participants in the intimate condition reported greater levels of closeness toward their conversation partner compared to those in the small-talk condition. Similar findings have been replicated in a variety of face-to-face interactions, including those with a romantic partner (Slatcher, 2010; Welker et al., 2014) or an outgroup member (Dys-Steenbergen et al., 2016;

Mendoza-Denton & Page-Gould, 2008; Page-Gould et al., 2014; Page-Gould et al., 2008; Wright et al., 1997).

1.2 Face-to-Face and Computer-Mediated Communication

Research has shown that text-based computer-mediated communication (CMC) may be less conducive to relational outcomes. In one such study (Mallen et al., 2003), unfamiliar dyads were randomly assigned to converse face-to-face or through instant messaging (IM) for 20-minutes using the fast-friends paradigm (Aron et al., 1997). When compared to those who interacted via IM, dyads who engaged in face-to-face communication self-disclosed more, were more satisfied with the interaction, felt closer to their partner, and experienced less conflict during the course of the conversation. However, because the experiment lacked a small-talk control group, we cannot determine whether the fast-friends paradigm increased intimacy more than small-talk would have for dyads interacting via IM. Similar studies comparing face-to-face and CMC interactions have also found that interactions occurring entirely or initially face-to-face resulted in greater enjoyment (Okdie et al., 2011), liking (Okdie et al., 2011; Sprecher, 2014; Sprecher & Hampton, 2017), closeness (Okdie et al., 2011; Sprecher, 2014; Sprecher & Hampton, 2017), perceived partner responsiveness (Sprecher, 2014), and perceived similarity (Sprecher & Hampton, 2017)

Importantly, the studies reviewed thus far did not include a comparison between small-talk and intimate conversations when using CMC. Research thus far has provided a glimpse into how conversations of different intimacy levels occurring over different mediums may compare to one another, but further research is needed. The present study expands upon previous research using the fast-friends paradigm in face-to-face and CMC interactions by using a texting platform instead

of the previously used IM, adding a control (small-talk) condition, and investigating multiple indicators of social bonding.

1.3 The Present Research

The present study builds on previous research by comparing social bonding in face-to-face and text-based CMC interactions via the fast-friends paradigm. Previous studies using this method point to downsides of CMC compared to face-to-face interactions, such as less self-disclosure (Mallen et al., 2003) and reduced feelings of interpersonal closeness (Mallen et al., 2003; Okdie et al., 2011; Sprecher, 2014; Sprecher & Hampton, 2017). However, it has not yet been determined whether intimate communication via texting produces greater social bonding than small-talk. People spend considerable time texting and therefore it is important to understand whether such interaction quality can be improved via intimate conversations. This is an important research question because having an intimate conversation is one of the best-known methods for establishing social bonding. Thus, the present research compares face-to-face and texting communication for both intimate and casual conversations. This study accounts for gaps in the literature that have not been addressed by similar studies (e.g., Mallen et al., 2003), such as using texting as a source of CMC, including a control (small-talk) condition, and measuring multiple indicators of social bonding.

1.3.1 Communicating via texting

Participants in the CMC condition of this study communicated using text messaging on a smartphone. It has been typical for studies of this nature to use an IM chat room on a computer as a means of CMC (Mallen et al., 2003; Okdie et al., 2011; Sprecher, 2014; Sprecher & Hampton, 2017). However, texting is a much more common form of communication (Anderson, 2015; Lenhart, 2015). Therefore, having participants in the CMC condition use a smartphone instead of a computer makes the interaction more realistic.

1.3.2 Control condition

Previous studies comparing text-based CMC to face-to-face communication using the fast-friends paradigm have neglected to include a control small-talk condition. Although studies have shown that the fast-friends paradigm does increase closeness for face-to-face interactions (e.g., Aron et al., 1997), this possibility has not been adequately tested for text-based CMC. Thus, the present research is the first large scale study to investigate whether the fast-friends paradigm increases social bonding as compared to small-talk when texting. It may be the case that the fast-friends paradigm does not improve texting conversations as it does with communication occurring face-to-face. Alternatively, intimate topics may improve texting conversations to a similar or greater extent than face-to-face communication. The inclusion of this control condition also allows this study to compare intimate conversations that occur when texting to small-talk that occurs during face-to-face interactions. It may be the case that intimacy is better than small-talk regardless of medium. Alternatively, face-to-face communication may be better than texting regardless of

conversation intimacy. Another possibility is that intimate texting "catches up" to small-talk face-to-face interactions.

1.3.3 Multiple indicators of social bonding

Previous research investigating the effects of intimate conversation and text-based CMC on relational well-being has mainly focused on outcomes including self-disclosure, perceived partner responsiveness, liking, closeness, and satisfaction or enjoyment. For instance, we like others more and feel greater intimacy when we self-disclose personal information about ourselves (Collins & Miller, 1994; Laurenceau et al., 1998), when we perceive that they self-disclose to us (Collins & Miller, 1994; Laurenceau et al., 1998), and when we perceive them as being responsive to our self-disclosure (Laurenceau et al., 1998). However, the social support literature suggests additional indications for why we develop social bonds with others. We experience more positive affect and less loneliness when we perceive others as being socially supportive (Neely et al., 2006; Pierce et al., 1991) and we feel interpersonally closer to others when we perceive them to be instrumental to our goals (Orehek et al., 2018). The present research aims to examine the effects of intimacy development occurring face-to-face and via text for a breadth of social bonding outcomes, including self-disclosure, perceived partner disclosure, interpersonal closeness, perceived partner responsiveness, perceived partner support, perceived partner instrumentality, enjoyment, positive affect, negative affect, and desire to affiliate outside of the experiment.

1.4 Hypotheses and Implications

The present study will use a 2 (intimacy: intimate vs. small-talk) × 2 (medium: face-to-face vs. texting) between-subjects factorial design. All hypotheses were preregistered through the Open Science Framework.

1.4.1 Hypothesis 1: Effect of intimacy

Similar to previous studies using the fast-friends paradigm (e.g., Aron et al., 1997), it was hypothesized that participants in the intimate condition would exhibit greater social bonding than those in the small-talk condition (H1). Social bonding is operationalized as higher levels of self- and perceived disclosure, perceived partner support, perceived partner responsiveness, perceived partner instrumentality, desire to affiliate, interpersonal closeness, enjoyment, and positive affect, as well as lower levels of negative affect. This hypothesis would be supported if there is a main effect of the intimacy condition across the outcome variables.

1.4.2 Hypothesis 2: Effect of medium

It was hypothesized that participants interacting face-to-face would exhibit more social bonding as compared to those interacting over text (H2). This hypothesis would be supported if there is a main effect of the medium condition across the outcome variables indicating greater social bonding.

1.4.3 Hypothesis 3: Statistical interaction of intimacy and medium

It was hypothesized that there would be an interaction between conversation intimacy and medium. It was expected that there would be a larger difference in social bonding between small-talk and intimate conversation for participants interacting face-to-face than over text (H3a). In other words, participants interacting over text would be less influenced by the intimacy of the conversation than those interacting face-to-face. This hypothesis would be supported if the analyses of the simple effects for medium revealed a larger difference between small-talk and intimate conversation for the face-to-face condition than the texting condition. Additionally, it was expected that there will be a larger difference in social bonding between face-to-face and texting for intimate conversations (H3b). In other words, small-talk conversations would be less influenced by the medium of the interaction than would intimate conversations. This hypothesis would be supported if the analyses of the simple effects for social bonding revealed a larger difference between face-to-face and texting for the intimate condition than the small-talk condition.

1.4.4 Hypothesis 4: Specific comparison

Due to the lack of a small-talk condition in previous studies, a comparison between small-talk face-to-face interactions and intimate CMC interactions has not been made. This begets the question of how an intimate conversation over text message compares to a small-talk conversation in-person. One possibility suggests that participants having intimate texting interactions would experience greater social bonding than those having small-talk conversations face-to-face (H4a). This result would suggest that more intimate conversations, even when occurring over text, are

more beneficial than small-talk with someone in-person. On the other hand, participants having small-talk conversations face-to-face may experience greater social bonding than those having intimate conversations over text (H4b). This finding would suggest that even small-talk communication occurring face-to-face is superior to intimate communication occurring via text message. These hypotheses are competing, such that only one can be true. A null effect would suggest that intimate texting is similar to small-talk face-to-face.

