

RESEARCH ARTICLE

Congruity of observed social support behaviors and couple relationship quality

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Received: 28 June 2016

Accepted: 27 January 2017

<http://dx.doi.org/10.1002/ejsp.2302>

Abstract

This study examined the role of congruity in couples' social support behaviors on relational outcomes. Participants ($N = 123$ couples, $M_{\text{age}} = 26.91$, $SD = 8.46$) completed surveys on relationship satisfaction and discord. Positive and negative behaviors were then observed during supportive interactions. Results revealed that the detrimental effect of negative behaviors on satisfaction was buffered by a partner's engagement in fewer negative behaviors or intensified by more negative behaviors. Further, the beneficial effect of positive behaviors on reducing discord was amplified by a partner's engagement in more positive behaviors or offset by fewer positive behaviors. Last, the detrimental effect of negative behaviors on discord was buffered by a partner's engagement in more positive behaviors. These findings highlight the complex nature of dyadic relationships and provide insights for developing interventions focused on improving romantic relationship quality.

Romantic partners are often regarded as the most important source of social support in adulthood (Carbery & Buhrmester, 1998; Cutrona, 1996). Social support, namely, the behavioral and affective exchanges between two partners, provides a unique lens for understanding relationship functioning (Bradbury, Fincham, & Beach, 2000; Reis & Shaver, 1988). Numerous studies on social support have revealed associations between couples' social support behaviors, emotions (e.g., positive and negative), and relationship functioning (Bradbury et al., 2000). Unfortunately, existing literature rarely goes beyond the effects of individuals' social support behaviors on their own or their partners' perceptions of relationship quality. Consequently, little is known about the role of congruity, or the conjoint effect of two partners' social support behaviors, in explaining relationship functioning, above and beyond each partner's individual-level characteristics. Contemporary statistical methods for analyzing dyadic data (e.g., the moderated actor-partner interdependence model) may prove useful in examining the effects of individual partners' characteristics, as well as the interaction or joint effects of both partners' characteristics, on various relational outcomes (Chow, Claxton, & van Dulmen, 2015; Garcia, Kenny, & Ledermann, 2015; Wickham & Knee, 2012). Therefore, addressing the role of congruity in couples' social support behaviors on relationship quality represents a timely step towards understanding the complex dynamics of relationship functioning. Along with contemporary dyadic data analysis, the current study utilized observational and

self-report methods to investigate the role of congruity in partners' positive and negative behaviors during supportive interactions on relationship quality outcomes.

According to the interpersonal process model of intimacy, social support exchanges in close relationships play an important role in determining relationship functioning (e.g., intimacy) between two partners (Reis, Clark, & Holmes, 2004; Reis & Shaver, 1988). This model emphasizes the interdependence of self-disclosure and support-giving during social support interactions and how these behavioral exchanges may have profound impacts on long-term relationship quality. Accordingly, although self-disclosure may trigger intimate interaction, it is not the sole factor that leads to intimacy between two partners. Instead, the manner in which a partner responds is also critical in the process of social support exchanges. Having a supportive partner who shows understanding and validation plays a crucial role in an individual's development of perceived responsiveness, which in turn serves as a foundation for long-term relationship quality, including intimacy and satisfaction (Reis et al., 2004). In contrast, relationship distress arises when partners fail to engage in adequate social support or when partners are insensitive and unresponsive to the needs of their counterpart. Indeed, numerous relationship researchers have argued that social support interactions represent one of the most important dyadic processes, serving as a key to understanding relationship quality in couple relationships (Barbee & Cunningham, 1995; Cutrona, 1996; Reis et al., 2004).

Consistent with the propositions set forth by the interpersonal process model of intimacy, existing research suggests that laboratory observations of couples' social support behaviors are related to their relationship quality (Bradbury et al., 2000). Specifically, research has consistently demonstrated that more positive and fewer negative behaviors observed during social support interactions are related to higher marital satisfaction, both concurrently and longitudinally (Julien, Chartrand, Simard, Bouthillier, & Bégin, 2003; Pasch & Bradbury, 1998; Sullivan, Pasch, Johnson, & Bradbury, 2010; Williamson, Altman, Hsueh, & Bradbury, 2016). For instance, positive behaviors, such as expression of positive affect, responsiveness, and supportiveness, are related to higher relationship satisfaction (Pasch & Bradbury, 1998). In contrast, negative behaviors, such as expression of negative affect, criticism, and aloofness, are related to lower relationship satisfaction (Pasch & Bradbury, 1998). Furthermore, a recent study found that observed social support behaviors played an important role in forecasting whether couples remained married or divorced after 10 years (Lavner & Bradbury, 2012). In the same longitudinal study, it was found that couples who divorced displayed more negative affect during their early social support interactions than couples who remained married.

Despite a large body of research demonstrating the linkages between couples' positive and negative behaviors during social support interactions and relationship satisfaction, the congruity of partners' social support behaviors and its effect on relationship satisfaction has yet to be examined. Interdependence theory has long suggested that relationship outcomes are dependent on the combined behavioral decisions of two partners, above and beyond the behaviors of each partner separately (Kelley et al., 2003; Kelley & Thibaut, 1978). Specifically, this theory proposes that three components underlie the pattern of any relationship outcome: actor control, partner control, and joint control (Kelley et al., 2003). In some earlier work, these components were also termed as reflective control, fate control, and behavior control, respectively (Kelley & Thibaut, 1978). Actor control refers to an individual's direct influence on their own outcome, partner control refers to an individual's direct influence on their partner's outcome, and joint control refers to two members' joint influence on each other's outcomes. When this framework is applied to the current research, it is reasonable to argue that an individual's perceptions of relationship quality should be related to their own support behaviors (actor control), their counterpart's support behaviors (partner control), and the interaction between the two members' support behaviors (joint control). Interdependence theory has been adopted by some dyadic coping theorists who have offered insight into the importance of examining complex interactions between partners' behaviors and relationship outcomes (Badr, 2004; Chow, Buhrmester, & Tan, 2014; Revenson, 2003; Velotti et al., 2016). Although not in the area of social support behaviors, these perspectives

lay a foundation for speculating possible interaction patterns between two partners' social support behaviors and their role in relationship quality.

