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When Harry and Sally Met Dick and Jane:

Creating Closeness between Couples

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Abstract

This study investigated how friendships between couples form and implications for within-couple processes. Sixty couples were randomly assigned to one of two conditions where they engaged in a 45-minute interaction with another couple. In one condition, couples carried out self-disclosure tasks; in the other, couples engaged in non-emotional small-talk. Compared to the small-talk condition, those in the high-disclosure condition felt closer to the couples they interacted with and were more likely to meet up with them again during the following month. Further, couples in the high-disclosure condition felt closer to their own partners. APIM analyses showed these effects to be mediated by increases in positive affect. Implications for studying the interplay of social networks and romantic relationships are discussed.

**KEYWORDS:** Couples, dyads, self-disclosure, social networks, actor-partner interdependence, positive affect, novelty

When Harry and Sally Met Dick and Jane:

### Creating Closeness between Couples

Romantic relationships do not occur in a vacuum. They begin, develop, and change within a larger environment. The individual characteristics of couple members (e.g., their personalities, feelings of attachment) and the one-on-one interactions that couple members have with each other are critical forces in shaping the future path of a romantic relationship, but the environmental context in which couples interact is vitally important as well. This environment includes both the physical context (e.g., proximity and physical setting) and social context (e.g., family and friends) in which couples are embedded. Couples' friendships with those in their social networks may be particularly relevant determinants of what makes for a strong and stable romantic relationship (Agnew, Loving, & Drigotas, 2001; Milardo, 1982; Sprecher, Felmlee, Orbuch, & Willetts, 2002).

There is growing empirical evidence that shared friendships are beneficial for couples. One of the most robust findings in this area of research is that couples who have a larger percentage of shared friends (vs. individual friends) tend to have happier and longer-lasting relationships (Ackerman, 1963; Agnew et al., 2001; Milardo, 1988). From a sociological perspective, the more that couples are integrated into their social networks, the more likely they are to have happy and satisfying romantic relationships. However, it is unknown whether social networks have an inherent benefit for couples or just that people who are happier in their relationships are more likely to make friendships with others together as a couple. By studying how friendships between couples form in a controlled laboratory setting, we may be able to better understand the processes through which friendships between couples are generated, and

gain insight into the directionality of social network-romantic relationship quality links. For example, when two couples first meet at a cocktail party or other social gathering, why do some hit it off and become fast friends while others leave it at “nice to meet you”? And when couples do hit it off, are there residual benefits for the couples themselves? The purpose of this article is to examine how friendships between couples form and potential implications for within-couple processes (e.g., the effects of friendships between couples on feelings of closeness within a couple).

*Examining the Formation of Friendships Between Couples Using the Closeness Induction Paradigm*

One of the challenges facing researchers has been finding ways to study how friendships between couples form in a controlled environment. A paradigm that is potentially suitable for addressing this challenge is Aron and colleagues’ closeness induction method (Aron, Melinat, Aron, Vallone, & Bator, 1997). In this procedure, closeness is generated between individuals through conversational activities that primarily involve increasing levels of self-disclosure. Sustained, escalating and reciprocal self-disclosure is one of the keys to the establishment of close relationships with others (Altman & Taylor, 1973; Collins & Miller, 1994; Derlega, Metts, Petronio, & Margulis, 1993; Laurenceau, Feldman Barrett, & Pietromonaco, 1998; Laurenceau, Rivera, Shaffer, & Pietromonaco, 2004; Reis & Shaver, 1988; Slatcher & Pennebaker, 2006).

In a typical closeness induction study, two strangers are brought into the lab to have a 45-minute get-to-know-you conversation. They are randomly assigned to be in either a high-disclosure condition or a small-talk condition. Those in the high-disclosure condition are given questions to ask each other that are geared towards eliciting high levels of self-disclosure from

the respondent and other questions geared toward creating positive affect and intimacy between the two unacquainted individuals. Those in the small-talk condition are given questions to ask each other that involve very minimal amounts of self-disclosure and cover relatively unemotional topics. Compared to those in the small-talk condition, those in the high-disclosure condition feel much closer to each other, regardless of how much they expect to like each other or whether they agree or disagree on important topics (e.g., political attitudes) prior to the interaction.

By applying this paradigm to pairs of couples and by following up with them after they leave the lab, one can examine how friendships between couples form. Additionally, this paradigm allows one to investigate whether high levels of self-disclosure between couples result in stronger bonds within couples and investigate possible mechanisms underlying these effects.

#### *Why Might High Levels of Disclosure Between Couples Increase Closeness Within Couples?*

One possibility for why experimentally-induced disclosure between couples might enhance closeness within couples is that it is a novel and arousing activity. A number of recent studies by Aron and colleagues suggest that couples' participation in novel and arousing activities is associated with increases in positive affect (Aron, Norman, Aron, McKenna, & Heyman, 2000; Strong & Aron, 2006). Such increases in positive affect, in turn, have been found to lead to increases in self-reported relationship quality.

The theoretical foundation for this idea is based on Aron's self-expansion model of motivation and cognition in close relationships (Aron, Aron, & Norman, 2001). According to this model, when two people begin a relationship, each begins to "include the other in the self." Inclusion of other in the self describes a process by which one begins to identify his or her self-image as a new combination with the other's self. The partner's identity, his or her beliefs,

feelings, ideology, resources and personality begin to become associated with one's own self. By associating such unique aspects of one's partner to one's already defined self, the self expands to include these new aspects of the partner. This process of self-expansion typically takes place through mutual time spent with partner, shared activities, and common ideas and interests (Strong & Aron, 2006). Such activities are associated with rapid increases in positive affect—indicated by feelings of great pleasure, arousal and excitement (Aron et al., 2001).

Self-expansion theory suggests that novel activities—such as having a highly disclosing conversation with another couple—create strong positive affect, which becomes associated with one's partner through positive reinforcement, in turn leading to greater feelings of closeness toward one's partner. The first link in this proposed *meeting another couple*→*positive affect*→*relationship closeness* chain of associations is suggested in series of two daily experience sampling studies conducted by Larson and colleagues (Larson & Bradney, 1988; Larson, Mannell, & Zuzanek, 1986). In these studies, participants reported their highest levels of positive affect when they were engaging in activities with their spouses and friends together, compared to activities alone, with spouse only or with friends only. These findings provide preliminary evidence that increases in positive affect may be one mechanism through which friendships with other couples may lead to enhanced closeness within couples.

When two couples interact in an intense, self-disclosing fashion, rapid expansion of the self may be especially strong after the initial exhilaration of a new relationship starts to fade. Take, for example, relationship partners who have been dating for a year and have become more and more accustomed to each other as their relationship has progressed. The two people, once very fresh and exciting to each other, seem less and less novel and self-expansion slows or

comes to a halt. At this point, people may become bored and dissatisfied in their relationship (Aron & Aron, 1986). For long-term couples, intense self-disclosure with another couple may be sufficiently novel and arousing enough to lead to increased positive affect and, in turn, heightened feelings of closeness toward one's partner.

