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More Than Just Talking: The Role of Self-Disclosure in the Fast Friends Procedure

Chloe Shearer
coudykid@gmail.com

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More Than Just Talking:
The Role of Self-Disclosure in
the Fast Friends Procedure

by

Chloe Shearer

Submitted in partial fulfillment of the requirements for the degree

Master of Science

Department of Psychology

Seton Hall University

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Chloe Shearer

SETON HALL UNIVERSITY
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APPROVAL FOR SUCCESSFUL DEFENSE

Masters candidate, **Chloe Shearer**, has successfully defended and made the required modifications to the text of the thesis for the M.S. during this **Fall Semester 2017**.

THESIS COMMITTEE

(please sign and date beside your name)

Mentor:

Dr. Susan E. Teague

Susan E. Teague 11/17/17

Committee Member:

Dr. Paige Fisher

Paige Fisher 11/17/17

Committee Member:

Dr. Marianne Lloyd

Marianne E. Lloyd 11/17/17

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Abstract

The Fast Friends (FF) procedure was developed to generate feelings of closeness in the laboratory through escalating, mutual self-disclosure by partners (Aron, Melinant, Aron, Vallone, & Bator, 1997). Research indicates that, in addition to generating feelings of closeness, self-disclosure can also benefit mood. This study examined not only the total, but also the relative amount of self-disclosure between dyad partners in the FF vs. control condition. It was found that while participants in FF engaged in more self-disclosure overall, disclosure within FF dyads was not equitable. Contrary to prediction, the FF procedure did not generate more positive feelings than the control condition. Results are discussed in terms of social penetration and information process theories. Recommendations for further investigation are considered.

Keywords: dyadic interaction, acquaintance dyads, self-disclosure, Fast Friends Procedure

More Than Just Talking: The Role of Self-Disclosure in the Fast Friends Procedure

Many popular TV shows have made friendships look like they arise naturally with little effort. For example, in the show “Friends”, which ran in the 1990s, most of the characters formed friendships simply by living in an apartment building with other young adults. In sharp contrast, 28% of Americans report that they know none of their neighbors by name (Heimlich, 2010), and 48% of Americans report that they can trust only some or none of their neighbors (Gao, 2016). Clearly, being near someone, even for a long time, is not sufficient to generate feelings of friendship.

Above and beyond spending time with someone or simply being near a person, a primary driver of relationship progress is self-disclosure. Self-disclosure is the interpersonal expression of self-relevant information- it is through self-disclosure that personal information becomes shared knowledge (Derlega, Anderson, Winstead & Greene, 2011). For these reasons, self-disclosure is most effective at creating intimacy when it is centered on affective, and not factual, content (Collins & Miller, 1994). It outperforms both time and proximity at generating feelings of closeness between people (Chaudoir & Fisher, 2010). At the individual level, it has been shown to benefit the discloser as well as the recipient of the information, as both partners in an interaction enjoy engaging in self-disclosure. At the dyadic level, it benefits the relationship by building intimacy (Collins & Miller, 1994).

Effects of Self-Disclosure on Liking

Self-disclosure and liking work together in a cycle. To illustrate these effects, imagine two friends; A and B. The first and strongest effect is that A liking B can cause friend A to disclose to friend B. The second effect: A’s disclosure can cause B to like A. The third effect: A

likes B more as a result of having disclosed to B (Collins & Miller, 1994). Together, these three effects create an upward cycle of intimacy in a dyadic interaction.

Effects of Self-Disclosure on Disclosers

Self-disclosure is considered to be an opportunity to express one's thoughts and feelings, to achieve closeness in new and existing relationships (Chaudoir & Fisher, 2010), and to develop a sense of self (Derlega et al., 2011). It is also pleasurable: Tamir and Mitchell (2012) found that people enjoy talking about themselves in a number of circumstances, even when they know no one is listening (although they would prefer an audience). Further, the researchers found that when the participants were paid to talk about different topics, people were more likely to choose to talk about themselves instead of about others or about facts, even though talking about themselves resulted in the smallest monetary payouts. Overall, Tamir and Mitchell (2012) found that talking about the self resulted in an increase of activity in brain regions associated with anticipating and receiving rewards such as food, money, and humor.

Other research indicates that engaging in self-disclosure improves overall mood. A meta-analysis (Frattaroli, 2006) found that experimental disclosure improved the psychological health subcategories of distress, depression, subjective well-being, anger, and anxiety. Leikas, Lönnqvist, and Verkasalo (2012) found that participants reported being in a better mood and feeling warmer towards their partner after a discussion with a friendly confederate. However, the researchers also found that that participants were in a worse mood following the interaction if they had been with a quarrelsome confederate. Bareket-Bojmel and Shahar (2011) found that the topic of disclosure affected mood; participants who disclosed about positive topics reported positive emotions following the interaction, and participants who disclosed about negative topics reported negative emotions. Self-disclosure has been found to affect mood in several, sometimes

inconsistent, ways. In part, effects on mood seem to be dependent on partner characteristics or topic of disclosure.

Self-Disclosure's Effects on Recipients

Partners in dyadic interactions recognize that listening to disclosure is rewarding. Receiving self-disclosure communicates to the recipient that they are liked, and that the discloser wants to increase the intimacy of the relationship. Recipients of self-disclosure usually recognize this, and will reciprocate the disclosure to communicate their liking and desire for closeness as well (Collins & Miller 1994). Further, because intimate disclosure is traditionally only the result of less intimate disclosure, recipients recognize that it is rare, and thus more valuable (Derlega et al., 2011). Tsay-Vogel and Oliver (2014) found that people enjoy listening to someone disclose, even when they are not the intended recipient of the disclosure. The researchers posit that this is likely at least partly because people generally value rarer, intimate disclosure.

However, receiving too much disclosure too soon can make the discloser seem inappropriate. Chaikin and Derlega (1974b) found that in initial interactions, participants preferred partners who made low-intimacy disclosures. Collins and Miller (1994) found that high-intimacy disclosure was viewed as inappropriate if it occurred too soon. Disclosers who reveal intimate details about themselves early in a relationship may be viewed as poorly adjusted or less likeable.

Listening to self-disclosure and being the discloser have similar effects on mood. Bareket-Bojmel and Shahar (2011) found that those who listened to positive self-disclosure reported positive emotions following the interaction, and those that listened to negative self-disclosure reported negative emotions.

Effects on the Dyad

As partners continue to engage in self-disclosure, the dyad as a whole may benefit. As the interaction continues, each partner continues to be rewarded; both by listening to their partner disclose, and by disclosing themselves. Intimate disclosure may also spur more disclosure; if told something intimate, people generally feel the need to reciprocate by disclosing something equally personal (Chaudoir & Fisher, 2010).

In most cases, both partners are seen in an increasingly favorable light as a result of them listening to each other (Chaudoir & Fisher, 2010). Each partner starts to generalize the good feeling they get from self-disclosing to good feelings about their partner, their relationship, and the interaction as a whole (Collins & Miller, 1994).

Effects Summary

Much research has shown that self-disclosure affects liking and closeness in a cyclical way: Liking leads to self-disclosure, in turn, this promotes more liking. In addition to generating feelings of closeness, self-disclosure may also influence both discloser and recipient mood. The positivity or negativity of the discussion may contribute to how positive or negative the dyad members feel following the interaction.

Theories of Self-Disclosure

Two major theories that may explain the benefits of self disclosure are Social Penetration theory (Altman & Taylor, 1973) and Information Processing theory (Ajzen, 1985). Social Penetration theory emphasizes the social and conversational disclosure processes is used by partners to generate relationship intimacy, whereas Information Processing theory emphasizes the underlying cognitive processes through which listening to self-disclosure creates relationship intimacy.

Social Penetration Theory

Social Penetration theory (Altman & Taylor, 1973) arose out of Social Exchange theory (Emerson 1976), which posits that people weigh the costs and benefits of their relationships without realizing it. Altman and Taylor (1973) applied this idea to self-disclosure. For example, after two people meet and engage in self-disclosure, they may evaluate each other, considering the costs and rewards of the relationship.

Consistent with the cost/benefit analysis approach, Altman and Taylor (1973) suggest that self-disclosure is a kind of social currency, and for this reason, self-disclosure must be reciprocal for partners to feel emotional equity. If someone receives a lot of self-disclosure, they interpret that to mean that person likes them. Of the same token, if someone discloses a great deal, they assume they did it because they like the person to whom they disclosed. This is consistent with research showing that increases in reported self-disclosure led to increases in reported closeness (Morry, 2005; Welker, Slatcher, Baker, & Aron 2014). Because self-disclosure can be used to create closeness, it can also be withheld to thwart the development of closeness. Inequitable disclosure between partners indicates to the partner who disclosed more that the partner who disclosed less information did not wish to become as close. In sum, partners can compare the relative amount, breadth, and depth of their own and their partner's self-disclosure exchange to infer the amount of intimacy in their relationship (Collins & Miller, 1994).

Finally, Social Penetration theory posits that self-disclosure has stages that all disclosers must pass through. Partners must first engage in non-intimate disclosure before they can engage in intimate disclosure. This is consistent with Collins and Miller (1994) who reported that

disclosers who disclose too much too soon may fail at achieving closeness because they skipped low-intimacy stages of disclosure.

Information Processing Theory

Information Processing theory can also be applied to understanding why people enjoy listening to self-disclosure, and the reasons that self-disclosure fosters liking. It theorizes that the self-disclosure link to liking is mediated by the positive thoughts generated in the recipient by another person's disclosure of intimate details about themselves. In turn, these positive cognitions often lead to increased liking for the discloser. For example, Collins and Miller (1994), found that people who disclosed intimately were viewed as more warm, trustworthy, and friendly. Azjen (1985) found that recipients formed positive thoughts and greater liking even for people who disclosed negative, intimate information. For example, disclosers who revealed negative, intimate details such as, "Sometimes I enjoy hurting the people I love" were perceived as being honest, modest, and sincere, and thus were liked more.

