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## Relations between Spouses' Depressive Symptoms and Marital Conflict: A Longitudinal Investigation of the Role of Conflict Resolution Styles

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### Abstract

This study investigated longitudinal relations between spouses' depressive symptoms and styles of conflict resolution displayed by husbands and wives in marital conflict, including angry, depressive, and constructive patterns of expression. Behavioral observations were made from a community sample of 276 couples during marital conflict resolution tasks once a year for three years. Couples were observed engaging in a major and minor conflict resolution task. Constructive, angry, and depressive conflict resolution styles were derived from the behavioral observation coding. Couples self-reported on depressive symptoms and marital dissatisfaction. Path analyses provided support for an extension of the marital discord model of depression (Beach and colleagues, 1990). Specifically, angry, depressive, and constructive styles of conflict each mediated the link between marital dissatisfaction and depressive symptoms. Significant cross-spouse effects were found. Implications for the treatment of depressed and/or relationally-discordant couples are discussed.

### Keywords

Marital Conflict; Spousal Depression; Depressive Symptoms; Mediational Models; Marital Dissatisfaction

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The quality of intimate relationships is a critical factor in personal adjustment and well-being. Poor relationship quality is a significant risk factor for both diagnostic and sub-clinical levels of depressive symptoms (for a review, see Whisman, 2001), and depressive symptoms increase the risk of relationship disruptions (Davila, Bradbury, Cohan, & Tochluks, 1997). Although marital adjustment and spousal depression are intertwined with bidirectional effects (Whisman & Uebelacker, 2009), research suggests that marital

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adjustment problems more commonly precede depression, rather than the reverse (Beach, Sandeen, & O'Leary, 1990; Whisman & Bruce, 1999). However, questions remain regarding how marital adjustment problems may lead to depression. More research is needed to elucidate specific processes through which marital adjustment may influence depression.

### **Marital Discord Model of Depression**

Theorists have called for further exploration and extension of existing models on interpersonal communication and depression (Rehman, Gollan, & Mortimer, 2008). Beach's (1990) marital discord model of depression suggests that disturbance in the marital relationship is a powerful predictor of future depression symptoms. According to this theory, marital adjustment problems are associated with partners' handling of conflict in hostile and unsupportive ways, fostering eventual increases in depressive symptoms. Furthermore, the erosion of positive elements of the marital relationship, such as couple cohesion, intimacy, and acceptance of emotionality, is also thought to contribute to increased depression symptoms.

Substantial research has supported links between elements of marital conflict and depression and between marital adjustment and specific patterns of marital communication. For example, studies examining cross-sectional associations between marital adjustment and conflict have found unique patterns of interaction among maritally distressed but not depressed couples, including less facilitative and more aggressive behavior, (Jackman-Cram, Dobson, & Martin, 2006; Nelson & Beach, 1990) and high negative and low positive affect (Schmaling & Jacobson, 1990). Studies isolating spousal depression from marital adjustment have found that depression itself is typically associated with only more depressive behavior during conflict, and that it is the marital adjustment that contributes to more specific negative patterns of conflict (e.g. Jackman-Cram et al., 2006; Nelson & Beach, 1990). Looking at links between depressive symptoms and conflict, in a cross-sectional study based on the present sample, Du Rocher Schudlich, Papp, and Cummings (2004) found that husbands' depressive symptoms were related to angry and depressive conflict resolution patterns, while wives' depressive symptoms were only linked to depressive conflict resolution patterns. For both spouses, depressive symptoms were linked to reduced constructive patterns. Questions have remained though regarding the unique contributions of specific marital communication patterns and marital adjustment to the development of depression, given the strong overlap between marital adjustment and conflict. Is it simply general unhappiness in the marriage leading to depression, does marital conflict account entirely for links between marital adjustment and depression, or do both marital adjustment and marital conflict both contribute to the prediction of depression?

Recent work has supported notions that marital conflict may play an important mediational role between marital adjustment and depression. For example, Heene and colleagues (2005) found that negative conflict styles such as demand-withdrawal patterns and avoidance were partial mediators in the link between depression and marital distress in a community sample. Importantly, this study also found significant mediation for the much understudied constructive conflict as well. Similar results were found examining these processes in a clinical sample of depressed patients (Heene, Buysse, & Van Oost, 2007). These studies, however, did not specifically test the marital discord model, but rather examined depression and conflict as predictors of marital adjustment. Furthermore, both studies involved cross-sectional data and potentially biased self-reports of the constructs. Longitudinal examination is essential to further disentangle directions of influence between depressive symptoms and marital conflict.

