

HHS Public Access

Author manuscript

Contemp Fam Ther. Author manuscript; available in PMC 2022 September 01.

Published in final edited form as:

Contemp Fam Ther. 2021 September; 43(3): 226–233. doi:10.1007/s10591-020-09562-6.

Time Spent Together in Intimate Relationships: Implications for Relationship Functioning

Jasara N. Hogan¹, Alexander O. Crenshaw¹, Katherine J.W. Baucom¹, Brian R.W. Baucom¹ Department of Psychology, University of Utah

Abstract

Current models of relationship functioning often emphasize conflict with a particular focus on the behaviors that occur in that context. Much less is known about the impact of time spent interacting in the absence of conflict. The primary aim of this study is to test associations between time spent in various forms of daily interaction (engaging in a shared activity, talking, and arguing) and multiple relationship outcomes while controlling for positive and negative communication during conflict. The present sample consists of 49 married couples (N= 98 individuals). Data were analyzed using multilevel models to account for non-independence of the data. Consistent with previous literature, communication behaviors were related to relationship outcomes. After controlling for communication, couples who spent more time arguing per day were less satisfied in their relationships, and perceived greater negative qualities in their relationships. Finally, couples who spend a larger proportion of their time together talking reported greater satisfaction, perceived more positive qualities in their relationships, and experienced greater closeness. These findings suggest that low salience interactions account for unique variance in relationship functioning above and beyond what is currently studied. Future research is needed to determine possible mechanisms by which low salience interactions are related to relationship outcomes.

Keywords

relationship functioning; couple communication; daily interaction

Couple interactions are central to most major theories of romantic relationship formation and maintenance. A substantial body of work links the type and intensity of spouses' behavior to relationship as well as individual outcomes (Johnson, Horne, Hardy, & Anderson, 2018; Weber et al., 2020). A central premise in this line of research is that the way that spouses interact with one another (e.g., being supportive, blaming, criticizing) is more important for relationship functioning than either the frequency or the form (e.g., talking, doing a shared activity) of interactions. Yet there is a dearth of research that directly evaluates this assumption. Furthermore, individuals in romantic relationships cite amount of time spent together as an area of desired change and a necessary component of relationship maintenance (Chonody, Killian, Gabb, & Dunk-West, 2016; Heyman, Hunt-Martorano, Malik, & Slep, 2009). The primary aim of this study is to test associations between time

spent in various forms of interaction and relationship outcomes while controlling for communication during conflict.

Behavioral models of relationship functioning conceptualize marital distress to result from an imbalance of negative and positive interactions between partners (Rathgeber, Bürkner, Schiller, & Holling, 2019). The damaging effects of negative interactions are thought to outweigh the relationship-enhancing effects of positive interactions (Gottman, 1993). As such, models of relationship functioning and couple-based interventions for relationship distress typically emphasize the frequency and intensity of negative interactions, as well as behaviors during conflict. Behaviorally-based couple therapies conceptualize a couple's pattern of interaction as a culmination of learned behaviors shaped over the course of a relationship (Christensen et al., 2004; Lavner, Karney, & Bradbury, 2016; Rathgeber et al., 2019). One of the primary goals of these therapies is to help couples alter interaction patterns to improve their overall relationship functioning.

By focusing on how couples interact during moments of conflict, which we term "high-salience interactions," researchers have gained invaluable insight into which of these behaviors quickly and deeply damage relationships (Eldridge, Sevier, Jones, Atkins, & Christensen, 2007; Gottman, 2014). Particular attention has been paid to negative and positive communication, with demand/withdraw communication frequently linked to negative outcomes and constructive communication linked to positive outcomes (Christensen & Shenk, 1991; Crenshaw, Christensen, Baucom, Epstein, & Baucom, 2017; Fincham & Beach, 2002; Heavey, Larson, Zumtobel, & Christensen, 1996). However, there is no empirical evidence that evaluates whether the use of certain communication styles is related to the amount of time a couple spends arguing (e.g., do couples who engage in higher levels of destructive communication behaviors argue more frequently/for longer periods of time?).