Information Processing theory posits that liking for the discloser is a result of positive thoughts. It theorizes that recipients form positive thoughts while listening to the discloser, and then generalize these thoughts to positive thoughts about the discloser. In line with the effects of self-disclosure and liking, as explained by Collins and Miller (1994), increased feelings of liking for the discloser leads to a greater likelihood of the recipient disclosing information about themselves. Additionally, partners may generalize the positive feelings they have about each other to the interaction as a whole. As a result, partners may desire future interactions and greater closeness, which fosters increased self-disclosure in a cyclical fashion (Kleinke & Kahn 1980).

Factors Affecting Self-Disclosure

Big Five Personality Differences

The outcomes of a dyadic interaction may be influenced by the dyad members' personalities. Trait theory, which posits that people are characterized by individual differences in patterns of thought, affect, and behavior, is the basis for the Big Five (or "OCEAN") model of personality. The five traits in this model are; extraversion, agreeableness, openness, neuroticism, and conscientiousness (John & Srivastava, 1999).

Well-known qualities of extraversion include social seeking behavior, affection, friendliness, and talkativeness (John & Srivastava, 1999). As it relates to self-disclosure, Loiacono (2015) found that extraverts were more willing to share personal information on social media sites. In dyadic interactions, extraverts have reported to feel more control over the interaction (as compared to those low on extraversion) (Laurenceau, Barrett, & Pietromonaco, 1998), and were more willing to seek out social situations where the conversation topic is uncertain. Cuperman and Ickes (2009) also found that extraverts initiated more conversations and spent more overall time in social situations.

Agreeableness is characterized by trust, sympathy, and cooperation (John & Srivastava, 1999). People high on agreeableness are often characterized by their general friendliness. Cuperman and Ickes (2009) found that those high on agreeableness initiated more conversations with acquaintances. Those high on agreeableness have also been found to disclose more information and listen to their partner disclose more information, as compared to those low on agreeableness (Barrett & Pietromonaco, 1997).

Openness is defined by being imaginative, daring, and original (John & Srivastava, 1999). Cuperman and Ickes (2009) found that partners high in openness initiated more

conversation sequences and introduced more new discussion topics. Barrett and Pietromonaco (1997) found that those high in openness reported more intimacy following the interaction. However, Wilson, Harris and Vazire (2015) found that openness was not at all related to friendship satisfaction, and (Pennebaker & King, 1999) found that openness was negatively correlated with first person pronoun usage, so it is unclear just how openness affects self-disclosure in dyadic interactions.

Neuroticism is characterized by worry, insecurity, and self-consciousness (John & Srivastava, 1999). High levels of neuroticism have been associated with low levels of reciprocating self-disclosure, and lower friendship satisfaction (Wilson et al., 2015). Barrett and Pietromonaco (1997) found that neurotics felt less in control during dyadic interactions. While neurotics experience more quarrels, they also seek out more conversations where the topic is uncertain (likely because they already tolerate a high level of uncertainty). Neuroticism has also been found to positively correlate with first-person pronoun use, consistent with theories that those high on neuroticism are also high on self-involvement (Pennebaker & King, 1999). It is unclear what effect neuroticism has on self-disclosure in dyadic interactions. For these reasons, neuroticism's role in influencing self-disclosure will not be considered in the present research.

Conscientiousness is characterized by ambition, perseverance, and self-control (John & Srivastava, 1999). It has been found to be largely intrapsychic, and so it is unclear what role (if any) it plays in dyadic interactions (Barrett & Pietromonaco, 1997; Frederickx & Hofmans, 2014). Other research suggests that its link to self-disclosure is indirect because its impact is based on the level of other factors (i.e., perceived benefits and risks as a result of self-disclosure) (Loiacono 2015). For these reasons, conscientiousness' role in influencing self-disclosure will not be investigated in the present research.

Perceived Similarity

People may choose whether or not to disclose based on how similar they believe their partner is to them. People tend to prefer others who are similar to them. For example, people generally prefer others of the same gender, race, and/or occupation (Toosi, Babbitt, Ambady, & Sommers, 2012). When interacting with someone who was similar to them, partners reported less anger, contempt, fear, and nervousness than with those dissimilar to them (Brewer, 1999). Participants have also displayed visibly friendlier, warmer behavior, as well as better performance on tasks (both collaboratively and individually) when paired with similar partners (Fitzgerald & Wickwire, 2012). This is consistent with the Information Processing approach; people are more likely to disclose to people they view favorably (Kleinke & Kahn, 1980). Because people view those similar to them more favorably, they are more likely to disclose to them.

Cuperman and Ickes (2009) found that if partners were similar in personality, they engaged in more self-disclosure (as operationalized by the ratio of their first-person pronouns to their total pronouns), verbally acknowledged their partner more, and reported greater feelings of liking. However, if both partners were low on agreeableness, they each reported being uncomfortable, not feeling respected, and low feelings of closeness following interaction. While personality similarity can generate more feelings of closeness between two partners, it is not successful in cases of two disagreeable partners, wherein the negative effects are quite dramatic.

Experimentally Created Friendship

In an attempt to simulate friendship in a laboratory setting, Aron, Melinat, Aron, Vallone, and Bator developed the Fast Friends (FF) procedure (1997). Creating a friendship in the lab would minimize extraneous variables that would exist in naturally formed friendships, such as

how they met, length of friendship, etc. In order to generalize findings, the procedure would need to create a genuine feeling of closeness, similar to the bond between close friends.

To achieve these goals, Aron and colleagues based the FF procedure around a series of prompts (e.g., “When did you last cry?”, “Tell your life story in 4 minutes.”), which participants take turns reading aloud and answering for forty-five minutes. This method was successful: Following the procedure, participants reported that their relationship with their partner was as intimate as their average relationship, feelings which would normally take weeks to generate.

Because many earlier studies of friendship had documented the important effects of similarity on relationship formation, Aron initially matched participant pairs based on introversion/extraversion. What he found, however, was that conventional methods of matching participants did not increase feelings of closeness following the Fast Friends interaction.

Aron et al. conducted many other studies to further demonstrate the power of the FF technique. In one, for example, participants were told explicitly that their partners had been matched to them on personality to investigate the effects of a self-fulfilling prophecy. Based on Merton’s (1948) concept, if one has expectations about the characteristics of another, it may influence interactions with that person. This did not happen, however, in that feelings of closeness were not affected by this manipulation. Similarly, when participants were told explicitly that the goal of the procedure was to create closeness, there was no effect on perceived closeness, beyond that generated by the FF procedure.

Additionally, although previous research (Bareket-Bojmel & Shahar, 2011; Leikas et al., 2012) has found that mood following an interaction is often affected by the topic of discussion, or attitude of the partner, effects on peoples’ mood following participation in FF is unclear. Many of the prompts are serious, and some are potentially upsetting (i.e., “What is your most

terrible memory?"). Nonetheless, Aron et al. (1997) reported that many participants enjoyed the procedure, giving it a mean rating of 5 on a 7-point scale (1 = Not Very Much; 7 = Very Much). This item was also highly correlated ($r = .52$) to a composite index of closeness to partner.

In summary, the FF Procedure is a 45-minute activity that two strangers complete together. The most important component of this procedure is the escalating levels of self-disclosure. Upon completion, participants reported enjoying the procedure, in addition to feelings of closeness comparable to their average relationship.

Why is FF Successful?

Although most people want to make a good impression when meeting a new person, few people are always confident they will do so. Many people feel some sort of social anxiety when meeting a new person (Schlenker & Leary, 1982). Speaking to a stranger for the first time may invoke social anxiety if the person desires to make a good impression, or if they want to make a good impression but doubt that they will be successful.

The prompts in FF assist in working around this nervousness. Previous research has found that using a script in an acquaintance dyad reduces interaction anxiety (Avery, Richeson, Hebl & Ambady, 2009). In the FF procedure, participants are directed to take turns reading prompts aloud and answering them. This functions as a partial script, which can reduce participant anxiety. When participants are not anxious, they are more likely to be receptive to the effects of their own, and their partner's, self-disclosure. Specifically, when participants' social anxiety is reduced, they are more likely to feel close to their partner as a result of their own and their partner's self-disclosure (Kashdan & Wenzel, 2005).

By functioning as a partial script, the prompts in FF can also direct conversation to appropriate intimacy levels. Revealing too much personal information too soon has been shown

to sour interactions (Collins & Miller, 1994). Similarly, Johnson, Olson, and Fazio (2009) found that people prefer to disclose about intimate topics later in an interaction. FF avoids the problem of over-disclosure by ordering the prompts: early prompts center on superficial topics, while later ones focus on intimate ones.

Reciprocal turn-taking is an important component in generating equitable feelings of liking. Sprecher, Treger, Wondra, Hilaire and Wallpe (2013) showed that taking turns while engaging in self-disclosure generates the strongest feelings of liking. They found that when partners were prompted to take immediate turns disclosing, they reported greater liking, closeness, enjoyment of the interaction, and perceived similarity, as compared to partners who took on the role of either disclosing or listening. Consistent with Social Penetration theory (Altman & Taylor, 1973), the FF procedure may be generating feelings of closeness because it facilitates reciprocity: prior to the interaction, partners are encouraged to take turns reading and answering the prompts.

While the partial script and reciprocity components of the prompts are important, the self-disclosure that the prompts elicit is what generates the strongest feelings of closeness. Aron et al. (1997) originally tested the FF procedure against a control “Small Talk” (ST) condition that also had prompts and turn-taking. These prompts are banal topics (e. g., “Where do you get your hair cut?” “What magazines do you read?”), instead of prompts for self-disclosure. The FF condition generated more feeling of closeness than the ST condition. This suggests that while immediate turn taking in conjunction with self-disclosure may increase feelings of closeness, immediate turn-taking in a conversation without self-disclosure does not create feelings of closeness.

In summary, the FF procedure is successful because of its self-disclosure prompts, which encourage reciprocal self-disclosure over the course of a 45-minute interaction. Consistent with

the Social Penetration theory (Altman & Taylor 1973), the most important component of the procedure appears to be the escalating self-disclosure. From an Information Processing perspective, partners' perceptions of sharing privileged information promotes mutually favorable impressions of one another. These perceptions are likely to lead to increased liking and closeness.

