Marital Communication Behaviour: The Role of Marital Satisfaction, Depressive Symptoms and Proximal Appraisals of Marital Problem-Solving Ability.

by

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Author's Declaration

I hereby declare that I am the sole author of this thesis. This is a true copy of the thesis, including any required final revisions, as accepted by my examiners.

I understand that my thesis may be made electronically available to the public.

Abstract

According to Bradbury and Fincham's contextual model of relationship conflict, communication behaviour is likely influenced by relationship factors at both the distal and proximal level. The overall goal of the present study was thus to build on previous research on marital conflict by examining the relations between relevant distal (i.e. marital satisfaction and depressive symptomatology), and proximal relationship variables (i.e. event-dependent expectancies and appraisals), and communication behaviour. Our specific aims were threefold: a) to explore the impact of marital satisfaction and depression on couples' expectancies for marital problem-solving discussions; b) to examine the effect of such expectancies on actual communication behaviour, after controlling for marital satisfaction and depressive symptoms; and c) to determine whether expectancies and actual communication behaviour influence couples' post-discussion appraisals, even after controlling for levels of depression and marital satisfaction. A total of 76 married and cohabitating couples across varying levels of marital satisfaction and depression participated in this study. All couples engaged in two marital problem-solving discussions, one in which the husband wanted change and the second in which the wife wanted change. Before engaging in these problem-solving discussions, spouses' expectancies for resolving the topic of conflict were assessed using both affective and cognitive items. After each discussion ended, participants also rated their cognitive and affective appraisals of the interaction. Results showed that higher levels of marital satisfaction predicted more positive expectancies (both affective and cognitive) for successful communication in the upcoming interactions. Depressive symptoms, however, were only found to impact couples' feelings in anticipation of the discussions, and not their cognitive expectancies. With regards to actual communication behaviour, after controlling for the effects of marital satisfaction and depressive

symptoms, more positive expectations for an upcoming conflict discussion were associated with less negative communication behaviours during the discussion. Spouses' cognitive post-discussion appraisals of the conflict interactions were positively associated with individuals' own expectancies going in to these discussions, as well as their partners' expectancies over and above the effects of depression and marital satisfaction. Finally, actual communication behaviour also influenced appraisals, such that those who spent more time during the conflict discussions engaging in positive behaviours and less time engaging in negative communication behaviours reported greater satisfaction with the discussions. Implications of these results for couples' therapy are briefly discussed.

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Introduction

There is a wide body of evidence supporting importance of the study of conflict resolution within romantic relationships. In particular, the ability to communicate with one's romantic partner in problem-solving or conflict situations has been linked to various aspects of wellbeing. For example, married couples' communication patterns during conflict discussions are related to their relationship satisfaction, the likelihood of marriage dissolution (Berns, Jacobson, & Gottman, 1999), the mental health of their children (Cummings & Davies, 2002), and levels of violence in the relationship (Karney & Bradbury, 1995). In fact, communication during marriage has even been shown to impact physical wellbeing. In their study of newlywed couples, Kiecolt-Glaser and colleagues (1996) found that wives' levels of stress hormones were related to the types of communication behaviours enacted during marital conflict. These stress hormone levels were in turn found to predict marital distress and marriage dissolution after a 10 month period (Kiecolt-Glaser, Bane, Glaser, & Malarkey, 2003). Since stress hormones play an important role in many aspects of physical wellbeing, including the regulation of immune function (Lovallo, 1997), these findings have implications for spouses' long-term physical health as well. Perceived communication patterns have also been shown to influence neuroendocrine reactions to marital conflict among older couples (Heffner et al., 2006). Thus, there is evidence that both perceived and actual marital communication patterns during times of conflict can have a significant impact on individual functioning.

