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## “Will you complete this survey too?” Differences between individual versus dyadic samples in relationship research

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### Abstract

This study examines the ways in which collecting data from individuals versus couples affects the characteristics of the resulting sample in basic research studies of romantic relationships. From a nationally representative sample of 1,294 individuals in a serious romantic relationship, approximately half of whom were randomly selected to invite their partner to participate in the study, we compare relationship, individual, and demographic characteristics among three groups: individuals randomized to invite their partner and whose partner participated in the study, individuals randomized to invite their partner but whose partner did not participate, and individuals who were not randomized to invite their partner. Results indicated that individuals whose partner participated reported the highest levels of relationship and individual well-being relative to comparison groups, and individuals who participated alone despite being asked to invite their partner reported the lowest levels of relationship and individual well-being relative to comparison groups. Effect size magnitudes indicated the strongest group differences with respect to relationship variables, particularly cognitive appraisals of overall relationship stability and satisfaction. Implications for romantic relationship research and study design are discussed.

### Keywords

Dyadic data; recruitment; relationship satisfaction; romantic relationships; sampling

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At the outset of any study of romantic relationships, researchers must decide whether data will be collected from one or both partners. Each approach comes with logistical and methodological tradeoffs (Kenny, Kashy, & Cook, 2006; Starks, Millar, & Parsons, 2015). Studies of individuals who are in relationships (hereafter single-partner designs) entail fewer logistical and financial demands in data collection as well as more straightforward

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approaches in data analysis as all observations (i.e., participants) are independent from other observations. Studies including both partners in the relationship (hereafter two-partner designs) are often more challenging to implement and to analyze, but have the advantage of allowing for the empirical examination of questions related to the influence of one partner on another, couple-level effects, and the degree of correspondence between members of the same dyad, as well as the advantage of providing increased power to detect effects.

The implications of selecting a single- versus a two-partner design may, however, extend beyond matters of methodology and implementation. In particular, requiring data from both partners in a relationship may impact the composition, or representativeness, of the sample itself. From the perspective of the couple, joint participation requires both a mutual willingness to think and answer questions about one's relationship as well as some degree of communication between partners as, irrespective of recruitment strategy, one partner typically first learns about the study and then discusses the prospects of participating with his or her partner. Consequently, some scholars (e.g., Hoff & Beougher, 2010; Yucel & Gassanov, 2010) have suggested that participation bias may occur among two-partner studies relative to single-partner studies, with dyadic studies containing a disproportionate number of high functioning couples and individuals who are more satisfied with their relationship.

Previous empirical research on this issue, although limited, provides some support for the proposition that studies involving two-partner samples are qualitatively different than studies involving single-partner samples. For example, in ancillary analyses of the German Family Panel study that surveyed more than 7,000 partnered individuals, respondents whose partner also participated (52% of the sample) reported being more committed to their partner, and were older, were in a longer-term relationship, had more children, and had higher household income compared to individuals whose partner did not participate (Johnson & Horne, 2016). A separate study, involving a sample of 260 partnered gay men, found that individuals who successfully recruited their partner (40% of the sample) reported significantly higher relationship satisfaction than men who declined to invite their partner to participate (25%) or agreed to invite their partner but were unable to secure his participation (35%; Starks et al., 2015). These findings suggest that dyadic versus single-partner data collection efforts may differ with regard to both relationship and demographic factors, such that two-partner samples are more established individually (e.g., older, higher income) and as a couple (e.g., longer relationship duration, more children, more committed and satisfied).

The current study builds on this limited prior work using an experimental design and data from a large, nationally-representative sample of individuals in a serious romantic relationship, approximately half of whom were randomly selected to invite their partner to participate in the study as well. From the sample of individuals randomized to invite their partner, some individuals had partners who returned a survey whereas others did not. As a result, this sample uniquely allows us to compare characteristics of individuals whose partner also participated in a research study with individuals whose partner did not, either by choice (i.e., individuals were asked to include the partner and the partner did not participate) or by randomization (i.e., individuals were not asked to include the partner). Such analyses can provide relationship researchers with new information about how decisions about

collecting data from either individuals or couples may impact the nature of the relationships analyzed in the resulting sample.

Consistent with earlier studies, we examine group differences in relationship variables (e.g., satisfaction, commitment) as well as demographics (e.g., age, relationship length). In addition, given prior research linking mental health to participation in human subjects research (Leykin, Dunn, & Muñoz, 2017), we consider group differences in individual characteristics (e.g., psychological distress, attachment orientations). On the basis of the aforementioned literature, we hypothesized that individuals with a partner who also participated in the study would be characterized by higher relationship quality than comparison groups and, conversely, that individuals who were randomized to ask their partner to participate but whose partner did not participate would be characterized by lower levels of relationship functioning relative to comparison groups. We also hypothesize that demographic characteristics indicative of older, more established relationships (e.g., longer relationship length, older participant ages) will be associated with greater likelihood of partner participation. We do not posit any *a priori* hypotheses with respect to individual or other demographic characteristics given the lack of prior research and consistent findings in these domains.