## Gender and Cross-Spouse Effects

Overall, research has demonstrated that wives tend to feel more responsible for managing their relationships (Vogel & Karney, 2002) and may be more sensitive to relationship problems than their husbands (Bradbury, Beach, Fincham, Nelson, 1996). Additionally, women experience depression at a rate twice that of men (Kessler et al., 2003). Thus, stronger findings in associations between marital adjustment, marital conflict, and depression seem likely for wives compared to husbands. However, findings pertaining to associations between depression, marital adjustment, and conflict in husbands and wives have varied according to methodological differences. In community samples of couples with depressive symptoms, a stronger link has been reported between marital adjustment and depression for wives than husbands cross-sectionally (Heene et al., 2005, 2007; Whisman, 2001) but typically no difference is found in relations for husbands and wives longitudinally (Beach, Katz, Kim, & Brody, 2003; Whisman & Uebelacker, 2009).

Previous research has typically examined associations between one spouse's marital adjustment and his or her own level of depressive symptoms. However, cross-spouse effects are increasingly being recognized as important factors (Katz, Monnier, Beach, Libet, & Shaw, 2000; Beach et al., 2003; Whisman & Uebelacker, 2009). Cross-spouse effects are particularly pertinent in evaluating the notion that one spouse's adjustment problems in the marriage may be associated with his or her spouse engaging in more negative conflict, which, in turn, may be associated with increased depressive symptoms in partners. Simultaneous examination of both husbands' and wives' data is imperative to delineate the unique effects of each partners' marital adjustment and conflict styles on depression symptoms.

## The Present Study and Hypotheses

This study addresses gaps in the literature by extending the marital discord model to test a precise model in which husbands' and wives' *specific* marital conflict styles serve as potential mediators in the relations between marital adjustment and depressive symptoms. Specification and testing of a specific process-oriented model is imperative to illuminating potential targets for intervention. An additional advance is the multi-method approach, including study of specific marital conflict tactics and emotions displayed by couples (both positive and negative elements), utilizing strong behavioral observation methods. Further extending previous work, associations between depressive symptoms and conflict were examined longitudinally to help elucidate directionality of relations. Finally, cross-spouse effects are considered.

Consistent with the marital discord model of depression and previous research establishing links between marital adjustment, couple conflict, and depression, we hypothesized that couples' specific marital conflict styles would mediate links between marital dissatisfaction and depression symptoms. Hypotheses pertaining to which specific conflict styles would be more prominent for wives versus husbands regarding the links with marital dissatisfaction and depressive symptoms were exploratory.

## Method

### Participants

Participants were 279 heterosexual couples who were part of a larger longitudinal study concerning family relationships and child development. Couples were recruited from the community through newspaper, television and radio advertisements; mailing postcards to families; posting fliers at several local agencies and community events; referrals from other participating families; and sending home fliers with students at local schools in the South

Bend, Indiana area. Couples were invited to participate if they had been living together for at least two years (married or not) with an 8- to 16-year old child. This study was explained to couples as being concerned with everyday marital differences, family relationships, and children. No references were made to couples' mental health or relationship distress.

Past research has indicated that the magnitude of the association between marital adjustment and depression differs for married vs. unmarried cohabiting couples (e.g. Uebelacker & Whisman, 2006) and therefore we dropped unmarried couples for the present study, resulting in a sample size of 276 couples. Couples were married on average for 13 years ( $SD = 8$  years) and had an average of 3 children ( $SD = 1.36$ ) at Time 1. The vast majority of wives and husbands were biological parents to the target child in the study (97% and 76%, respectively), with only 1% of wives and 15% of husbands reporting step-parent status. Couples were primarily middle to upper middle class, with income ranging from \$0–10,000 (6%) up to \$80,000 (12%) or more. Modal yearly family income was between \$40,000–\$65,000. Wives were between 24–70 years of age ( $M = 38$  years,  $SD = 6$  years) and husbands were between 25–70 years of age ( $M = 40$  years;  $SD = 7$  years). Ninety-eight percent of the wives completed high school and 37% graduated college or beyond, 97% of husbands completed high school and 44% graduated college or beyond. Ninety-one percent of the couples were Caucasian, 7% African-American, and 2% biracial or other. The attrition rate was low at Times 2 and 3, with 227 of the couples at time two retained and 223 at Time 3. Minimal differences were found between the couples who were retained ( $n = 223$ ) for all three waves compared to those participating for only one or two waves; couples dropping out were more likely to have a maritally dissatisfied husband.

## Measures

**Depressive symptoms**—Depressive symptoms were assessed using the Center for Epidemiological Studies - Depression Scale (CES-D; Radloff, 1977). The CES-D is a twenty-item scale designed to measure depressive symptomatology in the general population. The CES-D has well-established psychometric properties including high internal consistency, test-retest reliability, and convergent validity with clinical and self-report measures of depression (Radloff, 1977). Cronbach's  $\alpha$ s were .87, .83, and .85 for husbands and .92, .90, and .88 for wives at Times 1, 2, and 3, respectively. Median scores were 14, 8, and 7 for husbands and 15, 9, and 8 for wives at Times 1, 2, and 3, respectively. Scores of 16 or above are considered reflective of potentially serious depression (Ensel, 1982). Using this cut-off, at Time 1 16% of husbands and 20% of wives had scores above this clinical cutoff.