According to a dyadic coping framework, relationship functioning depends on the *congruity* of two partners' coping behaviors (Bodenmann, Meuwly, & Kayser, 2011; Revenson, 2003). This coping framework posits that high congruity, or coordination, in partners' positive behaviors may foster mutual reinforcement of positive coping behaviors and, therefore, better relationship functioning (Velotti et al., 2016). Indeed, research indicates that couples with congruous adaptive coping styles report higher relationship quality (Badr, 2004; Chow et al., 2014; Ptacek & Dodge, 1995). Although congruence between partners' positive coping is associated with better relationship functioning, such an association may not be true for congruent negative coping (Bodenmann et al., 2011). For example, past research indicates that partners who both use maladaptive coping styles report lower relationship quality (Chow et al., 2014).

The dyadic coping framework posits that couples may experience poorer relational outcomes when the maladaptive (e.g., avoidance or rumination) coping style of one partner undermines the adaptive (e.g., problem-focused) coping style of the other partner (i.e., non-congruency; Bodenmann et al., 2011; Revenson, 2003). However, more recent elaboration of the dyadic coping framework suggests that non-congruent coping styles may not always lead to negative relational outcomes. Rather, the framework posits that opposing coping styles may reflect complementarity when the negative effects of one partner's maladaptive coping are buffered by another partner's adaptive coping (Badr, 2004; Chow et al., 2014). In support of this perspective, research suggests that the negative impact of maladaptive avoidance coping on relationship quality is buffered by another partner's low engagement in avoidance coping or high engagement in adaptive coping (Badr, 2004; Chow et al., 2014).

Although the dyadic coping framework addresses congruity of coping styles, research and theory have yet to provide insight into the different possible dyadic combinations of social support behaviors and how these combinations may impact romantic relationship functioning. For example, research has yet to examine whether beneficial effects of positive social support behaviors might be impeded by a partner's negative behaviors, or whether detrimental effects of negative social support behaviors might be buffered by a partner's positive behaviors. Therefore, the current study will be the first to examine the effects of congruity of social support behaviors on relationship quality in romantic couples.

The Current Study

The current study had two primary goals. The first goal was to address how positive and negative social support behaviors are related to two partners' self-reported

relationship quality, conceptualized as relational *satisfaction* and *discord*. Research on romantic relationship quality has generally relied on satisfaction and discord (e.g., conflict) dimensions to capture both positive and negative features of a relationship (Howes & Markman, 1989; Gable & Reis, 2001). Researchers argue that positive and negative features of a relationship should be treated and examined as functionally independent constructs (Gable & Reis, 2001). Indeed, some cross-sectional and longitudinal studies have focused on romantic conflict in relation to romantic satisfaction (Cramer, 2000; 2004; Noller & Feeney, 1998). Due to the lack of a strong theoretical framework, we did not make specific hypotheses about possible differences between discord and satisfaction as relational outcomes. Rather, we took an exploratory approach by considering both dimensions independently, yet simultaneously, in this study. Specifically, we hypothesized that more positive behaviors and fewer negative behaviors exhibited by individuals would be related to individuals' own reports of higher relational satisfaction and lower relational discord (Pasch & Bradbury, 1998). We also hypothesized that more positive behaviors and fewer negative behaviors exhibited by individuals would be related to their partners' reports of higher relational satisfaction and lower relational discord.

The second goal of the study was to examine how the congruity of social support behaviors among couples relates to relationship quality. On the basis of interdependence theory and dyadic coping research, we hypothesized that different combinations of positive and negative social support behaviors would be related to relationship quality, above and beyond the main effects of each partner individually (Badr, 2004; Chow et al., 2014; Kelley & Thibaut, 1978; Revenson, 2003). In the case of high congruity, we hypothesized that partners who were both high in positive behaviors would experience more relational satisfaction and less relational discord. We also hypothesized that partners who were both high in negative behaviors would experience less relational satisfaction and more relational discord. On the basis of the dyadic coping framework, we hypothesized that the potential benefits of positive behaviors on higher satisfaction and lower discord would be offset by partners' engagement in fewer positive behaviors or more negative behaviors (Revenson, 2003). On the basis of more recent coping research, we also hypothesized that negative behaviors would be related to lower satisfaction and higher discord, but that such associations would be buffered by partners' engagement in more positive behaviors or fewer negative behaviors (Chow et al., 2014).

Method

Participants

Participants were 123 heterosexual romantic couples residing in the Southwestern region of the United

States. This sample was part of a larger study on social support and romantic relationship quality. Couples were recruited through flyers posted at a local university, university e-mails, and Internet postings. Couples involved in a romantic relationship for at least 6 months were eligible to participate. Participants' ages ranged from 18 to 60 years ($M_{\text{age}} = 26.91$, $SD = 8.46$). Couples' relationship duration ranged from 6 months to approximately 27 years ($M_{\text{years}} = 4.77$, $SD = 5.58$), with 68% dating and 32% married. Approximately 53.9% of the sample was White (14.3% Hispanic, 13.1% Asian, 1.2% Black, and 8.5% other). The remaining participants chose not to report their ethnicity. Of the sample, 71 couples received monetary compensation of \$50 for their participation in the study and 52 couples received research credits for psychology classes in which one partner was enrolled.

Procedure

Couples were scheduled for a laboratory session and were informed that they would complete a series of questionnaires and a video-recorded interaction. Upon consent, partners completed a series of questionnaires assessing their relationship features, psychological health, and demographic information. To protect their privacy, partners completed the questionnaires on lab computers located in two separate rooms. All self-report measures used in this study were completed in the first phase of the study. Then, partners participated in a video-recorded social support interaction. A trained research assistant asked partners to recall recent upsetting or stressful events that occurred outside of the relationship (e.g., problems with a job or school). When both members had a topic in mind, they were informed that each partner would have a turn to discuss the issue with their partner. One of the members was randomly selected to begin the discussion session that lasted for 6 minutes. The second partner was asked to respond to the discloser spontaneously in order to simulate natural interactions that would occur outside the lab. After the first discussion, another 6 minutes was dedicated to the discussion of the second partner's stressful event.