There are, of course, alternative explanations for why self-disclosing interactions between couples might lead to greater feelings of closeness within couples. The most likely alternative is that people may learn new things about their romantic partners after going through a closeness-induction interaction with another couple as a result of the high levels of self-disclosure that are elicited in this type of interaction. Indeed, learning new things about one's partner via partner disclosures is linked to greater feelings of closeness in the early phases of one's relationship (Aron et al., 2001); it is possible that learning new things about one's partner at later phases of a relationship may lead to increased closeness as well. Second, it is possible that the sheer novelty of this type of lab-based interaction might make couple members feel closer to each other. Although it has been argued that positive affect is the mediating mechanism through which novel and arousing activities enhance relationship functioning (Strong & Aron, 2006), the effects of novelty and positive affect have not yet been directly compared.

#### *Overview of the Current Study and Research Questions*

In the current study, 60 heterosexual couples in committed dating relationships completed baseline measures of relationship quality and positive affect and then were randomly assigned to one of two conditions where they engaged in a 45-minute interaction with another couple. In the high-disclosure condition, pairs of couples carried out self-disclosure tasks that gradually escalated in intensity. In the small-talk condition, pairs of couples engaged in non-emotional

small-talk discussions. Measures were administered to assess feelings of closeness toward the other couple, measures of closeness within couples, and measures assessing possible mediators of the effects of the manipulation on feelings of closeness within couples, including positive affect, novelty, and learning new things about one's partner. One month later, participants were asked to complete a brief online follow-up measure to assess long-term effects of the manipulation on perceptions of the other couple, feelings of closeness toward romantic partners and whether or not they had contacted the other couple.

Using this design, the following hypotheses were tested: 1) Couples in the high-disclosure condition would feel closer to the other couples compared to those in the small-talk condition and would be more likely to meet up with them again after the experiment; 2) couples in the high-disclosure condition would feel closer to their own partners compared to those in the small-talk condition; and 3) the effects of the manipulation on closeness within couples would be mediated by increases in positive affect. This design also made it possible to test whether effect of the manipulation on closeness within couples alternatively might be due to the novelty of the interaction or to simply learning new things about one's partner. Further, with the follow-up data, it was possible to investigate whether couples who attempt to form friendships with other couples are happier in their relationships to begin with than those who do not. Finally, potential moderators of the effects of the manipulation—including gender, ethnicity and length of time dating—also were examined.

## Method

### *Participants*

Sixty couples in dating relationships from the Austin, TX metropolitan area were recruited via flyers and advertisements posted on the websites *Craig's List* and *Facebook*. Couples were recruited on the basis that they were unmarried and had been dating their partner for at least 1 year. Participants ranged in age from 19 to 26 ( $M = 20.83$ ,  $SD = 1.73$ ). The ethnic make-up of the sample was 62.5% White/Caucasian, 16.7% Asian, 14.2% Hispanic/Latino, 1.7% Black/African American, and 5% indicating other ethnicity. Couples had been dating from 1 to 5 years ( $M = 2.04$ ,  $SD = 1.05$ ) and indicated that they either were in a serious dating relationship (85.8%) or life partnership (14.2%); none were married or had children. Each couple was paid \$20 for participating in the study.

### *Procedure*

Unacquainted couples came to the lab in pairs. On couples' arrival at the lab, the experimenter checked to make sure that the pairs of couples did not know each other; none did. After getting informed consent from participants, the experimenter led each person to one of four separate rooms to complete baseline questionnaires. The pairs of couples then were brought into a room to engage in one of two types of discussion tasks described below. Afterwards, couples filled out post-interaction questionnaires; all measures at baseline and after the interaction were counterbalanced to prevent order effects.

One month later, both members of each couple were contacted to fill out a final online measure, assessing their perceptions of the other couple, feelings of closeness toward their own partner and the extent to which they talked to each other about the interaction with the other couple over the past month. Additionally, they were asked whether they or their romantic partner had been in contact with and met up with other couple. Of the original 120 participants in the

study, 103 (86%) completed the follow-up measure. Participation at Time II was completely voluntary and unpaid.

*Experimental Manipulation: Discussion Topic (closeness or small-talk)*

After completing baseline measures, the pairs of couples were randomly assigned to engage in a discussion primarily involving increasing amounts of self-disclosure (high-disclosure condition) or a discussion involving unemotional everyday topics (small-talk condition) for 45 minutes (a complete description of this procedure may be found in Aron et al., 1997). After being brought into a room with two sets of comfortable chairs, one participant was given a packet with three sets of slips. The experimenter then read the task instructions aloud to the group and then left the room. These basic initial instructions were the same for both the closeness and small-talk conditions.

Groups then began at once with the first Set I slip. The participant with the slips would read the question printed on each slip to the group, then each member of the group answered the question in turn. After 15 minutes, the experimenter came back into the room to tell the couples to stop, put away the Set I slips, and begin Set II; after another 15 minutes, to begin Set III; and after a final 15 minutes, to stop completely. In the high-disclosure condition, questions on the slips were geared to elicit high levels of self-disclosure, with the intensity of the questions gradually increasing (three sets are used so that pairs of couples who go slowly through the tasks will do at least some of the fairly intense Set III tasks). Examples of some of these questions include, “For what in your life do you feel the most grateful?” and, “How close and warm is your family? Do you feel your childhood was happier than most other people's?”

Those in the small-talk condition similarly went through three sets of slips, but, in this condition, questions focused on everyday, unemotional activities involving very little personal disclosure, such as, “When was the last time you walked for more than an hour? Describe where you went and what you saw.” After the 45-minute interaction sessions came to an end, participants were separated to complete post-interaction questionnaires in individual lab rooms. They then were paid and dismissed from the lab. Couples were neither encouraged nor discouraged from contacting each other after completion of the study. Any exchanges of contact information occurred outside of the experiment—for example, couples providing each other with phone numbers as they left the building.

#### *Baseline Measures*

*Relationship satisfaction.* Baseline relationship satisfaction was measured using Hendrick’s (1988) Relationship Assessment Scale (RAS). The RAS is a validated measure of relationship satisfaction that consists of 7 items on a 5-point Likert-type scale such as, “In general, how satisfied are you with your relationship?” It has good internal reliability ( $\alpha = .83$  in the current sample) and correlates strongly with measures of love, commitment, investment and dyadic adjustment.

*Relationship closeness.* Baseline closeness was measured using Sternberg’s (1997) Intimacy Scale (SIS). The SIS contains 12 seven-point Likert-type scale items (e.g., “I have a warm relationship with my partner”) and correlates moderately with other measures of closeness and intimacy. Internal consistency ( $\alpha$ ) for the SIS in this sample was .86. The SIS was chosen for two main reasons: 1) so that participants’ responses on the IOS scale administered after the

experiment would be less biased by baseline responses, and 2) in the initial validation of the IOS, the measure that correlated most strongly with it ( $r = .45$ ) was the SIS (Aron et al., 1992).

*Positive affect.* Baseline positive affect was measured using the Vigor subscale of the Profile of Mood States (POMS; McNair, Lorr, & Droppleman, 1971). This subscale of the POMS contains 8 feeling descriptors such as “lively,” “active,” and “energetic” on a scale from 0 (*not at all*) to 4 (*extremely*). The POMS is a broad measure of trait-level positive affect, and has exhibited very good internal consistency ( $\alpha = .84$  in the current sample). The scale was chosen because of its wide use and because of its strong correlation ( $r = .43$  in this sample) with the positive affect subscale of the PANAS (Watson & Clark, 1994), which was the post-interaction measure of positive affect used in this study.