Our first set of analyses focus on the subsample of individuals selected to invite their partner, examining group differences between individuals whose partner also participated in the study (i.e., returned a completed questionnaire) and those individuals whose partner did not participate. Our second set of analyses compared these two groups of individuals with the sample of individuals from the larger study who were not randomized to invite their partner to participate in order to investigate how samples reflective of traditional, single-partner research designs compare to samples in which partners are asked to participate.

## Method

### Participants

The present study included a sample of 1,294 participants who took part in the first wave of a longitudinal project examining romantic relationship development. At the time of recruitment, all participants were unmarried but in a “serious, exclusive romantic relationship” of at least two months with a member of the opposite sex. In this sample, 63% of participants were female. Participants’ mean age was 25.57 years (ranging from 18.09 to 35.74 years,  $SD = 4.81$ ). The median years of school completed was 14 years (ranging from 8 to 24 years,  $SD = 2.21$ ), and median annual income was \$15,000-\$19,999 (ranging from “Under \$4,999” to “Over \$100,000”). Most participants (76%) were employed. Regarding race, the sample was 76% White, 14% Black or African American, 3% Asian, 1% American Indian/Alaska Native, and 0.3% Native Hawaiian or Other Pacific Islander; 4% reported being of more than one race and 1% did not report race. Regarding ethnicity, the sample was 8% Hispanic or Latino. Median relationship length was 24 months (25<sup>th</sup> percentile: 10.50 months; 75<sup>th</sup> percentile: 48 months). Nineteen percent of individuals were engaged and 32 percent of individuals were cohabiting (i.e., living together without having separate places to live). Fourteen percent of the sample had children with the current partner, 17% had children with prior partners, and 20% had partners with children from prior relationships. Thirty-five

percent of the sample reported at least one child currently living in their household. When compared to U.S. Census 2000 figures, this sample is similar in terms of race, ethnicity, and income to similarly aged unmarried individuals who speak English.

## Procedures

The sample for this project was recruited in 2008 by a calling center using a targeted-listing sampling strategy. A survey firm began with a targeted (by age) list of 325,273 phone numbers of individuals in the contiguous United States. This contact information came from many different sources, such as the telephone white pages, warranty card information, public records, and magazine subscriptions. The calling firm did not ask for the specific individual whose name was on the sampling list, but rather allowed any person in the household who met criteria to participate (one per household). Eligibility requirements included an age between 18 to 34 and for the individuals to be in unmarried relationship with a member of the opposite sex that had lasted two months or longer. In this list of telephone numbers, 73,508 (23%) were disconnected, 186,647 were never answered live (57%), and 65,118 (20%) were answered. Of those who answered, 3,570 (5%) were ineligible due to not speaking English, 22,375 (34%) refused to answer any screening questions, 37,468 (56%) answered screening questions but were ineligible due to age or relationship status, and 2,658 (5%) were eligible. Of those who were eligible, 2,327 (88%) completed the phone survey and provided their contact information for the longitudinal study. Of those who provided their contact information, 2,213 (95%) provided complete and usable mailing addresses and were mailed forms (within two weeks of the phone screening). Of those who were mailed forms, 1,447 individuals returned them (65% response rate); however, 153 of these respondents indicated on their forms that they did not meet requirements for participation, either because of age, language, or relationship status, leaving a final sample of 1,294 participants.

To collect a subsample of relationships with dyadic data, approximately half (50.5%, or 1,118 individuals) of the 2,213 individuals with a complete mailing address were randomly assigned to receive an additional set of forms and asked if they would like to invite their partner to participate in the study. From these 1,118 initial contacts randomly selected to ask their partner to participate, 711 returned the questionnaire mailed to them (63.6% response rate), of which 642 were eligible and included in the final sample (69 cases dropped due to eligibility issues noted in the preceding paragraph). From this sample of 642 eligible individuals with a returned questionnaire randomized to ask their partner to participate, questionnaires from partners were returned by 316 individuals (49.2%). Hence, the final study sample of 1,294 individuals was composed of the following three groups: 316 individuals randomized to invite their partner and whose partner participated, 326 individuals randomized to invite their partner and whose partner did not participate, and 652 individuals randomized to not invite their partner.

All participants were paid US\$40 for completing the survey. All procedures were approved by the Institutional Review Board of the sponsoring research institution (Proposal title: The Relationship Development Study; protocol number: 471794).

## Measures

Additional details for the measures, including sample items, response options, and psychometric properties, are provided in Supplemental Material. All measures are widely-used in the relationship literature and demonstrated acceptable psychometrics in this sample. Observed responses spanned the complete range of possible response options for all measures.

**Relationship characteristics.**—Relationship characteristics were assessed using a variety of multi- and single-item measures. Constructs composed of multiple items included: psychological aggression (8 items; Revised Conflict Tactics Scale [CTS], Straus, Hamby, Boney-McCoy, & Sugarman, 1996;  $\alpha = .91$ ), physical aggression (10 items, from CTS;  $\alpha = .90$ ), and Communication Danger Signs (6 items; Stanley & Markman, 1997;  $\alpha = .81$ ). Single-item questions were used to assess couple satisfaction (from Couple Satisfaction Index; Funk & Rogge, 2007; see Rhoades, Stanley, & Markman, 2012a for similar assessment), personal commitment, perceived partner commitment (similar to standard, multi-item measures of dedication commitment; Owen, Rhoades, Stanley, & Markman, 2011), and break-up likelihood (see Rhoades, Stanley, & Markman, 2012b for similar assessment). Correlations among these items ranged in absolute value from .11 to .64 (see Table 1 for correlations among all variables examined in this study).