Measures

Relationship satisfaction. Participants completed the relationship satisfaction subscale of the Investment Model Scale (Rusbult, Martz, & Agnew, 1998). The satisfaction subscale measured the degree to which participants' current relationship fulfilled their needs for intimacy, companionship, security, and emotional involvement (five items). One satisfaction item is, "I feel satisfied with our relationship." Participants rated how descriptive each item was of their current relationship from 1 (*do not agree at all*) to 9 (*completely agree*). Internal consistency of the satisfaction subscale was satisfactory for both men ($\alpha = .93$) and women ($\alpha = .93$).

Relationship discord. Participants completed the relationship discord subscale of the Network of Relationships Inventory (Furman & Buhrmester, 1985). The discord subscale (15 items) measured negative aspects of participants' current relationships, including conflict (e.g., "How often do you and this person disagree and quarrel with each other?"), criticism (e.g., "How often does this person point out your faults or put you down?"), pressure (e.g., "How often does your partner push you to do things that you don't want to do?"), dominance (e.g., "How often does this person get you to do things his/her way?"), and exclusion (e.g., "How often does it seem like this person ignores you?"). Participants rated how descriptive each item was of their current relationship from 1 (*Never or hardly at all*) to 5 (*Always or extremely much*). Internal consistency of the discord subscale was satisfactory for both men ($\alpha = .88$) and women ($\alpha = .87$).

Social support. Behavioral observations were used to assess partners' behaviors during social support interactions. The Brief Romantic Relationship Interaction Coding Scheme (BRRICS) was adopted and modified to capture positive and negative affective behaviors exhibited by couples during these interactions (Humbad, Donnellan, Klump, & Burt, 2011).¹ The positive dimension of the BRRICS captured affective behaviors such as smiling, laughing, making humorous statements, and responses intended to make a partner feel understood and validated. The negative dimension captured affective behaviors such as facial and verbal expressions of distress or sadness, numbing or avoiding emotional reactions, and rehashing negative emotions or experiences. These dimensions were coded on the basis of a scale from 1 to 6, where 1 = *Never*, 2 = *1–2 instances*, 3 = *A few/several instances*, 4 = *Moderate amounts—about half of the time*, 5 = *Substantial amounts—over half the time but not the entire time*, and 6 = *Constantly throughout the interaction*.

Two undergraduate research assistants coded the social support interactions. Coders met with a trained graduate student to learn the coding system by viewing, rating, and discussing a set of training videos. After achieving high reliability in the training videos, coders independently rated 25% of the couples, and both coders rated 50% of the couples to establish reliability. For the interactions viewed by both coders, composite scores were computed by averaging the two ratings. Interrater reliabilities were adequate for all dimensions. Intraclass correlations for the positive behaviors dimension were .77 and .75 for women and men, respectively. Intraclass correlations for the negative behaviors dimension were .66 and .74 for women and men, respectively.

¹Although the original BRRICS scale is coded for reciprocal positive and negative behaviors, the current study coded behaviors exhibited by individual partners instead of the reciprocity of these behaviors. Focusing on specific behaviors shown by individual partners, rather than the mutuality or reciprocity of these behaviors, produced more satisfactory interrater reliabilities.

Analysis Plan

We first conducted a series of preliminary analyses to examine descriptive statistics and correlations for target variables. A moderated actor–partner interdependence model was then used to examine the main hypotheses (APIM; Chow et al., 2015; Garcia et al., 2015; Kenny, Kashy, & Cook, 2006). As depicted in Figure 1, the moderated APIM estimates the effect of individuals' observed social support behaviors on their own relationship quality (*actor effect*) and on partners' relationship quality (*partner effect*) simultaneously and independently. Furthermore, the model accounts for the degree of interdependence between partners in the predictor and outcome variables (reflected as correlations). Finally, to examine the congruity hypotheses, a total of four product terms between the actor and partner scores on observed positive and negative behaviors were estimated (i.e., actor positive * partner positive, actor positive * partner negative, actor negative * partner positive, and actor negative * partner negative). A significant interaction would indicate that a particular combination of partners' positive and negative behaviors relate to a relationship quality outcome (satisfaction or discord), above and beyond the effects of two partners' behaviors on the outcome individually. In order to facilitate the interpretation of results, we standardized all predictors (positive and negative support behaviors) on the basis of grand means (irrespective of gender), and we computed interaction terms on the basis of the standardized variables (Aiken & West, 1991). The general moderated APIM depicted in Figure 1 was used to examine the effects of social support behaviors on relational satisfaction and relational discord with two separate models.

The APIMs proposed above were estimated with structural equation modeling implemented by *R* with the "lavaan" package (Rosseel, 2012). Because issues related to gender differences are central to research on social relationships (Garcia et al., 2015; Wickham & Knee, 2012), gender differences in actor, partner, and interaction effects were evaluated by examining nested models with χ^2 difference tests. Tests for gender differences in the current study served two major purposes. For a theoretical purpose, tests for gender differences examined whether the directions and strengths of the actor, partner, and interaction coefficients differed for men and women. These analyses would provide insight on the extent to which the importance of social support processes differs in relation to men's and women's relationship quality (Garcia et al., 2015). For a statistical purpose, tests for gender differences compared path coefficients across men and women. If these coefficients were not found significantly different across men and women, they would be constrained to be equal in the structural equation modeling framework, which would improve the power of significance tests for the path coefficients (Garcia et al., 2015).