Despite the emphasis on high-salience interactions in research and practice, couples themselves often focus on the mundane, day-to-day tasks, which we term "low-salience interactions." For instance, half of the top 10 areas in which partners desire change revolve around shared activities and conversations (Heyman et al., 2009). Partners reported desiring an increase in shared housework and showing appreciation for tasks completed above increased sexual relations, or better communication on the topics of conflict, emotions, or finances (Heyman et al., 2009). Research on how communication functions to maintain relationships yields similar findings. Studies have shown that most daily communication between spouses revolves around non-intimate topics, self-disclosure is relatively rare, and greater perceived sharing of household tasks is associated with higher relationship satisfaction and increased liking of one's partner (Duck, Rutt, Hoy, & Strejc, 1991; Ogolsky, Monk, Rice, Theisen, & Maniotes, 2017; Stafford & Canary, 1991). Likewise, couples most frequently cited sharing tasks and simply being together as behaviors important to maintaining their relationship (Dainton & Stafford, 1993).

The importance of low-salience interactions holds even in the face of an intense, proximal stressor. Couples coping with breast cancer have been the focus of a number of studies due to the potential impact of the disease on both dyadic and individual functioning. Several

laboratory studies have found that emotional disclosures and the ability to have difficult conversations with one's partner increases the patient's ability to cope and predicts better relationship outcomes (Belcher et al., 2011; Hagedoorn et al., 2000; Lepore & Revenson, 2007). However, in an ambulatory study observing naturally occurring conversations in couples dealing with breast cancer, cancer was only a topic of approximately 5% of these conversations and these conversations were more likely to be focused on relaying illness related information than emotional disclosures or seeking support (Robbins, López, Weihs, & Mehl, 2014). Partners' responses to emotional cancer-related conversations were predictive of overall patient adjustment, confirming the relative importance of high salience, low frequency interactions. Patient adjustment was also predicted by the partner's engagement in informational cancer-related conversations, a low salience conversation about a high salience topic. It is unknown, however, if and how the low salience interactions comprising up to 95% of the couples' conversations impacted their overall relationship functioning. Among couples not experiencing a major stressor, there is even less information about frequency of high- and low-salience interactions.

The present study aims to: (1) examine differences in the amount of time couples spend in various forms of interaction (i.e., engaging in activities, talking, and arguing); (2) explore associations between amount of time in different types of interaction and use of positive and negative communication during conflict; and (3) determine if the amount of time spent engaging in both low and high salience interactions predicts relationship outcomes while controlling for communication style in conflict. We examine multiple relationship outcomes for two reasons: 1) given that we are most interested in the meta-construct of relationship functioning rather than a specific facet of this construct, there is no clear gold standard measure to use; and 2) consistent with calls to examine multiple measures linked to a metaconstruct (i.e., global relationship functioning), we view examination of these outcomes in separate models as a form of internal replication (De Los Reyes, Kundey, & Wang, 2011); and 2) Consistent with their suggestions, we are hypothesizing a consistent pattern of findings across relationship functioning measures with the supposition that the credibility of findings increases when the results of a single hypothesis are replicated across multiple outcomes within a single study (De Los Reyes et al., 2011). We hypothesize that the amount of time spent engaged in activity and talking to one another will be positively associated with positive relationship outcomes and negatively associated with negative relationship outcomes. We also hypothesize that the amount of time spent arguing each day will be negatively associated with positive relationship outcomes (relationship satisfaction, experienced closeness, and positive qualities in marriage) and positively associated with negative relationship outcomes (negative qualities in marriage).

Method

Participants

Participants were 49 married couples (N= 98 individuals), a subsample of 60 couples recruited for two larger studies of emotion and behavior with identical laboratory protocols. Participants in this study ranged from 20–64 years of age, with a mean age of 29.86 years (SD= 8.25). Participants identified as White (71.4%), Asian (12.2%), Native Hawaiian/

Pacific Islander (4.1%), and or Black/African American (1.0%); 9.2% of participants identified as Hispanic/Latino, and 11.2% chose not to answer questions on either race or ethnicity. Participants included 48 heterosexual couples and one female, same-sex couple. On average, couples had .85 children (SD = 1.33) and a combined monthly income of \$1,902 (SD = \$3.003). All spouses had to be fluent in English and married for at least one year. Couples were recruited using stratified random sampling such that one third of couples were non-distressed (spouses reporting scores of 18 or higher on the 4-item Couples Satisfaction Index [CSI-4; (Funk & Rogge, 2007)]), one third were mildly distressed (one or both spouses' CSI-4 between 13 and 17), and one third were severely distressed (one or both spouses' CSI-4 scores below 13, where 13.5 is the cutoff for clinically significant relationship distress; Funk & Rogge, 2007).