In light of the above-mentioned findings, there has been considerable attention devoted to understanding conflict resolution in marriage. Furthermore, improving communication behaviour during conflict is a major component of most interventions designed for the treatment of marital discord among couples seeking therapy for relationship problems. Based on behavioural models,

the assumption guiding these interventions is that marital distress results from social skillsdeficits and can thus be reduced by teaching more adaptive communication behaviours (Stuart, 1969). Initially, most of the empirical investigations into marital conflict were also predominantly based on behavioural models and thus focused either on treatment outcome studies or examined communication behaviours (e.g., Gottman, Coan, Carrere, & Swanson, 1998). However, research on marital behaviours has consistently revealed a bidirectional association between behaviour and cognition, where not only have couples' perceptions been shown to predict behaviour (e.g. Gottman & Notarius, 2000), but both partner and own behaviour have been found to influence one's cognitive and emotional experience of a discussion (e.g. Bradbury & Fincham, 1991; Bradbury, Beach, & Fincham, 1996; Dimitri-Carlton, 1997; Verhofstadt, Buysse, Ickes, De Clercq, & Peene, 2005). Knowledge on the interdependence of cognitions and behaviour has contributed to increased interest in the intrapersonal or cognitive correlates of marital functioning (see Fincham, 1994 for a review).

Within the context of relationship conflict, Bradbury and Fincham (1991) have proposed a model that incorporates both cognitive and behavioural influences on relationship interactions. In their contextual model, the way that couples communicate during conflict is dependent upon how both partners interpret or appraise relationship events and discussions. However, these authors outlined an important distinction between cognitive appraisals made in a distal and proximal context. The distal context includes stable, trait-like characteristics or appraisals of a relationship, whereas the proximal context includes event-dependent, changeable appraisals of a specific situation. In terms of marital communication, relatively stable global evaluations of the marriage would represent distal appraisals. Proximal appraisals of relationship events, on the other hand, are more flexible and allow individuals to make immediate decisions as to how to

respond in a given situation. According to this contextual model, not only is communication behaviour influenced by proximal and distal cognitions, but proximal appraisals of relationship interactions are also influenced by distal cognitive factors (i.e. global evaluations of the marriage). For example, spouses' general satisfaction with their relationship is expected to influence the way that they interpret their partner's behaviour during a marital interaction.

In support of Bradbury and Fincham's model, previous research has shown that both distal and proximal cognitions exert unique influences on marital communication behaviour (e.g., Fincham, Gamier, Gano-Phillips, & Osborne, 1995; Fincham, 1994). At the distal cognitive level, the most commonly studied variable in marital conflict studies has been relationship satisfaction, which represents relatively stable global evaluations of one's relationship. Research has demonstrated a well-established, consistent and robust association between marital satisfaction and communication behaviour across many different ways of measuring communication (i.e. self-report and observational), as well as many different populations (i.e. clinical, community, and newly-wed) (see Karney & Bradbury, 1995 for a review). In addition to global relationship sentiments, depressive thoughts or schemas also function as important distal cognitions that influence marital interactions. In fact, as depression researchers have come to appreciate the role of interpersonal factors in this disorder (Gotlib & Beach, 1995), depressive symptoms have increasingly been studied with regards to marital conflict. For example, research shows that depressive symptoms are related to marital communication behaviours (e.g., Beach, Whisman, & O'Leary, 1994) and to attributions made during marital conflict discussions (e.g., Fincham & Bradbury, 1993).

In comparison to the distal context, there has been less emphasis on studying proximal cognitive factors relevant to marital conflict. However, it has been suggested that the proximal

context may be especially important to consider when studying marital communication, since it can provide immediate and direct changes in behaviour (Sanford, 2006). Appropriately, a number of event-dependent cognitions have also been identified among married couples and studied in relation to marital conflict resolution. One of these cognitions is expectancies regarding conflict interactions in marriage. Expectancies with regard to marital conflict are generally defined as beliefs about what is going to happen when a couple encounters conflict. These can include expectations of how one's spouse is likely to behave during future conflict, as well as predictions of one's own actions in upcoming conflict situations. Such expectancies have been thought to tap into a couple's relational efficacy, or a couple's belief that they can successfully resolve their disputes (e.g. Doherty, 1981). Although the broad definition of expectancies suggests that they could be viewed as a distal influence, expectancies for a specific situation are event-dependent and thus operate at the proximal level.