The Present Study

The research suggests that, for self-disclosure to generate the most feelings of closeness, partners must both engage in reciprocal self-disclosure (Altman & Taylor, 1970; Sprecher, 2013). However, the original creators of FF, Aron et al (1997), did not experimentally test the amount of self-disclosure participants engaged in. Although it is assumed that the self-disclosure is reciprocal, as participants are instructed to take turns reading aloud and answering the prompts, it is not clear if this is actually so. For example, it is possible that one partner could do more of the talking during the procedure. For these reasons, the current study tested the relative amount of self-disclosure partners engaged in, and how this may have affected the quality of their interaction. There were only two possibilities: either the prompts in FF elicit roughly the same amount of self-disclosure from both partners, or self-disclosure is uneven between partners. If the latter is true, that means that the FF procedure generates feelings of closeness despite uneven levels of self-disclosure. This would be inconsistent with the current research on self-disclosure as it relates to closeness, which states that self-disclosure must be reciprocal to generate feelings of closeness.

Further, it is not known whether personality affects the amount of partners' self-disclosure in FF. Previous research (Cuperman & Ickes, 2001; Laurenceau, Barrett, & Pietromonaco, 1998; Loiacono, 2015) has found both extraversion and agreeableness to be

important determinants of closeness and liking in dyadic interactions. When developing the FF procedure, Aron et al., (1997) tested the effects of personality on closeness by matching participants on introversion/extraversion. They found that personality differences between participants did not affect reported closeness following the interaction. However, although personality does not affect feelings of closeness, it is not clear if personality affects the degree or type of disclosure within the interaction.

Based on research documenting self-disclosure's role in friendship formation, and the fact that the self-disclosure component of FF has not been studied systematically, the first hypothesis was created:

H1: Members of FF dyads will both engage in high levels of self-disclosure.

Because the FF procedure has been shown to work regardless of personality effects on friendship formation, Hypothesis 2 predicts that participant personality differences will not affect self-disclosure in the FF condition.

H2: In the FF condition, differences in personality will not affect the amount of self-disclosure participants engage in.

The effects of self-disclosure on mood are unclear. Other studies have found that participant mood can be improved as a result of self-disclosure (Bareket-Bojmel & Shahar, 2011; Leikas et al., 2012), but it is unclear if this effect would extend to the FF procedure. While participants have reported previously that they enjoyed the FF procedure (Aron et al., 1997), some of its prompts concern potentially upsetting topics: Its effects on mood are unclear and have not been studied explicitly. For these reasons, the researcher created a third hypothesis:

H3: Participants in the FF group will report more positive emotions following the interaction, as compared to those in the Small-Talk control condition.

Method

Research Participants

A G*Power analysis showed that 50 dyads, or 100 participants, would be needed to detect a moderate effect of the FF procedure on amount of self-disclosure and mood. The goal was to set up 25 dyads for each of the two experimental conditions. This number of participants should have allowed for the detection of a moderate effect, thought to be a sufficient test of the hypotheses.

Only women were selected for participation. The researcher wanted to avoid mixed gender dyads that could become gender confounds. Women were chosen also because they have been shown to have closer and more involved interactions with other women, as compared to women with men, and men with men (Cuperman & Ickes, 2009). Additionally, all experimenters proctoring the experimental sessions were women. By selecting only women, the researcher avoided gender confounds between and within dyads, as well as between participants and the experimenter.

There was a total of 114 participants, 58 were in the FF condition. All participants were undergraduate women. Most participants ($n=84$) were between the ages of 18 and 19. The race distribution was as follows; 72 participants were White, 26 were Asian/Pacific Islander, 11 were African American/Black, 2 were multiracial, and 3 chose not to respond. The ethnic distribution was as follows; 88 participants were non-Hispanic or non-Latina, 26 participants were Hispanic or Latina. Through random assignment, 56 participants were paired with someone who was the same race as them, and 40 participants were paired with someone who was the same race and ethnicity as them. The modal year in school was freshman ($n=60$), followed by sophomore ($n=34$), junior ($n=7$), senior ($n=11$); two participants chose not to respond.

Participants were recruited through the university research participant pool and were reimbursed with class credit. Students were required to be fluent in English to participate, as they had to be able to read and comprehend the experimental materials. Participants were assigned to dyads based on signing up for the same timeslot, and dyads were randomly assigned to FF or ST conditions.

Procedure

The FF Procedure scaffolds conversation by prompting participants with questions printed on slips of paper (see Appendix A for all prompts). As specified in Aron et al. (1997), dyads in the FF condition received three envelopes containing questions prompting conversation at increasing levels of self-disclosure: The first contained prompts at a superficial level, the second contained more personal, but somewhat superficial topics, and the third contained prompts for more intimate topics, generally in the domain of close friendships.

Consistent with the original Aron et al. (1997) procedure, participants in the ST control group also received three sets of prompts in envelopes to facilitate conversation (see Appendix B). These prompts remained at a superficial level and did not escalate in intimacy over the course of the interaction.

When the dyads arrived, the experimenter went over the consent form with them, answering any questions they had about the study. Next, participants completed a The Big Five Inventory (see Appendix C) and the demographics inventory (see Appendix D) in separate rooms. Next, the experimenter read them the instructions for the procedure, taken directly from Aron et al. 1997. All dyads heard the same instructions:

“This is a study of interpersonal closeness, and your task, which we think will be quite enjoyable, is simply to get close to your 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 demonstration only, we are not advising you about your behavior outside of this demonstration.”

Dyads were further instructed to start with the first envelope, to take turns selecting slips of paper out of the envelope, and then to read the prompt aloud. For example, dyad member A may select the prompt, “What would constitute a "perfect" day for you?” to which dyad member A and B would both respond. At this point, it would be dyad member B’s turn to select a prompt to which they would both answer. The partners went back and forth until fifteen minutes passed, as indicated by a bell tone, and then moved on to the second envelope. The question and answer format repeated for the prompts contained in the second envelope, also for fifteen minutes, and then the dyad concluded with discussing topics prompted by slips in the third envelope. Dyads rarely got through all the slips in the time allowed, but this was of no consequence. According to Aron’s research, what is most important is that dyads were engaging in prompted, escalating self-disclosure for 45 minutes. And for the ST condition, it is only important that they continued discussing at a superficial level the entire time (Aron et al., 1997).

Once the instructions for the task were read, the experimenter reminded the participants that the session would be recorded. At this point, the experimenter turned on the digital recorder and asked each participant to say their participant ID aloud. Participant IDs were the dyad number and either A or B. For example, the participant IDs for dyad number 12 were “12A” and “12B”. This method of distinguishing dyad members was piloted on the first 5 dyads, all of whom reported during debriefing that they did not feel it impacted their interaction quality or self-consciousness. For this reason, this method of distinguishing the dyad members on the audio

recordings was continued. After the participants said their IDs aloud, the experimenter left the room.

When the forty-five minutes were up, the experimenter re-entered the room and stopped the discussion. Then, the participants were separated to fill out evaluative questionnaires. When both participants completed all the measures, the experimenter brought them back into the same room to be debriefed.

The conversations of both experimental and control groups were recorded via a digital voice recorder. This was to record the interaction for further analyses. Using the recorded audio, the researcher verified that participants completed the prompts in order, and took notes on the number of pronouns each participant used.

Inventories

Manipulation check.

Disclosed Subscales. Although scales measuring self-disclosure exist, they ask only general questions about broad topics. For example, “My deepest feelings” and “My thoughts” (Miller, Berg, & Archer, 1983; Laurenceau et al., 1998). There are no scales specific to the FF and ST conditions. Based on the differences between the FF and ST prompts, the researcher expected participants in the two conditions to discuss these different topics. Therefore, the researcher created a measure that had separate subscales sensitive to the two conditions. These distinct subscales were created to obtain richer data about disclosure during the interaction. The researcher used them to measure participant self-disclosure, as well as to check that participants stayed on task.

In numerous studies, Aron et al. (1997) found that participants did not need to complete all the prompts in order to achieve feelings of closeness, because many of the prompts ask about

similar topics. For this reason, all participants were eligible to complete the post-interaction inventories, even in the event they did not complete all the prompts.

Participants were asked to indicate the degree to which they disclosed to their partner about various topics (see Appendix E). Responses were on a five-point Likert scale; (1) not at all, (2) very little, (3) some, (4) a fair amount, (5) very much. Seven of the items asked about topics taken from FF prompts, five of the items were topics from the ST prompts (see Appendix F). Participants then completed a second version of the questionnaire where they indicated the degree to which they listened to their partner disclose about these same topics. The maximum score on the FF Disclosed subscale is 35. The maximum score on the ST Disclosed subscale is 25. Given that the same items were used in the Listened subscales, the maximum scores are the same. However, due to the type of analysis chosen, the Listened subscales were not included in these analyses.

Closeness verification.

Because generating feelings of closeness is the true purpose of the FF procedure, it was critical to assess its efficacy. In order to verify the effectiveness of the FF procedure, the researcher utilized two measures of closeness; The Inclusion of the Other in the Self (IOS) and a measure of future interest.

Inclusion of Other in the Self (IOS) scale. This measure is comprised of two items (see Appendix G). The first asks about the participant's assessment of their current relationship with their partner, the second asks about the participant's desired relationship with their partner. Both scales are comprised of seven Venn diagram-like figures, ranging from the circles not at all touching to almost completely overlapped. The participant selected the figure that best represented their current relationship with their partner. Next, from an identical set of Venn

diagram-like figures, they selected the one that represented their desired relationship with their partner. The first figure is coded as a “1”, the last figure is coded as a “7”. Seven is the maximum score for each scale. Consistent with Aron et al. (1997), responses to each scale were considered and analyzed separately, so as not to obscure any differences in actual and desired closeness.

Aron, Aron, and Smollan (1992) found that the IOS has high test-retest (.85) and alternate-form (.92) reliability in friendship research. They also found that the scale has convergent and discriminant validity with related measures. The scale has also been found to predict relationship maintenance over 3 months. The scale is not as sensitive to the effects of social desirability, as other measures have been found to be.