#### *Post-Interaction Measures*

*Closeness with the other couple.* Closeness with the other couple was measured using a tailored version of Aron et al.’s Inclusion of Other in the Self Scale (IOS; Aron, Aron, & Smollan, 1992). The IOS consists of seven pairs of circles labeled “Self” and “Other” that overlap to various degrees, creating a 7-point interval scale. Respondents choose the pair that they feel best describes their relationship. The IOS has exhibited high test-retest and alternate-form reliability (.85 and .92, respectively) and convergent and discriminant validity with other measures of closeness and intimacy. In this case, the measure was altered so that each of the seven pairs of circles was labeled “My partner and I” and “The other couple.”

*Relationship closeness.* Post-interaction closeness with romantic partners was measured using the standard version of Aron et al.’s (1992) previously described Inclusion of Other in the Self Scale (IOS). The standard IOS has convergent and discriminant validity with other measures

of closeness and intimacy and has been shown to be a good predictor of relationship stability—as good as or better than several longer and more elaborate measures of closeness (Aron et al., 1992).

*Positive affect.* Post-interaction positive affect was measured using the positive affect subscale of the Positive Affect and Negative Affect Scale (PANAS; Watson, Clark, & Tellegen, 1988), one of the most widely-used measures of affect. The positive affect scale on the PANAS is made up of ten items (e.g., “interested,” “strong”) on a Likert-type scale ranging from 1 (*not at all*) to 7 (*extremely*) that participants use to rate how they feel at a particular moment. The internal reliability of for this scale is very good ( $\alpha = .93$  in the current sample).

*Newly-learned knowledge about one’s partner.* In order to test the alternative hypothesis that increased closeness within couples is a function of simply learning new information about one’s partner in the high-disclosure condition, a single-item question on a 9-point Likert-type scale asked, “To what extent do you feel as though you gained new knowledge about your partner today?”

*Novelty of interaction.* In order to test the other alternative hypothesis that increased closeness within couples is explained by the novelty of the interaction, a multi-item scale of interaction novelty was constructed for this study. A copy of the scale may be found in the appendix. Internal consistency for the measure was  $\alpha = .72$  in this sample.

### *Time II Measures*

Time II measures were designed to be very short to reduce attrition; items were chosen to be as broad and encompassing as possible. The first item assessed the extent to which the participant had talked about the interaction with his/her romantic partner after the study. The

second item assessed interest in “hanging out” with the other couple again in the future. The third item assessed the hope that the other couple would stay together in the future. The fourth item assessed how much participants thought the other couple hoped that their relationship (that of the participant and his/her partner) would stay together; these first four items were all on a 9-point scale (1 = *not at all*, 9 = *very much*). The fifth item was the IOS scale, used to assess closeness with one’s romantic partner. In addition to these items, the questionnaire contained an item asking whether the respondent or their romantic partner had been in contact with the other couple since the study ended; this item was at the couple level to maximize statistical power in case of high attrition and/or low frequency of contact between couples at Time II. Finally, an item was included asking whether participants and their partners had together met in person with the other couple since the study ended.

## Results

### *Baseline Relationship Characteristics*

As shown in Table 1, couples did not differ at baseline between conditions in length of time dating or positive affect (POMS). However, there was a trend of couples in the small-talk condition having slightly higher levels of relationship satisfaction (RAS) compared to those in the high-disclosure condition, and those in the small-talk condition felt significantly closer (SIS) to their romantic partners than did those in the high-disclosure condition. Accordingly, the post-test measure of relationship closeness controlled for baseline closeness. Additionally, the post-test measure of positive affect controlled for baseline positive affect so that it reflected changes in positive affect over the course of the interaction rather than simply mean levels.

### *Overview of Data Analytic Strategy – The Actor-Partner Interdependence Model (APIM)*

A unique characteristic of dyadic data is that the data from two couple members are not independent. For example, people who are satisfied in their romantic relationship tend to have romantic partners who also are satisfied; people who are optimistic tend to have optimistic romantic partners, and so on. In order to account for this nonindependence in statistical analyses, relationship researchers in recent years often have framed their analyses in the Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000; Kenny, 1996).

APIM is a technique designed to address nonindependence in dyadic analysis. This technique allows researchers to estimate, for example, the influence of one person's behavior (e.g., expressions of positive affect) on her own feelings of closeness toward her romantic partner—*actor* effects—as well as the effects of her behavior on her partner's feelings of closeness toward her—*partner* effects. Furthermore, APIM can be used for testing for mediation and moderation (Campbell & Kashy, 2002). For example, APIM can be used to estimate the effects of the experimental manipulation used here on within-couple relationship closeness and whether the effects of the manipulation on closeness are mediated by a person's own level of positive affect (actor effect), as well as by his or her partner's level of positive affect (partner effect).

In this study, the APIM analyses are somewhat more complex because they involve two couples interacting with each other rather than two individuals interacting. In this case, the people within each couple are distinguishable by gender, but the two couples within the group are indistinguishable from each other (Olsen & Kenny, 2006). The model constructed for this special case of the APIM may be found in Figure 1.

In this mediation model, experimental condition (small-talk or closeness, dummy coded as 0 and 1, respectively) directly affects the hypothesized mediator, X (positive affect), as well as directly affecting each person's outcome variable, Y (e.g., within-couple closeness). There also are indirect effects from experimental condition that are mediated through X to affect Y. In this model, each person's behavior affects his own outcome (actor effect) as well as the outcome of his conversational partners (partner effects)—including the outcome of his romantic partner as well as the outcomes of each member of the other couple. This model can allow one to investigate, for example, the extent to which experimental condition drives each person's level of positive affect, and how each person's level of positive affect in turn drives his own level of closeness as well as driving everyone else's levels of closeness.

Presented below are the results of APIM analyses, first for the main effects of condition on the outcome variables of interest (Hypotheses 1 and 2), and then for the mediation analysis (Hypothesis 3). Except when otherwise noted, structural equation modeling (SEM) was used for all analyses.

#### *Post-Interaction Group Differences*

As shown in Table 2, participants in the high-disclosure condition felt closer to the other couples they interacted with than did those in the small-talk condition. Further, those in the high-disclosure condition felt closer to their romantic partners following the interaction than did those in the small-talk condition. This finding is particularly striking considering that the mean romantic partner closeness for participants in both conditions was greater than 6 on a 7-point scale—a large ceiling effect. Those in the high-disclosure condition also reported greater increases in positive affect after the interaction, reported that the interaction was more novel, and

reported that they learned more new things about their romantic partner during the interaction compared to those in the small-talk condition. However, both groups scored below the mid-point of 5 on this scale, in essence signaling that people learned very few new things about their partners through this exercise, regardless of condition. There were no gender differences in any of these effects.

#### *Group Differences at Time II (1-Month Follow-Up)*

Out of the 60 participants in the small-talk condition, 50 completed the follow-up measure one month after interacting with the other couple, while 53 out of 60 participants in the high-disclosure condition completed it; at least 1 member from every couple completed the follow-up measure. Attrition analyses detected no differences in any Time I measures (both at baseline and post-interaction) between those who completed the Time II measures and those who did not.