Procedures

The Institutional Review Board approved all study procedures and informed consent was given by all participants before participating. Couples were recruited through flyers, email listservs, on-line classified postings, and departmental research participant websites. Participants completed a 3–4 hr laboratory assessment that included self-report questionnaires and video-recorded conversations. Data for the current study were taken from the self-report questionnaires.

Measures

Time together.—Time spouses spend together was assessed using a 4-item measure created for the current study. Participants were asked to report how much time (to the nearest quarter hour) they spend in a typical day: in the same physical location as their spouse, engaged in an activity with their spouse, talking with their spouse, and arguing with their spouse. When an individual reported a range of time, the average of that range was used unless the range exceeded 2 hrs (time range > 2 hrs was considered missing; 13.3% of responses). We analyzed the rate of proportion of couples' time spent in activity, talking, and arguing by dividing these by the total amount of time in the same physical location.

Communication.—The Communication Patterns Questionnaire (Crenshaw et al., 2017) was used to measure each partner's use of demand/withdraw and constructive communication. Each partner is asked to rate the frequency of specific behaviors when problems arise in the relationship on a scale from 1 (very unlikely) to 9 (very likely), such as "both members blame, accuse, and criticize each other," or "my partner threatens negative consequences while I give in or back down." Subscales were calculated for demand/withdraw behavior and constructive communication, with higher scores indicating greater presence of communication type. Cronbach's alphas for the demand/withdraw and constructive communication subscales were .80 and .89 for wives, and .87 and .79 for husbands.

Relationship satisfaction.—The CSI-4 (Funk & Rogge, 2007) was used to measure relationship satisfaction, with higher scores indicating greater satisfaction. Sample items include, "I have a warm and comfortable relationship with my partner," and "how rewarding is your relationship with your partner?" Cronbach's alphas were .94 for wives and .92 for

husbands. In the current study, 43.3% of all couples reported below-average relationship satisfaction, with 26.7% of all couples reporting clinically significant relationship distress.

Closeness.—The Inclusion of Other in the Self scale (Aron, Aron, & Smollan, 1992) is a single-item visual measure of how close partners feel to their spouse. Responses range from 1(no overlap between partner and spouse) to 7 (most overlap between partner and spouse). Higher scores reflect greater closeness.

Positive and Negative Qualities in Marriage.—The Positive and Negative Qualities in Marriage Scale (Fincham & Linfield, 1997) was used to measure participants' feelings about their relationship, with items ranging from 0 (not at all) to 10 (extremely). Sample items include, "considering only good feelings you have about your marriage, and ignoring the bad ones, evaluate how good these feelings are" and "considering only negative feelings you have towards your spouse, and ignoring the positive ones, evaluate how negative these feelings are." Separate subscales are calculated for positive and negative qualities, with higher scores indicating greater positive and negative feelings, respectively. Cronbach's alphas for negative and positive subscales were .90 and .98 for wives, and .96 and .89 for husbands.

Analytic Strategy

A 3 (type of time; within-subjects factor) x 2 (spouse; within-couple factor) mixed-effects Analysis of Variance (ANOVA) was used to test Hypothesis 1. Hypotheses 2 and 3 were tested with multilevel models in HLM (Raudenbush, Bryk, Cheong, Congdon, & Du Toit, 2011). Mutlilevel modeling is a statistical framework suitable for analyzing non-independent, nested data such a dyadic data from romantic couples (Kenny, Kashy, & Cook, 2006). For these analyses, individuals (level 1) were nested within couple (level 2). Level 1 variables were created by subtracting the mean value for the couple from the individual's value. Therefore level 1, within-couple variables represent how much an individual's score varies from the average score for the couple. Level 2 variables were created by subtracting the couple's mean value from the mean of all couples within the study. Therefore level 2, between-couple variables represent how much a particular couple's score varies from the average of all other couples within the study.