**Individual characteristics.**—Individual characteristics were also assessed using a variety of multi- and single-item measures. Constructs composed of multiple items included: anxious attachment (4 items from Adult Attachment Scale [AAS]; Collins & Read, 1990;  $\alpha = .61$ ), avoidant attachment (6 items from AAS;  $\alpha = .64$ ), general psychological distress (12 items from the Mood and Anxiety Symptom Questionnaire; Watson & Clark, 1991;  $\alpha = .92$ ), exposure to interparental conflict during childhood (4 items; Grych, Seid, & Fincham, 1992;  $\alpha = .73$ ), and financial hardship (4 item; cf. Masarik et al., 2016;  $\alpha = .80$ ). Religiosity and general physical health were assessed using one item measures. Correlations among these items ranged in absolute value from .02 to .41.

**Demographic characteristics.**—Demographic characteristics of the relationship included engagement status, cohabitation status, and relationship length. Individual demographic characteristics included gender, race, age, education, presence of children in the home, employment, and income.

## Plan of Analysis

After verifying the equivalence of the randomization for partner invitation, we conducted analyses with the 642 individuals randomized to invite their partner to participate, comparing those with ( $n=316$ ) and without ( $n=326$ ) a partner response. Continuous variables were compared using independent samples t-tests, and nominal variables were compared using cross-tabulation chi-squared difference tests. Effect sizes were calculated using Cohen's  $d$  (for continuous variables) and Phi coefficient (for nominal variables).

To examine how data collection efforts that do not attempt dyadic data collection compare with the two groups randomized to invite their partner, we conducted additional analyses

investigating how the relationships of individuals randomized to not invite their partner (n=652) compared to those with and without a partner response. Analysis of variance tests were run with the sample of 1,294 individuals, with post-hoc analyses conducted using least significant difference tests. Overall effect size was calculated using partial eta squared statistic.

Valid cases were used in analyses; percentages of missing data were minimal (< 1.0% for all variables using the analyses). To be conservative in our interpretation of results, we only discuss findings with statistical significance of  $p < .01$  or effect sizes equal to or greater than 0.2 (i.e., at least small in magnitude), though all results are reported in the Tables.

## Results

### Equivalence Analyses

We first verified the equivalence of the randomization for partner invitation. Results (summarized in Supplemental Table S1) indicated that the randomization was effective, as individuals randomly selected to invite their partner to participate (n = 642) were equivalent to individuals randomly not selected to invite their partner to participate (n = 652) with respect to all relationship, individual, and demographic characteristics under investigation.

### Comparisons between Single and Two Partner Responders

Table 2 summarizes results of analyses from the subsample of 642 individuals asked to invite their partner to participate. Means and standard deviations of individuals whose partner returned a questionnaire are listed first, followed by corresponding statistics for individuals whose partner did not return a questionnaire. Consistent with the structuring of the table, we summarize results with respect to three domains: relationship, individual, and demographic. Results indicated that for relationship characteristics, compared to individuals whose partner did not return a questionnaire, individuals whose partner returned the questionnaire reported higher levels of relationship satisfaction ( $d = .45$ ), personal commitment ( $d = .34$ ), perceived partner commitment ( $d = .43$ ), and less likelihood of breaking up ( $d = .47$ ). No differences between groups were observed with respect to psychological or physical aggression.

Within the domain of individual characteristics, compared to individuals whose partner did not return a questionnaire, individuals whose partner returned the questionnaire reported less anxious ( $d = .32$ ) and avoidant attachment ( $d = .30$ ). No differences were observed with respect to religiosity, health, or financial hardship. For demographic characteristics, individuals whose partner returned the questionnaire were more likely to be male ( $\phi = .18$ ), living together ( $\phi = .21$ ), and White ( $\phi = .15$ ) compared to individuals whose partner did not return a questionnaire. No differences were observed with respect to education, age, employment, children in the home, or income.

### Comparisons to the Sample Not Randomized to Invite Partner

Our next set of analyses compared individuals who were not randomly invited to ask their partner to participate in the study (n=652) with those whose partner also participated



(n=316) and those whose partner did not return a survey despite being asked (n=326). As summarized in Table 3, results indicated that, with respect to relationship characteristics, individuals not asked to invite their partner were generally in between the other two groups. Hence, individuals not asked to invite their partner reported higher levels of relationship satisfaction, personal and partner commitment, and lower break-up potential relative to individuals asked to invite partner but whose partner did not respond; conversely, they reported lower levels of relationship satisfaction, personal and partner commitment, and higher break-up potential relative to individuals asked to invite partner but whose partner responded. Again, there were no group differences with respect to psychological or physical aggression.