A series of nested models was estimated in which gender differences in actor, partner, and interaction effects

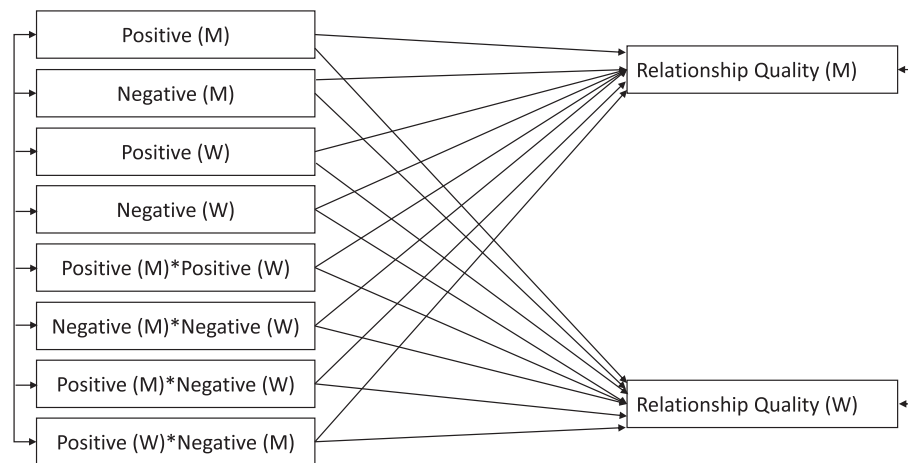


Fig. 1: A general path diagram of the moderated actor-partner interdependence model with structural equation modeling. Positive and negative support behaviors of men (M) and women (W) were exogenous, whereas relationship quality as reported by men and women were endogenous. The model was estimated twice to examine the outcomes of relationship satisfaction and discord separately. Single-headed arrows represent regression coefficients, and double-headed arrows represent covariances. All predictors (including interaction terms) were allowed to covary

were constrained to be equal in multiple steps. Specifically, a baseline model was first estimated in which all actor, partner, and actor-partner interaction effects were estimated freely across gender, resulting in a saturated model. A second model was then estimated in which the interaction terms were constrained to be equal (Garcia et al., 2015). This approach examined whether the moderating roles of partners' positive and negative behaviors were different for men and women. Because the tests for gender differences in the interaction terms were independent from the actor and partner effects (Garcia et al., 2015), a model in which actor effects were constrained to be equal across gender was then estimated. This model examined whether the effects of individuals' positive and negative support behaviors on their own relationship quality differed for men and women. Following that, a model was estimated in which partner effects were constrained to be equal across gender. This model examined whether the effects of individuals' positive and negative support behaviors on partners' relationship quality differed for men and women. Finally, in order to examine the extent to which social support behaviors were related to self-reported and partner-reported relationship quality differently, we constrained actor and partner effects to be equal for men and women. A significant decrease in the model fit would suggest differential effects of social support behaviors on self-reported versus partner-reported relationship quality. Two-tailed tests were utilized for all proposed analyses.

Results

Preliminary Analyses

Means, standard deviations, correlations, and paired-samples *t*-tests (to examine gender differences) of study variables are presented in Table 1. With regard to gender differences, paired *t*-tests revealed no significant differences between men and women in relationship

satisfaction or observed social support behaviors. However, men reported significantly higher discord than women. Bivariate correlations revealed that for both men and women, more positive and fewer negative social support behaviors were related to higher self-reported relationship satisfaction, as well as higher partner-reported relationship satisfaction. Similarly, for both men and women, more negative social support behaviors were related to higher self-reported relationship discord, as well as higher partner-reported discord. For women, more positive social support behaviors were related to less self-reported and partner-reported discord. For men, more positive social support behaviors were related to less partner-reported, but not self-reported, discord. Additionally, men and women exhibited concordances in their observed positive and negative social support behaviors as well as in their self-reported relationship satisfaction and discord.

Primary Analyses

Model comparisons. Table 2 presents the summary of model comparisons for examining gender differences in the actor, partner, and interaction effects for both the relationship satisfaction and discord APIMs. For relationship satisfaction, compared with a saturated model, constraining the interaction terms to be equal across gender did not significantly reduce the model fit. This suggests that the moderating roles of partners' positive and negative behaviors did not significantly differ for men and women. Furthermore, constraining both the actor and partner effects to be equal across gender did not lead to significant reductions in model fit. This suggests that the effects of individuals' positive and negative support behaviors on their own and their partners' relationship satisfaction were not significantly different for men and women. Finally, when actor and partner effects were constrained to be equal across and within partners, the change in model fit was not significant. This suggests that there were no significant

Table 1 Descriptive statistics and correlations

	1	2	3	4	5	6	7	8	M	SD
1. Positive (men)	—								3.70	.90
2. Negative (men)	-.70**	—							2.85	.85
3. Satisfaction (men)	.25**	-.36**	—						6.34	1.73
4. Discord (men)	-.18	.35**	-.43**	—					2.41	.65
5. Positive (women)	.63**	-.44**	.21*	-.21*	—				3.75	.82
6. Negative (women)	-.35**	.43**	-.28**	.30**	-.64**	—			2.84	.76
7. Satisfaction (women)	.23*	-.43**	.59**	-.44**	.25**	-.36**	—		6.40	1.68
8. Discord (women)	-.28**	.35**	-.40**	.50**	-.39**	.37**	-.66**	—	2.19	.65
Paired <i>t</i> -tests for gender differences	-.81	.08	-.41	3.96**						
Cohen's <i>d</i> for gender differences	.08	.01	.04	.36						

Note. Positive, positive social support behaviors; Negative, negative social support behaviors; Satisfaction, relationship satisfaction; Discord, relationship discord.