2.0 Method

2.1 Participants

Data was collected from 612 undergraduate students (306 dyads) at the University of Pittsburgh who were compensated with course credit. Two participants were able to sign up for each timeslot and students were eligible to participate if they were at least 18 years of age and owned a smartphone at the time of sign-up. Upon arriving to the laboratory, both participants were retrieved from the waiting area together and escorted to separate rooms where they could individually consent to participate.

After providing consent, each participant was asked to indicate how well they knew the other participant in the study (1 = *I have never seen this person before*, 6 = *I would call this person a close friend*). In order to ensure the dyads in the study were unacquainted, we excluded dyads from data analysis if at least one participant indicated a four (*I have spent time with them socially but would only call them an acquaintance*) or higher on the familiarity question. Forty participants (20 dyads) were excluded because of familiarity, resulting in 572 participants (286 dyads).

Because students were able to freely sign-up for this study, it was possible to have dyads of multiple gender make-up combinations. As previous research suggests that there are gender differences in self-disclosure, specifically that women tend to self-disclose more than men (e.g., Dindia & Allen, 1992), steps were taken to control for the gender make-up of the dyad in all analyses. At the end of the experiment, participants were asked to indicate their gender: woman, man, non-binary, or other. Of the remaining sample, two participants indicated that they identified as non-binary. This number was not large enough to create a separate group for dyads including

non-binary individuals, and thus four participants (two dyads) were excluded, resulting in a final sample of 568 participants (284 dyads).

The distribution of the remaining 568 participants (284 dyads) into each of the four conditions is as follows: 164 (82) in face-to-face/intimate, 154 (77) in face-to-face/small-talk, 144 (72) in texting/intimate, and 106 (53) in texting/small-talk. The age of participants in the final sample ranged from 18 to 60 years with a mean age of 18.75 (*SD* = 2.13; 25 missing responses). Regarding gender, 68.7% of participants identified as women. Of the dyads, 46.5% were comprised of only women, 44.4% of women and men, and 9.2% of only men. Regarding race, 74.5% of participants were White, 17.8% Asian, 6.3% Black or African American, 5.5% Hispanic or Latinx, 0.5% Native American, 0.4% Pacific Islander, and 1.4% Other. Additionally, 90.8% of participants indicated that English was their first language.

2.2 Power Analysis

A sensitivity power analysis was performed to estimate the effect size able to be detected with our sample of 568 participants (284 dyads). With an alpha of .05 and power of .90, it was determined that multiple linear regression analyses would be able to detect an effect size of .03 (using GPower 3.1; Faul et al., 2007). This is considered to be a small effect size using Cohen's (1992) criteria. Thus, our sample size is sufficient for the main objective of this study.

2.3 Procedure

After providing consent and reporting how familiar they were with the other participant in the study (described above), each participant was told that they would be having a conversation with the other participant. Dyads were then randomly assigned to interact face-to-face or via text using either small-talk or intimate conversation topics. Dyads assigned to converse face-to-face were escorted to a larger room where both participants sat together at a large-round table. Dyads assigned to converse over text remained in their individual rooms. The experimenter read the following instructions to all participants (adapted from Aron et al., 1997):

You will now have a conversation using a provided set of topics divided into three sets. You will discuss each set of for twelve minutes. Both partners should respond to each topic before moving onto the next one. It is more important to respond to each topic thoroughly than it is to finish all of the topics in each set. Once twelve minutes have passed, I will return with the next set of topics. Although I have provided an overview of the task, please read through the instructions carefully. After you read the instructions you may introduce yourselves and begin.

At this time, participants assigned to the texting condition were provided with an iPhone SE and informed how they can communicate with the other participant via text. See Appendix for additional task instructions.

Participants in the intimate condition were provided discussion topics from the fast-friends paradigm (Aron et al., 1997), which are designed to increase self-disclosure and intimacy between conversation partners. For this task, topics are organized into three sets of 12 topics (36 topics total), with each set eliciting more self-disclosure as the dyads move from the first to the second set, and then to the third. This format ensures that all dyads discuss the more intimate topics toward the end, regardless of conversation pace. Examples of the intimate topics include, “Do you have a

secret hunch about how you will die?" and "Tell your partner something that you like about them already" (Aron et al., 1997). See Appendix for the full set of intimate discussion topics.

Participants in the small-talk condition were provided discussion topics that, when compared to the fast-friends paradigm, do not lead to greater feelings of intimacy between conversation partners (Aron et al., 1997). The small-talk conversation follows the same three set structure as the intimate conversation, but the topics provided involve minimal disclosure and are not designed to focus on the partners or the relationship. Examples of the small-talk topics include, "Describe the last time you went to the zoo" and "What is your favorite holiday? Why?" (Aron et al., 1997). See Appendix for the full set of small-talk discussion topics.

For both sets of topics, participants were allotted 12-minutes to discuss each set of 12 topics for a total of 36-minutes. Face-to-face interactions were video-recorded, the transcripts of conversations occurring over text message were saved, and dyads reported the number of questions they completed after each set.

After completing the interaction task, dyads were separated (if in the face-to-face condition) and participants individually completed a series of dependent measures in random order, as well as a demographic questionnaire. Upon completing the measures, participants were debriefed and excused.

2.4 Measures

2.4.1 Self- and perceived partner disclosure

After the interaction, participants responded to four items measuring how much they self-disclosed during the conversation, as well as how much they thought their conversation partner disclosed. Using a 9-point Likert-type scale (1 = *not at all*, 9 = *extremely*), participants responded to the following items for themselves and their conversation partner: To what extent did you/your partner "disclose information about your/their innermost self," "disclose personally important experiences and events," "openly expressed your/their feelings," and "openly expressed your/their values and beliefs" (Kashdan & Wenzel, 2005). Higher scores indicate more disclosure.

2.4.2 Perceived partner support

Participants completed the Support subscale of the Quality of Relationships Inventory (QRI; Pierce et al., 1991) as a measure of perceived support from their conversation partner. For seven items, participants reported the extent to which their conversation partner could be expected to be supportive using a 4-point Likert scale (1 = *not at all*, 4 = *very much*). Sample questions include, "To what extent can you count on this person to listen to you when you are very angry at someone else?" and "To what extent can you turn to this person about problems?" A similar scale has been used in previous research in which unacquainted dyads responded after brief conversations (Neely et al., 2006; Veenstra et al., 2011). Higher scores indicate greater perceived partner support.

2.4.3 Perceived partner responsiveness

As a measure of perceived partner responsiveness, participants reported how much they felt "understood," "validated," and "cared for" by their conversation partner using a 5-point Likert scale (1 = *very little,* 5 = *a great deal*; Welker et al., 2014). Higher scores indicate greater perceived partner responsiveness.

2.4.4 Perceived partner instrumentality

Participants completed the Perceived Partner Instrumentality Scale (Orehek et al., 2018) as a measure of participants' perception of how instrumental their conversation partner is toward their goal pursuit. Participants reported how helpful or harmful their conversation partner is for achieving nine types of goals on an 11-point Likert-type scale (–5 = *extremely harmful,* +5 = *extremely helpful*). Sample goals include "Social Connection/Social Support Goals," "Academic Goals," and "Personal Improvement/Growth Goals." Higher scores indicate greater perceived partner instrumentality.

2.4.5 Desire to affiliate

Participants responded to four items measuring how much they would like to affiliate with their conversation partner (adapted from Park & Maner, 2009). Using a 7-point Likert scale (I = *Not at all,* 7 = *Very much*), participants indicated how much they would like to "talk to," "spend time with," "hang out with," and "make plans with" their conversation partner in the future.