Concerning individual characteristics, those not asked to invite their partner reported lower levels of an avoidant attachment orientation and similar levels of an anxious attachment orientation relative to individuals asked to invite partner but whose partner did not respond; both of these groups reported less secure orientations than individuals who were invited to solicit their partner and whose partner responded. No group differences were observed for religiosity, health, or financial hardship. With respect to demographic characteristics, individuals not asked to invite their partner were again generally in between the other two groups. Hence, relative to individuals asked to invite partner but whose partner did not respond, the subsample involving strictly single-partner data collection contained higher percentages of White, cohabiting, and male individuals but lower percentages of White, cohabiting, and male individuals relative to individuals who were invited to ask their partner whose partner responded.

## Discussion

Research examining romantic relationships traditionally employs either a single- or two-partner study design for data collection. To date, however, the implications of this decision for the constitution of the sample have received relatively little empirical attention. The current study addressed this gap by examining differences among three groups of individuals from a large, nationally-representative sample: those who were randomized to invite their partner and whose partners participated (i.e., two-partner data), those who were randomized to invite their partner but whose partners did not participate (i.e., single-partner data and who would not be eligible to participate in a study requiring two-partner data), and those who participated without any knowledge of an option for their partner to participate (i.e., traditional single-partner data). All participants were unmarried, but in a serious romantic relationship when they participated.

Compared to those asked to invite their partner and whose partner did not participate, individuals whose partner also participated reported greater relationship satisfaction, commitment (both personal and perceived commitment level of one's partner), and less perceived break-up likelihood. These results replicate relationship constructs (e.g., satisfaction [Starks et al., 2015]; commitment [Johnson & Horne, 2016]) identified in prior studies that attempted to recruit partners from a larger sample of individuals. The current results especially highlight the strong effects of constructs grounded in commitment (e.g., personal commitment, perceived partner commitment, and break-up potential) in

discriminating group membership. In addition to relationship factors (where most prior research has focused), our results also suggest significant individual and demographic differences as well, such that partners were also more likely to participate when the initial contacts were White, reported less anxious and avoidant attachment, and were cohabiting. Again, these findings are consistent with the general pattern that higher levels of commitment and security are associated with greater likelihood of participation. Lastly, we note that partners were more likely to participate when the initial contacts were male. This finding could reflect the greater willingness of women to participate in relationship research in general – indeed, the majority of the sample (63%) was female, consistent with a large body of research noting females more often participate in studies of romantic relationships relative to males (e.g., Barton, Futris, & Nielsen, 2014; De Goede, Branje, van Duin, VanderValk, & Meeus, 2012). More broadly, this finding suggests that for studies requiring dyadic participation, initially targeting men may increase the percentage of participants whose partners will also be willing to participate relative to recruitment efforts targeting women.

Collectively, these results indicate that, although two-partner designs advantageously allow for tests of a broader range of conceptual and empirical questions than single-partner designs, requiring dyadic data may also result in a sample with more positive relationship appraisals, more commitment, individuals with fewer attachment issues, and fewer minority individuals than would be the case from only requiring a single partner to participate. Hence, more at-risk relationships and minority couples, inadvertently and unintentionally, may be screened out in dyadic studies on the basis of these “researcher-selection effects” (Rogge et al., 2006), diminishing the overall variability in relationship functioning and individual characteristics in these samples. Further, epidemiological research on the prevalence of relationship distress may underestimate its occurrence if based strictly on dyadic samples.

Our second set of analyses involving the sample of individuals who were not randomized to invite their partner provided additional insight into how traditional single-partner data collection efforts compare to samples composed of dyadic data as well as samples in which individuals were asked to invite their partner, but for whom no partner response was received. In general, this group reported levels of relationship, individual, and demographic characteristics that were in between samples with and without a partner response. This finding likely reflects the fact that this group was composed of some individuals who, if randomized to invite their partner, would have had partners who responded and some who would have had partners who would not have responded. Positively, this suggests that single partner data collection efforts may have greater variability and retain a larger segment of the population compared to dyadic samples, particularly in relation to couples at higher risk for relationship difficulty and instability.

It is also notable that a number of factors did *not* differ between groups. Specifically, in all analyses conducted, no differences were observed with respect to partner aggression (psychological or physical) or negative communication. Considered alongside the significant group differences, this pattern of results suggests that relationship differences between individuals with and without a participating partner were more evident with respect to individuals’ overall cognitive appraisals of the relationship (i.e., commitment, break-up



potential), and less with respect to specific relationship behaviors such as communication and aggression (see Fincham and Rogge, 2010 for additional discussion on this distinction). In addition, few differences were observed with respect to multiple individual characteristics (financial hardship, religiosity, childhood conflict) and demographic characteristics (education, age, employment, children in home, income). These null results, as well as magnitude of effect sizes, suggest that relationship factors are the primary factors distinguishing individuals whose partner also participates in relationship research versus single partner data collection. In particular, the present findings suggest that one important difference in obtaining samples of dyads may be that such methods select for people in more committed relationships. It is possible that as people develop more of sense of being a couple with a future, they become more likely to engage in things that will be about their relationship—including participating in a research study together.

At the level of descriptive statistics, results from the study indicated that approximately half (49%) of participants who were asked to invite their partner to participate had a partner who also returned a questionnaire. This percentage is similar to the German Family Panel study that included married and non-married dyads (having a 52% partner participation rate from a sample of more than 7,000 couples; Johnson & Horne, 2016) and is higher than the sample of partnered gay men (40% partner participation in a sample of 260 individuals; Starks et al., 2015). Hence, studies requiring dyadic participation that initially recruit one individual and use that partner to recruit the other are likely to miss a large number of people (likely equivalent to the size of the final recruited sample) who are otherwise interested in participating in the research study, but not able to do so because of the dyadic data requirement.