**p* < .05.

***p* < .01.

Table 2 Summary of model comparisons for the relationship satisfaction and discord APIMs

	χ^2	df	Model	χ^2	df	<i>p</i> of	CFI	TLI	RMSEA
Satisfaction									
1. Baseline (saturated model)	.00	.00	—	—	—	—	—	—	—
2. Equal interaction effects across gender	6.05	4	2 vs. 1	6.05	4	.20	.98	.90	.06
3. Equal actor effects across gender	6.20	6	3 vs. 2	.15	2	.93	1.00	.99	.02
4. Equal partner effects across gender	7.37	8	4 vs. 3	1.16	2	.56	1.00	1.00	.00
5. Equal actor–partner effects	9.22	10	5 vs. 4	1.86	2	.40	1.00	1.00	.00
Discord									
1. Baseline (saturated model)	.00	.00	—	—	—	—	—	—	—
2. Equal interaction effects across gender	1.87	4	2 vs. 1	1.87	4	.76	1.00	1.00	.00
3. Equal actor effects across gender	5.08	6	3 vs. 2	3.21	2	.20	1.00	1.00	.00
4. Equal partner effects across gender	7.50	8	4 vs. 3	2.42	2	.30	1.00	1.00	.00
5. Equal actor–partner effects	8.47	10	5 vs. 4	.97	2	.62	1.00	1.00	.00

Note. For the “equal actor–partner effects” models, actor and partner effects were constrained to be equal across and within partners.

differential effects of social support behaviors on self-reported versus partner-reported relationship satisfaction. The final model was the most parsimonious and had an excellent fit to the data; $\chi^2(10) = 9.22$, *p* = .51; CFI = 1.00; TLI = 1.00; RMSEA = .00. Unstandardized betas and standard errors (*SEs*) were reported on the basis of the final model (Table 3).

The APIMs for relationship discord were compared using the same approach. Again, no significant gender differences were found for the actor, partner, or interaction effects on relationship discord. Furthermore, there were no significant differential effects of social support behaviors on self-reported versus partner-reported relationship discord. The final model was the most parsimonious and had an excellent fit to the data; $\chi^2(10) = 8.47$, *p* = .58; CFI = 1.00; TLI = 1.00; RMSEA = .00. Unstandardized betas and standard errors were reported on the basis of the final model (Table 3).

Relationship satisfaction. Actor and partner effects indicated that individuals’ positive behaviors were not significantly related to self-reported or partner-reported relationship satisfaction. However, supporting our hypothesis, actor and partner effects indicated that individuals’ negative behaviors were related to lower

Table 3 Actor, partner, and interaction effects from the moderated actor–partner interdependence model

Predictor	Satisfaction		Discord	
	<i>b</i>	<i>SE</i>	<i>b</i>	<i>SE</i>
Actor Positive	.03	.10	-.05	.04
Actor Negative	-.37**	.11	.11**	.04
Partner Positive	.03	.10	-.05	.04
Partner Negative	-.37**	.11	.11**	.04
A Negative × P Negative	-.47*	.21	-.07	.08
A Positive × P Positive	.22	.16	-.14*	.06
A Negative × P Positive	.17	.17	-.12	.07
A Positive × P Negative	.05	.17	-.13*	.07

Note: Unstandardized coefficients and standard errors based on model constrained to be equal across gender and across actor and partner effects. A, actor; P, partner; Positive, positive behaviors; Negative, negative behaviors; Satisfaction, relationship satisfaction; Discord, relationship discord.

**p* < .05.

***p* < .01.

self-reported and partner-reported relationship satisfaction (Table 3).

With regard to actor–partner interaction effects (Table 3), results showed that the interaction between actors’ and partners’ negative behaviors was

significantly related to self-reported relationship satisfaction. A simple slopes analysis was conducted to examine the varying effects of actors' negative behaviors on self-reported relationship satisfaction moderated by partners' negative behaviors (Aiken & West, 1991). As displayed in Figure 2, although individuals with more negative behaviors reported lower relationship satisfaction, such an effect was buffered by having a partner who showed fewer negative behaviors ($b = .10, SE = .23, p = .67$). Furthermore, the detrimental impact of negative behaviors on self-reported relationship satisfaction was intensified by having a partner who showed more negative behaviors ($b = -.85, SE = .24, p < .01$). The actor-partner interactions for positive-positive behaviors, positive-negative behaviors, and negative-positive behaviors on relationship satisfaction were not significant (Table 3).

Relationship discord. Actor and partner effects indicated that individuals' positive behaviors were not significantly related to self-reported or partner-reported relationship discord. In contrast, supporting our hypothesis, actor and partner effects indicated that individuals' negative behaviors were related to higher self-reported and partner-reported relationship discord (Table 3).

With regard to actor-partner interaction effects, results showed that the interaction between actors' and partners' positive behaviors was significantly related to self-reported relationship discord. A simple slopes analysis was conducted to examine the varying effects of actors' positive behaviors on self-reported relationship discord moderated by partners' positive behaviors. As displayed in Figure 3, the beneficial effect of positive behaviors on reducing relationship discord was amplified by partners' engagement in more positive behaviors ($b = -.19, SE = .09, p = .03$). However, the beneficial effect of positive behaviors on reducing relationship discord was offset by partners' engagement in fewer positive behaviors ($b = .10, SE = .06, p = .11$).

Results also showed that the interaction between actors' positive and partners' negative behaviors was significantly related to self-reported relationship discord. A simple slopes analysis was conducted to examine the varying effects of actors' positive behaviors on self-reported relationship discord moderated by partners' negative behaviors. As displayed in Figure 4,

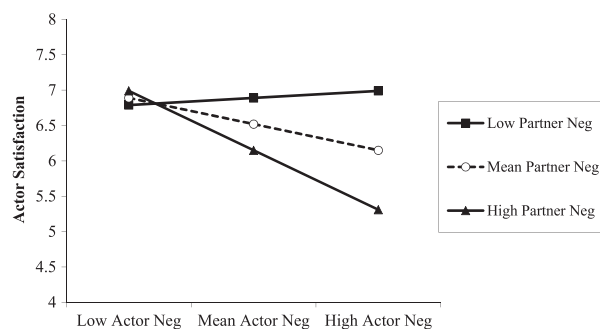


Fig. 2: Actor effect of negative behaviors on satisfaction, moderated by partner's negative behaviors. The graph was plotted on the basis of men's intercepts