Although spousal efficacy expectations are often targeted in marital therapy, few studies have examined spouses' expectations of their own and their partner's behaviours in conflict discussions. Furthermore, despite Bradbury and Fincham's (1991) speculation that cognitive factors at the distal and proximal levels are interrelated, there is little research on the interplay between distal and proximal cognitions in the context of marital communication. Therefore, an overarching goal of the current study was to examine how marital conflict expectancies relate to both distal cognitions (e.g. relationship satisfaction and depressive thoughts), and to appraisals of interactions that have occurred. We also wanted to examine how these cognitive factors impact actual communication behaviour during marital conflict discussions. Before outlining our hypotheses, however, we briefly summarize some findings from the literature that have demonstrated links between global relationship evaluations, depressive symptoms, marital

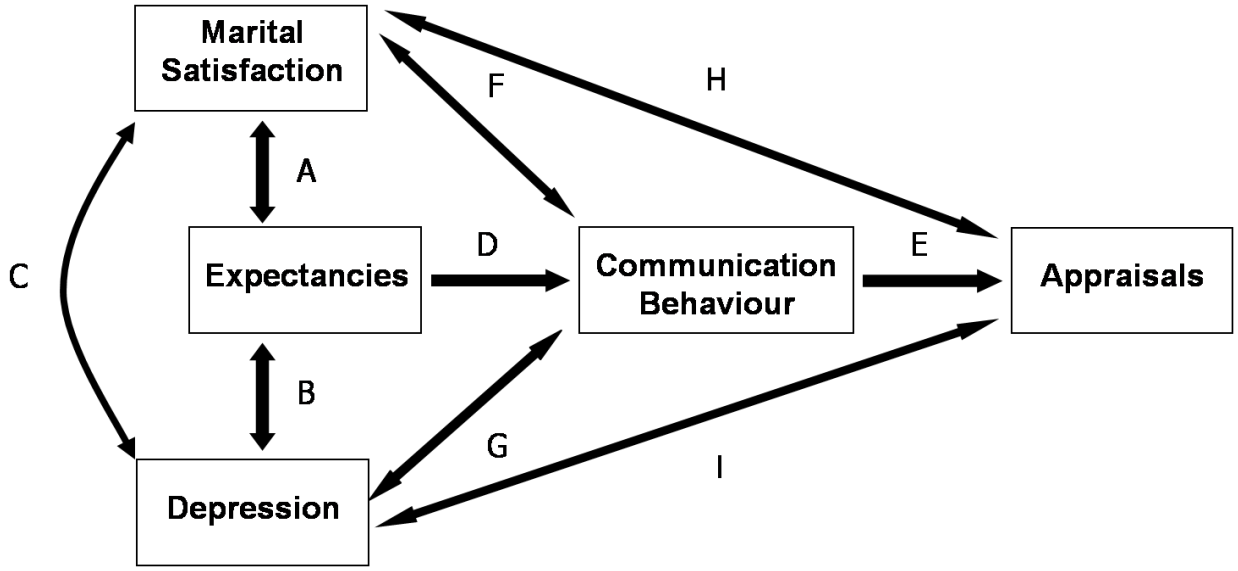
expectancies, communication behaviour, and appraisals of relationship interactions below. Figure 1 below outlines all of these associations in diagrammatic form.