As shown in Table 3, couples in the high-disclosure condition talked significantly more to each other about the couple they had met in the month after initially taking part in the study than did those in the small-talk condition. They also were more interested in “hanging out” with the other couple again in the future, hoped more that the other couple would stay together in the future and thought that the other couple would hope more that they (the respondent and their partner) would stay together in the future as well. This suggests that compared to couples in the small-talk condition, couples in the high-disclosure condition were more committed to the success of the other couple and thought that the other couple was more committed to theirs. Additionally, there was a marginally significant effect of those in the high-disclosure condition

to feel closer to their romantic partners in the month after the study compared to those in the small-talk condition. There were no gender differences for any of the Time II measures.

The follow-up questionnaire also assessed whether couples had been in contact with the other couples they met in the study, and, if so, whether they had actually gotten together with them. In the high-disclosure condition, 10 out of the 30 couples had contacted the couple they had met in the study—either by phone, email or in person. In contrast, none of the couples in the small-talk condition had initiated contact with the couples they had met. A chi-square analysis conducted at the group level showed that couples in the high-disclosure condition were significantly more likely than those in the small-talk condition to contact each other ( $X^2(1) = 12.00, p < .001, \Phi = .45$ ). Further, among those who had made contact with the other couples, 4 had reported getting together on two separate occasions and 2 had reported getting together on three separate occasions. A chi-square analysis showed that couples in the high-disclosure condition were significantly more likely than those in the small-talk condition to get together with the other couple ( $X^2(1) = 6.67, p < .01, \Phi = .33$ ). Thus, couples in the high-disclosure condition not only were more likely than those in the small-talk condition to have lasting positive feelings toward the couples they had met, but also more likely to contact them afterwards and to meet them in person—precursors to real friendship.

#### *Are Couples Who Contact Each Other Happier in Their Own Relationships?*

Although voluntary contact with another couple does not constitute a true shared friendship per se, it does suggest proactive steps toward friendship. With the couples in the high-disclosure condition in this study, we can see whether couples who contacted the other couples were happier in their own relationships at baseline compared to couples who made no attempt at

contacting the other couples. This would provide evidence that couples who are happier in their relationships are more likely to seek out friendships with other couples than couples who are less happy in their own relationships. However, analyses indicated that compared to couples who did not make contact with the other couples, couples who contacted the other couples felt no closer to their partners (contact  $M = 6.68$  and  $SD = .37$ ; no contact  $M = 6.48$  and  $SD = .56$ ,  $t(58) = 1.34$ ,  $p = .17$ ,  $d = .35$ ) and no more satisfied with their partners (contact  $M = 4.54$  and  $SD = .34$ ; no contact  $M = 4.40$  and  $SD = .62$ ,  $t(58) = .99$ ,  $p = .33$ ,  $d = .26$ ) at baseline. Although this provides preliminary evidence that the formation of friendships between couples is not driven by pre-existing relationship quality, interpretation is qualified by the small sample size of the group and the definition of friendship (contact with other couples) used here.

#### *Mediation of the Effects of the Manipulation on Within-Couple Closeness by Positive Affect*

Mediation of the effect of the manipulation on within-couple closeness by positive affect next was tested. The APIM mediation analyses presented below follow the four steps of mediation recommended by Baron and Kenny (1986). Following this approach, mediation is inferred when: (1) the independent variable significantly affects the mediator; (2) the independent variable significantly affects the dependent variable in the absence of the mediator; (3) the mediator has a significant unique effect on the dependent variable; and (4) the effect of the independent variable on the dependent variable shrinks or is reduced to zero upon the addition of the mediator to the model. A direct path from the independent variable to the mediator that is not statistically different from zero would support mediation. Formal tests of mediated paths followed the recommendations of Shrout and Bolger (2002). Specifically, a bootstrap method in SEM was used to obtain 95% confidence intervals and significance tests of

mediated paths. This method is slightly more accurate than the conventional Sobel test and is recommended when conducting mediation analyses with small to moderate sample sizes.

As shown in Figure 2, positive affect significantly mediated the association between experimental condition and closeness with romantic partners. There were significant actor effects for women, significant partner effects from the woman in one couple to the man in the other couple, and from the woman in one couple to the man in the same couple.

The bootstrap tests indicated that the mediated paths were significant: mediated paths for women (standardized indirect effect) = .09,  $p = .03$ , 95% CI = (.01, .55); mediated paths for men (standardized indirect effect) = .19,  $p = .02$ , 95% CI = (.02, .43). The analyses also suggested that the mediation was full for both women and men. After controlling for the mediated paths, the standardized direct path from experimental condition to within-couple closeness dropped from .20 to .08 and was no longer significant for women ( $p = .54$ ), and dropped from .20 to .01 and was no longer significant for men ( $p = .95$ ). Constraining the direct path to be equal to zero for women did not significantly worsen the fit of the model ( $\Delta X^2(1, N = 60) = .36, p = .55$ ); constraining the direct path to be equal to zero for men also did not significantly worsen the fit of the model ( $\Delta X^2(1, N = 60) = .09, p = .92$ ). Thus, the extent to which people felt close to their romantic partners was, for women, driven by their own level of positive affect, and, for men, by the levels of positive affect of both of their own partner and the woman in the other couple.

Might the effects of the experimental manipulation on positive affect be mediated by increased feelings of closeness toward one's partner rather than vice versa? A model testing this reverse-mediation model was next constructed. The analysis showed that women's positive affect was significantly predicted by their own partner's feelings of closeness ( $\beta = .28, p < .05$ )

but the path from the closeness to positive affect from the man in the one couple to the woman in the other couple was no longer significant ( $\beta = .18, p > .10$ ), nor was the path from one woman's feelings of closeness to her own positive affect significant ( $\beta = .16, p > .10$ ). Further, a bootstrap test indicated that mediation of the effect of condition on women's positive affect via their partner's closeness was only marginally significant (standardized indirect effect = .12,  $p = .08$ , 95% CI = (-.01, .31). However, this reverse-mediation model was not significantly worse-fitting than the original mediation model tested above ( $\Delta X^2 (1, N = 60) = 1.14, p = .29$ ). Thus, the results of this reverse-mediation model analysis were somewhat inconclusive.

*Novelty.* There were no significant actor or partner effects for how novel the interaction was. Although those in the closeness condition reported that their experience was more novel than those in the small-talk condition, varying levels of perceived novelty did not mediate the effects of the manipulation on feelings of closeness toward one's own romantic partner.

*Learning new things about one's romantic partner.* There also were no significant actor or partner effects for learning new things about one's romantic partner. This indicates that the effects of the experimental manipulation on feelings of closeness toward one's partner cannot be explained by the fact that they may have simply been learning new things about their partner during the interaction.

### *Moderators*

Did the experimental manipulation work for some people but not others? Additional analyses were conducted to see whether gender, ethnicity or length of time dating moderated the effects of the manipulation on closeness with the other couple and closeness with one's romantic partner. In these analyses, SEM again was used, with experimental condition (dummy coded 0

and 1 for small-talk and closeness, respectively) entered with the moderator (e.g., length of time dating) and the product of experimental condition and the moderator. As shown in Figure 3, the effects of the manipulation on feelings of closeness with the other couple were moderated by length of time dating (interaction term  $\beta = .25, p = .04$ ); length of time dating was positively associated with feelings of closeness with the other couple for those in the closeness condition but not for those in the small-talk condition. This finding suggests that the longer that two people are dating each other, the more comfortable they may be about being open and disclosing around other couples. Neither gender nor ethnicity—including whether couples were matched on ethnicity—moderated the effects of the manipulation.