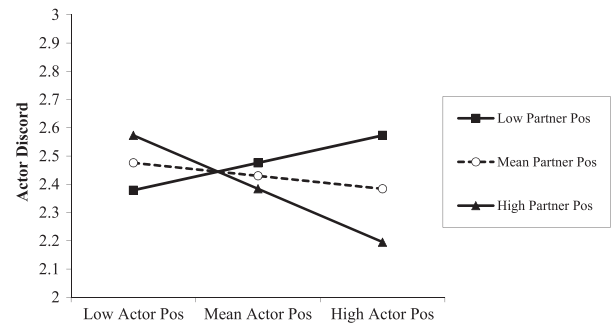


Fig. 3: Actor effect of positive behaviors on discord, moderated by partner's positive behaviors. The graph was plotted on the basis of men's intercepts

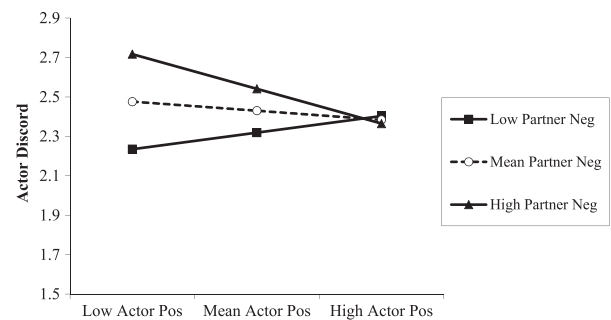


Fig. 4: Actor effect of positive behaviors on discord, moderated by partner's negative behaviors. The graph was plotted on the basis of men's intercepts

individuals' positive behaviors were not related to their reports of relationship discord when partners were low in negative behaviors ($b = .08, SE = .06, p = .19$). However, more positive behaviors were related to less relationship discord when partners were high in negative behaviors ($b = -.18, SE = .09, p = .04$). In other words, individuals' own positive behaviors appear to serve as a buffer against partners' negative behaviors.

Discussion

The importance of congruity in partners' behaviors has long been suggested by interdependence theory (Kelley & Thibaut, 1978); however, specific hypotheses regarding partner congruity have been overlooked in previous relationship research, especially that which focused on social support processes. The current study represents an important step in illuminating complex dyadic dynamics in romantic relationships. Overall findings revealed that congruity of social support behaviors between partners, above and beyond each partner's individual behaviors, were important indicators of relationship functioning.

Partners' Social Support Behaviors and Relationship Quality

As hypothesized, observed negative behaviors during social support interactions were related to less relationship satisfaction and more relationship discord, as reported by individuals and their partners. Individuals

often perceive romantic partners to be their primary source of comfort and support during stressful situations (Cutrona, 1996). However, when partners seek support from their romantic counterparts, they may expect a response that conveys validation and understanding in order to cope with an external stressor. When partners receive responses that are not conducive to effective coping, such as intrusiveness or avoidance, they are likely to feel that the romantic relationship is not meeting their emotional needs, leading to dissatisfaction and discord (Reis & Shaver, 1988). It is also possible, however, that individuals who are not satisfied in their romantic relationship may display negative behaviors during supportive interactions, using the interaction as a means to express their relational frustration. Similarly, individuals who perceive experiences of romantic discord, such as criticism or exclusion, may not be motivated to maintain accord in a relationship if they do not believe their efforts will be reciprocated.

Interestingly, individuals' negative behaviors during social support interactions were related to perceptions of relationship quality, even when positive behaviors were not. Although this finding is noteworthy, it does not warrant the conclusion that positive behaviors do not play a role in relationship quality. Indeed, previous research has demonstrated that both positive and negative behaviors are important, independent correlates of relationship quality (Julien et al., 2003; Pasch & Bradbury, 1998; Sullivan et al., 2010; Williamson et al., 2016). The current study's findings may be attributable to methodological differences between current and previous research, such as differences in observational coding of support behaviors. For instance, previous research examined specific types of behaviors observed (e.g., instrumental vs. emotional support) whereas the current study did not distinguish between different forms of support behaviors. Furthermore, it is advisable to consider the differential importance of positive and negative behaviors in relation to relationship quality under varying circumstances. For instance, the current study did not find that positive behaviors, such as laughing and humor, were related to relationship quality when a partner was attempting to cope with a stressor. However, humorous exchanges may be related to relationship quality when used to enhance closeness and bonding during typical pleasant encounters (Butzer & Kuiper, 2008; Ziv, 1988).

Congruity of Partners' Social Support Behaviors and Relationship Quality

In addition to actor and partner effects, the actor-partner interaction effects revealed that specific combinations of romantic partners' social support behaviors were related to relationship quality above and beyond the effects of individual partners' behaviors on relationship outcomes. As hypothesized, the interaction between two partners' negative behaviors in social support situations was related to their relationship satisfaction. Specifically, the detrimental impact of individuals' negative behaviors

on relationship satisfaction was reduced when partners engaged in fewer negative behaviors. This finding is consistent with the buffering hypothesis (Cohen & Wills, 1985), suggesting that partners who are less willing to engage in negative behaviors during social support interactions thwart their romantic counterparts' attempts at maladaptive behaviors, leading to more relationship satisfaction for both partners. However, the detrimental impact of individuals' negative behaviors on relationship satisfaction was intensified when partners also engaged in more negative behaviors. According to research on emotional coregulation, partners' negative emotions and behaviors may reciprocate or transmit to each other over time, an interpersonal dynamic referred to as a morphogenic process (Butler & Randall, 2013). Such a process is theorized to have harmful effects on partners' long-term psychological and relational functioning. The association between two partners' high negative behaviors and low relationship satisfaction provides support for this interpersonal dynamic.

With regard to discord, the interaction between two partners' positive behaviors was related to relational discord. Specifically, the beneficial effect of positive behaviors on reducing discord was amplified by partners' engagement in more positive behaviors and offset by partners' engagement in fewer positive behaviors. Thus, relational discord was lowest when both partners were high in positive behaviors. When partners mutually engage in adaptive support behaviors, both partners are likely to feel that their needs for comfort and well-being are met, leading to less discord (Badr, 2004; Butler & Randall, 2013; Revenson, 2003; Velotti et al., 2016). It is also possible that partners who characterize their relationships as high in parity and harmony are more likely to engage in positive support behaviors to foster further unity in the relationship. In contrast, when one partner was low in positive behaviors, ratings of discord were higher, even when the other partner was high in positive behaviors. This finding highlights the importance of both partners' efforts in promoting relational harmony. When one partner's attempts at positive support behaviors are not reciprocated, this partner is likely to feel disparity in relational duties, leading to more perceptions of discord (Reis & Shaver, 1988).