Marital Expectancies and Distal Cognitions (Pathways A and B)

A number of studies have demonstrated an association between global relationship satisfaction and couples' expectations for their interactions (Fincham, Garnier, Gano Phillips, & Osborne, 1995; Vanzetti, Notarius, & Neesmith, 1992; McNulty & Karney, 2002; McNulty & Karney, 2004). Specifically, individuals who are unhappy with their relationships have been shown to expect more negative and less positive behaviours from their spouses during a problem discussion than those who are not maritally-distressed (Vanzetti et al., 1992). It has been proposed that partners' general beliefs about their relationships can influence how they interpret specific relationship events, a concept referred to as *sentiment override* (Weiss, 1980). According to the sentiment override hypothesis, the association between relationship satisfaction and conflict expectancies arises because individuals ignore relevant situational factors and instead reflect their general sentiment towards their partner when forming expectations of partner behaviour. In this way, the link between marital satisfaction and expectancies can be taken as evidence that global evaluations of one's relationship can affect proximal or event-dependent relationship cognitions.

In addition to the influence of relationship satisfaction, there is also some evidence that relationship expectancies may be predicted by depression (e.g., Jackman Cram, 2000). For example, depressed spouses have been found to be more likely than non-depressed spouses to believe that their partners cannot change, and to make dispositional attributions for their partner's negative behaviours (Uebelacker & Whisman, 2005; Gordon, Friedman, Miller, & Gaertner, 2005). Therefore, depressed individuals are more likely to have stable, negative

Figure 1. Conceptual Diagram of the Associations Between Target Variables (Footnote 1).



expectancies of their partner's conflict resolution abilities. However, most of the research on expectancies in relationships has ignored the impact of depression. This is particularly problematic in light of the fact that there is considerable evidence to suggest that marital dysfunction and depression tend to co-occur (Pathway C). Although the nature of the link between depression and marital distress is under debate, this robust association has been replicated in numerous samples (both community and clinical) and with a wide range of depressive symptoms (see review by Whisman, 2001). Several theories have been outlined to explain this association and the current data suggest that both marital dissatisfaction and depression exert reciprocal influences on each other over time (Davila, Karney, Hall, & Bradbury, 2003). To our knowledge, Jackman Cram (2000) has been the only one to date to examine the combined influence of marital satisfaction and depression on efficacy expectations regarding marital problem-solving ability. She found that maritally distressed couples reported lower levels of efficacy expectations for conflict resolution than couples who were not distressed. However, depression only appeared to have an effect on efficacy expectations when couples were not distressed. This suggests that depression may interact with marital distress to predict expectations of efficacy. One limitation of this study was that it separated participants into four groups by crossing depressed/non-depressed couples with distressed/non-distressed ones. However, since levels of depressive symptoms and marital distress vary along on a continuum, using arbitrary cut-off points to classify individuals as depressed/non-depressed or distressed/non-distressed may not be appropriate. Furthermore, since the study only included depressed wives, the results may not generalize to husbands. In addition, the potential influence of gender on the relation between depression and efficacy evaluations could not be discerned.

Impact of Conflict Resolution Expectancies on Communication Behaviour and Appraisals of Conflict Resolution (Pathways D and E)

Of the limited research that has examined specific marital conflict expectancies, studies have established a direct link between these expectancies and immediate behaviour for wives in particular (McNulty & Karney, 2002; Sanford, 2003; Sanford 2006). For example, Sanford (2003; 2006) found that expecting positive behaviour from the spouse during an interaction led to individuals engaging in better communication behaviour themselves, especially for wives. Furthermore, across several marital conflict discussions, not only did participants' pre-discussion expectancies correlate positively with their own communication behaviour, but wives' expectancies were associated with husbands' behaviour as well (Sanford, 2006). One explanation for this phenomenon could be that wives were able to use prior experience to form accurate predictions of how their partners were likely to behave during the discussions, resulting in a significant correlation between wives' expectations and husbands' actual communication behaviour. In addition, wives' own behaviour could have been informed by their partners' actions, as opposed to resulting directly from their own expectations. However, contrary to this hypothesis, Sanford (2006) found that participants' expectancies for how their partners would behave during conflict were actually better at predicting their *own* behaviour than their partners' behaviour. Specifically, when expectancies were used to predict partner's behaviour, participants were better able to predict their spouse's average behaviour across several discussions. However, when predicting their own behaviour, individuals were able to accurately predict event-specific changes in their own communication patterns. Thus, participants' expectations in this study were more immediately and directly associated with their own communication behaviour than their spouses' behaviour. Specifically, when expectancies were used to predict partner's behaviour,