Measure of future interest. Rosen, Mickler, and Collins (1987) used a behavioral measure of future interest as a measure of attraction. The researchers asked participants if they were interested in being their partner’s tutor, or would like to work with that person again in some capacity. This logic was used in the present study to formulate an indicator of interest in future contact with partner. Participants responded to an item asking if they would like to share their phone number with their partner (see Appendix H). It was explained that many people enjoyed the interaction with their partner, and that it was not uncommon for partners to share phone numbers to facilitate future contact with each other. Participants either selected a “yes” or “no” option. The response was used to assess participants’ liking of their partner; choosing “yes” would imply liking for their partner, and that they wished to see their partner again.

Assessments of self-disclosure.

Pronoun ratio. As a way of measuring self-disclosure, the researcher counted the number of each type of pronoun participants used. Pronouns were sorted into four categories; first person (I, me, myself), third person (he, she, it), second person (you, your, yourself), and community

(pronouns referencing the self and partner i.e., we, our). The researcher created a coding form with a section for each category. Each time a participant used one of the four pronouns in her recorded conversation, the researcher made a tally mark in the appropriate section. The researcher then computed a ratio of first person pronouns to the total number of pronouns used in the interaction. The ratio was calculated as follows:

$$\frac{\textit{first person pronouns}}{(\textit{first person pronouns}+\textit{third person pronouns}+\textit{second person pronouns}+\textit{community pronouns})}$$

This method of counting pronouns is similar to the method developed by Ickes, Reidhead, and Paterson (1986). They found that an increase of first person pronouns was related to an increase in self-focused discussion. The researchers originally sorted pronouns as follows; by person (first, second, or third person; number (singular, plural), and case (nominative, objective, possessive, reflexive). However, in later research, Cuperman and Ickes (2009) explained that significant results are rarely found for the personal pronoun dimensions of number and case. Thus, Cuperman and Ickes computed pronoun ratios based on first-person, second-person, and third-person pronouns, splitting first-person into first-person singular (I, me) and first-person plural (we, our).

According to Social Penetration Theory (Altman & Taylor, 1973), for a dyad to reach a very intimate level of conversation, they must first pass through the less intimate levels. Based on this theory, the researcher chose to count pronouns during the third and final stage of the interaction. Cuperman and Ickes (2009) originally analyzed six-minute recordings of dyadic interactions, however their paradigm used unstructured dyadic interactions. Based on other structured dyadic interaction research that instructed participants to discuss a prompt (Feeney, Collins, Vleet, & Tomlinson, 2013) the present research used ten-minute sections of the interaction for analysis. The ten minutes following the start of the third and final set of prompts

as the section of audio to use for analysis, as this contained prompts for the most intimate topics in the FF condition.

The procedure for counting the pronouns was as follows. The researcher would first listen to the dyad members say their participant IDs at the beginning of the interaction. Next, the researcher would skip ahead to approximately 30 minutes into the recording to listen for the second chime, which signaled the third and final stage. Upon hearing the chime, the researcher would mark the timestamp of the chime on the audio file. The researcher would then listen to the entire ten-minute segment to get a sense of the interaction. Then the researcher would select one of the dyad members and only listen for pronouns from that dyad member. The researcher would then go back and start from the second chime again, this time only listening to pronouns from the other dyad member. Thus, each ten-minute segment was listened to at least three times. Interactions wherein dyad members were hard to hear were listened to as many times as necessary.

To establish reliability, after counting the pronouns in the first ten segments, the researcher listened to and counted them a second time. The second counts were within three pronouns for all four categories, and so the researcher continued with the analysis. Following the completion of all 108 segments, the researcher randomly selected a quarter of them (25 segments) for a second count (not including the first ten segments, which were already listened to twice). These segments were also within three pronouns on all four categories. In total, 35 segments were listened to twice, all of which were within three pronouns on all four categories.

Assessment of personality.

The Big Five Inventory (BFI). Participants completed the Big Five Inventory, as developed by John and Srivastava (1999) (see Appendix C). This is a 44-item personality scale

with 5 dimensions. Each item asked participants the degree to which they possess a personality trait. Responses were recorded on a five-point Likert scale; (1) disagree strongly, (2) disagree a little, (3) neither disagree nor agree, (4) agree a little, (5) agree strongly. All personality dimensions reported high alphas: Extraversion (.86), Agreeableness (.73), Conscientiousness (.78), Neuroticism (.84), and Openness to Experience (.79). All personality dimensions have a maximum score of 5. Subscales are scored by taking the average of the items. All participant subscale averages were within 1 standard deviation of reported norms (see Appendix I).

Assessment of mood.

Brief Mood Introspection Scale (BMIS). To measure mood following the interaction, participants completed the BMIS, as developed by Mayer and Gaschke (1988) (see Appendix J), to indicate how they were feeling following the interaction. The scale has 16 items; 2 selected from each of eight mood states: (1) happy (happy, lively), (2) loving (loving, caring), (3) calm (calm, content), (4) energetic (active, peppy), (5) fearful/anxious (jittery, nervous), (6) angry (grouchy, fed up), (7) tired (tired, drowsy), and (8) sad (gloomy, sad). Responses to each item were recorded on a four-point Likert scale; (1) definitely do not feel, (2) do not feel, (3) slightly feel, (4) definitely feel.

Mayer and Gaschke (1988) used principal factor analysis of the items to compute the subscales. The two subscales also used in the current study are as follows;

Pleasant-Unpleasant. Items added were active, calm, caring, content, happy, lively, loving, and peppy. Items reverse scored and then added were drowsy, fed up, grouchy, jittery, nervous, sad, and tired. (Cronbach's alpha= .83). The minimum score is 15, the maximum score is 60.

Positive-Tired. Items added were active, caring, lively, loving, and peppy. Items reverse scored and then added were drowsy and tired. (Cronbach's $\alpha = .77$). The minimum score is 7, the maximum score is 28.

These subscales were selected due, in part, to their high Cronbach's alphas. The remaining subscales had Cronbach's alphas of .58 (Arousal-Calm) and .76 (Negative-Relaxed). More importantly, the selected subscales contained the most items related to "enjoyment". Given that the only mood data on FF suggests that participants felt joy following the interaction, it is logical that the chosen mood scale should address this.

Demographics. To collect more general information about the participants, the researcher included a demographics inventory (see Appendix D). This asked for participant's gender, race, ethnicity, class, major, and age. The gender items were as follows; male, female, prefer not to answer. Although the study only recruited female participants, this was included to be certain that all participants identified as female. The race/ethnicity items were as follows: African American/Black, Asian/Pacific Islander, Hispanic/Latino, Multiracial, Native American/American Indian, White, Not Listed (please specify _____), Prefer not to respond. Participants were able to check as many options as they felt applied to them. The class items were as follows; Freshman, Sophomore, Junior, Senior. The major item was a free response section. The age items were as follows; Under 18, 18-19, 20-21, 22-24. These small age ranges simplified later analysis as responses are 1 of 4 categories. These age items have been used on survey forms for college populations (College of New York, Brooklyn, 2003; Texas A&M, 2016).

Results

Preliminary Analyses

Manipulation check.

The data was analyzed using SPSS version 24 software. A one-way ANOVA was used to compare (1) the FF Disclosed subscale total scores in the FF and ST condition and (2) the ST Disclosed subscale total scores in the FF and ST condition. This was done to confirm that the FF condition talked about FF topics, and that the ST condition talked about ST topics.

Table 1

Means and Standard Deviations on the Measures of Disclosure

Condition	<i>n</i>	FF style disclosure		ST style disclosure	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
FF	58	23.16	5.24	7.52	2.31
ST	56	16.30	4.67	15.55	3.99

There was a significant difference on the FF Disclosed subscale total score, $F(1, 112) = 54.25, p < .01, d = 1.38$. Participants in FF reported talking about more intimate, FF style topics ($M = 23.16, SD = 5.24, 95\% CI [21.78, 24.53]$) as compared to those in the ST condition ($M = 16.30, SD = 4.67, 95\% CI [15.05, 17.55]$).

There was a significant difference on the ST Disclosed subscale total score, $F(1, 112) = 174.90, p < .001, d = 1.74$. Participants in ST reporting talk about shallower, ST style topics ($M = 15.55, SD = 3.99, 95\% CI [14.49, 16.62]$) as compared to those in the FF condition ($M = 7.52, SD = 5.17, 95\% CI [10.51, 12.42]$). Based on these results, the researcher concluded that

participants largely stayed on task: FF participants talked about FF topics, and that ST participants talked about ST topics.

Closeness Verification

A one-way ANOVA and a chi-square were used to compare how close partners in the FF condition reported feeling to their partners versus how close participants in the ST condition reported feeling to their partners. This test was done to confirm that the FF procedure successfully generated feelings of closeness.

Closeness was measured using the IOS current and desired items, as well as partner's willingness to exchange phone numbers. A one-way ANOVA was conducted on both the IOS current and desired items, and a chi-square was conducted on partners' reported willingness to exchange phone numbers, as it was a dichotomous variable.

Levene's tests were conducted on the IOS current and desired items. Both the IOS current and desired passed the assumption of homogeneity of variance.

There was a significant effect of Condition on the IOS current and the IOS desired scores (see figure 1), $F(1, 112) = 14.94, p < .01, d = .73$, and $F(1, 112) = 5.61, p = .02, d = .44$ respectively. Participants in the FF condition reported higher scores on the IOS current ($M = 3.64, SD = 1.41, 95\% CI [3.27, 4.01]$) and the IOS desired ($M = 4.26, SD = 1.66, 95\% CI [3.82, 4.70]$) as compared to those in the ST condition (IOS current $M = 2.66, SD = 1.28, 95\% CI [2.32, 3.00]$; IOS desired $M = 3.54, SD = 1.60, 95\% CI [3.11, 3.96]$).

IOS Mean Differences



Figure 1. IOS mean differences in FF and ST conditions.