2.4.6 Interpersonal closeness

Participants completed the Inclusion of Other in the Self scale (IOS; Aron et al., 1992) and Subjective Closeness Index (SCI; Berscheid et al., 1989) as a measure of participants' perceived interpersonal closeness toward their conversation partner. For the IOS, participants responded to the question, "How close do you feel to your conversation partner right now?" on a pictorial 7-point Likert-type scale (1 = *not close at all*, 7 = *extremely close*) whereby each scale point is represented by two increasingly overlapping circles labeled "Self" and "Partner."

For the SCI, participants rated the following two questions about their conversation partner using a 7-point Likert scale (1 = *not close at all*, 7 = *extremely close*): "Relative to *all* your other relationships [both romantic and platonic], how would you characterize your relationship with this person?" and "Relative to what you know about *other people's* close relationships, how would you characterize your relationship with this person?". Scores from the IOS and SCI were combined to form a composite of interpersonal closeness, such that higher scores indicate greater perceived closeness.

2.4.7 Enjoyment

To measure their enjoyment of the interaction, participants used a 7-point Likert scale (1 = *not at all*, 7 = *a great deal*) to respond to the following four questions: (1) "How much did you enjoy the interaction?" (2) "How much did you enjoy your role in the interaction?" (3) "How satisfied were you with the interaction?" and (4) "How much fun was the interaction?" (adapted from Sprecher, 2014). Higher scores indicate more enjoyment of the interaction.

2.4.8 Positive and negative affect

Participants completed the Positive Affect and Negative Affect Scales (PANAS; Watson, Clark, & Tellegen, 1988) as a measure of their affect after the interaction. Participants reported the extent to which 20 items represented their current mood using a 5-point Likert scale (1 = *very slightly to not at all*, 5 = *extremely*). Sample items include, "interested," "strong," and "inspired" for positive affect and "upset," "guilty," and "afraid" for negative affect. Higher scores indicate greater affect.

2.5 Data Analytic Strategy

Using software provided by R Core Team (2018), random-intercept regression models were used to assess between-subject outcomes while accounting for the interdependence within dyads. Individual participants were included at Level 1, nested within conversation dyads at Level 2. The interacting effect of conversation intimacy and medium was examined for each outcome variable while also controlling for the gender-makeup of the dyad. Effects coding was used for conversation intimacy (–0.5 = small-talk, 0.5 = intimate) and medium (–0.5 = texting, 0.5 = face-to-face) so that results could be compared to the average conversation across conditions. Because it was expected that women would engage in more self-disclosure than men (Dindia & Allen, 1992), women-only dyads were used as the reference group for the gender make-up variable.

3.0 Results

3.1 Descriptive Statistics

Table 1 contains descriptive statistics (means, standard deviations, intraclass correlations, and Cronbach's alphas) and bivariate correlations. Table 2 contains the mean, standard deviation, and sample size for each outcome variable per cell.

3.2 Main Effects

To examine the main effects of conversation intimacy and medium, a regression model including intimacy, medium, gender make-up, and a random-intercept for each dyad was run for each outcome variable (Table 3). There was a significant main effect of conversation intimacy and medium on self-disclosure, perceived partner disclosure, perceived partner support, perceived partner responsiveness, perceived partner instrumentality, interpersonal closeness, enjoyment, and positive affect. There was also a significant main effect of just intimacy on negative affect and of just medium on desire to affiliate. None of these effects were qualified by an interaction between intimacy and medium (Table 5).

Participants who had an intimate (vs. small-talk) conversation self-disclosed more, enjoyed the conversation more, experienced greater positive and negative affect, and felt closer to their conversation partner. These participants also perceived that their conversation partner self-disclosed more and that they were more supportive, responsive, and instrumental. Participants who

conversed face-to-face (vs. texting) self-disclosed more, enjoyed the conversation more, experienced greater positive affect, and felt closer to and desired to affiliate with their conversation partner. These participants also perceived that their conversation partner self-disclosed more and that they were more supportive, responsive, and instrumental. None of these effects were qualified by an interaction between intimacy and medium (Table 5).

3.2.1 Differences based on dyad gender make-up

Participants in women-only dyads (as compared to mixed-gender and men-only) self-disclosed more, enjoyed the conversation more, desired to affiliate with their conversation partner more, perceived that their partner self-disclosed more, and perceived that their partner was more supportive, responsive, and instrumental. There were no differences between women-only dyads and the other gender compositions for interpersonal closeness, positive affect, or negative affect. Mixed-gender and men-only dyads did not differ in their social bonding outcomes (Table 4).

3.3 Simple Effects

Simple effects analyses were also conducted using the interaction model for each outcome variable and are displayed in Table 6.

3.3.1 Face-to-face: Intimate vs. small-talk

For participants who conversed face-to-face, those who had an intimate (vs. small-talk) conversation self-disclosed more, perceived that their conversation partner disclosed more, felt more positive and negative affect, felt closer to their conversation partner, and perceived that their partner was more supportive, responsive, and instrumental. However, for participants conversing face-to-face, there was not a significant difference in their enjoyment of the conversation or desire to affiliate with their conversation partner as a result of conversation intimacy.

3.3.2 Texting: Intimate vs. small-talk

For participants who conversed via text, those who had an intimate (vs. small-talk) conversation self-disclosed more, perceived that their conversation partner disclosed more, felt closer to their partner, and perceived that their partner was more supportive, responsive, and instrumental. However, for participants conversing via text, there was not a significant difference in their positive or negative affect, enjoyment of the conversation, or desire to affiliate with their conversation partner as a result of conversation intimacy.

3.3.3 Intimate: Face-to-face vs. texting

For participants who had an intimate conversation, those who conversed face-to-face (vs. texting) self-disclosed more, experienced greater positive and negative affect, and felt closer to and desired to affiliate with their conversation partner more. These participants also perceived that

their partner self-disclosed more and that they were more supportive, responsive, and instrumental. However, for participants having an intimate conversation, there was not a significant difference in their enjoyment of the conversation as a result of conversation medium.

3.3.4 Small-talk: Face-to-face vs. texting

For participants who had a small-talk conversation, those who conversed face-to-face (vs. texting) self-disclosed more, experienced greater positive affect, perceived that their partner self-disclosed more, and perceived that their partner was more supportive and responsive. However, for participants who had a small-talk conversation, there was not a significant difference in their negative affect, enjoyment of the conversation, interpersonal closeness, perceived partner instrumentality, or desire to affiliate with their partner as a result of conversation medium.

3.4 Pairwise Comparisons

Pairwise comparisons using the interaction model described above were conducted for each outcome variable to examine differences between participants who had an intimate texting conversation and those who had a small-talk face-to-face conversation (Table 4). Results from a Tukey Test revealed that—when controlling for the gender make-up of the dyad—participants who had an intimate texting (vs. small-talk face-to-face) conversation perceived that their partner self-disclosed significantly more. There was not a significant difference between these two groups for each of the other outcome variables (self-disclosure, perceived partner support, perceived

partner responsiveness, perceived partner instrumentality, desire to affiliate, interpersonal closeness, enjoyment, positive affect, and negative affect).

4.0 Discussion

In line with previous research using the fast-friends paradigm (e.g., Aron et al., 1997), having an intimate conversation (vs. small-talk) led to greater social bonding, as indicated by greater self- and perceived partner disclosure, greater experienced positive affect and enjoyment, closer feelings toward one's conversation partner, and perception of one's partner as more supportive, responsive, and instrumental. Although it was also hypothesized that having an intimate conversation would lead to lower negative affect, participants who had an intimate conversation actually experienced greater negative affect as compared to those who had a small-talk conversation. This increase in negative affect is likely a result of having discussed emotionally sensitive and personally revealing topics. Thus, engaging in intimate conversation seems to increase social bonding between conversation partners, even when experiencing greater negative affect. Finally, participants having an intimate or small-talk conversation did not differ in their desire to affiliate with their conversation partner. This suggests that even though having an intimate conversation leads to greater social bonding in the moment, this might not be enough for individuals to want to keep in contact after the interaction. One possible explanation is that other factors outside of engaging in intimate conversation, such as perceived similarity between conversation partners (Byrne, 1961; Montoya et al., 2008), may have a more impactful role in promoting the desire to affiliate outside of the experiment.