participants were better able to predict their spouse's average behaviour across several discussions. However, when predicting their own behaviour, individuals were able to accurately predict event-specific changes in their own communication patterns. Thus, participants' expectations in this study were more immediately and directly associated with their own communication behaviour than their spouses' behaviour. This result could be explained by the fact that individuals' expectations simply reflected how they were intending to act during the discussions. Thus, communication behaviour resulted directly from spouses' plans for the discussions, and these plans informed their expectations.

The idea of a self-fulfilling prophecy, however, provides an alternative explanation for the association between expectancies and actual behaviour. From this perspective, individuals are motivated to confirm their expectations and they may accomplish this through *behavioural confirmation*. In other words, individuals are motivated to behave in ways that are consistent with their expectations (Rosenthal & Jacobson, 1968). The process of behavioural confirmation has received some empirical support in the context of relationships. For example, it has been observed that women who were expecting rejection from their partners during a discussion were more likely to engage in behaviours that correlated with negative feelings in their partner at the end of the discussion (Downey, Freitas, Michaelis & Khouri, 1998, as cited in McNulty & Karney, 2004). Therefore, there is evidence that expectations for relationship discussions can have a direct effect on how one behaves during those discussions.

Expectancies can be confirmed through the process of *perceptual confirmation* as well, whereby individuals may interpret events in a way that is consistent with their expectations (Miller & Turnbull, 1986). In support of the role of perceptual confirmation in intimate relationship functioning, past research has demonstrated that spouses' expectations for an

upcoming conflict discussion are positively associated with their appraisals of those discussions afterwards, even after controlling for behaviour (McNulty & Karney, 2002). Thus, marital expectancies for conflict resolution can influence not only immediate communication behaviour, but also appraisals of conflict interactions that have just taken place. Appraisals of problem-solving behaviour have in turn been shown to moderate the impact of actual communication behaviour on changes in marital satisfaction over time (Karney & Bradbury, 2000). These results highlight the need to study proximal cognitions regarding relationship conflict both before *and* after a conflict event occurs.

Limitations of Previous Expectancy Research

In sum, current research on married couples' expectancies regarding conflict situations suggests that these expectancies can have immediate and direct effects on communication behaviour and appraisals of marital interactions. Furthermore, spousal expectancies for conflict resolution are associated with marital satisfaction and levels of depression, and are often targeted in treatment for depressed couples. However, the studies conducted in this domain are limited in a number of ways. First of all, the majority of studies on the link between marital conflict expectancies and communication behaviour have failed to control for the effects of both depression and marital satisfaction. Therefore, the simultaneous influence of both marital distress and depression on marital problem-solving expectancies has rarely been examined. Second, it has been demonstrated that both marital distress (Berns, Jacobson & Gottman, 1999) and depression (Nelson & Beach, 1990) are also related to dysfunctional marital communication behaviour (Pathways F and G). As a result, it is difficult to determine whether the impact of expectancies on communication behaviour is above and beyond the effects of global relationship evaluations and depressive symptoms. In fact, Jackman Cram (2000) found that spouses'

efficacy expectations were unrelated to problem-solving behaviour after controlling for the level of depression and marital satisfaction.

Another limitation of previous research on marital conflict expectancies is that it has focused almost exclusively on cognitive expectations related to problem-solving, while ignoring affect related to the conflict discussions. When a person is faced with an upcoming conflict situation, the impending conflict is likely to evoke both feelings and thoughts in anticipation of the event. While these thoughts and feelings are probably highly related, one may be more variable than the other. For instance, affect in response to upcoming conflict interactions may be more prone to change than cognitive appraisals of what might happen from one discussion to the next. To date, few studies have examined married couples' affect specific to conflict discussions.