To test Hypothesis 2, two-level multilevel models were used to explore the associations between amount of time spent in different forms and positive and negative communication. This model is described in the following series of equations:

```
 \text{Level-1:} Type \ of \ Communication = \ \beta_{0j} + \beta_{1j} * (Spouse_{ij}) + \beta_{2j} * (Time \ Interacting_{Ij}) + \beta_{3j} * (Time \ Talking_{ij}) + \beta_{4j} * (Time \ Arguing_{ij}) + r_{ij}
```

$$\text{Level}-2:\beta_{0j} = \gamma_{00} + \gamma_{01}*(\textit{Time Interacting}_{j}) + \gamma_{02}*(\textit{Time Talking}_{j}) + \gamma_{03}*(\textit{Time Arguing}_{j}) + u_{0j}*(\textit{Time Interacting}_{j}) + u_{0j}*(\textit{Time Talking}_{j}) + v_{0j}*(\textit{Time Arguing}_{j}) + u_{0j}*(\textit{Time Interacting}_{j}) + v_{0j}*(\textit{Time Talking}_{j}) + v_{0j}*(\textit{Time Interacting}_{j}) + v_{0j$$

where *i* indexes individuals and *j* indexes couples. The Level-2 random effect (u_{0j}) allows for individual differences in average use of each communication type.

To test Hypothesis 3, two-level MLMs were estimated to test associations between amount of time spent in different forms and relationship outcomes controlling for positive and negative communication as described by the following series of equations:

```
Level-1: Outcome = \beta_{0j} + \beta_{1j} * (Spouse_{ij}) + \beta_{2j} * (Time\ Interacting_{ij}) + \beta_{3j} * (Time\ Talking_{ij}) + \beta_{4j} * (Time\ Arguing_{ij}) + \beta_{5j} * (Constructive\ Comm._{ij}) + \beta_{6j} * (Demand/Withdraw) + r_{ij}
```

```
 \text{Level-2: } \beta_{0j} = \gamma_{00} + \gamma_{01}*(\textit{Time Interacting}_j) + \gamma_{02}*(\textit{Time Talking}_j) + \gamma_{03}*(\textit{Time Arguing}_j) + \gamma_{04}*(\textit{Constructive Comm.}_j) + \gamma_{05}*(\textit{Demand/Withdraw}_j) + u_{0j}
```

where *i* indexes individuals and *j* indexes couples. The Level-2 random effect, u_{0j} , allows for individual differences in average level of relationship outcome.

Results

Table 1 presents means, standard deviations, and correlations for variables. Consistent with predictions for Hypothesis 1, there was a significant main effect for type of time, R(2,80) = 95.147, p < .001. Post hoc comparisons indicated that spouses reported spending significantly more time engaged in activity (M = .569, SE = .045) and talking (M = .521, SE = .045) than arguing (M = .055, SE = .008), ps < .001. There was not a significant difference between time spent engaged in activity and time spent talking (M = .048, SE = .047), p = .314. There was not a significant main effect of sex, R(1, 40) = .200, p = .658, nor a significant type of time × spouse interaction, R(2,80) = .517, P = .598.

Table 2 presents results for all models for Hypotheses 2 and 3. Hypothesis two explored associations between amount of time in different types of interaction and use of positive and negative communication during conflict. Between couples, greater use of demand/withdraw communication was associated with more time arguing each day (p = .02) and greater use of constructive communication was associated with more time interacting (p = .049). Within couples, spouses who reported greater use of constructive communication reported significantly more time talking (p < .001) and less time arguing (p < .001). No other associations were significant.

Within couples, partners who reported greater time spent interacting, but not talking, also reported feeling significantly less close to their partner (p = .03) No other significant associations were found with time spent interacting. Couples who reported spending more time talking to one another each day were also significantly more satisfied (p<.001), experienced greater closeness (p=.001), and perceived more positive qualities in their marriages (p=.004). Within couples, spouses who reported spending more time talking each day reported greater experienced closeness (p=.002) and perceived less negative qualities in their marriages (p<.001). Couples who reported spending more time arguing per day were also significantly less satisfied with their relationships (p=.003), experienced less closeness with their partners (p<.001), and perceived more negative qualities in their relationships (p=.03). Within couples, spouses who reported spending more time arguing each day also

perceived greater negative qualities in their marriages (p<.001), and were less satisfied in their relationships (p=.02).