In line with previous work comparing computer-mediated and face-to-face communication (Mallen et al., 2003; Okdie et al., 2011; Sprecher, 2014; Sprecher & Hampton, 2017), face-to-face conversations led to greater social bonding, as indicated by greater self- and perceived partner disclosure, greater experienced positive affect and enjoyment, closer feelings toward and stronger

desire to affiliate with one's conversation partner, and perception of one's partner as more supportive, responsive, and instrumental. Although it was hypothesized that having a face-to-face conversation would lead to lower negative affect as a result of greater social bonding with one's conversation partner, there was actually no difference in negative affect. This finding may be partly explained by participants' overall comfort level with communicating over text and in-person. Because participants were required to own a smartphone in order to participate, it can be expected that these participants were relatively familiar and comfortable communicating over text. Additionally, the sample in this study was primarily comprised of young adults, an age group that almost entirely (96%; Pew Research Center, 2019) owns a smartphone and engages in texting (Duggan, 2012). Thus, young smartphone users seem to experience similar levels of negative affect when conversing over text or in-person.

Notably, results from this study suggest that having an intimate conversation, as compared to small-talk, over text can lead to bonding at a similar proportion as conversing face-to-face. For participants who conversed over text or in-person, those who had an intimate (vs. small-talk) conversation self-disclosed more, perceived that their conversation partner disclosed more, felt closer to their partner, and perceived that their partner was more supportive, responsive, and instrumental. For participants who conversed face-to-face, those who had an intimate conversation also felt more positive and negative affect. Although conversing in-person lead to overall greater social bonding than conversing over text, these findings suggest that intimate conversations are just as beneficial (relative to small-talk) for social bonding over text as they are in-person. Thus, people should aim to have face-to-face conversation whenever possible. However, when communicating in-person is not an option, individuals can improve their texting conversation by discussing more intimate topics.

This study also aimed to examine how social bonding after having an intimate conversation over text compares to after having a small-talk conversation in-person. Participants having intimate texting conversations and small-talk face-to-face conversations did not differ in their levels of self-disclosure, interpersonal closeness, enjoyment, positive affect, negative affect, desire to affiliate, or perceptions of their partners' support, responsiveness, or instrumentality. However, participants who had an intimate texting (vs. small-talk face-to-face) conversation did perceive that their partner disclosed significantly more. These results suggest that, with the exception of perceived partner disclosure, having an intimate conversation over text leads to a similar amount of social bonding as does having a small-talk conversation face-to-face. The exceptional finding that people having an intimate texting conversation perceived that their partner disclosed more may be partly explained by the nature of the conversation itself. The intimate discussion topics from the fast-friends procedure are especially designed to promote reciprocal self-disclosure from both partners (Aron et al., 1997). Thus, participants having an explicitly intimate conversation, even when texting, may perceive that their partner is disclosing at high levels as prefaced by the intimate nature of the topics being discussed.

4.1 Strengths and Implications

The present research aimed to use a more ecologically valid form of CMC by having participants communicate over text rather than through IM. Although people still engage in conversation through email and IM on their computers, texting and messaging via smartphones has become a nearly ubiquitous form of communication among Americans (Duggan, 2012; Pew Research Center, 2019). For example, two college students who just met at a campus event may

exchange phone numbers with one another in order to keep in contact over text. Additionally, a single individual interested in online dating may initiate conversations with potential romantic partners through a dating app on their smartphone. Thus, having participants engage in texting conversations in this study more closely represents how people engage in conversations with unacquainted others in daily life.

Previous research has demonstrated that having an intimate conversation face-to-face leads to greater social bonding than does have an intimate conversation through CMC (Mallen et al., 2003; Okdie et al., 2011; Sprecher, 2014; Sprecher & Hampton, 2017). This finding was replicated in this study with a texting comparison. Thus, findings from thus study suggest that it is better to get to know someone face-to-face than by texting. For example, people who meet via an online dating platform should move to having intimate conversations in-person rather than self-disclosing intimate information over text for an extended period. This finding also has implications for romantic partners, friends, and family, suggesting that they should schedule more time to have face-to-face conversations rather than relying on texting.

By including a small-talk conversation condition, this study was able to expand on our understanding of CMC by examining whether having an intimate conversation via CMC is significantly better than having a small-talk conversation. Indeed, results from this study suggest that, when texting, discussing intimate topics leads to greater social bonding than engaging in small-talk. This finding has implications for how people communicate with others in daily life. In general, in-person interactions promote greater social bonding than texting conversations—but talking in-person may not always be a viable option. Distance may make it inconvenient or impossible to meet, timing of the relationship may not yet warrant an in-person meeting, or individual differences in preferred communication medium may favor texting or messaging. For

situations in which texting is a lone or preferred option, people can benefit from knowing that discussing intimate topics, such as those that involve disclosing about oneself, can actually improve their conversation and bring them closer to the person with whom they're talking. This finding also has implications for interventions among isolated individuals. For populations in which face-to-face interaction is rare or impossible, these results suggest that directing people toward strategies for intimate conversations via CMC (e.g., the fast-friends paradigm) may be beneficial. Future work should explore this possibility.

Including a small-talk condition in this study also made it possible to make a direct comparison between intimate texting conversations and small-talk face-to-face conversations. This comparison represents the choice one might make between engaging with their smartphone or talking to a stranger in a public space, such as in a waiting room or on a bus. Recent research suggests that when in such scenarios, engaging with one's smartphone in the presence of others negatively impacts mood and feelings of social connection (Kushlev et al., 2019) and talking to a stranger can be a more positive experience than initially expected (Epley & Schroeder, 2014). But what if you have the option to engage in an intimate conversation with another person via your smartphone? Should you bypass this conversation to engage in small-talk with the stranger next to you? Results from this study suggest that engaging in either conversation would lead to similar levels of social bonding.

This finding also has important theoretical implications for understanding how smartphone use affects well-being. In recent years, some research has been interpreted to suggest smartphone use is broadly associated with poor well-being (e.g., Twenge, 2019). However, more nuanced looks at device usage suggest that the link to well-being is less clear (e.g., Liu et al., 2019). This study adds to this literature by showing that using one's smartphone to have an intimate

conversation with another person can have equally beneficial outcomes as casually talking to someone nearby. This finding provides support for the notion that *how* we use our mobile devices is just as important as—if not more important than—*how often* we use them.

Finally, the present research allowed us to form a better understanding of the implications of texting for social bonding by showing that the fast-friends paradigm does increase social bonding for dyads interacting over text message. Thus, this procedure could be used outside of the laboratory to promote relationship formation. For example, these topics could be used to enhance conversation over text with a potential friend or romantic partner. This would allow the fast-friends paradigm to be used in texting interventions designed to reduce social isolation. Additionally, this paradigm could be used in future research on relationship formation over texting, social media, dating applications, and other forms of text-based CMC.

4.2 Limitations and Future Directions

One limitation of this study stems from its implementation in a laboratory setting. Because people do not typically engage in long structured conversations with people they just met, it is possible that these findings may not directly generalize to real world interactions. Future research could add to these findings by having participants engage in unstructured intimate conversations, as well as including conversations between people who are somewhat acquainted or strongly familiar. This would allow exploration of whether or not naturally occurring intimate conversation over text still promote social bonding. Also, by including participants who are acquainted or close, researchers could infer whether intimate conversation is just as beneficial for known others as it is for unacquainted others.

Another limitation is that the sample of this study was largely comprised of young undergraduate students—a population that is comfortable engaging in text-based communication. Thus, these findings may not generalize to older samples that are less familiar or comfortable engaging in text-based communication. Because the participants in this study were college students, they are quite comfortable with elaborate verbal communication. It may be the case that younger or less educated people may be less comfortable with these elaborate conversations, and therefore may not benefit as much. Future research could build upon these findings by including a more diverse and representative sample.