A further shortcoming of existing research is that most of the studies on pre-conflict discussion expectancies have not considered whether or not appraisals of the conflict change from before to immediately after a discussion. Changes in conflict-specific appraisals would suggest that couples are able to use their behaviour during the actual discussions to inform their interpretations. On the other hand, if post-discussion appraisals of a problem-solving event are completely predicted by pre-discussion expectations, then it is likely that individuals are ignoring relevant situational information when interpreting their discussions. Evidence from a previous study by McNulty and Karney (2002) suggests that both prior expectations and actual communication behaviour may have unique effects on appraisals of spousal problem-solving interactions. In addition, the authors found that prior expectations completely mediated the effect of global relationship satisfaction on post-discussion appraisals. However, this study did not control for the possible effects of depressive cognitions.

The Current Study

The overall goal of the present study was to examine the associations between marital communication behaviours and factors relating to distal (i.e. marital satisfaction and depressive symptoms) as well as proximal (i.e. event-specific expectancies and appraisals) cognitions and affect in the context of marital conflict resolution. Specifically, we focused on expectations for conflict resolution in marriage and aimed to build on previous research by addressing the limitations noted above. First of all, we simultaneously explored the relations between marital satisfaction, depressive symptoms, marital expectancies, and communication behaviours in the context of a problem-solving situation in which one spouse requests for change. In addition to examining expectancies, we also examined proximal appraisals of conflict resolution ability *after* the problem-solving discussion. Furthermore, pre-discussion expectancies and post-discussion appraisals were measured at both a cognitive and affective level (Footnote 2). This study also extends previous research by including both actor and partner effects for marital satisfaction, depression, and expectancies. In this way, we were able to explore not only how individuals are influenced by their own thoughts and feelings, but also how they are impacted by their spouses' thoughts and feelings. An additional strength of the current study is that communication behaviours were measured observationally, as opposed to relying on self-reports of conflict interactions. This is important because, in our study, we measured expectancies and appraisals through self-reports. Therefore, using a different method to measure behaviour reduces the chance of possible spurious correlations due to common method variance.

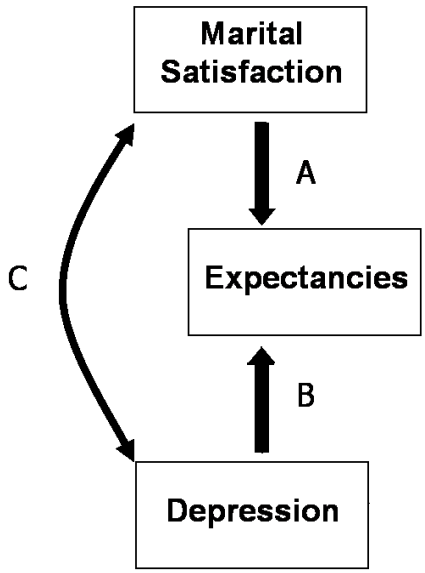
Using these methodological improvements, we attempted to test three key research questions in our study. The specific research questions are outlined below, along with our hypotheses.

1) Do depression and marital satisfaction interact to predict married couples' cognitive and affective expectancies of their ability to resolve conflict?

As mentioned previously, both marital satisfaction and depression have been independently associated with expectations for relationship interactions. However, relatively little is known about how relationship satisfaction and depression may interact to influence marital conflict appraisals, or whether the effects of one would persist when controlling for the other. In the only other study examining the simultaneous impacts of marital satisfaction and depression on marital conflict expectations, Jackman Cram (2000) found that distressed and depressed couples had lower efficacy expectations than depressed-only or distressed-only couples. This finding may be explained by the unique additive effects of both depression and relationship distress on expectancies. However, it is also possible that the deleterious impact of negative relationship beliefs associated with depression is *especially* salient for individuals who are experiencing relatively high levels of marital distress. Conversely, depressed individuals may be more sensitive to the negative relationship cognitions that arise from relationship distress. Thus, the impact of depression on relationship expectancies may depend on how satisfied individuals are with their romantic relationships, and/or vice versa. In line with these ideas, our hypotheses for the effects of relationship satisfaction and depressive symptomatology on expectations for marital problem-solving discussions were as follows (refer to Figure 2):