Based on these findings, how should researchers decide whether to collect single or dyadic data? Although by no means comprehensive, we provide the following three recommendations for researchers conducting studies of relationships and faced with the question of single- versus two-partner data collection. First, as with any study, the motivating research questions should guide data collection efforts. If questions of partner effects, or discrepancies between partners, are of central focus, then the need for two-partner data collection efforts is determinative. Second, to the degree that researchers are focused on collecting data from more “at-risk” or unstable romantic relationships, single-data collection may be advisable. Third, researchers may wish to consider including single- and two-partner data collection efforts within the same study. When dyadic data are important for certain empirical aims of the study yet researchers are also interested in including higher-risk relationships, racial minorities, or less established relationships, they can design the study to collect data from both partners whenever possible *and* from individuals whose partner does not participate. This approach facilitates hierarchical dyadic analyses from the subsample of relationships in which both partners participated as well as single-level analyses involving all main contacts, with a final overall sample that is likely to have a greater variability on study measures relative to the dyadic subsample.

Several limitations of the present study should be noted. First, the recruitment strategy for the current study involved initially recruiting one partner and using that partner to recruit the other. Generalizability of findings associated with this strategy to other strategies that focus

more on targeting partners simultaneously or the family as a unit (e.g., sending two separate letters to couples identified through marriage licenses, letters to families based on having a child in school) is unknown. However, we expect the underlying recruitment dynamics in the current sample are likely similar to other strategies because even “couple-only” recruitment material (e.g., separate mailed letters, etc.) will still involve one individual interested in participating that approaches his or her partner about participating as well (either before or after enrolling themselves). Second, no information was collected regarding whether a lack of partner response was due to the individual not asking their partner to participate or the individual asking their partner and their partner declining. Nonetheless, we suspect a similar dynamic may be at play in both cases: when a relationship is already less stable, individuals may be less likely to ask their partner to participate in a study focused on relationships or have partners who, when asked, are less likely to want to answer questions about their relationship. As one’s relationship becomes more established, individuals may become more likely to want to include the partner in a study about “my” relationship. Third, given that the sample was nationally recruited and representative of individuals who were in serious heterosexual relationships, we are unable to determine whether these findings also generalize to research involving other demographic groups, research focused on married samples, or more applied studies involving help-seeking couples. Future research can continue to explore each of these questions. Lastly, future research can also consider implementation approaches that best facilitate dyadic data collection, as well as practical advice for helping consenting initial contacts recruit their partner to participate. Various approaches have been implemented for dyadic data recruitment (e.g., main respondent contacting partner, research team members contacting partner, dyadic participation at onset) but the degree to which partner response rates differ across various approaches remains unclear. As a final limitation, the reliability of certain measures (i.e., anxious and avoidant attachment, several single-item measures) was low or unable to be calculated.

In sum, given its unique sample and study design, results from the current study provide new insights about differences between single- and two-partner samples in relationship research. These differences suggest that, in addition to sample recruitment and data analysis, the selection of single- versus two-partner design also has important substantive implications for sample composition. Equally important, researchers can continue to consider innovative approaches to data collection and analyses that reduce participation bias, retain as many individuals (and their partners) as possible, and test models composed of individual and dyadic data.

## Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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**Table 1.**  
Correlation Matrix and Descriptive Statistics for Study Variables (N = 1294 individuals)

|                              | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | 12.  | 13.  | 14.  | 15.  | 16. | 17. | 18. | 19. | 20. | 21. | 22. | 23. |  |
|------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|-----|-----|-----|-----|-----|-----|-----|-----|--|
| 1. Relationship Satisfaction | ---  |      |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 2. Commitment (self)         | .50  | ---  |      |      |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 3. Commitment (partner)      | .50  | .54  | ---  |      |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 4. Break-up Likelihood       | -.57 | -.64 | -.58 | ---  |      |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 5. Psychological Aggression  | -.32 | -.08 | -.12 | .15  | ---  |      |      |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 6. Physical Aggression       | -.23 | -.11 | -.13 | .13  | .53  | ---  |      |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 7. Communication Danger      | -.55 | -.23 | -.26 | .36  | .62  | .40  | ---  |      |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 8. Anxious Attachment        | -.31 | -.15 | -.36 | .28  | .16  | .14  | .29  | ---  |      |      |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 9. Avoidant Attachment       | -.29 | -.21 | -.18 | .22  | .13  | .15  | .24  | .17  | ---  |      |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 10. Psychological Distress   | -.32 | -.14 | -.22 | .27  | .25  | .21  | .38  | .41  | .28  | ---  |      |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 11. Health                   | .17  | .05  | .11  | -.07 | -.13 | -.12 | -.16 | -.19 | -.18 | -.24 | ---  |      |      |      |      |     |     |     |     |     |     |     |     |  |
| 12. Financial Hardship       | -.21 | -.07 | -.16 | .12  | .18  | .18  | .25  | .26  | .21  | .32  | -.27 | ---  |      |      |      |     |     |     |     |     |     |     |     |  |
| 13. Religiosity              | .02  | .00  | -.02 | .04  | -.06 | .00  | -.04 | .01  | -.05 | -.02 | .06  | -.02 | ---  |      |      |     |     |     |     |     |     |     |     |  |
| 14. Childhood Conflict       | -.13 | -.06 | -.06 | .08  | .15  | .10  | .16  | .15  | .19  | .17  | -.13 | .18  | -.07 | ---  |      |     |     |     |     |     |     |     |     |  |
| 15. Female <sup>a</sup>      | -.02 | .13  | -.02 | -.05 | .08  | .01  | .00  | .06  | .07  | .10  | -.03 | .16  | .08  | .06  | ---  |     |     |     |     |     |     |     |     |  |
| 16. Race <sup>b</sup>        | .18  | .15  | .17  | -.10 | -.03 | -.11 | -.14 | -.06 | -.13 | .02  | .03  | -.08 | -.13 | -.04 | -.03 | --- |     |     |     |     |     |     |     |  |
| 17. Cohabiting <sup>a</sup>  | -.07 | .14  | .11  | -.17 | .28  | .11  | .18  | -.01 | .05  | .05  | -.15 | .18  | -.19 | .12  | .08  | .03 | --- |     |     |     |     |     |     |  |