A chi-square test of independence was performed to examine the relation between Condition and willingness to share phone number. The relation between these variables was significant, $X^2(2, N = 112) = 5.63, p = .02$. FF participants were more willing to share their phone number with their partner (*Yes* = 47, *No* = 9) than ST participants (*Yes* = 36, *No* = 20).

Together, these results suggest that the FF procedure was successful in generating feelings of closeness between partners. Partners in FF reported feeling closer to their partner and

desiring more closeness with their partner, as compared with those in the ST condition.

Additionally, more participants in FF were interested in sharing their phone number with their partner than those in the ST condition.

To further confirm the effectiveness of the FF procedure, the researcher split the file by Condition. This was done so that researchers could look within dyads. Four related-samples *t*-tests were conducted; on the IOS current for both FF and ST dyads, and on the IOS desired for both FF and ST dyads. The related-samples *t*-test has been previously used to measure how members of a dyad differ on the same measure (Schneider, 2016). It was selected for its simplicity and ease of use. The researcher also conducted two chi-square tests on the behavioral phone number measure; comparing ST partners on their desire to share phone numbers, comparing FF partners on their desire to share phone numbers.

Within both the FF and ST conditions, there were no significant differences between interaction partners on the IOS current FF $t(28) = .33, p = .74$; ST $t(27) = -.56, p = .58$, or on the IOS desired FF $t(28) = 1.28, p = .21$; ST $t(27) = .16, p = .87$. That is to say, in both FF and ST dyads, partners reported feeling and desiring similar levels of closeness to their partners. Further, there were no differences according to condition between partners' desire to exchange phone numbers, FF $X^2(2, N = 56) = .13, p = .72$; ST $X^2(2, N = 56) = 1.244, p = .26$. Only 5 FF and 8 ST dyads indicated differing desires to exchange phone numbers with their partners. These results suggest that feelings of closeness were equitable within dyads in both the FF and ST conditions.

To confirm the null results of the one-way ANOVAs on the IOS current and IOS desired items, the researcher examined the data by estimating a Bayes factor using JASP (2017). This compared the fit of the data under the null hypothesis and the alternative hypothesis. In all tests comparing IOS current and IOS desired scores within FF and ST dyads, the data was in favor of

the null hypothesis. These results indicate that there were no statistically significant differences on the IOS current and IOS desired items within FF and ST dyads.

H1: Members of FF Dyads Will Both Engage in High Levels of Self-Disclosure

To test if FF members engaged in comparable amounts of self-disclosure, the researchers first tested overall self-disclosure; comparing the FF and ST conditions. A one-way ANOVA was conducted on the dependent variable measuring self-disclosure; the ratio of first person to overall pronouns.

There was a significant difference in the ratio of first-person to overall pronouns, $F(1, 106) = 8.32, p = .005, d = .54$. Participants in FF used more first-person pronouns, relative to all pronouns, ($M = .57, SD = .096, 95\% \text{ CI } [0.54, 0.59]$) than did those in the ST condition ($M = .52, SD = .09, 95\% \text{ CI } [0.49, 0.54]$) (see Figure 2).

Pronoun Ratio Mean Differences



Figure 2. Ratio of first-person to all pronouns in the FF and ST conditions.

To test whether both members of the FF pairs engaged in high levels of self-disclosure, a related-samples t-test was conducted on the dependent variable; the ratio of first-person pronouns to overall pronouns. This analysis revealed a significant difference in the ratio of first-person to overall pronouns ($M = .05$, $SD = .11$; $t(26) = 2.54$, $p = .02$). This suggests that first person pronoun use was not equitable within FF dyads, that is, some FF dyad members used more first-person pronouns (relative to their total number of pronouns) than their partners. Because first-

person pronouns are a proxy for self-disclosure, this finding suggests that FF dyad members did not engage in equitable levels of self-disclosure.

To test whether both members of the ST pairs engaged in similarly low levels of self-disclosure, a related samples t-test was conducted on the dependent variable; the ratio of first-person pronouns to overall pronouns ($M = .03$, $SD = .10$; $t(27) = 1.31$, $p = .20$). This suggests that first person pronoun use was equitable within ST dyads, that is, most ST dyad members use similar amounts of first-person pronouns (relative to their total number of pronouns). Because first person pronouns are a proxy for self-disclosure, this finding suggests that FF dyad members not engage in equitable levels of self-disclosure.

In summary, FF dyad members did not use equitable levels of first-person pronouns. These findings are surprising given the closeness verification tests, which showed the FF dyad members reported feeling equitable levels of closeness following the interaction.

H2: In the FF Condition, Differences in Personality Will Not Affect the Amount of Self-Disclosure

A one-way analysis of covariance (ANCOVA) was conducted to test the effect of Condition on the self-disclosure variable (pronoun ratio) while controlling for the effects of the personality factors Extraversion, Agreeableness, and Openness.

Because the analysis of Condition (FF vs ST) had shown differences in self-disclosure, as operationalized by pronoun ratio, similar analyses were conducted while controlling for the effect of personality. To test the effect of personality on the pronoun ratio, the researcher inserted the three personality variables, Extraversion, Agreeableness, and Openness as covariates into an ANCOVA. A Levene's test was conducted on the model, it was nonsignificant, thus the assumption of equal variances was met.

None of the personality variables were found to significantly affect the pronoun ratio: Extraversion, $F(1, 103) = 1.18, p = .28, \eta_p^2 = .01$; Agreeableness, $F(1, 103) = .76, p = .39, \eta_p^2 = .007$; and Openness, $F(1, 103) = 1.50, p = .22, \eta_p^2 = .01$. These results suggest that there is no interaction between these personality factors and Condition on the measure self-disclosure; first-person pronouns relative to all other pronouns.

To confirm the null results the researcher examined the data by estimating a Bayes factor using the JASP software (2017), comparing the fit of the data under the null hypothesis and the alternative hypothesis (Kass & Raftery, 1995). An estimated Bayes factor (null/alternative) suggested that the data were 1:0.77 in favor of the null hypothesis. Based on Jeffreys (1961) Bayes Factors table, this is considered to be anecdotal evidence for the null hypothesis. This is not considered to be evidence in favor the of the alternative hypothesis.

H3: Participants in the FF Group Will Report More Positive Emotions Following the Interaction, as Compared to the Small-Talk Control Condition

To test if there was a significant difference between FF and ST participant mood following the interaction, the researchers conducted a one-way (FF vs.ST Condition) ANOVA. The two dependent variables were the BMIS subscores; Pleasant-Unpleasant, and Positive-Tired.

No significant difference was found between FF ($M = 47.11, SD = 7.76, 95\% CI [44.99, 49.23]$) and ST ($M = 47.89, SD = 5.66, 95\% CI [46.35, 49.43]$) participant mood on the BMIS Pleasant-Unpleasant subscore $F(1, 106) = .35, p = .55, d = .11$. Because the range of this subscale is 15 to 60, with higher scores indicating greater pleasantness, these means indicate that participants in both conditions felt largely pleasant emotions following the interaction. There also was no significant difference between FF ($M = 20.24, SD = 3.97, 95\% CI [19.16, 21.32]$) and ST ($M = 19.93, SD = 3.76, 95\% CI [18.90, 20.95]$) on the BMIS Positive-Tired subscale $F(1,$

106) = .18, $p = .67$, $d = .08$. The range of this subscale is 7 to 28, with 28 being very positive: These results suggest that participants in both conditions felt about the same amount of positive emotion following the interaction. In other words, participants’ emotional reactions were comparable across both FF and ST conditions.

Table 2

Means and Standard Deviations on the Measure of Pleasant Mood

Condition	<i>n</i>	Pleasant Mood		Positive Mood	
		<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
FF	54	47.11	7.76	20.24	3.97
ST	54	47.89	5.66	19.93	3.76

To confirm the null results regarding the Pleasant-Unpleasant mood scale, the researcher examined the data by estimating a Bayes factor, comparing the fit of the data under the null hypothesis and the alternative hypothesis. An estimated Bayes factor (null/alternative) suggested that the data were 1:0.24 in favor of the null hypothesis. Based on Jeffreys (1961) Bayes Factors table, this is considered moderate evidence in support of the null hypothesis: that there were no differences on the Pleasant-Unpleasant mood between the FF and ST groups.

To confirm the null results regarding the Positive-Tired mood scale, the researcher examined the data by estimating a Bayes factor, comparing the fit of the data under the null hypothesis and the alternative hypothesis. An estimated Bayes factor (null/alternative) suggested that the data were 1:0.22 in favor of the null hypothesis. Based on Jeffreys (1961) Bayes Factors

table, this is considered moderate evidence for the null hypothesis: that there were no differences on the Positive-Tired mood scale between the FF and ST groups.

To further explore the relationship between mood, disclosure, and feelings of closeness, the researcher conducted a point-biserial correlation between the two mood subscales (Pleasant and Positive) with the measure of self-disclosure (pronoun ratio), and the three measures of closeness; IOS current, IOS desired, and the willingness to share phone number.

The Positive mood subscale correlated significantly with the IOS current, $r(108) = .29, p = .002$, as well as with the IOS desired, $r(108) = .29, p = .002$. It did not correlate significantly with willingness to share phone number or the pronoun ratio.

There were no significant correlations between the Pleasant mood subscale and any of the dependent measures.

Table 3

Correlations Between Measures of Closeness and Mood

Measure	1.	2.	3.	4.	5.	6.
1. Positive mood subscale	-	-	-	-	-	-
2. Pleasant mood subscale	.89*	-	-	-	-	-
3. IOS current	.29*	.18	-	-	-	-
4. IOS desired	.29*	.19	.82*	-	-	-
5. Phone number	.170	.08	.41*	.53*	-	-
6. Pronoun ratio	.05	.02	-.03	-.05	.06	-

* $p < .01$

Discussion

Summary of the Hypotheses and Findings

The purpose of this study was to further explore the role of self-disclosure in the FF procedure. Specifically, the researcher investigated the total and relative amounts of self-disclosure in the FF and ST conditions, whether personality affected the amount of self-disclosure participants engaged in, and how the disclosure may have affected mood.