Hypotheses 1a&b. We expected both marital satisfaction and depressive symptomatology to have unique effects on expectancies. Specifically, we predicted that individuals with higher levels of depressive symptoms and lower levels of marital satisfaction would have more negative cognitive (Hypothesis 1a) and affective expectancies (Hypothesis 1b) regarding an upcoming discussion with their partner. On an exploratory level, we also investigated whether depressive

Figure 2. Diagram of the Expected Relations Between Marital Satisfaction, Depressive Symptoms, and Marital Conflict resolution expectancies.



symptoms and relationship satisfaction would interact to predict cognitive (Hypothesis 1c) and affective (Hypothesis 1d) expectancies.

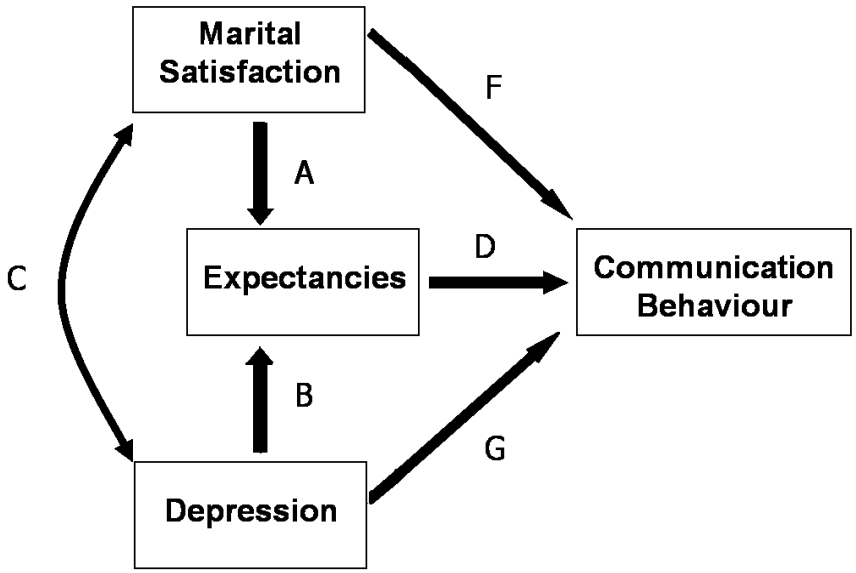
In addition, we wanted to examine the effects of a partner's marital satisfaction and depressive symptoms on one's own expectations of conflict resolution. Due to a lack of literature examining these partner effects, however, our investigations in this domain were exploratory and no specific hypotheses were generated.

2) Do expectancies for marital conflict resolution predict subsequent problem-solving behaviour above and beyond the influence of marital satisfaction and depression?

Although previous research has demonstrated a link between expectancies and behaviour, there are mixed results as to whether or not expectancies have an impact on behaviour above and beyond marital satisfaction and depression. For example, Jackman Cram (2000) did not find any effect of expectancies on marital communication behaviour after controlling for depression and relationship satisfaction. However, Sanford (2006) reported that marital problem-solving expectancies had a direct effect on behaviour over and above the effect of relationship satisfaction. Furthermore, in the literature on proximal *attributions* for marital conflict behaviour, there is evidence to suggest that the attribution-behaviour link may not vary according to level of depression or marital distress (e.g. Bradbury et al., 1996). Since there is a strong association between attributions and expectancies (e.g., Vanzetti, Notarious, & Neesmith, 1992), this finding suggests that expectancies may have a unique effect on behaviour that is unaccounted for by levels of marital satisfaction or depressive symptomatology. Consistent with this idea, we made the following predictions, which are summarized in Figure 3 below:

Hypotheses 2a&b. Pre-interaction cognitive expectancies (Hypothesis 2a) and affective expectancies (Hypothesis 2b) were expected to influence couples' behaviour during the problem-

Figure 3. Model Depicting the Proposed Associations Between Marital Satisfaction, Depression, Expectancies, and Communication Behaviour.



solving discussions, even after controlling for marital satisfaction and depression.