Discussion

The current study examined associations between time spent together in various forms, communication style, and relationship outcomes. Consistent with predictions, findings suggest that couples spend significantly more time talking to one another than engaging in conflict. Couples who use more negative and less positive communication also spend greater proportions of time arguing daily. When controlling for both positive and negative conflict communication and amount of time spent in conflict, more time spent talking is broadly related to higher levels of positive relationship outcomes. More time spent arguing is linked to higher levels of negative relationship outcomes, lower levels of positive outcomes, and greater use of negative communication during conflict.

As expected, a significantly greater proportion of couples' time together was spent engaged in activities and talking as opposed to arguing. This finding supports the intuitive idea that couples spend more time engaged in low-salience interactions than in high-salience interactions, but to our knowledge this is the first empirical demonstration of this difference. This finding is particularly striking considering that nearly half of the sample reported at least moderate relationship distress (Funk & Rogge, 2007).

Contrary to expectations, there was not a significant difference between proportion of time engaged in activities and proportion of time spent talking. It is possible this is an artifact of our measure of time together. Several couples reported spending more time talking than the total amount of time they reported being together, which suggests that these couples were including electronic communication (e.g., phone calls, text messages, etc.) in their estimation of the amount of time they spent talking. Should frequency of communication prove to impact relationship outcomes, as suggested, more research will be needed to determine how this impact may differ by various forms of communication.

Couples with greater use of demand/withdraw communication also report spending significantly higher proportion of their time together arguing. Previous research has linked demand/withdraw behavior to negative relationship outcomes (Eldridge et al., 2007) but this is the first study of which we are aware to demonstrate that couples who use more of this destructive communication pattern argue more than couples who do not. This finding suggests that couples who argue poorly also argue more, potentially increasing the opportunity for relationship damage to occur.

Couples with use of greater constructive communication report spending a greater proportion of their time together engaged in activities. It is unclear whether these couples communicate more effectively during conflict because they spend more time interacting, or whether they are able to spend more time interacting because they communicate in a more positive way when conflicts arise. This finding complements previous research demonstrating that couples who are more satisfied tend to interact more throughout the day (Gump, Polk, Kamarck, & Shiffman, 2001).

Couples who spent more of their time together engaged in activities were significantly more likely to use constructive communication compared to couples who spent less time interacting. Within couples, individuals who reported spending more time interacting with their partner also reported greater experienced closeness. These findings suggest that proportion of time spent interacting may be less relevant for overall relationship functioning than hypothesized. It is important to note that there was not a statistically significant difference between proportion of time spent engaged in activities and proportion of time spent talking. Additionally, future studies are needed to determine if there is a point at which spending time together becomes detrimental to relationship functioning rather than beneficial.

After accounting for the contribution of amount of time spent engaged in conflict and the use of positive or negative communication in conflict, the amount of time partners spent talking to one another significantly predicted relationship outcomes. Couples who spent a greater proportion of time talking to one another reported significantly higher relationship satisfaction, more positive qualities in their marriage, and more desired and experienced closeness. Within couples, partners who reported spending more time talking to their partners had less perceived negative qualities in their marriage, more desired and experienced closeness, and greater use of constructive communication. In other words, the amount of time couples spend talking to one another accounts for unique variance in each of these relationship measures above and beyond either the amount of time spent arguing or the use of either constructive or demand/withdraw communication. This suggests that the contribution of this type of low salience interaction to overall relationship functioning may not be fully understood by research focused on high salience interactions.

Consistent with previous literature, the communication used during conflict was associated with a number of relationship outcomes. The use of negative, demand/withdraw communication was associated with lower levels of relationship satisfaction and higher levels of negative qualities in marriage. The use of constructive communication was associated with higher levels of relationship satisfaction and lower levels of negative qualities in marriage.

Consistent with hypotheses, amount of time arguing each day was also associated with relationship outcomes when controlling for both positive and negative communication during conflict. Increased amount of daily arguing was associated with perception of greater negative qualities in the marriage, lower relationship satisfaction, and experiencing less closeness. These findings support the idea that the duration of conflict accounts for unique variance beyond the communication used during conflict.