**Marital Dissatisfaction**—Marital dissatisfaction was assessed via the Negative Marital Quality (NMQ) subscale of the Positive and Negative Quality Marriage Scale (PANQIMS; Fincham & Linfield, 1997). The NMQ is a three-item scale designed to be an index of spouses' negative feelings towards their partner and marriage. The NMQ has sound psychometric properties, including high internal consistency, convergent and predictive validity (Fincham & Linfield, 1997). Cronbach's  $\alpha$ s were .88, .90, and .92 for husbands and .92, .92, and .95 for wives at Times 1, 2, and 3, respectively.

## Procedures

Couples attended a laboratory session once a year for three years and were monetarily compensated each year of participation. Specific dimensions of couples' conflict tactics were revealed by how couples handled their major and minor disagreements, allowing for both destructive and constructive marital conflict styles to emerge. The first marital interaction was a major disagreement that the couple did not handle well. Following a short

break, the couples then engaged in a second, minor disagreement that they felt they could handle well or better than the first topic.

Couples indicated separately three of their most problematic topics (i.e., major disagreement) and three problems most successfully resolved (i.e., minor disagreement) and then together choose one topic for each discussion. Couples were instructed to discuss a specific issue within each topic, either something that was frequently occurring or something that had occurred recently and still needed to be worked out, and to work toward a resolution to the problem. They were asked to discuss these topics like they would at home, for approximately seven and a half minutes each, while alone and videotaped in the lab.

### Coding of Marital Conflict Resolution Patterns

The Marital Daily Records (MDR; Cummings, Goeke-Morey, Papp, & Dukewich, 2002) protocol was used to code observational records of marital interactions and is the same coding system that was used in Du Rocher Schudlich et al. (2004). The MDR coding system has good convergent validity with widely used self-report measures of marital conflict and marital relations (see Du Rocher Schudlich & Cummings, 2003). Coded responses included: a) verbal hostility, using an angry tone of voice; b) withdrawal, creating a physical or emotional distance between self and partner; c) nonverbal hostility, physically expressing anger or frustration; d) personal insult, hurting partner's feelings intentionally; e) defensiveness, trying to avoid blame or responsibility; g) physical distress, physical signs of sadness, fear or nervousness; f) pursuit, hounding or nagging partner; g) support, reassurance that partner is being listened to or understood, complimenting partner; h) physical affection, physical expressions of caring; i) calm discussion, using calm tone of voice, regardless of content; j) verbal affection, saying loving or caring things to partner; k) problem solving, suggesting possible solutions to fix problem or prevent it in future and l) humor, trying to make a joke or to lighten the mood, but *not* making fun of the other person. The behaviors were coded on a scale from 0 (*absence of the behavior*) to 2 (*very strong or frequent displays*). The degree of emotional intensity of positivity, angry, sad, and fearful responses, and overall conflict resolution, displayed by each partner was also coded on a scale from 0 (*absence of the emotion/resolution*) to 9 (*strongest display of emotion/resolution*). One score was coded for each of the 18 individual conflict codes for the entire conflict period.

Each discussion was coded once by one of two undergraduate research assistants, who received extensive training by advanced graduate students. Coders were taught the definitions of the conflict styles by means of written descriptions, after which they viewed and were required to correctly identify prototypes of the individual tactics demonstrated on videotapes. Next they reviewed and discussed several practice interactions with the advanced research assistants. Coders were provided with anchors for the odd numbers of the emotion coding scale, as well as for each number represented in the behavior codes. Finally, coders coded 30 practice videos throughout which they received feedback and clarification regarding any questions. A subset of 25 interactions was used to assess the coders' agreement with the graduate students' codes using Intraclass Correlation Coefficient (ICC) (3,k), which is equivalent to Cronbach's  $\alpha$  (Shrout & Fleiss, 1979). Mean alpha coefficients for husbands' and wives' codes were .86 (*range = .67–1.0*) and .85 (*range = .55–.95*), respectively.

For the purposes of analyses, couples' conflict tactics, emotions and resolution were sorted into 3 categories according to conceptual criteria based on the research literature on marital conflict: constructive, angry, and depressive conflict behavior patterns (Du Rocher Schudlich et al., 2004). Constructive styles of conflict included support, physical affection, verbal affection, calm discussion, problem solving, humor, positivity, and resolution. Angry

styles of conflict included verbal hostility, nonverbal hostility, personal insult, defensiveness, and pursuit. Finally, depressive conflict styles included withdrawal, physical distress, sadness and fear. Although the basis for grouping was conceptual, a subsequent factor analysis confirmed the existence of the three factors and were consistent with theoretical concepts; for angry conflict the eigenvalue = 4.10, accounting for 24% of the variance, for depressive conflict the eigenvalue = 2.14, accounting for 13% of the variance, and for constructive conflict the eigenvalue = 2.08, accounting for 12% of the variance. Factor loadings ranged from .30–.87, with all but 1 variable loading greater than .45. Given the different scaling for the behaviors and emotions, we standardized the conflict behavior and emotions response scales and then used the mean of the relevant behaviors and emotions to create our conflict composites.