Last, the interaction between partners' positive and negative behaviors was related to relationship discord. Specifically, discord was highest when one partner was low in positive behaviors and the other was high in negative behaviors. However, when one partner engaged in more positive behaviors, relational discord was lower, even when the other partner was high in negative behaviors. This finding indicates that one partner's engagement in more positive behaviors may serve as a buffer against the detrimental effects of another partner's negative behaviors on discord. Although these findings indicate that one partner's positive support behaviors may ease discord in a relationship, it is possible that the burden of providing a disproportionate amount of effective support behaviors in a relationship may bring about more relational discord over time.

Although the current study provided evidence of the importance of congruity in social support behaviors in relation to relationship quality, hypotheses in the current study were primarily developed on the basis of health and coping literature (e.g., Badr, 2004). In research on health and coping, stressors are often contextualized, such as couples dealing with chronic illness. In contrast, the current study focused on the observation of partners discussing unique, personal stressors not shared by both partners. Although findings were discussed in the context of previous literature on coping, it should not be assumed that the congruence in supportive behaviors assessed in this study is the same as congruence in coping behaviors observed in couples dealing with specific stressors. Unfortunately, limited research has examined congruence between supportive behaviors (or even coping behaviors) and relationship quality. Therefore, the current study provided preliminary evidence on the relationships between congruent social support behaviors and relationship outcomes.

Perhaps more importantly, the current study illustrated several fundamental ideas about the complexities of dyadic dynamics that may further future research on romantic relationships. For instance, Bodenmann's dyadic coping framework posits that the coping process in a relationship consists of one partner's support seeking followed by either positive or negative behaviors from the other partner (Bodenmann, 2005; Falconier, Jackson, Hilpert, & Bodenmann, 2015). *Positive dyadic coping* involves one partner's support seeking followed by another partner's positive support (e.g., validation, emotional support, and instrumental help). In contrast, *negative dyadic coping* involves one partner's support seeking followed by another partner's negative behaviors (e.g., denial of the problem, criticism, avoidance, and sarcasm). Although Bodenmann's model is inherently dyadic, complex dyadic dynamics have not been fully explored in this body of research. Specifically, it has only investigated how partners respond to support seeking with positive or negative patterns. This approach has failed to demonstrate interesting dyadic dynamics such as how negative dyadic coping reported by one partner could be buffered by another partner's positive dyadic coping. Relating the dyadic coping framework to the current study, the fundamental ideas of dyadic congruence could expand previous research on dyadic coping as well as other domains of dyadic functioning.

Limitations and Future Directions

One major limitation of this study is that the cross-sectional design of this study does not allow for causal conclusions to be made. Although the dyadic coping framework posits that specific forms of coping and support behaviors may play an important role in relationship quality, it is also possible that feelings of relational discord or satisfaction may impact partners' decisions to engage in positive or negative support behaviors. Additionally, because self-reports of relationship quality were used to assess romantic satisfaction and discord,

it is not possible to determine the extent to which perceptions of relationship quality were an accurate assessment of relational functioning.

Also, the current study offers limited insight into partners' development of congruous social support behaviors. For instance, it is possible that individuals seek out partners with specific social support styles based on their own support styles. Alternatively, partners' social support styles may become higher or lower in congruity over time through mutual influence. Thus, future research should adopt a developmental framework for conceptualizing stability and change in partners' social support behaviors and relationship quality (Butler & Randall, 2013). Nonetheless, the current study's use of dyadic analyses and multiple methods (observations and self-reports) offers unique insights into the role of congruity in partners' positive and negative behaviors on relationship satisfaction and discord.

Practical Implications

Interventions focused on increasing satisfaction and decreasing discord in romantic relationships should consider the importance of social support interactions among romantic partners. Indeed, findings from the current study indicate that romantic relationships may be more successful when at least one partner avoids negative support behaviors or utilizes positive support behaviors. Thus, attempts to replace negative behaviors with more adaptive support behaviors, such as validation and problem-focused coping, may be useful in optimizing relational fulfillment. Further, on the basis of these findings, interventions should teach the importance of both partners' engagement in adaptive support behaviors for optimizing relational outcomes. Although one partner's adaptive behaviors appear to buffer against another partner's maladaptive behaviors, relational success appears most likely when both partners engage in adaptive support behaviors.

Acknowledgement

This research was supported by the Timberlawn Psychiatric Research Foundation Inc (GA-2009-013).

References

- Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Newbury Park, CA: Sage.
- Badr, H. (2004). Coping in marital dyads: A contextual perspective on the role of gender and health. *Personal Relationships, 11*, 197–211.
- Barbee, A. P., & Cunningham, M. R. (1995). An experimental approach to social support communications: Interactive coping in close relationships. *Annals of the International Communication Association, 18*(1), 381–413.
- Bodenmann, G. (2005). Dyadic coping and its significant for marital functioning. In T. Revenson, K. Kayser, & G. Bodenmann (Eds.), *Couples coping with stress: Emerging perspectives on dyadic coping* (pp. 33–50). Washington, D.C.: American Psychological Association.