Closeness Verification. One major purpose of this study was to test whether the FF procedure would lead to greater self-disclosure than ST control. It was important to first ascertain whether the FF procedure had successfully created closeness in the dyad, as shown in prior studies of FF. Participants in FF felt closer to their partner and were more interested in sharing their phone numbers than those in the ST condition. These findings are consistent with Aron et al. (1997) regarding the effectiveness of the procedure. The researcher also found that within FF and ST dyads, feelings of closeness were equitable. That is, FF dyad members both felt generally medium to high levels of closeness, and ST dyad members both felt generally low to medium levels of closeness.

The practical significance of the FF procedure is unclear. In both the current study and the Aron et al (1997) original investigation of the procedure, the mean rated closeness on the IOS was slightly less than four on a scale that ranges from 1 to 7. However, when Aron originally asked participants to think of and then rate their “closest, deepest, most involved, and most intimate relationship” a mean of only 4.65 was found. In comparison to this number, the mean obtained in the present study (3.64) appears to indicate strong feelings of closeness. Yet, without putting the present finding in this context, the mean of 3.64 might not seem to indicate intense

feelings of closeness, given a maximal value of 7. As compared to the maximum value reported by Aron et al. (1997), however, this finding may have practical significance.

The mean IOS score in the ST condition must also be considered. Although it was statistically significantly lower than the mean in the FF condition, it was 2.66, roughly one point lower than the FF condition mean. For the ST condition, Aron et al (1997) did not report the IOS mean score, and instead reported a closeness composite, which included the IOS as well as other measures of closeness. The mean score on the closeness composite was 3.25 in the ST condition, and 4.06 in the FF condition. The reported effect size difference for these scores is comparable to the effect size found in the current research. These results suggest that participants reported feelings of closeness in the ST condition in the current research are similar to those found by Aron et al (1997).

In summary, while the IOS scores in the FF and ST condition are significantly different, it is unclear if the differences amount to substantial differences in feelings of closeness. Based on previous research on the role of self-disclosure and closeness (Altman & Taylor, 1973; Collins & Miller, 1994), as well as the weaknesses of time and proximity in generating closeness (Chaudoir & Fisher, 2010), one would expect greater feelings of closeness in the FF given that the participants are engaging in escalating, intimate self-disclosure in addition to spending time together.

FF and Self-disclosure. Two major purposes of this study were to test whether the FF procedure would lead to greater self-disclosure than ST control, and to test whether the amounts of self-disclosure would be equitable within the dyads. Aron et al., (1997) the original creators of FF, never experimentally tested self-disclosure within the FF procedure. These hypotheses were created to explore self-disclosure, and were based on research indicating that feelings of

closeness were the result of high levels of reciprocal self-disclosure (Chaudoir & Fisher 2010; Collins & Miller 1994; Sprecher et al., 2013). The present study confirmed that overall self-disclosure was higher in the FF condition. Participants in FF used more first-person pronouns (as compared to all their other pronouns) than did those in the ST condition.

However, the researcher found that first-person pronoun use within FF dyads was not equitable. In many FF dyads, one partner used significantly more first-person pronouns (as compared to all their other pronouns) than their partner. While no other research has tested the amount of self-disclosure in FF dyads explicitly, these findings are inconsistent with other literature indicating the importance of reciprocal self-disclosure in generating equitable feelings of closeness (Altman & Taylor, 1970; Sprecher, 2013). Specifically, other literature suggests that inequitable self-disclosure leads to inequitable feelings of closeness.

It is unclear how practically significant these findings are. There was only a 5% difference in first-person use when the FF and ST conditions were compared. There was also a 5% mean difference between partners when first-person pronoun use was compared within FF condition dyads. These results were smaller than the mean differences found by Ickes, Reidhead and Patterson (1986). When comparing first-person pronoun use among those high on Machiavellianism with those low on Machiavellianism, the researchers found a 9.5% difference between the two. When comparing first-person pronoun use among those high on self-monitoring with those low on self-monitoring, an 8.7% difference was demonstrated. However, Cuperman and Ickes (2001) found a 4% difference between men and women's third-person pronoun use, and used this as evidence to support their larger conclusion that partners had closer and more involved interactions with women than with men.

Although a 5% difference in first person pronoun use may only be a small to moderate difference, it is consistent with the size of differences found in pronoun use in other dyadic research. Thus, we can conclude that there is likely a practically significant difference in the amount of self-disclosure between FF and ST groups, as well as within FF dyads. Further, it is particularly noteworthy that the difference in the amount of self-disclosure between the experimental (FF) and control (ST) groups is the approximately the same size of the difference within FF dyads. This suggests that not only does the FF procedure fail to create equitable self-disclosure within dyads, the differences in self-disclosure are as great as those when the FF procedure is compared the ST control group.

Further, even if the mean differences in first-person pronoun use are somewhat small, it still begs the question: In FF dyads, how is it possible for there to be any difference in first-person pronoun use in an interaction which generates equitable levels of closeness? These findings run counter to Social Penetration theory, as well as call into question assumptions of FF's ability to generate reciprocal self-disclosure through the use of prompts.

Social Penetration theory argues that reciprocal self-disclosure signals to dyadic partners that both members are both trying to achieve closeness (Altman & Taylor, 1973; Sprecher et al., 2013). The results of the present study are more in line with the Information Process theory, which emphasizes the importance of listening to self-disclosure in generating feelings of closeness. It posits that people form positive thoughts about the discloser after listening to them disclose, and that these thoughts facilitate recipients' liking for the discloser (Ajzen, 1985; Kleinke & Kahn, 1980). In the current study, participants who disclosed less than their partner (and so, presumably, listened more), may have felt increased feelings of closeness to their partner because they listened more.

Personality and Self-disclosure. Another major goal of the present research was to test the effect of personality in the FF and ST conditions. This hypothesis was based on Aron et al.'s (1997) finding that partner personality did not affect feelings of closeness following the interaction. While previous work has established that personality does not affect feelings of closeness following the FF procedure, it has not specifically explored whether FF affects participant disclosure. For this reason, the researcher tested if personality was affecting the amount of self-disclosure in which FF participants engaged. Results confirmed the researcher's hypothesis: No interaction was found between the four personality factors, Extraversion, Agreeableness, Openness and Condition, and self-disclosure. This suggests that differences in self-disclosure are likely not due to differences in personality. Further, the findings suggest that the effect of the FF procedure is greater than the effect of personality. In other words, the FF procedure may be able to overcome individual differences in personality that in other contexts have been conceptually related to self-disclosure. This is likely because the FF procedure creates a strong situation, something that has been found time and again to overpower personality traits (Milgram, 1963) The FF procedure constrains the situation by guiding participant interaction through use of a partial script. These results indicating that personality did not affect the amount of self-disclosure are consistent with Aron et al.'s (1997) findings that personality had no effect on feelings of closeness following the interaction.

FF and Mood. The final goal of the present research was to test the FF procedure's effect on mood. The researcher expected that participants in the FF procedure would report more positive emotions following the interaction, as compared to those in the ST condition. This hypothesis was based on previous research indicating that self-disclosure can improve mood (Bareket-Bojmel & Shahar 2011; Leikas et al., 2012), as well as Aron et al.'s (1997) findings

that participants greatly enjoyed the FF procedure. However, the results of the current study did not confirm the researcher's hypothesis. It was found that participants in both FF and ST dyads felt similarly pleasant and positive following the interaction. This is surprising, given previous research indicating that the topic (positive or negative) of discussion is often what influences mood following an interaction (Bareket-Bojmel & Shahar, 2011; Leikas et al., 2012). Certainly the topics of discussion in the current study's two conditions differed substantially. For example, in the ST condition, participants discussed lighthearted topics, such as what kinds of foods they like and their favorite holidays, whereas participants in the FF condition discuss more serious topics, such as their greatest regrets and what they value in a friendship (see Appendices A and B for a full list of prompts used in each condition). It is possible that the kind of disclosure in the both FF and ST conditions generates feelings of pleasant and positive mood, while also generating other feelings unique to condition which are not measured in the current research. Tamir and Mitchell (2012) found that people generally enjoy talking about themselves. Perhaps, even though the ST condition asks participants to discuss their superficial preferences, talking about the self in any capacity is enough to generate positive mood. Following this line of logic, the Information Processing theory (Ajzen, 1985) posits that positive thoughts facilitate liking. It is possible that the feelings of closeness generated in the ST condition are fueled by participants' positive thoughts and feelings, which they then generalize to positive thoughts about their partner, leading to greater liking.

It is also possible that there are some other effects on mood by variables not measured in the current research, for example, simply spending time with another person may improve mood. In this study, all participants were women attending the same university. Perhaps there is some benefit to overall mood by hanging out with one's peers, regardless of conversation topic.

Limitations

While the FF procedure has been used in numerous studies to generate feelings of closeness between strangers, it is not clear if the differences between the FF and ST condition are practically significant. For instance, FF participants reported only feeling, on average, one point closer to their partner than those in the ST condition. Based on the current research, it should be considered whether the FF procedure is actually generating feelings of closeness through the use of escalating, intimate, and reciprocal self-disclosure. Are the feelings of closeness generated by the FF procedure stunted by the inequity of self-disclosure within FF dyads? Or, are these the greatest feelings of closeness we can hope to achieve in a 45 minute interaction between two strangers?

Similarly, while there was a statistically significant difference on the ratio of first-person to all other pronouns, it was only a five percent difference. It is unclear if these mean differences are indicative of practical differences between the FF and ST procedures. In fact, first-person pronoun use as a measure of self-disclosure is understudied as a whole, and the measure itself appears to have some problems related to validity. For example, Norrick (2013) found that people sometimes use talking about other's experiences as a form of self-disclosure, instead of simply focusing on the self, and making mostly first-person references. In the current study, a participant talking about someone else's experiences as a form of self-disclosure would lead to an increase in the use of third person pronouns, instead of an increase in first person pronouns. In this way, differences in self-disclosure levels might have been obscured.