### Discussion

In a romantic relationship, one person's thoughts, feelings and behaviors are not independent from the other's. So, too, are the thoughts, feelings and behaviors of both people not independent from the social world in which a relationship is embedded. How do couples form friendships with others outside of their relationship, and what are the implications of those friendships?

The goal of this article was to investigate how friendships between couples are forged in a controlled laboratory setting and the impact of those developing friendships on within-couple processes. The method used was relatively simple and straightforward, lasting only 45 minutes. Couples took part in discussion activities primarily involving increasing amounts of self-disclosure or in discussion activities involving minimal disclosure. This design provided a framework for investigating whether it is possible to generate interpersonal closeness between couples and for examining the effects of interactions between couples on closeness within

couples. Following up with couples one month later provided an opportunity to examine the long-term effects of the manipulation on whether couples advanced further in the friendship-formation process (e.g., contacted the other couple or met up with them), and other long-term effects on perceptions of the other couple and feelings of closeness toward one's own romantic partner.

### *Between-Couple Effects*

Compared to couples in the small-talk condition, couples in the high-disclosure condition felt much closer to the other couples. Of the moderators examined in this study—gender, ethnicity and length of time dating—only length of time dating moderated the effects of the manipulation, with length of time dating positively associated with feelings of closeness with the other couple for those in the closeness condition but not for those in the small-talk condition.

Anecdotally, based on experimenter observations made during and after the study sessions, a large number of couples in the high-disclosure condition enjoyed their interaction with the other couple immensely and seemed to be on a path toward real friendship. On several occasions, when the experimenter requested that couples in the high-disclosure condition stop what they were doing and go on to the next set of slips, she was chastised for interrupting and given looks of disappointment. Similar moments occurred at the end of the 45-minute interaction, when couples were asked to separate. Couples in the high-disclosure condition often balked at this request, asking for more time to discuss whatever topic they had at that moment; many did not want to leave or end their conversation with the other couple. In contrast, almost every couple in the small-talk condition seemed ready to depart and emotionally neutral at the end of the experiment.

At the 1-month follow-up, compared to those in the small-talk condition, those in the high-disclosure condition were significantly more committed to the success of the other couple's relationship and thought the other couple was more committed to the success of theirs. Further, 10 out of the 30 couples in the high-disclosure condition contacted the other couple they had met—6 actually met up in person; none in the small-talk condition contacted the couples they had met.

Are couples who seek out friendships with other couples happier in their romantic relationships to begin with compared to those who do not? The findings from the follow-up phase of this study preliminarily suggest otherwise: those in the high-disclosure condition who contacted the other couples felt no closer or more satisfied in their relationships compared to those who did not. However, this finding is qualified by the fact that only a small number of couples contacted each other—limiting the statistical power of analyses—and because the couples in this study were by and large happy to begin with. It is unknown whether couples who are truly unhappy in their relationships would be willing to put the effort into couple-based friendships.

#### *Within-Couple Effects*

Couples in the high-disclosure condition also felt closer to their own partners immediately following the interaction and marginally closer to them a month later. This suggests the possibility of relationship-enhancing effects of evolving friendships between couples, particularly in the short term.

Positive affect mediated the effects of the manipulation on feelings of closeness to one's romantic partner for both men and women. The greater the positive affect reported by the

women, the closer they felt to their partners. For the men, the greater the positive affect reported by both of the women in the group—their own partner and the woman in the other couple—the closer they felt to their partner; neither novelty nor learning new things about one's partner mediated the effects of the manipulation.

The findings relating to positive affect are in line with current thinking on the mechanisms underlying the benefits of novel and arousing activities for couples (Strong & Aron, 2005). As couples naturally become more accustomed to each other over time and relational boredom becomes more likely, going out on a double-date with another couple may be an easy way for couples to re-create the initial feelings of excitement in their relationship. It has been theorized that self-expansion must be rapid in order for there to be rises in positive affect (Aron et al., 2001). The self-expansion that couple members went through in this paradigm was rapid enough to lead to rises in positive affect and, in turn, increased feelings of closeness within couples. However, in the real world, it is likely that this rapid self-expansion would lessen on future double-dates with other couples as the novelty of meeting a new couple wears off. The process through which interacting with a new couple enhances relationship closeness may be different from the process through which getting together with existing couple friends might enhance closeness. Thus, while previous research has hinted that interactions with existing couple friends are beneficial for couples (Agnew et al., 2001; Milardo, 1988), the extent to which previous findings map on to those reported here requires further investigation.

Although it was predicted that increases in positive affect would mediate the effects of the manipulation on within-couple closeness, the partner effects of positive affect on closeness were somewhat unexpected. The links between positive affect and feelings about one's

relationship typically have been thought of from an *intrapersonal* perspective rather than an *interpersonal* one (Laurenceau, Troy, & Carver, 2005; Strong & Aron, 2005). However, the actor-partner analyses reported here suggest that, for men at least, there may be interpersonal processes at work. In other words, while the feeling of positive affect is an intrapersonal experience, the outward expression of positive affect influences other people and is thus highly interpersonal. It is important that future work further investigate these processes—incorporating questionnaire measures as well as observational measures of affect—to see whether these interpersonal effects are direct or involve more complex processes and attributions. It is conceivable, for example, that the effect of increased positive affect from the woman in one couple leading to the man in the other couple feeling closer to his own partner is due to the man interpreting that the woman in the other couple enjoyed spending time with him and his partner, which in turn led the man to feel better about his relationship. The lack of similar effects from the men to the women is notable. While men and women reported similar levels of positive affect during the interaction, differences in men and women's *visible* levels of positive affect may have been a contributing factor. In other words, the women may not have picked up the men's positive affect as easily as the men picked up on theirs because of gender differences in the ways in which positive affect is outwardly displayed.

#### *Limitations and Future Directions*

These findings have some notable limitations. Most importantly, a very reasonable argument can be made that the direction of the effects between positive affect and within-couple closeness could be reversed because they were measured at the same point in time. In other words, it could be that feeling close toward another couple lead to increases in positive affect,

and not vice versa. While reverse-mediation analysis did not lend support to the idea that increases in within-couple closeness mediated the effects of the manipulation on positive affect, future studies examining these questions with larger samples followed over time are necessary to rule out issues of directionality. Second, with the number of couples in this study, only medium to large effects could be detected with substantial power; while no evidence was found for the hypothesis that more satisfied couples are more likely to seek out shared friendships, the null effects may have been in part a function of low statistical power. Finally, the couples in this study were young couples in dating relationships from the United States. Although the couples in this study had been together for at least a year, it may be that the effects generated here may differ somewhat for married and older couples and for those from other cultures.