4.3 Conclusion

Texting has become a common way for people to communicate with one another, yet its effects on social bonding have not been well understood. It is important to understand how texting affects intimacy development because intimacy is important for fostering feelings of validation, understanding, and caring within a relationship (Reis & Shaver, 1998). Using the fast-friends paradigm (Aron et al., 1997), findings from this study suggest that, even though in-person conversation is generally better for social bonding than texting, having an intimate conversation over text can promote social bonding to a greater extent than small-talk. When comparing face-to-face and texting communication more directly, results from this study suggest that having an intimate texting conversation "catches up" to having a small-talk face-to-face conversation in regard to social bonding. These findings have important implications for when and how people engage in texting conversations in daily life, as well as for understanding how using one's mobile device may impact individual and relational well-being.

Appendix A Fast-Friends Paradigm

Appendix A.1 Instructions

This is a study of interpersonal closeness and your task is simply to get close to your conversation partner. We believe that the best way for you to get close to your partner is for you to share with them and for them to share with you. Of course, when we advise you about getting close to your partner, we are giving advice regarding your behavior in this task only, we are not advising you about your behavior outside of this task.

In order to help you get close we've arranged for the two of you to engage in a kind of sharing game. Your sharing time will be for about 45-minutes, after which time we will ask you to fill out a questionnaire concerning your experience with your partner

You will be given three sets of topics. Each topic is either a question or a task. As soon as you both finish reading these instructions, you should begin with Set 1.

Read the first topic and then BOTH do what it asks. When you are both done, go on to the second topic—reading it and both doing what it asks. And so forth. Alternate who goes first with each new topic

As you go through the topics, one at a time, please don't skip any—do them in order. If it asks you a question, share your answers with your partner. Then let them share their answer to the same question with you. If it is a task, do it first, then let your partner do it.

The experimenter will provide you with the next set of topics. You do not need to finish all the topics in each set within the time allotted. Take plenty of time with each topic, doing what it asks thoroughly and thoughtfully.

Appendix A.2 Intimate Discussion Topics

Appendix A.2.1 Set 1

1. Given the choice of anyone in the world, whom would you want as a dinner guest
2. Would you like to be famous? In what way?
3. Before making a phone call, do you ever rehearse what you are going to say? Why?
4. What would constitute a “perfect” day for you?
5. When did you last sing to yourself? To someone else?
6. If you were able to live to the age of 90 and retain either the mind or body of a 30-year-old for the last 60 years of your life, which would you want?
7. Do you have a secret hunch about how you will die?
8. Name three things you and your partner appear to have in common.
9. For what in your life do you feel most grateful?
10. If you could change anything about the way you were raised, what would it be?
11. Take a few minutes and tell your partner your life story in as much detail as possible.
12. If you could wake up tomorrow having gained any one quality or ability, what would it be?

Appendix A.2.2 Set 2

1. If a crystal ball could tell you the truth about yourself, your life, the future, or anything else, what would you want to know?

2. Is there something that you've dreamed of doing for a long time? Why haven't you done it yet?
3. What is the greatest accomplishment of your life?
4. What do you value most in friendship?
5. What is your most treasured memory?
6. What is your most terrible memory?
7. If you knew that in one year you would die suddenly, would you change anything about the way you are now living? Why?
8. What does friendship mean to you?
9. What roles do love and affection play in your life?
10. Alternate sharing something you consider a positive characteristic of your partner. Share a total of five items.
11. How close and warm is your family? Do you feel your childhood was happier than most other people's?
12. How do you feel about your relationship with your mother?

Appendix A.2.3 Set 3

1. Make three true "we" statements each. For instance, "We are both in this room feeling…"
2. Complete this sentence: "I wish I had someone with whom I could share…"
3. If you were going to become a close friend with your partner, please share what would be important for them to know.
4. Tell your partner what you like about them; be very honest this time saying things that you might not say to someone you've just met.

5. Share with your partner an embarrassing moment in your life.
6. When did you last cry in front of another person? By yourself?
7. Tell your partner another thing that you like about them already.
8. What, if anything, is too serious to be joked about?
9. If you were to die this evening with no opportunity to communicate with anyone, what would you most regret not having told someone? Why haven't you told them yet?
10. Your home, containing everything you own, catches fire. After saving your loved ones and pets, you have time to safely make a final dash to save any one item. What would it be? Why?
11. Of all the people in your family, whose death would you find most disturbing? Why?
12. Share a personal problem and ask your partner's advice on how they might handle it. Also, ask your partner to reflect back to you how you seem to be feeling about the problem you have chosen.

Appendix A.3 Small-Talk Discussion Topics

Appendix A.3.1 Set 1

1. When was the last time you walked for more than an hour? Describe where you went and what you saw.
2. What was the best gift you ever received and why?
3. If you had to move from Pennsylvania where would you go, and what would you miss the most about Pennsylvania?

4. How did you celebrate last Halloween?
5. Do you read, watch, or listen to the news often and which news outlets do you prefer? Why?
6. What is a good number of roommates to have in a student household and why?
7. If you could invent a new flavor of ice cream, what would it be?
8. What is the best restaurant you've been to in the last month that your partner hasn't been to? Tell your partner about it.
9. Describe your last pet.
10. What is your favorite holiday? Why?
11. Tell your partner the funniest thing that ever happened to you when you were a small child.
12. What gifts did you receive on your last birthday?

Appendix A.3.2 Set 2

1. Describe the last time you went to the zoo.
2. Tell the names and ages of your family members, include grandparents, aunts and uncles, and where they were born (to the extent you know this information).
3. One of you say a word, the next say a word that starts with the last letter of the word you just said. Do this until you have said 50 words. Any words will do—you aren't trying to make a sentence.
4. Do you like to get up early or stay up late? Is there anything funny that has resulted from this?
5. Where are you from? Name all of the places you've lived.

6. What is your favorite class at Pitt so far? Why?
7. What did you do this summer?
8. What gifts did you receive last holiday (e.g., Christmas, Hanukkah, etc.)?
9. Who is your favorite actor? Describe a favorite scene in which this person has acted.
10. What was your impression of Pitt the first time you ever came here?
11. What is the best TV show you've seen in the last month that your partner hasn't seen? Tell your partner about it.
12. What is your favorite hobby? Why?

Appendix A.3.3 Set 3

1. Where did you go to high school? What was your high school like?
2. What is the best book you've read in the last three months that your partner hasn't read? Tell you partner about it.
3. What foreign country would you most like to visit? What attracts you to this place?
4. Do you prefer digital watches and clocks or the kinds with hands? Why?
5. Describe a family member's (e.g., mother's, father's, or sibling's) best friend.
6. What are the advantages and disadvantages of artificial trees (e.g. Christmas trees) or other house plants?
7. How often do you get your hair cut? Where do you go? Have you ever had a really bad haircut experience?
8. Did you have a class pet when you were in elementary school? Do you remember the pet's name?
9. Do you think left-handed people are more creative than right-handed people?

10. What is the last concert you saw? How many of the artist's albums do you own? Had you seen them before? Where?
11. Do you have any subscriptions (e.g., magazines, products, streaming services, etc.)? What are they? What have you subscribed to in the past?
12. Were you ever in a school play? What was your role? What was the plot of the play? Did anything funny ever happen when you were on stage?