### Data Analysis Plan

Path analysis was used to test our hypotheses regarding mediational pathways between marital dissatisfaction and depressive symptoms. The models were estimated using the AMOS 7.0 statistical package, using the maximum likelihood (ML) method for estimating parameters. Multiple fit indices are reported to facilitate evaluation of the degree to which our models fit the sample data. The traditional chi-square statistic represents a good fit when not statistically significant. For the  $\chi^2/df$  ratio, which adjusts for model complexity, values between 1 and 3 indicate an acceptable fit (Arbuckle & Wothke, 1999). Additionally, when the comparative fit index (CFI) is greater than .90, and the root mean square error of approximation (RMSEA) is less than .08, then the hypothesized model fits the observed data adequately (Browne & Cudek, 1993). Errors of the indicators from the same measure were correlated with each other, however for clarity of presentation, correlations of errors are not shown in the figures. Analyses were first conducted separately examining conflict from the major and minor disagreements. No significant differences were found in paths or model fit and thus the final models presented averaged scores across the two interactions. Finally, our analysis of statistical power, according to guidelines by MacCallum, Brown and Sugawara (1996), indicated that the structural model had adequate power to reject the hypothesis of poor model fit.

Although Baron and Kenny's (1986) "causal steps" criteria are the most frequently cited mediation analyses, difficulty arises with multiple mediators and multiple outcomes (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002), as is the case with our study. To determine the significance of mediation, bias-corrected confidence intervals for the indirect effects were calculated using bootstrap methods (MacKinnon, Lockwood & Williams, 2004). Confidence intervals for the indirect effects which do not contain zero are considered significant. For each model, the magnitude of effects were evaluated using Cohen's (1988) criteria.

## Results

### Descriptive Statistics

Table 1 presents the descriptive statistics for husbands' and wives' conflict styles, marital dissatisfaction, and levels of depressive symptoms. Husbands' and wives' conflict resolution styles, depressive symptoms and marital dissatisfaction all demonstrated significant stability over time ( $p < .001$  for all correlations). Table 2 presents intercorrelations for all variables in the path analyses. Couples' marital dissatisfaction was significantly related to each of the conflict resolution styles in the expected directions, although fewer findings were found for male's depressive conflict. Couples' conflict resolution styles were significantly interrelated in anticipated directions and finally, couples' depressive symptoms were significantly

related to couples' conflict resolution styles and marital dissatisfaction in the expected directions.

### **Couples' angry conflict as a mediator between marital dissatisfaction and depressive symptoms**

Figure 1 presents the results of the hypothesized model test with angry conflict as the mediator. The results of the SEM indicated a good fit with the data,  $\chi^2(12, N=223) = 20.39$ ,  $p = .06$ ,  $\chi^2/df$  ratio = 1.70, IFI = .98, CFI = .98, and RMSEA = .050. As hypothesized, several indirect links between marital dissatisfaction and couples' depressive symptoms were found. Wife marital dissatisfaction at T1 was significantly associated with both wives' and husbands' greater use of angry conflict tactics at T2. Angry husband conflict at T2 was in turn associated with significantly higher depressive symptoms in husbands at T3. Significant direct effects remained between wife marital dissatisfaction at T1 and wife depressive symptoms at T3, suggesting only partial mediation may be occurring. Confidence intervals of the indirect effects of wife marital dissatisfaction on wives' depressive symptoms (95% CI: .146–.316 and 95% CI: .074–.240, respectively) based on 500 bootstrap samples did not include zero, indicating significant mediation effects of husband angry conflict.

**Magnitude of Effects**—The standardized regression coefficients displayed in the model represent effect sizes (see Figure 1). For example, the standardized path coefficients between wife marital dissatisfaction and wife and husband angry conflict were .30 and .20, respectively, which were small to medium effect sizes. The effect sizes of husband angry conflict on husband depression symptoms were small.

### **Couples' depressive conflict as a mediator between marital dissatisfaction and depressive symptoms**

Figure 2 presents the results of the hypothesized model test with depressive conflict as the mediator. The results of the SEM indicated a good fit with the data,  $\chi^2(12, N=223) = 31.76$ ,  $p = .002$ ,  $\chi^2/df$  ratio = 2.65, IFI = .94, CFI = .94, and RMSEA = .07. As hypothesized, several indirect links between marital dissatisfaction and couples' depressive symptoms were found. Wife marital dissatisfaction at T1 was significantly associated with wives' greater use of depressive conflict tactics at T2. Depressive wife conflict at T2 was in turn associated with significantly higher depressive symptoms in wives at T3. Significant direct effects remained between wife marital dissatisfaction at T1 and wife depressive symptoms at T3, suggesting only partial mediation may be occurring. Confidence intervals of the indirect effects of wife marital dissatisfaction on wives' depressive symptoms (95% CI: .016–.226) based on 500 bootstrap samples did not include zero, indicating significant mediation effects of wife depressive conflict.