Additional issues arose around what kinds of pronouns participants chose to use. While listening to the recordings, the researcher noticed that some participants repeatedly used first-person pronouns while others used third-person pronouns as different ways to refer to the same

people or things (e.g., “my dad” versus “he”, “my sister” versus “she”). On the recording, the researcher also heard some participants continuing to use nouns while other participants used pronouns to talk about the same things. This was particularly problematic with the “Christmas tree” prompt in the ST group (“What are the advantages and disadvantages of artificial Christmas trees”). While discussing this question, some participants referred to “tree/trees” the entire time, while other participants quickly switched to “it/them”. Those who switched to “it/them” pronouns used more third-person pronouns while discussing this prompt. Further it is also possible that, due to the nature of English language and grammar, the kinds of prompts in the FF procedure may be causing participants to use more first-person pronouns. It is unclear if these differences in pronoun usage reflected meaningful differences in disclosure.

The researcher did not attempt to control whether participants were already acquainted. However, the audio recording of all the interactions was carefully reviewed, and the researcher excluded one dyad who made it clear during the interaction that they knew each other. Although this data was not formally collected, many of the dyads (especially in the FF Condition) were heard to express surprise to one another that they had never met, given how similar they perceived themselves to be. Participants being surprised by qualities or facts about their partner suggests that they were not already formally acquainted with one another. Perhaps perceptions of similarity between participants also contributed to the overall positivity of the experience, including feelings of closeness and pleasant mood.

Although people generally habituate to being recorded (Reis, 2014), some participants expressed being conscious of the recording. For example, while counting pronouns, the researcher heard some participants express concern about saying their real names or hometowns during the interaction for this reason. This level of self-consciousness could have also been

inhibiting other topics of self-disclosure, and somewhat constraining the cycle of escalating self-disclosure between the two partners.

To avoid gender confounds, only undergraduate women were used. As a result, it is difficult to generalize these results to self-disclosure between men, and self-disclosure between men and women.

Recommendations for Future Research

It is still unclear precisely how the FF prompts generate feelings of closeness. For this reason, there should be more research on the underlying processes of the FF procedure. For example, future research could test how much the FF procedure relies on participants listening to each other as a means to generate closeness. Given that the procedure already relies on giving participants the explicit instruction that the goal of the task is for them to get close to each other, the instructions could also be revised to include explicit instructions for participants to listen to each other. If this revision were to generate greater feelings of closeness than the current FF instructions, it would lend support to an Information Processing explanation of the procedure's effects. Future research should investigate the mechanisms through which FF is able to generate feelings of closeness, despite unequal levels of self-disclosure. It should also explore other ways to measure the quantity, and assess the quality, of self-disclosure during these interactions.

Of particular interest, is whether it is possible that some aspect of the English language might be related to the use of a disproportionate number of first-person pronouns in the FF procedure. Future research should investigate the validity of using the ratio of first-person to all other pronouns as a measure of self-disclosure. For example, the use of this measure may not be equally applicable in other languages. The French language, for example, uses more reflexive pronouns. The phrase "I remember" requires two first-person pronouns in French, "*Je me*

souviens”. Participants using phrases like this could lead to a higher number of first-person pronouns in some languages than in others. It is unclear if these differences in pronoun use equate to meaningful differences in self-disclosure. Other methods of assessing the amount of self-disclosure largely involve listening to the audio of the interaction. For example, researchers could code for the level of intimacy of each disclosure. Further, in lieu of simply measuring if participants were disclosing the same amount of personal information, future research could code whether participants’ disclosures were followed by their partner disclosing the same amount of information at the level of intimacy. This would give the fullest picture of how disclosure in the FF procedure behaves.

Future work concerning the FF procedure should attempt to modernize it. Some participants in the present study commented on the “dated” nature of the prompts. For example, a prompt about what newspapers they like, and another about what magazines they enjoy stood out to participants, in particular. Many answered this question by saying “I don’t read any/I have never subscribed to any”, likely because print media is not as popular as it once was. Perhaps an updated prompt would read, “What social media sites do you spend the most time on? What kinds of social media accounts do you have?” or something similar. Perhaps “Do you prefer digital watches and clocks or the kind with hands?” should be updated to “Do you prefer smart watches, digital watches or analog watches (the kind with hands)?”.

Additionally, future research would likely benefit from studying the partners’ interaction in its entirety. For example, by looking at the entire conversation, it might be possible to assess more accurately the rate at which participants engage in self-disclosure. The FF prompts claim to use prompts that make use of escalating self-disclosure; it would be interesting to investigate the processes through which self-disclosure escalates in this condition. It would also then be possible

to see if first-person pronoun use is equitable or inequitable throughout the entire interaction, or just during the later stages of the interaction, as was shown in these results.

The current study explored self-disclosure in the FF procedure through the perspectives of social penetration theory and the information process theory. Social penetration theory views self-disclosure as a social currency, and posits that partners should engage in escalating, reciprocal self-disclosure to achieve closeness. In contrast, information process theory emphasizes the positive thoughts people form about those who disclose to them. Both theories yield similar conclusions: closeness is best generated through the exchange of self-disclosure that escalates in intimacy, such as that prompted by the FF procedure. Conclusive support was not found for the role of reciprocity in self-disclosure in generating feelings of closeness. The present research found that feelings of closeness created by the FF procedure may be the result of partners listening to or engaging in self-disclosure, but not necessarily in equitable amounts.

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Appendix A

FF Prompts

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 telephone 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 4 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 of ability, what would it be?

Set 2

13. If a crystal ball could tell you the truth about yourself, your life, the future, or anything else, what would you want to know?
14. Is there something that you’ve dreamed of doing for a long time? Why haven’t you done it?
15. What is the greatest accomplishment of your life?

16. What do you value most in a friendship?
17. What is your most treasured memory?
18. What is your most terrible memory?
19. If you knew that in one year you would die suddenly, would you change anything about the way you are now living? Why?
20. What does friendship mean to you?
21. What roles do love and affection play in your life?
22. Alternate sharing something you consider a positive characteristic of your partner. Share a total of 5 items.
23. How close and warm is your family? Do you feel your childhood was happier than most other people's?
24. How do you feel about your relationship with your mother?

Set 3

25. Make 3 true "we" statements each. For instance, "We are both in this room feeling..."
26. Complete this sentence, "I wish I had someone with whom I could share..."
27. If you were going to become a close friend with your partner, please share what would be important for her to know.
28. 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.
29. Share with your partner an embarrassing moment in your life.
30. When did you last cry in front of another person? By yourself?
31. Tell your partner something that you like about them already.
32. What, if anything, is too serious to be joked about?

33. 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?
34. Your house, 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?
35. Of all the people in your family, whose death would you find most disturbing? Why?
36. Share a personal problem and ask your partner's advice on how she 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 B

ST Prompts

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 New Jersey where would you go, and what would you miss about New Jersey?
4. How did you celebrate last Halloween?
5. Do you read a newspaper often and which do you prefer? Why?
6. What is a good number of people 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 the last pet you owned.
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?

Set 2

13. Describe the last time you went to the zoo.
14. 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).

15. One of you say a word, the next say a word that starts with the last letter of the word just said. Do this until you have said 50 words. Any words will do- you aren't making a sentence.
16. Do you like to get up early or stay up late? Is there anything funny that has resulted from this?
17. Where are you from? Name all of the places you've lived.
18. What is your favorite class at SHU so far? Why?
19. What did you do this summer?
20. What gifts did you receive last Christmas/Hanukkah/Kwanza?
21. Who is your favorite actor of your own gender? Describe a favorite scene in which this person has acted.
22. What was your impression of SHU the first time you ever came here?
23. What is the best TV show you've seen in the last month that your partner hasn't seen?
Tell your partner about it.
24. What is your favorite holiday? Why?

Set 3

25. Where did you go to high school? What was your high school like?
26. What is the best book you've read in the last three months that your partner hasn't read?
Tell your partner about it.
27. What foreign country would you like to visit? What attracts you to this place?
28. Do you prefer digital watches and clocks or the kind with hands? Why?
29. Describe your mother's best friend.
30. What are the advantages and disadvantages of artificial Christmas trees?

31. How often do you get your hair cut? Where do you go? Have you ever had a really bad haircut experience?
32. Did you have a class pet when you were in elementary school? Do you remember the pet's name?
33. Do you think left-handed people are more creative than right-handed people?
34. What is the last concert you saw? How many of that band's albums do you own? Had you seen them before? Where?
35. Do you subscribe to any magazines? Which ones?
36. What have you subscribed to in the past? 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 C

Big Five Personality Inventory

The Big Five Inventory (BFI)

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who likes to spend time with others? Please write a number next to each statement to indicate the extent to which you agree or disagree with that statement.

Disagree strongly 1	Disagree a little 2	Neither agree nor disagree 3	Agree a little 4	Agree Strongly 5
---------------------------	---------------------------	------------------------------------	------------------------	------------------------

I see Myself as Someone Who...