|                                   | 1.   | 2.   | 3.   | 4.   | 5.   | 6.   | 7.   | 8.   | 9.   | 10.  | 11.  | 12.  | 13.  | 14.  | 15.  | 16.  | 17.  | 18.  | 19.  | 20.  | 21.  | 22.  | 23.  |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|------|
| 18. Engaged <sup>a</sup>          | .11  | .23  | .19  | -.26 | .11  | .05  | .01  | -.07 | -.03 | -.08 | -.07 | .04  | .00  | .03  | .06  | .06  | .30  | ---  | ---  | ---  | ---  | ---  | ---  |
| 19. Relationship Length           | -.13 | .08  | .00  | -.10 | .29  | .12  | .24  | -.04 | .08  | -.02 | -.09 | .09  | -.05 | .05  | .10  | .06  | .38  | .23  | ---  | ---  | ---  | ---  | ---  |
| 20. Schooling                     | .11  | .07  | .06  | -.07 | -.15 | -.19 | -.17 | -.13 | -.13 | -.11 | .20  | -.18 | .05  | -.06 | .05  | .02  | .12  | .01  | .07  | ---  | ---  | ---  | ---  |
| 21. Age                           | -.17 | -.04 | -.07 | .04  | .02  | -.05 | .05  | .05  | .11  | .01  | -.10 | .11  | -.03 | .04  | -.02 | .09  | .31  | .14  | .27  | .18  | ---  | ---  | ---  |
| 22. Children in Home <sup>a</sup> | -.21 | -.03 | -.14 | .09  | .20  | .13  | .19  | .14  | .09  | .10  | -.15 | .21  | .03  | .11  | .15  | .13  | .21  | .10  | .16  | .24  | .20  | ---  | ---  |
| 23. Employed <sup>a</sup>         | .06  | .04  | .07  | -.06 | -.05 | -.06 | -.07 | -.06 | -.08 | -.10 | .14  | -.19 | -.04 | -.01 | -.03 | .11  | .02  | .03  | .04  | .15  | .07  | -.06 | ---  |
| 24. Income                        | -.06 | -.04 | -.01 | -.02 | -.06 | -.11 | -.04 | -.06 | -.04 | -.13 | .06  | -.20 | -.03 | .03  | -.14 | .00  | .09  | .05  | .03  | .30  | .47  | -.03 | ---  |
| <b>Mean</b>                       | 4.13 | 6.32 | 6.26 | 1.95 | 2.29 | 0.45 | 1.66 | 2.35 | 2.42 | 2.27 | 3.69 | -0.0 | 3.96 | 2.60 | 0.63 | 0.77 | 0.32 | 0.19 | 34.5 | 8.33 | 25.6 | 0.35 | 0.76 |
| <b>SD</b>                         | 1.34 | 1.09 | 1.18 | 1.05 | 1.70 | 0.87 | 0.50 | 0.75 | 0.71 | 0.93 | 0.89 | 0.79 | 1.73 | 0.78 | n/a  | n/a  | n/a  | n/a  | 33.1 | 2.21 | 4.81 | n/a  | 2.61 |

Note. Correlations (absolute value) .057 are significant at level of  $p < .05$ ; Correlations (absolute value) .074 are significant at level of  $p < .01$ ;

<sup>a</sup><sub>1</sub> = Yes.

<sup>b</sup><sub>1</sub> = White.

n/a = Not applicable for dichotomous variable.