**Magnitude of Effects**—The standardized path coefficient between wife marital dissatisfaction and wife depressive conflict was .15, indicating a small effect size (see Figure 2). The effect size of wife depressive conflict on wife depression symptoms was small.

### **Couples' constructive conflict as a mediator between marital dissatisfaction and depressive symptoms**

Figure 3 presents the results of the hypothesized model test with constructive conflict as the mediator. The results of the SEM indicated a good fit with the data,  $\chi^2(12, N=223) = 25.29$ ,  $p = .013$ ,  $\chi^2/df$  ratio = 2.11, IFI = .98, CFI = .98, and RMSEA = .060. As hypothesized, several indirect links between marital dissatisfaction and couples' depressive symptoms were found. Wife marital dissatisfaction at T1 was significantly associated with wives' and husbands' lesser use of constructive conflict tactics at T2. Constructive husband and wife

conflict at T2 were in turn associated with significantly lower depressive symptoms in husbands and wives at T3. Significant direct effects remained between wife marital dissatisfaction at T1 and wife depressive symptoms at T3, suggesting only partial mediation may be occurring. Confidence intervals of the indirect effects of wife marital dissatisfaction on wives' depressive symptoms (95% CI: .042–.60) based on 500 bootstrap samples did not include zero, indicating significant mediation effects of husband constructive conflict. Confidence intervals of the indirect effects of wife marital dissatisfaction on husbands' depressive symptoms (95% CI: .031–.45, respectively) based on 500 bootstrap samples did not include zero, indicating significant mediation effects of husband and wife constructive conflict.

**Magnitude of Effects**—The effects sizes of wife marital dissatisfaction on husband and wife constructive conflict indicated small effect sizes (see Figure 3). The effect sizes of wife and husband constructive conflict on husband depression symptoms were large. The effect size of husband constructive conflict on wife depression symptoms was small.

## Discussion

The results of this study supported hypotheses that, over time, specific conflict resolution styles partially mediated links between marital dissatisfaction and depression symptoms. Different patterns of relations for husbands and wives and cross-spouse effects in mediational pathways between marital dissatisfaction and depressive symptoms over time were identified. Findings thus extend the marital discord model of depression, supporting notions that marital conflict reflects a disordered interpersonal context in which depression occurs, with conflict styles contributing to process relations between marital adjustment and depression. The mediational role of marital conflict in relations between marital dissatisfaction and depression symptoms varied across type of conflict. Furthermore, only one of the significant mediations was through spouses' own behavior and symptoms; all other significant mediational pathways involved cross-partner effects.

Significant mediational effects for angry marital conflict were found for links between wives' marital dissatisfaction and wives' and husbands' depression symptoms. Thus, a pattern emerged in which wives' marital dissatisfaction (but not husbands') was associated with greater angry conflict in both husbands' and wives, and husbands' angry conflict in turn was associated with greater depression symptoms in husbands. Beach and colleagues' (1990) marital discord model emphasizes effects of particular negative conflict styles, such as criticism, verbal anger, and threats, on spouses' risk for depression. These elements of conflict were captured in our angry conflict construct, as well as several other elements including non-verbal hostility, pursuit, defensiveness, suggesting that multiple forms of angry conflict may develop out of marital dissatisfaction and contribute to increased risk for depression. Husbands' angry conflict was particularly pertinent to within-person effects associated with depression symptoms in our models, suggesting husbands may be especially sensitive to their own expressions of anger. Socialization practices typically encourage and support more expressions of anger in males than females (see Brody, 2000, for review) and perhaps, consequently, males express their anger more intensely, which results in more destructive elements of angry conflict being expressed compared to females. It is unclear from our findings, however, the specific ways in which husbands' angry behavior may contribute to depression over time.

Constructive marital conflict represented a significant indirect link in relations between both husbands' and wives' marital dissatisfaction and depression symptoms. Serving as a potential protective factor and point of intervention, couples who engaged in more constructive conflict had less depressive symptoms one year later. Both husbands' and



wives' constructive conflict was associated with less depression symptoms for husbands, whereas for wives, it was only husbands' constructive conflict that predicted less depression symptoms.

Depressive marital conflict played a role only for wives. The only significant indirect effect was from wives' marital dissatisfaction to wives' depression symptoms, through wives' depressive conflict. Research supports the negative impact of depressive conflict on couples and families (Davis, Sheeber, Hops, & Tildesley, 2000; Du Rocher Schudlich et al., 2004; Du Rocher Schudlich & Cummings, 2007). Wives who are dissatisfied in their marriages may over time avoid discussing feelings and thoughts they perceive to be interpersonally challenging in order to avoid conflict (Jack, 1991). However, although meeting the short-term goal of avoiding conflict, such self-imposed silencing over time may lead to a loss of self-esteem and increased self-negation, increasing their vulnerability to depressive symptoms in the long run. The other component captured in our depressive conflict construct was emotional distress. It is possible that unhappiness in the marriage carries over into increased emotional distress in marital interactions, which over time increases wives' vulnerability to experiencing depression symptoms in multiple contexts. Examination of these specific elements of depressive conflict in future research would help to better pinpoint the specific mechanisms in play.