Appendix B Tables

Table 1 Descriptive Statistics and Bivariate Correlations

		M	*SD*	*ICC*		1	2	3	4	5	6	7	8	9	10
1	Self-Disclosure	5.50	1.90	.33	.88	1.00	.85***	.54***	.50***	.47***	.37***	.50***	.45***	.44***	.14**
2	Partner Disclosure	5.37	1.97	.25	.92		1.00	.58***	.53***	.50***	.40***	.50***	.47***	.44***	.14**
3	Partner Support	2.47	0.67	.28	.90			1.00	.57***	.56***	.56***	.63***	.54***	.46***	.01
4	Partner Responsiveness	3.90	0.85	.28	.86				1.00	.47***	.49***	.51***	.58***	.43***	.002
5	Partner Instrumentality	7.42	1.15	.24	.89					1.00	.45***	.50***	.43***	.51***	.05
6	Desire to Affiliate	4.35	1.41	.24	.96						1.00	.57***	.61***	.42***	–.10*
7	Closeness	2.88	1.02	.29	.85							1.00	.51***	.45***	–.04
8	Enjoyment	5.42	1.25	.28	.95								1.00	.54***	–.10*
9	Positive Affect	2.75	0.83	.17	.89									1.00	.15***
10	Negative Affect	1.27	0.34	.22	.72										1.00

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

Table 2 Means, Standard Deviations, and Sample Size by Cell

	Face-to-Face			Texting			Total		
	Intimate	Small-Talk	Total	Intimate	Small-Talk	Total	Intimate	Small-Talk	Total
Variable	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)	*M* (*SD*)
Self-Disclosure	6.79 (1.57)	5.04 (1.65)	5.94 (1.83)	5.41 (1.80)	4.28 (1.71)	4.93 (1.85)	6.14 (1.81)	4.73 (1.71)	5.50 (1.90)
Partner Disclosure	6.59 (1.75)	4.82 (1.75)	5.73 (1.96)	5.37 (1.80)	4.28 (1.85)	4.91 (1.89)	6.02 (1.87)	4.60 (1.81)	5.37 (1.97)
Social Support	2.74 (0.65)	2.44 (0.63)	2.59 (0.66)	2.43 (0.64)	2.13 (0.65)	2.30 (0.66)	2.60 (0.67)	2.31 (0.66)	2.47 (0.67)
Partner Responsiveness	4.15 (0.79)	3.86 (0.79)	4.01 (0.80)	3.86 (0.80)	3.61 (0.95)	3.76 (0.88)	4.02 (0.81)	3.76 (0.87)	3.90 (0.85)
Partner Instrumentality	7.90 (1.23)	7.18 (1.10)	7.55 (1.22)	7.46 (1.02)	6.95 (0.96)	7.24 (1.02)	7.70 (1.15)	7.09 (1.05)	7.42 (1.15)
Desire to Affiliate	4.61 (1.43)	4.32 (1.44)	4.47 (1.44)	4.21 (1.39)	4.19 (1.29)	4.20 (1.35)	4.42 (1.42)	4.27 (1.38)	4.35 (1.41)
Closeness	3.24 (1.09)	2.74 (0.91)	3.00 (1.03)	2.90 (0.99)	2.48 (0.96)	2.72 (0.99)	3.08 (1.05)	2.64 (0.94)	2.88 (1.02)
Enjoyment	5.67 (1.20)	5.41 (1.26)	5.55 (1.23)	5.38 (1.22)	5.12 (1.31)	5.27 (1.26)	5.53 (1.21)	5.30 (1.28)	5.42 (1.25)
Positive Affect	3.00 (0.85)	2.76 (0.84)	2.88 (0.85)	2.66 (0.81)	2.47 (0.73)	2.58 (0.78)	2.84 (0.84)	2.64 (0.81)	2.75 (0.83)
Negative Affect	1.35 (0.43)	1.22 (0.28)	1.29 (0.37)	1.27 (0.33)	1.21 (0.25)	1.24 (0.30)	1.31 (0.39)	1.21 (0.27)	1.27 (0.34)
N (*dyads*)	164 (82)	154 (77)	318 (159)	144 (72)	106 (53)	250 (125)	308 (154)	260 (130)	568 (284)

Table 3 Main Effects Regression Analyses of Conversation Intimacy and Medium

Variable	*B*	*SE*	*t*	df	*p*
Self-Disclosure					
Constant	4.36	.16	27.52	280.30	<.001
Intimacy	1.50	.15	10.10	284.09	<.001
Medium	1.10	.15	7.37	279.01	<.001
Mixed-Gender vs. Women Only	–0.50	.16	–3.22	279.02	.001
Male Only vs. Women Only	–0.76	.27	–2.84	278.99	.005
Perceived Partner Disclosure					
Constant	4.36	.16	26.63	280.16	<.001
Intimacy	1.50	.15	9.76	283.52	<.001
Medium	0.91	.15	5.92	279.02	<.001
Mixed-Gender vs. Women Only	–0.54	.16	–3.40	279.03	<.001
Male Only vs. Women Only	–0.78	.28	–2.84	279.00	.005
Perceived Partner Support					
Constant	2.21	.06	34.92	280.57	<.001
Intimacy	0.31	.06	5.24	285.07	<.001
Medium	0.31	.06	5.19	279.04	<.001
Mixed-Gender vs. Women Only	–0.16	.06	–2.59	279.06	.010
Male Only vs. Women Only	–0.12	.11	–1.11	279.03	.267
Perceived Partner Responsiveness					
Constant	3.75	.08	46.20	280.63	<.001
Intimacy	0.29	.08	3.76	285.33	<.001
Medium	0.27	.08	3.58	279.03	<.001
Mixed-Gender vs. Women Only	–0.29	.08	–3.67	279.05	<.001
Male Only vs. Women Only	–0.32	.14	–2.38	279.01	.018
Perceived Partner Instrumentality					
Constant	7.00	.11	66.40	280.35	<.001
Intimacy	0.64	.10	6.45	284.42	<.001
Medium	0.35	.10	3.51	278.96	<.001
Mixed-Gender vs. Women Only	–0.22	.10	–2.13	278.98	.034
Male Only vs. Women Only	–0.32	.18	–1.78	278.95	.077
Desire to Affiliate					
Constant	4.38	.14	32.25	280.57	<.001
Intimacy	0.21	.13	1.65	285.10	.100
Medium	0.28	.13	2.18	279.04	.030
Mixed-Gender vs. Women Only	–0.56	.13	–4.24	279.06	<.001
Male Only vs. Women Only	–0.57	.23	–2.48	279.02	.014
Interpersonal Closeness					
Constant	2.49	.10	24.96	280.71	<.001
Intimacy	0.48	.10	5.13	285.63	<.001
Medium	0.31	.10	3.31	279.04	.001
Mixed-Gender vs. Women Only	–0.11	.10	–1.14	279.07	.256
Male Only vs. Women Only	0.10	.17	0.57	279.02	.570
Enjoyment					
Constant	5.34	.12	43.33	280.73	<.001
Intimacy	0.28	.12	2.38	285.71	.018
Medium	0.29	.12	2.52	279.04	.012
Mixed-Gender vs. Women Only	–0.41	.12	–3.39	279.06	.001
Male Only vs. Women Only	–0.53	.21	–2.55	279.02	.011

Table 3 (continued)

Positive Affect					
Constant	2.50	.08	31.96	280.36	<.001
Intimacy	0.22	.07	3.01	284.26	.003
Medium	0.31	.07	4.26	279.03	<.001
Mixed-Gender vs. Women Only	–0.08	.08	–1.07	279.05	.284
Male Only vs. Women Only	–0.11	.13	–0.87	279.02	.388
Negative Affect					
Constant	1.17	.03	35.43	280.55	<.001
Intimacy	0.10	.03	3.10	284.99	.002
Medium	0.05	.03	1.63	279.03	.105
Mixed-Gender vs. Women Only	0.06	.03	1.71	279.05	.089
Male Only vs. Women Only	–0.04	.06	–0.72	279.02	.475

Table 4 Pairwise Comparisons Using the Tukey Test of Honest Significant Difference