Comparing individuals randomized to invite partner to study, those with (n = 316) and without (n = 326) partner response

**Table 2.**

| Variable                            | Partner Response |       | No Partner Response |     | Test Statistic <sup>a</sup> | p-value | Effect size |     |      |
|-------------------------------------|------------------|-------|---------------------|-----|-----------------------------|---------|-------------|-----|------|
|                                     | n                | M     | SD                  | n   |                             |         |             | M   | SD   |
| <b>Relationship characteristics</b> |                  |       |                     |     |                             |         |             |     |      |
| Relationship satisfaction           | 288              | 4.39  | 1.27                | 293 | 3.80                        | 1.38    | 5.40        | .00 | 0.45 |
| Commitment - self                   | 314              | 6.50  | 0.94                | 325 | 6.13                        | 1.21    | 4.29        | .00 | 0.34 |
| Commitment - partner                | 315              | 6.51  | 0.90                | 323 | 6.03                        | 1.31    | 5.37        | .00 | 0.43 |
| Break-up likelihood                 | 316              | 1.71  | 0.92                | 324 | 2.19                        | 1.11    | 5.95        | .00 | 0.47 |
| Psychological aggression            | 314              | 2.33  | 1.70                | 324 | 2.15                        | 1.62    | 1.32        | .19 | 0.11 |
| Physical aggression                 | 314              | 0.45  | 0.89                | 324 | 0.41                        | 0.81    | 0.56        | .58 | 0.05 |
| Communication danger signs          | 316              | 1.63  | 0.49                | 324 | 1.71                        | 0.51    | 1.98        | .05 | 0.16 |
| <b>Individual characteristics</b>   |                  |       |                     |     |                             |         |             |     |      |
| Anxious attachment                  | 315              | 2.20  | 0.70                | 325 | 2.43                        | 0.76    | 3.90        | .00 | 0.32 |
| Avoidance attachment                | 315              | 2.31  | 0.70                | 325 | 2.53                        | 0.75    | 3.90        | .00 | 0.30 |
| General psychological distress      | 316              | 2.19  | 0.88                | 324 | 2.36                        | 0.94    | 2.37        | .02 | 0.19 |
| Health                              | 315              | 3.74  | 0.84                | 324 | 3.67                        | 0.95    | 0.99        | .32 | 0.08 |
| Financial hardship                  | 313              | -0.04 | 0.78                | 323 | -0.00                       | 0.73    | 0.54        | .59 | 0.05 |
| Religiosity                         | 313              | 3.91  | 1.65                | 325 | 4.14                        | 1.70    | 1.74        | .08 | 0.14 |
| Childhood conflict                  | 315              | 2.57  | 0.74                | 324 | 2.61                        | 0.75    | 0.79        | .43 | 0.05 |
| <b>Demographic characteristics</b>  |                  |       |                     |     |                             |         |             |     |      |
| Gender (1=female)                   | 316              | 0.54  | n/a                 | 326 | 0.72                        | n/a     | 20.73       | .00 | 0.18 |
| Race (1=white)                      | 313              | 0.84  | n/a                 | 319 | 0.72                        | n/a     | 14.36       | .00 | 0.15 |
| Cohabitation status (1=yes)         | 316              | 0.42  | n/a                 | 326 | 0.22                        | n/a     | 28.69       | .00 | 0.21 |
| Engaged (1=yes)                     | 315              | 0.23  | n/a                 | 323 | 0.15                        | n/a     | 4.23        | .05 | 0.06 |
| Length of relationship              | 315              | 37.64 | 34.32               | 323 | 32.12                       | 34.18   | 2.03        | .04 | 0.16 |
| Years of schooling                  | 316              | 8.47  | 2.20                | 324 | 8.29                        | 2.25    | 1.01        | .31 | 0.08 |
| Age                                 | 315              | 25.42 | 4.72                | 322 | 25.34                       | 4.68    | 0.23        | .82 | 0.02 |
| Children in home (1=yes)            | 316              | 0.31  | n/a                 | 326 | 0.34                        | n/a     | 0.68        | .45 | 0.03 |



| Variable         | Partner Response |      |      | No Partner Response |      |      | Test Statistic <sup>a</sup> | p-value | Effect size |
|------------------|------------------|------|------|---------------------|------|------|-----------------------------|---------|-------------|
|                  | n                | M    | SD   | n                   | M    | SD   |                             |         |             |
| Employed (1=yes) | 314              | 0.79 | n/a  | 324                 | 0.76 | n/a  | 0.69                        | .45     | 0.03        |
| Income – self    | 306              | 4.00 | 2.57 | 313                 | 4.03 | 2.49 | 0.93                        | .89     | 0.01        |

<sup>a</sup> *Z*-test for continuous and ordinal variables; chi-square cross-tab statistic for binary variables.

**Table 3.**

Comparing individuals randomized to not invite partner to study (n=652), randomized to invite partner and with partner response (n = 316), and randomized to invite partner and no partner response (n =326)