Thus, it appears that wife marital dissatisfaction showed a greater tendency to spill over into both husbands' and wives' conflict styles in terms of number of significant pathways across models compared to husbands, reflecting couples' greater sensitivity to wives' unhappiness in the marriage. However, husband conflict showed more significant associations with depression in both husbands' and wives' than wife conflict, indicating that husbands' conflict styles may be more of an emotional barometer for later psychological functioning in couples. This is consistent with previous research indicating that impairments in husbands' communication are especially detrimental to couples and families (Du Rocher Schudlich & Cummings, 2003, 2007).

Further research is needed to better understand transactions between depressive symptoms and conflict over time. Our findings supported partial mediation for couples' conflict styles, suggesting that additional factors may play important roles such as couples' attachment (Marchand-Reilly & Reese-Weber, 2005), attributions (Heene et al., 2007), personality characteristics (Uebelacker & Whisman, 2006), or biological/genetic substrates which may predispose individuals to have greater risk for developing depression in response to conflict (Rice, Harold, Shelton, & Thapar, 2006). Our study examined depressive symptoms in a community sample; different relations might be found for clinical samples of depressed individuals or for couples seeking couples' therapy. Couples in our study who dropped out were more likely to have maritally dissatisfied husbands. Given the infrequent observations of some of the negative behaviors in the laboratory and the low alpha for fear, replication of the findings in both laboratory and home settings would be useful. Finally, use of a primarily white, middle-class sample, may limit generalizability to more ethnically and economically diverse samples.

Nonetheless, the identification of multiple styles of conflict expression and their significance to relations between marital dissatisfaction and depressive symptoms is a contribution of this line of research. Currently, couples therapy for the treatment of marital distress focuses strongly on improving couples' communication patterns (Mead, 2002). The current findings support this approach; prospective relations between marital dissatisfaction and depressive symptoms, with marital conflict mediating between these, suggests that improving specific communication styles may reduce future depressive symptoms. The need to target communication in both partners is especially highlighted by our cross-spouse findings, with

partners' constructive conflict being especially pertinent to spouses' depressive symptoms. Furthermore, targeting a range of marital conflict styles is important given that the particular conflict styles that are linked with depressive symptoms differs somewhat for husbands compared to wives. Finally, our findings also emphasize the positive role of constructive conflict, which has been rarely emphasized in studies of relations between marital conflict and depression, and especially the essential element of resolution in couples' conflict.

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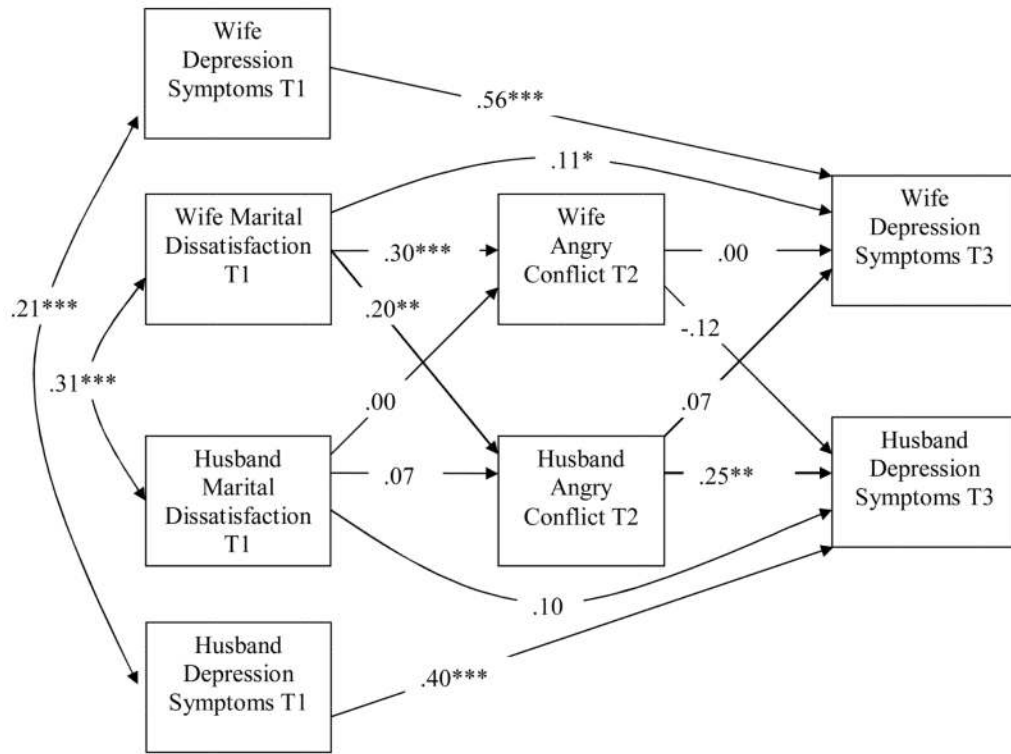