These findings suggest that it may be useful to consider how much time couples are spending together throughout the day in addition to their conflict and conflict behaviors in treatment. Increasing the amount of time spent together on everyday activities may help couples by providing opportunities to connect and discuss their days, problem solve together, or simply enjoy one another's company, and it may be simpler to work on increasing time in everyday activities than to assign full "date nights" for many couples. This may be particularly useful for low-conflict couples as not everyone who presents for

treatment is highly distressed or frequently engaging in conflict. For these couples, focusing on amount of time together may be an alternate intervention point that provides increased satisfaction.

For couples experiencing high levels of distress, assigning more time together may not be helpful early in treatment as it could instead provide more opportunities for poor communication or conflict. As treatment progresses, highly distressed couples who have been successfully learning new communication tools within treatment may also benefit from an intervention focusing on increasing time spent together. Many distressed couples may respond to their difficult partner interactions by avoiding time with one another without being aware of making this shift. For such couples, learning to spend more time together may be an important step in moving from a state of no longer being distressed to being engaged in a truly flourishing and fulfilling relationship.

These results should be considered in light of several limitations. First, these are self-reported averages which may or may not vary from objective amounts of time spent in various formats. Future studies are needed to assess how these associations may change based on objective measurement, such as GPS tracking of participants, and based on day to day reports of time spent together, such as a daily diary study. Second, our measure of communication could be improved with more precise instructions. In addition to the possibility that partners reported on interaction via electronic mediums, there appeared to be variability in whether or not sleep was included in participants' self-report of total time together and time spent engaged in activity. Future work in this area should include more precise measurement of these constructs across participants. As these analyses used forms of time spent together as a proportion of total time spent together for within person comparisons, it is unlikely that these inconsistencies had a substantial impact on overall findings. Finally, the current sample included only married couples and participants were largely white. Future studies are needed to determine if these associations are the same in couples at various stages, ages, and with different racial and ethnic backgrounds.

Taken together, these findings suggest that the frequency and form of couple conflict are important to understanding relationship functioning. However, a focus on only these areas may not provide a complete picture. Time spent in low salience interactions uniquely contribute to relationship outcomes as well and are currently poorly understood. Future research is needed to determine which behaviors in these low salience interactions are of importance for overall relationship functioning.

Acknowledgments

Compliance with Ethical Standards

Disclosure of potential conflicts of interest: The authors have no conflicts to disclose.

Research involving human participants and/or animals: The study involved human participants. Study was compliant with all ethical principles for working with human participants. Procedures were reviewed by the university's Institutional Review Board.

Informed consent: All participants provided informed consent for this study. The protocol numbers were IRB $_00067907$ and IRB $_00070411$.

References

Aron A, Aron EN, & Smollan D (1992). Inclusion of other in the self scale and the structure of interpersonal closeness. Journal of Personality and Social Psychology, 63, 596. doi:10.1037/0022-3514.63.4.596