Variable	*B*	*SE*	*t*	df	*p*
Mixed-Gender vs. Men Only (Main Effects Model)					
Self-Disclosure	0.26	.27	0.96	279	.601
Partner Disclosure	0.24	.28	0.86	279	.669
Social Support	–0.04	.11	–0.39	279	.920
Partner Responsiveness	0.03	.14	0.24	279	.969
Partner Instrumentality	0.09	.18	0.53	279	.856
Desire to Affiliate	0.00	.23	0.01	279	>.999
Closeness	–0.21	.17	–1.22	279	.440
Enjoyment	0.12	.21	0.57	279	.835
Positive Affect	0.03	.13	0.24	279	.969
Negative Affect	0.09	.06	1.70	279	.208
Intimate Texting vs. Small-Talk Face-to-Face (Interaction Model)					
Self-Disclosure	0.40	.20	1.96	281	.208
Partner Disclosure	0.58	.21	2.77	280	.030
Social Support	0.00	.08	0.04	281	>.999
Partner Responsiveness	0.01	.11	0.13	281	.999
Partner Instrumentality	0.29	.14	2.12	281	.150
Desire to Affiliate	–0.07	.18	–0.40	281	.978
Closeness	0.17	.13	1.32	281	.554
Enjoyment	–0.02	.16	–0.10	281	>.999
Positive Affect	–0.09	.10	–0.91	281	.799
Negative Affect	0.04	.04	1.05	281	.721

Table 5 Interaction Regression Analyses of Conversation Intimacy and Medium

Variable	*B*	*SE*	*t*	df	*p*
Self-Disclosure					
Constant	4.51	.18	24.83	283.13	<.001
Intimacy	1.21	.23	5.38	289.81	<.001
Medium	0.82	.22	3.68	281.99	<.001
Intimacy*Medium	0.51	.30	1.70	284.63	.090
Mixed-Gender vs. Women Only	–0.48	.16	–3.07	278.16	.002
Male Only vs. Women Only	–0.72	.27	–2.72	278.01	.007
Perceived Partner Disclosure					
Constant	4.53	.19	24.11	282.57	<.001
Intimacy	1.19	.23	5.09	288.46	<.001
Medium	0.60	.23	2.64	281.57	.009
Intimacy*Medium	0.56	.31	1.80	283.89	.072
Mixed-Gender vs. Women Only	–0.52	.16	–3.24	278.17	.001
Male Only vs. Women Only	–0.75	.28	–2.71	278.03	.007
Perceived Partner Support					
Constant	2.20	.07	30.22	284.16	<.001
Intimacy	0.33	.09	3.61	292.17	<.001
Medium	0.32	.09	3.63	282.80	<.001
Intimacy*Medium	–0.03	.12	–0.21	285.95	.831
Mixed-Gender vs. Women Only	–0.16	.06	–2.59	278.25	.010
Male Only vs. Women Only	–0.12	.11	–1.12	278.07	.262
Perceived Partner Responsiveness					
Constant	3.75	.09	40.08	284.39	<.001
Intimacy	0.29	.12	2.54	292.76	.012
Medium	0.28	.11	2.46	282.97	.014
Intimacy*Medium	–0.01	.15	–0.09	286.26	.932
Mixed-Gender vs. Women Only	–0.29	.08	–3.66	278.22	<.001
Male Only vs. Women Only	–0.33	.14	–2.37	278.03	.018
Perceived Partner Instrumentality					
Constant	7.06	.12	58.12	283.43	<.001
Intimacy	0.54	.15	3.57	290.66	<.001
Medium	0.25	.15	1.69	282.20	.093
Intimacy*Medium	0.18	.20	0.89	285.05	.374
Mixed-Gender vs. Women Only	–0.21	.10	–2.05	278.07	.042
Male Only vs. Women Only	–0.30	.18	–1.71	277.91	.089
Desire to Affiliate					
Constant	4.43	.16	28.31	284.16	<.001
Intimacy	0.13	.19	0.65	292.19	.514
Medium	0.20	.19	1.03	282.80	.302
Intimacy*Medium	0.15	.26	0.58	285.95	.564
Mixed-Gender vs. Women Only	–0.56	.13	–4.17	278.23	<.001
Male Only vs. Women Only	–0.56	.23	–2.43	278.05	.016
Interpersonal Closeness					
Constant	2.51	.11	21.87	284.70	<.001
Intimacy	0.44	.14	3.10	293.45	.002
Medium	0.27	.14	1.94	283.22	.053
Intimacy*Medium	0.07	.19	0.37	286.65	.714
Mixed-Gender vs. Women Only	–0.11	.10	–1.10	278.26	.272
Male Only vs. Women Only	0.10	.17	0.59	278.06	.554

Table 5 (continued)

Enjoyment					
Constant	5.32	.14	37.48	284.77	<.001
Intimacy	0.32	.18	1.83	292.64	.068
Medium	0.34	.17	1.95	283.28	.053
Intimacy*Medium	–0.08	.23	–0.35	286.75	.726
Mixed-Gender vs. Women Only	–0.41	.12	–3.41	278.26	.001
Male Only vs. Women Only	–0.53	.21	–2.57	278.06	.011
Positive Affect					
Constant	2.51	.09	27.81	283.35	<.001
Intimacy	0.21	.11	1.86	290.28	.064
Medium	0.30	.11	2.73	282.18	.007
Intimacy*Medium	0.02	.15	0.17	284.90	.869
Mixed-Gender vs. Women Only	–0.08	.08	–1.05	278.20	.293
Male Only vs. Women Only	–0.11	.13	–0.85	278.05	.397
Negative Affect					
Constant	1.19	.04	31.46	284.05	<.001
Intimacy	0.05	.05	1.11	291.92	.270
Medium	0.01	.05	0.16	282.72	.872
Intimacy*Medium	0.08	.06	1.25	285.81	.212
Mixed-Gender vs. Women Only	0.06	.03	1.81	278.23	.072
Male Only vs. Women Only	–0.03	.06	–0.62	278.05	.534

Table 6 Simple Effects Analyses of the Intimacy by Medium Interaction Controlling for Gender Make-Up

Variable	*B*	*SE*	*t*	df	*p*
Self-Disclosure					
Intimate vs. Small-Talk					
Texting	1.21	.23	5.38	290	<.001
Face-to-Face	1.72	.20	8.74	278	<.001
Face-to-Face vs. Texting					
Small-Talk	0.82	.22	3.68	282	<.001
Intimate	1.33	.20	6.61	281	<.001
Perceived Partner Disclosure					
Intimate vs. Small-Talk					
Texting	1.19	.23	5.09	288	<.001
Face-to-Face	1.74	.20	8.56	278	<.001
Face-to-Face vs. Texting					
Small-Talk	0.60	.23	2.64	282	.009
Intimate	1.16	.21	5.60	280	<.001
Perceived Partner Support					
Intimate vs. Small-Talk					
Texting	.33	.09	3.61	292	<.001
Face-to-Face	0.30	.09	3.80	278	<.001
Face-to-Face vs. Texting					
Small-Talk	0.32	.09	3.63	283	<.001
Intimate	0.30	.08	3.70	281	<.001
Perceived Partner Responsiveness					
Intimate vs. Small-Talk					
Texting	0.29	.12	2.54	293	.012
Face-to-Face	0.28	.10	2.77	278	.006
Face-to-Face vs. Texting					
Small-Talk	0.28	.11	2.46	283	.014
Intimate	0.27	.10	2.59	281	.010
Perceived Partner Instrumentality					
Intimate vs. Small-Talk					
Texting	0.54	.15	3.57	291	<.001
Face-to-Face	0.72	.13	5.43	278	<.001
Face-to-Face vs. Texting					
Small-Talk	0.25	.15	1.69	282	.093
Intimate	0.43	.13	3.19	281	.002
Desire to Affiliate					
Intimate vs. Small-Talk					
Texting	0.13	.19	0.65	292	.514
Face-to-Face	0.28	.17	1.62	278	.106
Face-to-Face vs. Texting					
Small-Talk	0.20	.19	1.03	283	.302
Intimate	0.35	.17	2.00	281	.046
Interpersonal Closeness					
Intimate vs. Small-Talk					
Texting	0.44	.14	3.10	278	<.001
Face-to-Face	0.51	.12	4.09	278	<.001
Face-to-Face vs. Texting					
Small-Talk	0.27	.14	1.94	283	.053
Intimate	0.34	.13	2.69	281	.008