There are a number of potential future directions for this research. Perhaps most obvious is investigating when and under what specific conditions relationship closeness is enhanced through interactions with other couples. Self-disclosure is undoubtedly part of the process. However, the questions that couples asked each other in this procedure covered a broad array of topics—some very disclosing, some not. Manipulating these questions would allow for the isolation of different effects. For example, whether disclosures about negative experiences vs. positive experiences are differentially closeness-inducing could be investigated; although much of the research examining disclosure in close relationships has focused on negative disclosures and the support from partners that they elicit (Pasch & Bradbury, 1998), recent findings suggest that how people respond to positive event disclosures is important as well (Gable, Reis, Impett, & Asher, 2004). Further, some of the questions used in this procedure—albeit a small percentage—potentially involved a person’s romantic relationship (e.g., “What would constitute

a "perfect" day for you?"). To what extent are these types of questions responsible for the greater feelings of closeness toward romantic partners in the high-disclosure condition? Relatedly, to what extent were increases in within-couple closeness attributable to self-disclosures to and from one's own partner? Although mediation analyses showed that the effects of the manipulation were not due to simply learning new things about one's partner, it is possible that partner disclosure led to greater feelings of closeness through other pathways. Adding a comparison condition in which couples go through the closeness-induction procedure without other couples present could would allow one to test this idea directly. Finally, investigating of the effects of other types of novel and arousing activities—such as playing games or physical activities—would help clarify the conditions under which interactions between couples enhance relationship functioning.

Although positive affect may partially explain why interactions between couples can enhance within-couple closeness, other mechanisms should be considered as well. For example, previous research has demonstrated the tendency to perceive one's own relationship to be superior to others' relationships (Rusbult, Van Lange, Wildschut, Yovetich, & Verette, 2000; Van Lange & Rusbult, 1995). Thus, when couples interact with other couples they may generally be inclined to think that their relationship is better than the other couples' relationships. This downward comparison, in turn, may make couples feel better about their own relationship and lead to greater feelings of closeness toward their partner.

### *Implications*

Social and clinical psychologists, sociologists and others interested in the study of relationships would benefit from understanding how and why couples are impacted by people

outside their relationships. Studying how friendships between couples form can lead to clearer conceptions not only of how outsiders impact the quality of couples' relationships but also of even more basic questions about how friendships develop. For example, are my partner and I at our best when we are alone together or at a crowded party? If my romantic partner and I want to get to know another couple, what sorts of questions should we ask them? And how do we respond when they tell us personal things about themselves? Despite how often we come into contact with other people in the context of our relationships, little is known about how these people affect our relationships and how our relationships affect them.

From a clinical standpoint, the findings from this study offer preliminary evidence that having close, intimate and shared interactions with others outside of one's relationship offer relationship-enhancing benefits. Interventions developed for distressed couples potentially could integrate aspects of social networks into their approaches, either through structured interactions such as the one used here or by providing couples with strategies to strengthen current friendships or form new ones.

These findings have exciting practical implications as well. By seeking out friendships with other couples, couples may be able to build closeness within their own relationship, particularly when interactions with other couples involve increasing amounts of disclosure. Of course, in the real world, these processes would not be expected to occur as quickly as they do in the lab. Indeed, over thirty years of self-disclosure research indicates that when people disclose personal information too quickly in new friendships they are actually more apt to be *less* well-liked (Collins & Miller, 1994). In the lab—when disclosures are facilitated by an experimenter—early and intense self-disclosure may not violate social norms in the same way that it does

outside the lab. Thus, in the real world, couples would probably be best advised to engage in personal self-disclosures with other couples over several occasions and more extended periods of time. Naturalistic longitudinal research with pairs of couples is needed to test the ideal time course of disclosures and the long-term efficacy of interactions between couples in boosting closeness within couples. Such studies would allow one to test, for example, whether additional interactions with another couple would continue to boost within-couple closeness after the initial excitement of meeting a new couple starts to fade.

### *Conclusion*

The closeness-induction method provides a useful framework for examining how developing friendships between couples effect within-couple process in a controlled laboratory setting. The results reported here indicate that closeness between couples can be generated relatively quickly and that this process can enhance people's relationships. Further, with recent statistical advances, the effects of outside friendships on relationship processes now can be estimated fairly easily.

It is not known whether "real" friendships between couples are formed after going through this type of closeness-inducing exercise. The closeness that is generated is probably most akin to the closeness produced after a very good first double-date. The fact that many couples progressed on the path toward friendship—contacting each other, and, in some cases, meeting up for a second date—is indication that the closeness produced with this method is authentic.

The results reported here and elsewhere suggest that shared interactions with others can be beneficial for couples. Of course, in some instances, interactions with other couples may have

downsides—for example, when there are extra-dyadic attractions or when one perceives the other couple as being happier or more stable. We are only beginning to understand how and under what conditions these types of interactions are associated with positive relationship outcomes. However, the preliminary evidence suggests that investigating interactions between couples and outsiders will help elucidate the paths to intimacy in close relationships and, more broadly, the paths to friendship.



References

- Ackerman, K. (1963). Affiliations: Structural determinants of differential divorce rates. *American Journal of Sociology, 69*, 13-20.
- Agnew, C. R., Loving, T. J., & Drigotas, S. M. (2001). Substituting the forest for the trees: Social networks and the prediction of romantic relationship state and fate. *Journal of Personality and Social Psychology, 81*, 1042-1057.
- Altman, I., & Taylor, D. (1973). *Social penetration: The development of interpersonal relationships*. New York: Holt, Rinehart, & Winston.
- Aron, A., & Aron, E. (1986). *Love and the expansion of self: Understanding attraction and satisfaction*. New York: Hemisphere.
- Aron, A., & Aron, E., & Norman, C. C. (2001). Self-expansion model of motivation and cognition in close relationships and beyond. In G. J. O. Fletcher & M. Clark (Eds.), *Blackwell Handbook of Social Psychology: Interpersonal Processes*. (pp. 478-501). Malden, MA: Blackwell Publishers Inc.
- Aron, A., Norman, C. C., Aron, E. N., & Lewandowski, G., Jr. (2002). Shared participation in self-expanding activities: Positive effects on experienced marital quality. In P. Noller & J. Feeney (Eds.), *Understanding marriage: Developments in the study of couple interaction*. (pp. 177-194). New York, NY: Cambridge University Press.
- Aron, A., Aron, E. N., & Smollan, D. (1992). Inclusion of Other in the Self Scale and the structure of interpersonal closeness. *Journal of Personality and Social Psychology, 63*, 596-612.

- Aron, A., Melinat, E., Aron, E. N., Vallone, R., & Bator, R. (1997). The experimental generation of interpersonal closeness: A procedure and some preliminary findings. *Personality and Social Psychology Bulletin, 23*, 363-377.
- Aron, A., Norman, C. C., Aron, E. N., McKenna, C., & Heyman, R. E. (2000). Couples shared participation in novel and arousing activities and experienced relationship quality. *Journal of Personality and Social Psychology, 78*, 273-284.
- Baron, R. M. & Kenny, D. A. (1986). The moderator–mediator variable distinction in social psychological research: Conceptual, strategic and statistical considerations. *Journal of Personality and Social Psychology, 51*, 1173-1182.
- Campbell, L., & Kashy, D. A. (2002). Estimating actor, partner, and interaction effects for dyadic data using PROC MIXED and HLM: A user-friendly guide. *Personal Relationships, 9*, 327-342.
- Collins, N. L., & Miller, L. C. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin, 116*, 457-475.
- Derlega, V. J., Metts, S., Petronio, S., & Margulis, S. T. (1993). *Self-Disclosure*. Newbury Park, CA: Sage.
- Gable, S. L., Reis, H. T., Impett, E. A., & Asher, E. R. (2004). What do you do when things go right? The intrapersonal and interpersonal benefits of sharing positive events. *Journal of Personality and Social Psychology, 87*, 228-245.
- Hendrick, S. S. (1988). A generic measure of relationship satisfaction. *Journal of Marriage and the Family, 50*, 93-98.