- Belcher AJ, Laurenceau J-P, Graber EC, Cohen LH, Dasch KB, & Siegel SD (2011). Daily support in couples coping with early stage breast cancer: Maintaining intimacy during adversity. Health Psychology, 30, 665. doi:10.1037/a0024705 [PubMed: 21823795]
- Chonody JM, Killian M, Gabb J, & Dunk-West P (2016). Understanding everyday relationship work: The development of a relationship maintenance scale. Advances in Social Work, 17(2), 355–368.
- Christensen A, Atkins DC, Berns S, Wheeler J, Baucom DH, & Simpson LE (2004). Traditional versus integrative behavioral couple therapy for significantly and chronically distressed married couples. Journal of Consulting and Clinical Psychology, 72, 176. doi:10.1037/0022-006X.72.2.176 [PubMed: 15065953]
- Christensen A, & Shenk JL (1991). Communication, conflict, and psychological distance in nondistressed, clinic, and divorcing couples. Journal of Consulting and Clinical Psychology, 59, 458. doi:10.1037/0022-006X.59.3.458 [PubMed: 2071731]
- Crenshaw AO, Christensen A, Baucom DH, Epstein NB, & Baucom BR (2017). Revised scoring and improved reliability for the Communication Patterns Questionnaire. Psychological Assessment, 29, 913. doi:10.1037/pas0000385 [PubMed: 27618203]
- Dainton M, & Stafford L (1993). Routine maintenance behaviors: A comparison of relationship type, partner similarity and sex differences. Journal of Social and Personal Relationships, 10, 255–271. doi:10.1177/026540759301000206
- De Los Reyes A, Kundey SM, & Wang M (2011). The end of the primary outcome measure: A research agenda for constructing its replacement. Clinical Psychology Review, 31(5), 829–838. [PubMed: 21545781]
- Duck S, Rutt DJ, Hoy M, & Strejc HH (1991). Some evident truths about conversations in everyday relationships all communications are not created equal. Human Communication Research, 18, 228–267. doi:10.1111/j.1468-2958.1991.tb00545.x
- Eldridge KA, Sevier M, Jones J, Atkins DC, & Christensen A (2007). Demand-withdraw communication in severely distressed, moderately distressed, and nondistressed couples: Rigidity and polarity during relationship and personal problem discussions. Journal of Family Psychology, 21, 218. doi:10.1037/0893-3200.21.2.218 [PubMed: 17605544]
- Fincham FD, & Beach SR (2002). Forgiveness in marriage: Implications for psychological aggression and constructive communication. Personal Relationships, 9, 239–251. doi:10.1111/1475-6811.00016
- Fincham FD, & Linfield KJ (1997). A new look at marital quality: Can spouses feel positive and negative about their marriage? Journal of Family Psychology, 11, 489. doi:10.1037/0893-3200.11.4.489-502
- Funk JL, & Rogge RD (2007). Testing the ruler with item response theory: Increasing precision of measurement for relationship satisfaction with the Couples Satisfaction Index. Journal of Family Psychology, 21, 572–583. doi:10.1037/0893-3200.21.4.572 [PubMed: 18179329]
- Gottman JM (1993). A theory of marital dissolution and stability. Journal of Family Psychology, 7, 57–75. doi:10.1037/0893-3200.7.1.57
- Gottman JM (2014). What predicts divorce?: The relationship between marital processes and marital outcomes: Psychology Press.
- Gump BB, Polk DE, Kamarck TW, & Shiffman SM (2001). Partner interactions are associated with reduced blood pressure in the natural environment: Ambulatory monitoring evidence from a healthy, multiethnic adult sample. Psychosomatic Medicine, 63, 423–433. doi:10.1097/00006842-200105000-00011 [PubMed: 11382269]
- Hagedoorn M, Kuijer RG, Buunk BP, DeJong GM, Wobbes T, & Sanderman R (2000). Marital satisfaction in patients with cancer: Does support from intimate partners benefit those who need it most? Health Psychology, 19, 274–282. doi:10.1037/0278-6133.19.3.274 [PubMed: 10868772]

Heavey CL, Larson BM, Zumtobel DC, & Christensen A (1996). The Communication Patterns Questionnaire: The reliability and validity of a constructive communication subscale. Journal of Marriage and Family, 58, 796–800. doi:10.2307/353737

- Heyman RE, Hunt-Martorano AN, Malik J, & Slep AMS (2009). Desired change in couples: Gender differences and effects on communication. Journal of Family Psychology, 23, 474–484. doi:10.1037/a0015980 [PubMed: 19685983]
- Johnson MD, Horne RM, Hardy NR, & Anderson JR (2018). Temporality of couple conflict and relationship perceptions. Journal of Family Psychology, 32(4), 445. [PubMed: 29723003]
- Kenny D, Kashy D, & Cook W (2006). The analysis of dyadic data. New York, NY: Guilford.
- Lavner JA, Karney BR, & Bradbury TN (2016). Does couples' communication predict marital satisfaction, or does marital satisfaction predict communication? Journal of Marriage and Family, 78(3), 680–694. [PubMed: 27152050]
- Lepore SJ, & Revenson TA (2007). Social constraints on disclosure and adjustment to cancer. Social and Personality Psychology Compass, 1, 313–333. doi:10.1111/j.1751-9004.2007.00013.x
- Ogolsky BG, Monk JK, Rice TM, Theisen JC, & Maniotes CR (2017). Relationship maintenance: A review of research on romantic relationships. Journal of Family Theory & Review, 9(3), 275–306.
- Rathgeber M, Bürkner PC, Schiller EM, & Holling H (2019). The efficacy of emotionally focused couples therapy and behavioral couples therapy: A meta-analysis. Journal of marital and family therapy, 45(3), 447–463. [PubMed: 29781200]
- Raudenbush S, Bryk A, Cheong Y, Congdon R, & Du Toit M (2011). HLM statistical software: Version 7. Computer software.
- Robbins ML, López AM, Weihs KL, & Mehl MR (2014). Cancer conversations in context: Naturalistic observation of couples coping with breast cancer. Journal of Family Psychology, 28, 380. doi:10.1037/a0036458 [PubMed: 24730380]
- Stafford L, & Canary DJ (1991). Maintenance strategies and romantic relationship type, gender and relational characteristics. Journal of Social and Personal Relationships, 8, 217–242. doi:10.1177/0265407591082004
- Weber DM, Fischer MS, Baucom DH, Baucom BR, Engl J, Thurmaier F, ... Hahlweg K (2020). Escalation and Regulation of Emotional Arousal in Couples Predicts Relationship Satisfaction Concurrently and 25 Years Later. Family process. doi:Advance online publication. 10.1111/famp.12597