- Bodenmann, G., Meuwly, N., & Kayser, K. (2011). Two conceptualizations of dyadic coping and their potential for predicting relationship quality and individual well-being: A comparison. *European Psychologist, 16*(4), 255–266.
- Bradbury, T. N., Fincham, F. D., & Beach, S. R. (2000). Research on the nature and determinants of marital satisfaction: A decade in review. *Journal of Marriage and Family, 62*(4), 964–980.
- Butler, E. A., & Randall, A. K. (2013). Emotional coregulation in close relationships. *Emotion Review, 5*(2), 202–210.
- Butzer, B., & Kuiper, N. A. (2008). Humor use in romantic relationships: The effects of relationship satisfaction and pleasant versus conflict situations. *The Journal of Psychology, 142*(3), 245–260.
- Carbery, J., & Buhrmester, D. (1998). Friendship and need fulfillment during three phases of young adulthood. *Journal of Social and Personal Relationships, 15*(3), 393–409.
- Chow, C. M., Buhrmester, D., & Tan, C. (2014). Interpersonal coping styles and couple relationship quality: Similarity versus complementarity hypotheses. *European Journal of Social Psychology, 44*, 175–186.
- Chow, C. M., Claxton, S. E., & van Dulmen, M. H. M. (2015). Testing dyadic mechanisms the right way: A primer into moderation analyses within the APIM framework. *Emerging Adulthood, 3*, 421–433.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin, 98*, 310–357.
- Cramer, D. (2000). Relationship satisfaction and conflict style in romantic relationships. *The Journal of Psychology, 134*(3), 337–341.
- Cramer, D. (2004). Emotional support, conflict, depression, and relationship satisfaction in a romantic partner. *The Journal of Psychology, 138*(6), 532–542.
- Cutrona, C. E. (1996). *Social support in couples: Marriage as a resource in times of stress*. Thousand Oaks, CA: Sage.
- Falconier, M. K., Jackson, J. B., Hilpert, P., & Bodenmann, G. (2015). Dyadic coping and relationship satisfaction: A meta-analysis. *Clinical Psychology Review, 42*, 28–46.
- Furman, W., & Buhrmester, D. (1985). Children's perceptions of the personal relationships in their social networks. *Developmental Psychology, 21*(6), 1016–1024.
- Gable, S. L., & Reis, H. T. (2001). Appetitive and aversive social interaction. In J. Harvey, & A. Wenzel (Eds.), *Close romantic relationships: Maintenance and enhancement* (pp. 169–194). Mahwah, NJ: Erlbaum.
- Garcia, R. L., Kenny, D. A., & Ledermann, T. (2015). Moderation in the actor–partner interdependence model. *Personal Relationships, 22*(1), 8–29.
- Howes, P., & Markman, H. J. (1989). Marital quality and child functioning: A longitudinal investigation. *Child development, 1044*–1051.
- Humbad, M. N., Donnellan, M. B., Klump, K. L., & Burt, S. A. (2011). Development of the Brief Romantic Relationship Interaction Coding Scheme (BRRICS). *Journal of Family Psychology, 25*(5), 759–769.
- Julien, D., Chartrand, E., Simard, M. C., Bouthillier, D., & Bégin, J. (2003). Conflict, social support and relationship quality: An observational study of heterosexual, gay male and lesbian couples' communication. *Journal of Family Psychology, 17*(3), 419–428.
- Kelley, H. H., Holmes, J. G., Kerr, N. L., Reis, H. T., Rusbult, C. E., & Van Lange, P. A. M. (2003). *An atlas of interpersonal situations*. New York: Cambridge University Press.
- Kelley, H. H., & Thibaut, J. (1978). *Interpersonal relations: A theory of interdependence*. New York: Wiley.
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). *Dyadic data analysis*. Guilford Press.
- Lavner, J. A., & Bradbury, T. N. (2012). Why do even satisfied newlyweds eventually go on to divorce? *Journal of Family Psychology, 26*(1), 1–10.
- Noller, P., & Feeny, J. A. (1998). Communication in early marriage: Responses to conflict, nonverbal accuracy, and conversational patterns. In T. N. Bradbury (Ed.), *The developmental course of marital dysfunction* (pp. 11–43). Cambridge, England: Cambridge University Press.
- Pasch, L. A., & Bradbury, T. N. (1998). Social support, conflict, and the development of marital dysfunction. *Journal of Consulting and Clinical Psychology, 66*(2), 219–230.
- Ptacek, J. T., & Dodge, K. L. (1995). Coping strategies and relationship satisfaction in couples. *Personality and Social Psychology Bulletin, 21*(1), 76–84.
- Reis, H. T., Clark, M. S., & Holmes, J. G. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy and closeness. In D. Mashek, & A. P. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201–225). Mahwah, NJ: Erlbaum.
- Reis, H. T., & Shaver, P. (1988). Intimacy as an interpersonal process. In S. Duck, & D. F. Hay (Eds.), *Handbook of personal relationships: Theory, research and interventions* (pp. 367–389). Chichester, UK: Wiley.
- Revenson, T. A. (2003). Scenes from a marriage: Examining support, coping, and gender within the context of chronic illness. In J. Suls, & K. Wallston (Eds.), *Social psychological foundations of health and illness* (pp. 530–559). Oxford, England: Blackwell Publishing.
- Rosseel, Y. (2012). lavaan: An R package for structural equation modeling. *Journal of Statistical Software, 48*(2), 1–36.
- Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The Investment Model Scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships, 5*(4), 357–391.
- Sullivan, K. T., Pasch, L. A., Johnson, M. D., & Bradbury, T. N. (2010). Social support, problem solving, and the longitudinal course of newlywed marriage. *Journal of Personality and Social Psychology, 98*(4), 631–644.
- Wickham, R. E., & Knee, C. R. (2012). Interdependence theory and the actor–partner interdependence model: Where theory and method converge. *Personality and Social Psychology Review, 16*(4), 375–393.
- Williamson, H. C., Altman, N., Hsueh, J., & Bradbury, T. N. (2016). Effects of relationship education on couple communication and satisfaction: A randomized controlled trial with low-income couples. *Journal of Consulting and Clinical Psychology, 84*(2), 156–166.
- Velotti, P., Balzarotti, S., Tagliabue, S., English, T., Zavattini, G. C., & Gross, J. J. (2016). Emotional suppression in early marriage Actor, partner, and similarity effects on marital quality. *Journal of Social and Personal Relationships, 33*(3), 277–302.
- Ziv, A. (1988). Humor's role in married life. *Humor: International Journal of Humor Research, 1*, 223–229.