- | | |
|---|--|
| <p>___ 1. Is talkative</p> <p>___ 2. Tends to find fault with others</p> <p>___ 3. Does a thorough job</p> <p>___ 4. Is depressed, blue</p> <p>___ 5. Is original, comes up with new ideas</p> <p>___ 6. Is reserved</p> <p>___ 7. Is helpful and unselfish with others</p> <p>___ 8. Can be somewhat careless</p> <p>___ 9. Is relaxed, handles stress well</p> <p>___ 10. Is curious about many different things</p> <p>___ 11. Is full of energy</p> <p>___ 12. Starts quarrels with others</p> <p>___ 13. Is a reliable worker</p> <p>___ 14. Can be tense</p> <p>___ 15. Is ingenious, a deep thinker</p> <p>___ 16. Generates a lot of enthusiasm</p> <p>___ 17. Has a forgiving nature</p> <p>___ 18. Tends to be disorganized</p> <p>___ 19. Worries a lot</p> <p>___ 20. Has an active imagination</p> <p>___ 21. Tends to be quiet</p> <p>___ 22. Is generally trusting</p> | <p>___ 23. Tends to be lazy</p> <p>___ 24. Is emotionally stable, not easily upset</p> <p>___ 25. Is inventive</p> <p>___ 26. Has an assertive personality</p> <p>___ 27. Can be cold and aloof</p> <p>___ 28. Perseveres until the task is finished</p> <p>___ 29. Can be moody</p> <p>___ 30. Values artistic, aesthetic experiences</p> <p>___ 31. Is sometimes shy, inhibited</p> <p>___ 32. Is considerate and kind to almost everyone</p> <p>___ 33. Does things efficiently</p> <p>___ 34. Remains calm in tense situations</p> <p>___ 35. Prefers work that is routine</p> <p>___ 36. Is outgoing, sociable</p> <p>___ 37. Is sometimes rude to others</p> <p>___ 38. Makes plans and follows through with them</p> <p>___ 39. Gets nervous easily</p> <p>___ 40. Likes to reflect, play with ideas</p> <p>___ 41. Has few artistic interests</p> <p>___ 42. Likes to cooperate with others</p> <p>___ 43. Is easily distracted</p> <p>___ 44. Is sophisticated in art, music, or literature</p> |
|---|--|

Appendix D

Demographics

Gender: Male Female Prefer not to answer

Race/Ethnicity: African American/Black
 Asian/Pacific Islander
 Hispanic/Latino
 Multiracial
 Native American/American Indian
 White
 Not Listed (please specify) _____
 Prefer not to respond

Class status : Freshman
 Sophomore
 Junior
 Senior

Major: _____

Age: Under 18
 18-19
 20-21
 22-24

Appendix E

Disclosed subscale

Please indicate the degree to which **you disclosed** to your partner about the various topics below. The scale is from 1 to 5, with 1 meaning you told your partner nothing about this aspect of yourself, and 5 meaning you spoke to your partner fully or in great detail about this aspect of yourself.

A. Your immediate family

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

B. Your extended family

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

C. Your favorite foods

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

D. Your ideal future

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

E. Where you get your haircut

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

F. Very upsetting times in your life

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

G. Regrets about school

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

H. Which magazines you read

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

I. Very happy times in your life

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

J. Regrets about your interpersonal life

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

K. Your favorite holiday

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

L. Your romantic life/dating experiences

Not at all	Very little	Some	A fair amount	Very much
1	2	3	4	5

Appendix F

Disclosed subscale items derived from FF and ST prompts

Scale Item	Original Prompt
Item A, "Your immediate family"	FF prompt, "If you could change anything about the way you were raised, what would it be?"
Item B, "Your extended family"	ST prompt, "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)".
Item C, "Your favorite foods"	"If you could invent a new flavor of ice cream, what would it be?"
Item D, "Your ideal future"	FF prompt, "Is there something that you've dreamed of doing for a long time? Why haven't you done it?"

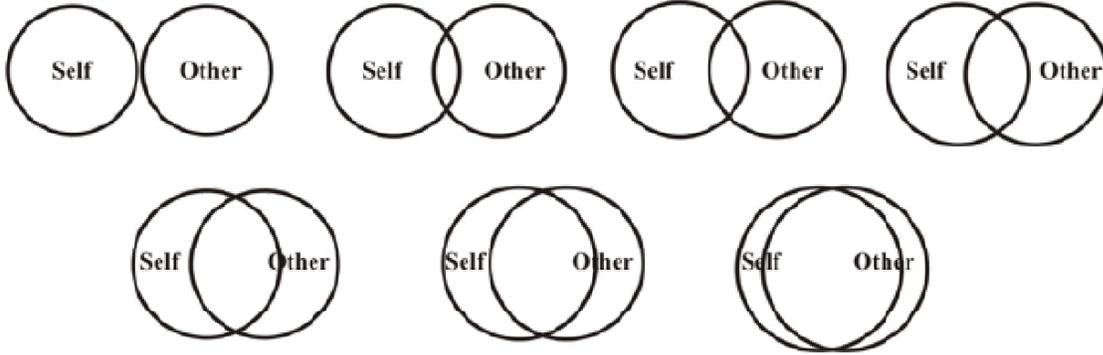
<p>Item E, “Where you get your hair cut”</p>	<p>ST prompt, “How often do you get your hair cut? Where do you go? Have you ever had a really bad haircut experience?”</p>
<p>Item F, “Very upsetting times in your life”</p>	<p>FF prompt, “What is your most terrible memory?”</p>
<p>Item G, “Regrets about school”</p>	<p>FF prompt, “What is the greatest accomplishment of your life?”</p>
<p>Item H, “Which magazines you read”</p>	<p>ST prompt, “Do you subscribe to any magazines? Which ones? What have you subscribed to in the past?”</p>
<p>Item I, “Very happy times in your life”</p>	<p>FF prompt, “What is your most treasured memory?”</p>
<p>Item J, “Regrets about your interpersonal life”</p>	<p>“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?”</p>

Item K, “Your favorite holiday”	ST prompt, “What is your favorite holiday? Why?”
Item L, “Your romantic life/dating experiences”	FF prompt, “What roles do love and affection play in your life?”

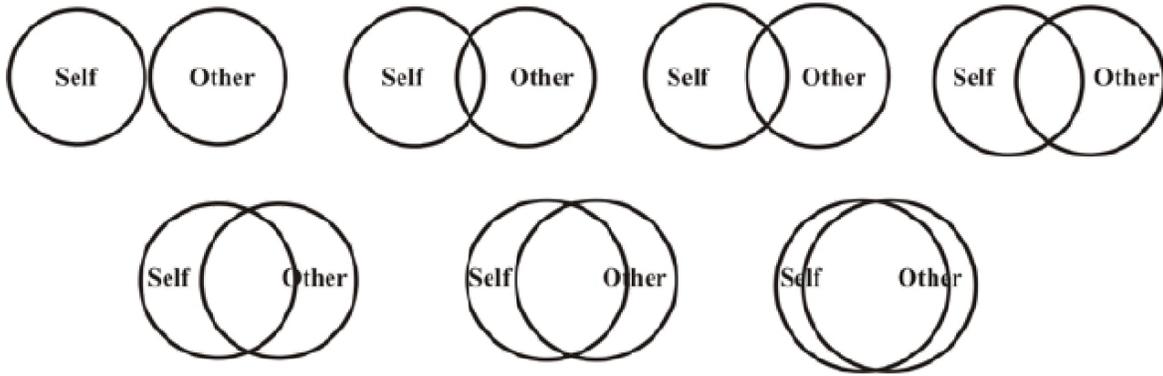
Appendix G

Inclusion of Other in the Self

Please circle the picture that best describes your **current** relationship with your partner:



Now, please circle the picture that best describes your **desired** relationship with your partner.



Appendix H

Phone Number Behavioral Measure

Many participants have reported that they really enjoyed the time they spent with their partner during the conversation part of this study, and that they might like a way to contact her again. If you're interested in sharing your contact information with your partner, please indicate this below.

_____ Yes, I would like to exchange phone numbers with my partner.

_____ No, I'm not really interested in exchanging phone numbers with my partner.

Appendix I

Big Five Inventory Norms

Participants' average Extraversion score was 3.23, $SD = .79$. The existing norms for Extraversion are; $M = 3.25$, $SD = .90$. Participants' average Agreeableness score was 4.01, $SD = .59$. The existing norms for Agreeableness are; $M = 3.64$, $SD = .72$. Participants' average Neuroticism score was 3.21, $SD = .70$. The existing norms for Neuroticism are; $M = 3.32$, $SD = .82$. Participants' average Openness score was 3.50, $SD = .59$. The existing norms for Openness are; $M = 3.92$, $SD = .66$. Participants' average Conscientiousness score was 3.62, $SD = .64$. The existing norms for Conscientiousness are; $M = 3.45$, $SD = .73$.

Appendix J

Brief Mood Introspection Scale (BMIS)

INSTRUCTIONS: Circle the response on the scale below that indicates how well each adjective or phrase describes your present mood.

(definitely do not feel) (do not feel) (slightly feel) (definitely feel)

	XX	X	V	VV					
Lively	XX	X	V	VV	Drowsy	XX	X	V	VV
Happy	XX	X	V	VV	Grouchy	XX	X	V	VV
Sad	XX	X	V	VV	Peppy	XX	X	V	VV
Tired	XX	X	V	VV	Nervous	XX	X	V	VV
Caring	XX	X	V	VV	Calm	XX	X	V	VV
Content	XX	X	V	VV	Loving	XX	X	V	VV
Gloomy	XX	X	V	VV	Fed up	XX	X	V	VV
Jittery	XX	X	V	VV	Active	XX	X	V	VV

Appendix K
Institutional Review Board Approval Letter



November 21, 2016

Dear Ms. Shearer,

The Seton Hall University Institutional Review Board has reviewed the information you have submitted addressing the concerns for your proposal entitled "More than just talking? Self-disclosure's role in creating closeness". Your research protocol is hereby approved as revised through expedited review. The IRB reserves the right to recall the proposal at any time for full review.

Enclosed for your records are the signed Request for Approval form, the stamped Recruitment Flyer, and the stamped original Consent Form. Make copies only of these stamped forms.

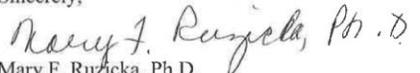
The Institutional Review Board approval of your research is valid for a one-year period from the date of this letter. During this time, any changes to the research protocol must be reviewed and approved by the IRB prior to their implementation.

According to federal regulations, continuing review of already approved research is mandated to take place at least 12 months after this initial approval. You will receive communication from the IRB Office for this several months before the anniversary date of your initial approval.

Thank you for your cooperation.

In harmony with federal regulations, none of the investigators or research staff involved in the study took part in the final decision.

Sincerely,


Mary F. Ruzicka, Ph.D.
Professor
Director, Institutional Review Board

cc: Dr. Susan Teague

Office of Institutional Review Board
Presidents Hall • 400 South Orange Avenue • South Orange, New Jersey 07079 • Tel: 973.313.6314 • Fax: 973.275.2361 • www.shu.edu

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