Figure 1. Mediation test of the Marital Discord Model of Depression with angry conflict

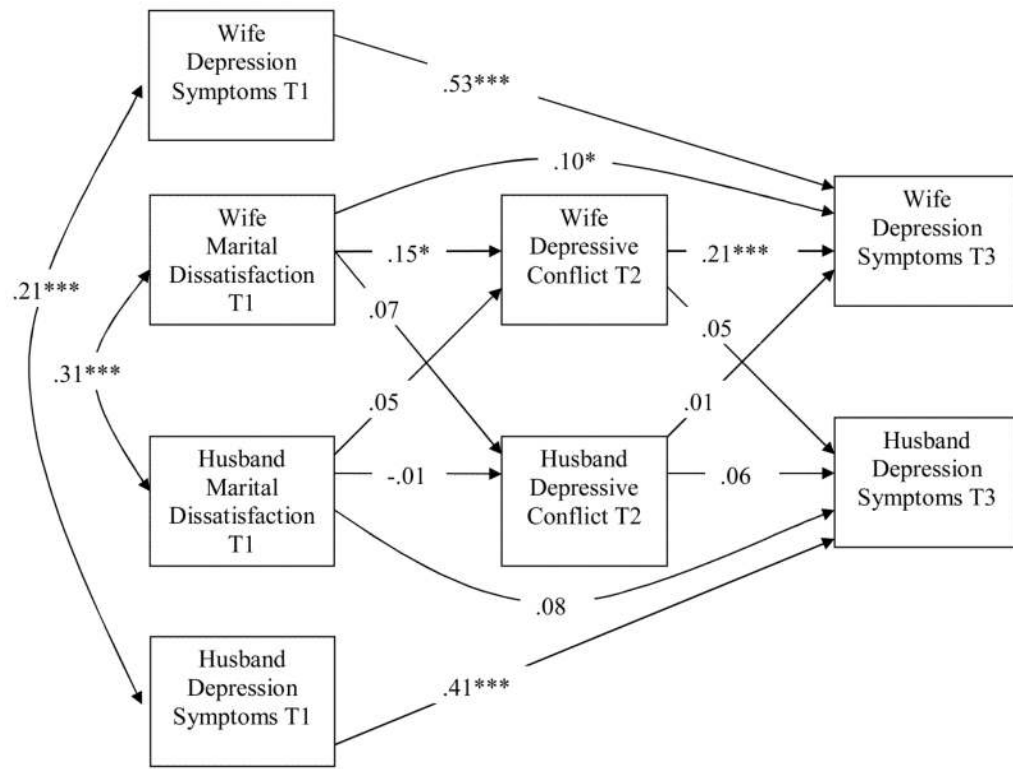


Figure 2. Mediation test of the Marital Discord Model of Depression with depressive conflict