- Kashy, D. A., & Kenny, D. A. (2000). The analysis of data from dyads and groups. In H. T. Reis & C. M. Judd (Eds.), *Handbook of research methods in social psychology* (pp. 451-477). New York: Cambridge University Press.
- Kenny, D. A. (1996). Models of interdependence in dyadic research. *Journal of Social and Personal Relationships, 13*, 279-294.
- Larson, R. W., & Bradney, N. (1988). Precious moments with family members and friends. In R. M. Milardon (Ed.), *Families and social networks* (pp. 107-126). Thousand Oaks, CA, US: Sage Publications.
- Larson, R., Manell, R., & Zuzanek, J. (1986). Daily well-being of older adults with friends and family. *Psychology and Aging, 1*, 117-126.
- Laurenceau, J-P., Feldman Barrett, L., & Pietromonaco, P. R. (1998). Intimacy as an interpersonal process: The importance of self-disclosure and perceived partner responsiveness in interpersonal exchanges. *Journal of Personality and Social Psychology, 74*, 1238-1251.
- Laurenceau, J-P., Rivera, L. M., Shaffer, A. R., & Pietromonaco, P. R. (2004). Intimacy as an interpersonal process: Current status and future directions. In D. Mashek & A. Aron (Eds.), *Handbook of Closeness and Intimacy* (pp. 61-78). Mahwah, NJ: Erlbaum.
- Laurenceau, J.-P., Troy, A. B., & Carver, C. S. (2005). Two distinct emotional experiences in romantic relationships: Effects of perceptions regarding approach of intimacy and avoidance of conflict. *Personality and Social Psychology Bulletin, 31*, 1123-1133.

- McNair, D. M., Lorr, M., & Droppleman, L. F. (1971). *Manual: Profile of Mood States*. San Diego: Educational and Industrial Testing Service.
- Milardo, R. M. (1982). Friendship networks in developing relationships: Converging and diverging social environments. *Social Psychology Quarterly*, *45*, 162-172.
- Milardo, R. M. (1988). Families and social networks. An overview of theory and methodology. In R. M. Milardo (Ed.), *Families and social networks* (pp. 13–47). Newbury Park, CA: Sage.
- Olsen, J. A., & Kenny, D. A. (2006). Structural equation modeling with interchangeable dyads. *Psychological Methods*, *11*, 127-141.
- Pasch, L. A., & Bradbury, T. N. (1998). Social support, conflict, and the development of marital dysfunction. *Journal of Consulting and Clinical Psychology*, *66*, 219-230.
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. W. Duck (Ed.), *Handbook of personal relationships* (pp. 367-389). Oxford, England: Wiley.
- Rusbult, C. E., Van Lange, P. A. M., Wildschut, T., Yovetich, N. A., & Verette, J. (2000). Perceived superiority in close relationship: Why it exists and persists. *Journal of Personality and Social Psychology*, *79*, 521-545.
- Shrout, P. E. & Bolger, N. (2002). Mediation in experimental and nonexperimental studies: New procedures and recommendations. *Psychological Methods*, *7*, 422-445.
- Slatcher, R. B., & Pennebaker, J. W. (2006). How do I love thee? Let me count the words: The social effects of expressive writing. *Psychological Science*, *17*, 660-664.

- Sprecher, S., Felmlee, D., Orbuch, T. L., & Willetts, M. C. (2002). Social networks and change in personal relationships. In A. L. Vangelisti, H. T. Reis, & M. A. Fitzpatrick (Eds.), *Stability and change in relationships* (pp. 257-284). New York, NY: Cambridge University Press.
- Sternberg, R. J. (1997). Construct validation of a triangular love scale. *European Journal of Social Psychology, 27*, 313-335.
- Strong, G., Aron, A. (2006). The effect of shared participation in novel and challenging activities on experienced relationship quality: Is it mediated by high positive affect? In K. D. Vohs and E. J. Finkel (Eds.), *Self and relationships: Connecting intrapersonal and interpersonal processes* (pp. 342-359). New York: Guilford Press.
- Van Lange, P. A. M., & Rusbult, C. E. (1995). My relationship is better than--and not as bad as--yours is: The perception of superiority in close relationships. *Personality and Social Psychology Bulletin, 21*, 32-44.
- Watson, D. W., Clark, L. A., & Tellegen, A. (1988). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063-1070.
- Watson, D. W., Clark, L. A. (1994). *The PANAS-X: Manual for the Positive and Negative Affect Schedule-Expanded Form*. Unpublished manuscript, University of Iowa, Iowa City, IA.

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Table 1

*Baseline Relationship Characteristics as a Function of Group*

<b>Measure</b>	<b>Experimental Condition</b>		<b><i>t</i></b>	<b><i>p</i></b>	<b>Cohen's <i>d</i></b>
	<b>Small-talk</b>	<b>High-Disclosure</b>			
	<b><i>M (SD)</i></b>	<b><i>M (SD)</i></b>			
Length of time dating partner	2.01 (1.00)	2.07 (1.11)	0.32	0.75	0.06
Closeness with romantic partner (SIS)	6.72 (0.35)	6.55 (0.51)	2.19	0.03	0.40
Relationship satisfaction (RAS)	4.58 (0.41)	4.45 (0.54)	1.52	0.13	0.30
Positive Affect (POMS)	18.87 (5.14)	18.23 (5.87)	0.63	0.53	0.12

*Note.* *n* = 15 groups (four participants in each group) in each condition.

Table 2

*Group Differences in Post-Interaction Outcome Measures*

<b>Measure</b>	<b>Experimental Condition</b>		<b><i>β</i></b>	<b><i>p</i></b>	<b>Cohen's <i>d</i></b>
	<b>Small-talk</b>	<b>High-Disclosure</b>			
	<b><i>M (SD)</i></b>	<b><i>M (SD)</i></b>			
Closeness with other couple (IOS)	3.35 (1.39)	4.75 (1.31)	.50	.000	1.05
Closeness with romantic partner (IOS)	6.37 (0.80)	6.63 (0.58)	.20	.039	0.39
Positive Affect (PANAS)	4.31 (1.28)	5.26 (0.91)	.47	.000	0.86
Novelty of Interaction	6.07 (1.57)	7.23 (1.46)	.38	.000	0.78
Learned new things about romantic partner	2.63 (1.68)	4.12 (2.59)	.31	.000	0.68

*Note.* *n* = 15 groups (four participants in each group) in each condition. *β*s represent standardized beta weights from APIM analyses. Means for closeness with romantic partner and positive affect are adjusted to control for respective baseline measures.

Table 3  
*Group Differences at Time II (1-Month Follow-Up)*

<b>Measure</b>	<b>Experimental Condition</b>		<b><math>\beta</math></b>	<b><i>p</i></b>	<b>Cohen's <i>d</i></b>
	<b>Small-talk</b>	<b>High-Disclosure</b>			
	<b><i>M (SD)</i></b>	<b><i>M (SD)</i></b>			
Amount of talk about the other couple after the study was finished	1.58 (0.78)	3.00 (2.47)	.31	.000	0.77
Interest in hanging out with this couple again in the future	3.24 (1.87)	5.21 (2.20)	.45	.000	0.97
Hope that the other couple stays together in the future	5.64 (2.17)	7.30 (1.60)	.42	.000	0.88
How much participant thinks the other couple hopes participant and partner stay together	4.98 (2.04)	6.91 (1.82)	.48	.000	1.01
Closeness with romantic partner (IOS)	5.65 (1.36)	6.08 (1.11)	.19	.076	0.34

*Note.*  $n = 50$  in small-talk condition and 53 in high-disclosure condition. Mean IOS scores adjusted to control for baseline closeness.  $\beta$ s represent standardized beta weights from APIM analyses.