Table 6 (continued)

Enjoyment					
Intimate vs. Small-Talk					
Texting	0.32	.18	1.83	294	.068
Face-to-Face	0.24	.15	1.56	278	.121
Face-to-Face vs. Texting					
Small-Talk	0.34	.17	1.95	283	.053
Intimate	0.26	.16	1.63	281	.105
Positive Affect					
Intimate vs. Small-Talk					
Texting	0.21	.11	1.86	290	.065
Face-to-Face	0.23	.10	2.37	278	.018
Face-to-Face vs. Texting					
Small-Talk	0.30	.11	2.73	282	.007
Intimate	0.32	.10	3.26	281	.001
Negative Affect					
Intimate vs. Small-Talk					
Texting	0.05	.05	1.11	292	.270
Face-to-Face	0.13	.04	3.16	278	.002
Face-to-Face vs. Texting					
Small-Talk	0.01	.05	0.16	283	.872
Intimate	0.09	.04	2.05	281	.042

Appendix C Figures

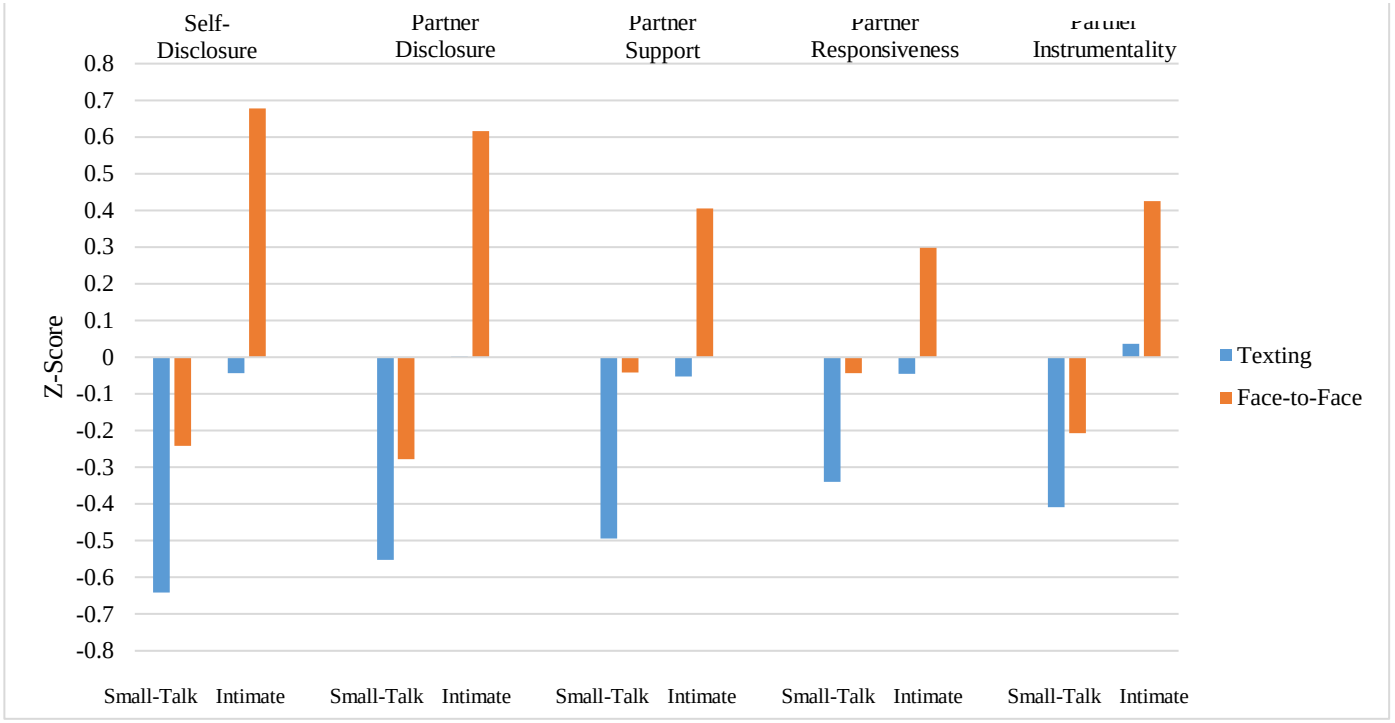

Figure 1 Z-scores as a Function of Condition for Self-Disclosure, Partner Disclosure, Partner Support, Partner Responsiveness, and Partner Instrumentality

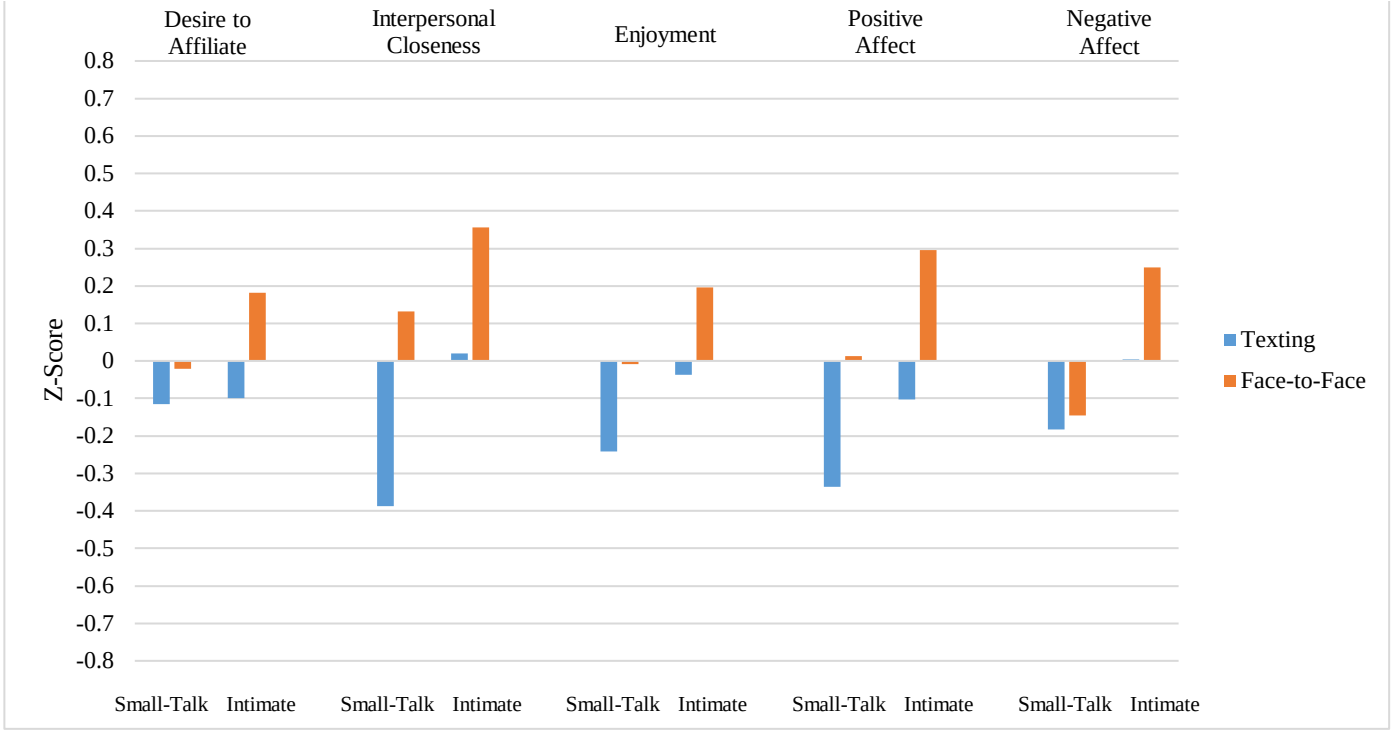

Figure 2 Z-scores as a Function of Condition for Desire to Affiliate, Interpersonal Closeness, Enjoyment, Positive Affect, and Negative Affect

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