| Variable                            | Partner not invited |                   |       | Partner Response |                   |       | No Partner Response |                   |       | p-value | Effect Size |
|-------------------------------------|---------------------|-------------------|-------|------------------|-------------------|-------|---------------------|-------------------|-------|---------|-------------|
|                                     | n                   | M                 | SD    | n                | M                 | SD    | n                   | M                 | SD    |         |             |
| <b>Relationship characteristics</b> |                     |                   |       |                  |                   |       |                     |                   |       |         |             |
| Relationship satisfaction           | 590                 | 4.16 <sup>b</sup> | 1.31  | 288              | 4.39 <sup>a</sup> | 1.27  | 293                 | 3.80 <sup>c</sup> | 1.38  | .00     | 0.03        |
| Commitment - self                   | 651                 | 6.33 <sup>b</sup> | 1.08  | 314              | 6.50 <sup>a</sup> | 0.94  | 325                 | 6.13 <sup>c</sup> | 1.21  | .00     | 0.01        |
| Commitment - partner                | 650                 | 6.25 <sup>b</sup> | 1.20  | 315              | 6.51 <sup>a</sup> | 0.90  | 323                 | 6.03 <sup>c</sup> | 1.31  | .00     | 0.02        |
| Break-up likelihood                 | 649                 | 1.94 <sup>b</sup> | 1.05  | 316              | 1.71 <sup>a</sup> | 0.92  | 324                 | 2.19 <sup>c</sup> | 1.11  | .00     | 0.03        |
| Psychological aggression            | 650                 | 2.35              | 1.74  | 314              | 2.33              | 1.70  | 324                 | 2.15              | 1.62  | .23     | 0.00        |
| Physical aggression                 | 652                 | 0.47              | 0.90  | 314              | 0.45              | 0.89  | 324                 | 0.41              | 0.81  | .65     | 0.00        |
| Communication danger signs          | 651                 | 1.64              | 0.51  | 316              | 1.63              | 0.49  | 324                 | 1.71              | 0.51  | .08     | 0.00        |
| <b>Individual characteristics</b>   |                     |                   |       |                  |                   |       |                     |                   |       |         |             |
| Anxious attachment                  | 652                 | 2.38 <sup>b</sup> | 0.75  | 315              | 2.20 <sup>a</sup> | 0.70  | 325                 | 2.43 <sup>b</sup> | 0.76  | .00     | 0.01        |
| Avoidance attachment                | 651                 | 2.43 <sup>b</sup> | 0.68  | 315              | 2.31 <sup>a</sup> | 0.70  | 325                 | 2.53 <sup>c</sup> | 0.75  | .00     | 0.01        |
| General psychological distress      | 651                 | 2.26              | 0.94  | 316              | 2.19              | 0.88  | 324                 | 2.36              | 0.94  | .06     | 0.00        |
| Health                              | 651                 | 3.69              | 0.88  | 315              | 3.74              | 0.84  | 324                 | 3.67              | 0.95  | .58     | 0.00        |
| Financial hardship                  | 645                 | 0.02              | 0.83  | 313              | -0.04             | 0.78  | 323                 | -0.00             | 0.73  | .61     | 0.00        |
| Religiosity                         | 650                 | 3.90              | 1.77  | 313              | 3.91              | 1.65  | 325                 | 4.14              | 1.70  | .10     | 0.00        |
| Childhood conflict                  | 643                 | 2.62              | 0.82  | 315              | 2.57              | 0.74  | 324                 | 2.61              | 0.75  | .63     | 0.00        |
| <b>Demographic characteristics</b>  |                     |                   |       |                  |                   |       |                     |                   |       |         |             |
| Gender (1=female)                   | 652                 | 0.63 <sup>b</sup> | .48   | 316              | 0.54 <sup>a</sup> | n/a   | 326                 | 0.72 <sup>c</sup> | n/a   | .00     | 0.02        |
| Race (1=white)                      | 645                 | 0.76 <sup>b</sup> | .43   | 313              | 0.84 <sup>a</sup> | n/a   | 319                 | 0.72 <sup>b</sup> | n/a   | .00     | 0.01        |
| Cohabitation status (1=yes)         | 652                 | 0.32 <sup>b</sup> | n/a   | 316              | 0.42 <sup>a</sup> | n/a   | 326                 | 0.22 <sup>c</sup> | n/a   | .00     | 0.02        |
| Engaged (1=yes)                     | 651                 | 0.19              | n/a   | 315              | 0.23 <sup>a</sup> | n/a   | 323                 | 0.15 <sup>b</sup> | n/a   | .05     | 0.01        |
| Length of relationship              | 645                 | 34.13             | 31.78 | 315              | 37.64             | 34.32 | 323                 | 32.12             | 34.18 | .10     | 0.00        |
| Years of schooling                  | 651                 | 8.28              | 2.20  | 316              | 8.47              | 2.20  | 324                 | 8.29              | 2.25  | .45     | 0.00        |
| Age                                 | 652                 | 25.76             | 4.92  | 315              | 25.42             | 4.72  | 322                 | 25.34             | 4.68  | .37     | 0.00        |
| Children in home (1=yes)            | 652                 | 0.37              | n/a   | 316              | 0.31              | n/a   | 326                 | 0.34              | n/a   | .12     | 0.03        |
| Employed (1=yes)                    | 650                 | 0.75              | n/a   | 314              | 0.79              | n/a   | 324                 | 0.76              | n/a   | .41     | 0.00        |

| Variable      | Partner not invited |      | Partner Response |     | No Partner Response |      | p-value | Effect Size |      |     |      |
|---------------|---------------------|------|------------------|-----|---------------------|------|---------|-------------|------|-----|------|
|               | n                   | M    | n                | SD  | n                   | SD   |         |             |      |     |      |
| Income – self | 634                 | 4.25 | 2.69             | 306 | 4.00                | 2.57 | 313     | 4.03        | 2.49 | .29 | 0.00 |

Note. Significant group differences indicated by superscripted letters ( $p < .05$ ).