## Figure Captions

*Figure 1.* Actor-Partner Interdependence Model (APIM) used to estimate the mediated effects of experimental condition on outcome variables with pairs of couples. F1 = female in couple 1; F2 = female in couple 2; M1 = male in couple 1; M2 = Male in couple 2. The parameters of this model include direct paths ( $b$  and  $b_1$ ) from the predictor (experimental condition) to the mediators ( $X_{F1}$ ,  $X_{F2}$ ,  $X_{M1}$  and  $X_{M2}$ ), direct paths ( $c$  and  $c_1$ ) from the predictor to the outcome variables ( $Y_{F1}$ ,  $Y_{F2}$ ,  $Y_{M1}$  and  $Y_{M2}$ ), direct actor effects ( $j$  and  $k$ ), direct partner effects ( $l$ ,  $m$ ,  $n$ ,  $o$ ,  $p$ ,  $q$ ), mediator intercepts ( $g$  and  $h$ ), mediator residual variances ( $i$  and  $i_1$ ), outcome intercepts ( $r$  and  $s$ ), outcome residual variances ( $t$  and  $t_1$ ), and mediator residual ( $f_1$ ,  $f_2$ ,  $f_3$  and  $f_4$ ) and outcome residual ( $w_1$ ,  $w_2$ ,  $w_3$  and  $w_4$ ) covariances.

*Figure 2.* APIM mediation model of the effects of experimental condition on changes in feelings of closeness with one's romantic partner by changes in positive affect. F1 = female in couple 1; F2 = female in couple 2; M1 = male in couple 1; M2 = Male in couple 2. Significant paths shown; intercepts, residual variances and residual covariances not shown. Overall model fit was good (CFI = .91, RMSEA = .07). \* $p < .05$ .

*Figure 3.* Moderation of effects of experimental manipulation on feelings of closeness with the other couple by length of time dating (split at the median for graphical representation).



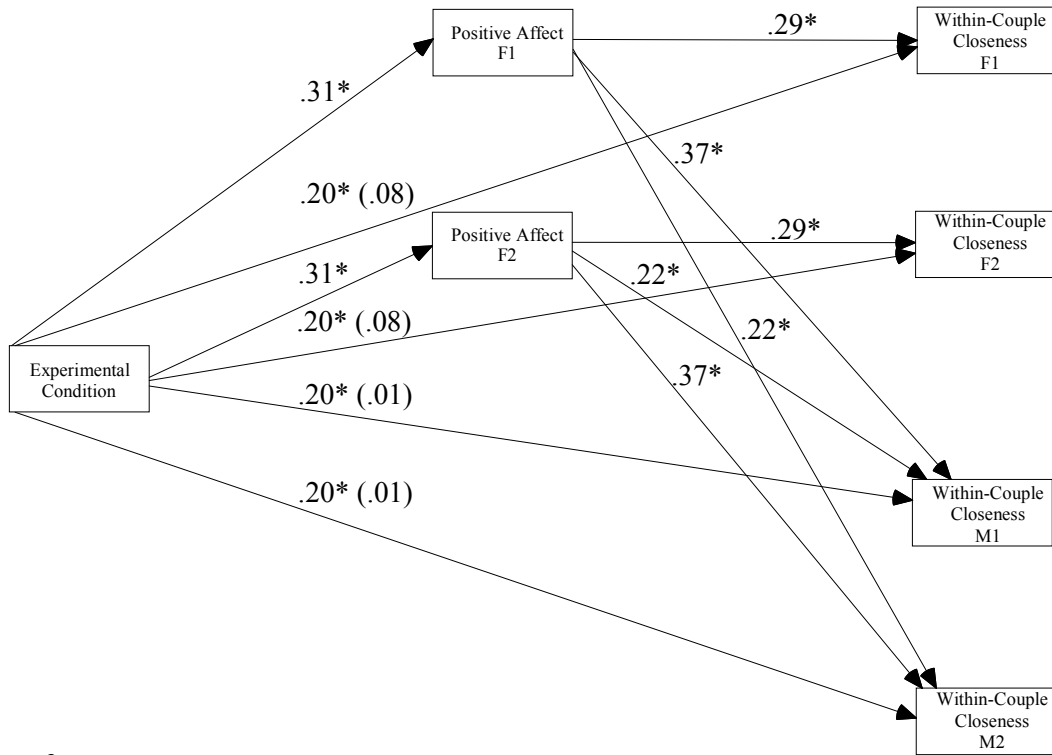


Figure 2.

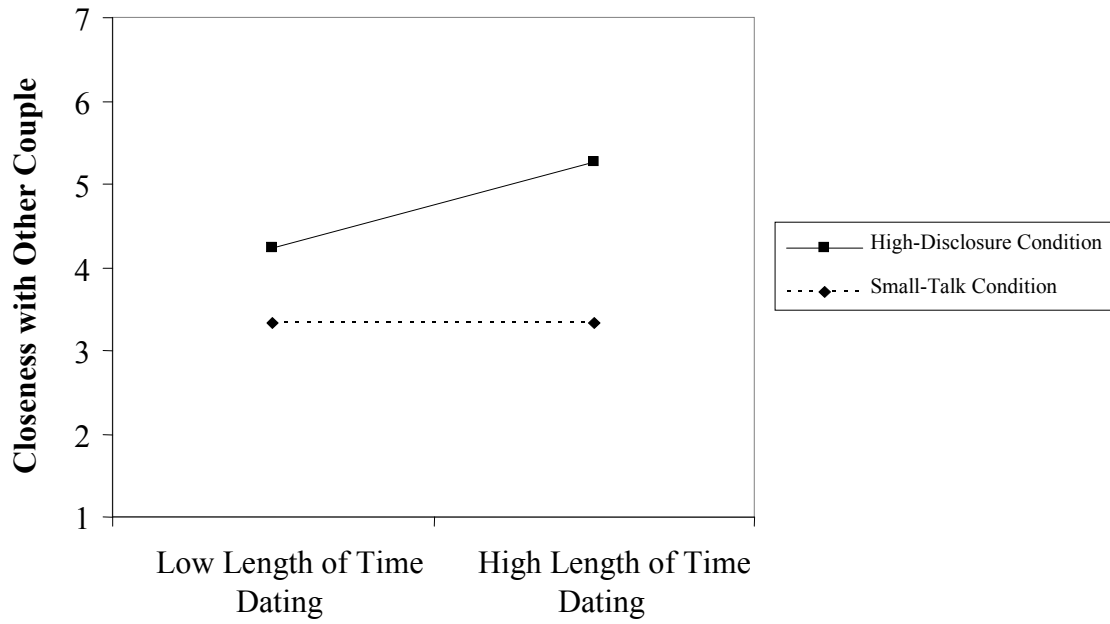


Figure 3.