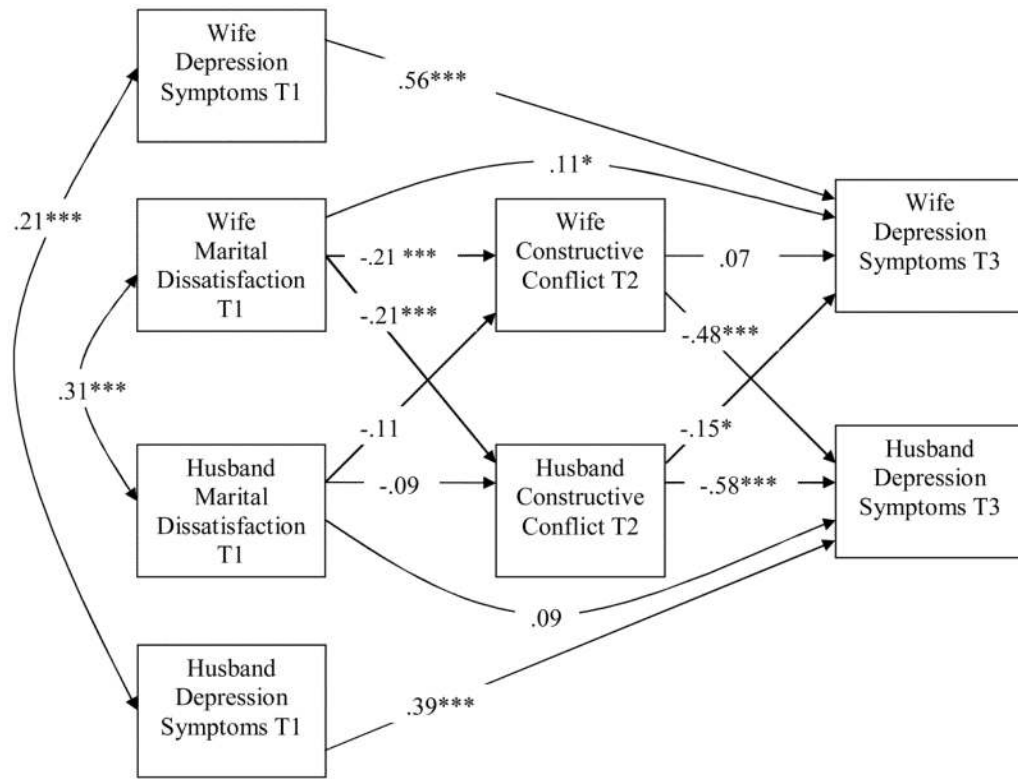


Figure 3. Mediation test of the Marital Discord Model of Depression with constructive conflict

**Table 1**

Descriptive Statistics

Conflict and Depression Measures	Time 1 (n = 276)			Time 2 (n = 227)			Time 3 (n = 223)		
	M	SD	Range of scores	M	SD	Range of scores	M	SD	Range of scores
<b>Husbands' Self-Report</b>									
NMQ	9.18	4.84	3-24	10.17	5.47	3-27	10.75	6.28	3-30
CES-D	15.36	5.18	5-40	8.30	6.07	0-36	8.01	6.78	0-48
<b>Wives' Self-Report</b>									
NMQ	9.46	5.67	3-30	10.98	6.36	3-30	11.99	6.71	3-30
CES-D	16.69	5.61	6-43	9.60	8.11	0-41	9.04	7.68	0-37
<b>Husband Conflict Dimensions</b>									
<b>Major Disagreement</b>									
Angry Conflict Composite	0	.58	-.47-2.41	0	.68	-.46-3.26	0	.72	-.52-3.46
Depressive Conflict Composite	0	.62	-.24-4.86	0	.60	-.26-3.47	0	.57	-.24-3.39
Constructive Conflict Composite	0	.53	-1.55-1.98	0	.55	-1.37-1.93	0	.56	-1.33-1.77
<b>Minor Disagreement</b>									
Angry Conflict Composite	0	.63	-.33-3.40	0	.63	-.28-4.71	0	.63	-.28-3.50
Depressive Conflict Composite	0	.70	-.18-6.97	0	.63	-.16-6.57	0	.58	-.15-4.50
Constructive Conflict Composite	0	.49	-2.14-1.41	0	.53	-1.61-1.42	0	.51	-1.32-1.68
<b>Wife Conflict Dimensions</b>									
<b>Major Disagreement</b>									
Angry Conflict Composite	0	.59	-.48-2.58	0	.70	-.54-3.11	0	.65	-.46-2.36
Depressive Conflict Composite	0	.63	-.35-3.06	0	.67	-.32-3.22	0	.63	-.30-3.07
Constructive Conflict Composite	0	.51	-1.75-1.39	0	.56	-1.28-2.17	0	.55	-1.29-1.71
<b>Minor Disagreement</b>									
Angry Conflict Composite	0	.66	-.36-5.13	0	.69	-.35-3.16	0	.72	-.34-3.81
Depressive Conflict Composite	0	.65	-.23-4.39	0	.59	-.25-2.75	0	.69	-.21-4.68
Constructive Conflict Composite	0	.49	-1.65-1.49	0	.56	-1.49-1.87	0	.51	-1.69-1.74

Note. NMQ=Negative Marital Quality; CES-D=Center for Epidemiological Studies Depression Scale.



Table 2

Intercorrelations of measures in path models

Variables	1	2	3	4	5	6	7	8	9	10
1. Wife NMQ W1	--									
2. Husband NMQ W1	.31***	--								
3. Wife Angry Conflict W2	.30***	.10	--							
4. Wife Depressive Conflict W2	.16**	.09	.40***	--						
5. Wife Constructive Conflict W2	-.24***	-.18**	-.69***	-.38***	--					
6. Husband Angry Conflict W2	.25***	.12*	.72***	.21***	-.54***	--				
7. Husband Depressive Conflict W2	.07	.01	.12*	.19**	-.11	.08	--			
8. Husband Constructive Conflict W2	-.24***	-.16**	-.55***	-.29***	.84***	-.64***	-.19**	--		
9. Wife CES-D W3	.18**	.18**	.13*	.34***	-.18**	.15*	.08	-.22**	--	
10. Husband CES-D W3	.07	.15***	.11	.10	-.06	.21***	.12*	-.25***	.25***	--

Note. NMQ=Negative Marital Quality; CES-D = Center for Epidemiological Studies Depression Scale.

\*  $p < .05$ .

\*\*  $p < .01$ .

\*\*\*  $p < .001$ .