Hogan et al.

Table 1.

Means, standard deviations, and correlations between all study variables.

	M(SD)	1	2	3	4	3	9	7	8	6
_	.45 (.29)	.53 ***	*** 09°	.35 **	90.	13	07	24*	.25*	60:
7	.39 (.30)	.72**	.03	.45	.02	.16	06	41	.33 **	.05
33	.04 (.05)	.19	.31*	.24	36**	19	.03	.16	06	.25*
4	16.45 (3.80)	.27	.27	47 **	.65	.36**	.30**	35 **	.43 **	37 **
2	5.13 (1.35)	04	80.	36*	** 09°	.34*	003	31 **	.18	10
9	27.37 (4.67)	.16	.13	.02	.40	.17	80.	.10	.13	14
7	9.31 (5.42)	27	** 44	.33*	62 **	43 **	11	.39 **	34 **	.11
∞	6.72 (1.57)	.29	.35*	15	.61	** T4.	.18	58	.48	38 **
6	5.57 (2.18)	37*	30*	.33*	55 **	36*	38 **	.58**	53 **	.68
l										

Note.

*
p<.05

**
p<.01

p<.01 *** p<.001 1. Time Interacting, 2. Time Talking, 3. Time Arguing, 4. CSI-4, 5. IOS, 6. PANQIM Positive, 7. PANQIM Negative, 8. Constructive Communication, 9. Total Demand/Withdraw.

Within-couple correlations are presented above the diagonal; Between-spouse correlations are presented on the diagonal; Between-couple correlations are presented below the diagonal

Two extreme scores were identified in proportion of time spent talking. Analyses were conducted with and without these scores which did not substantively change results, therefore all scores were included in final analyses. Without these scores, the between-spouse correlation for time spent talking was .25 and the between-spouse correlation for time spent arguing was .35 *. Page 12

Hogan et al.

Table 2.

Within and Between Couple Fixed Effects for models predicting relationship outcomes from form of time spent together, constructive communication, and demand/withdraw communication.

Variable	CSI-4	PNQ_N	PNQ_P	SOI	DW	CC
Between Couples						
Intercept	16.37 ***	9.67	27.60 ***	4.96 ***	5.64 ***	6.71
Interacting	-1.87	2.16	0.26	-0.93	-2.33	1.51*
Talking	5.07 ***	-2.45	3.45 **	1.42 **	-1.90	0.20
Arguing	-25.56 **	17.19*	-10.39	-8.91	16.90*	-6.20
22	1.18 **	-1.25*	-0.06	0.41*	l	
D/W	-0.36*	0.99	-0.51	0.02	I	1
Within Couple						
Interacting	1.03	0.50	-0.79	-1.85*	0.42	0.63
Talking	0.26	-7.31	-1.93	1.40 **	-0.44	1.02 ***
Arguing	-17.42*	42.00 ***	13.96	-6.84	8.44	-5.75
CC	* 62.0	-0.57	0.52	0.08	l	!
D/W	-0.10	-0.06	-0.37	0.03	1	:

*** p < .001

Page 13