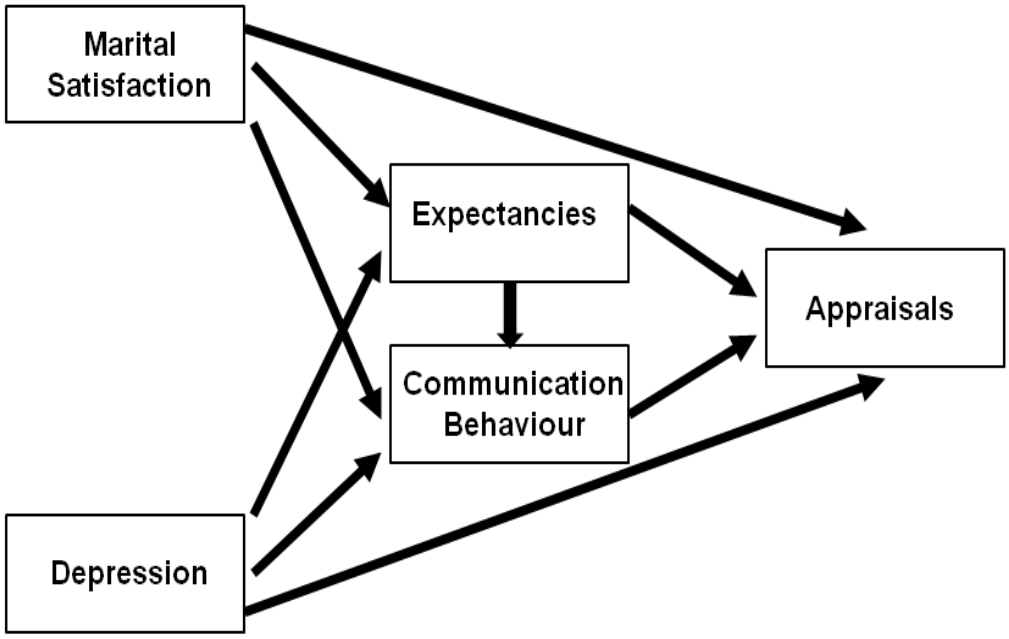
3) Are appraisals of marital conflict discussions predicted by behaviour during the discussions, even after controlling for problem-solving expectancies?

Marital satisfaction has been linked to post-discussion appraisals of relationship interactions (McNulty, 2002), where individuals who are more satisfied with their relationships tend to interpret interactions with their spouse in a more positive light. Similarly, depressive symptomatology has been found to influence the attributions that individuals make for their partner's behaviour (e.g., Uebelacker & Whisman, 2005), and these attributions can inform cognitive appraisals of relationship events (e.g., Vanzetti, Notarius & Neesmith, 1992). However, both communication behaviours and pre-interaction expectations have been found to predict appraisals of relationship interactions after they are over (McNulty & Karney, 2002). Therefore, previous research suggests that expectations for an upcoming marital conflict discussion may have an impact on spouses' thoughts and feelings after the discussion. The following hypotheses were generated on the bases of these findings and are represented in Figure 4:

Hypotheses 3a&b. Communication behaviour was expected to have an impact on individuals' cognitive post-interaction appraisals (Hypothesis 3a) and affective post-discussion appraisals (Hypothesis 3b), even after controlling for pre-interaction expectancies, marital satisfaction, and depression. Specifically, higher levels of positive (and lower levels of negative) communication behaviours during the problem-solving discussions were expected to lead to more positive appraisals of these discussions.

Hypotheses 3c&3d. Individuals' cognitive (Hypothesis 3c) and affective (Hypothesis 3d) pre-interaction expectancies were expected to influence one's own cognitive and affective post

Figure 4. Model Depicting the Proposed Associations Between Marital Satisfaction, Depression, Expectancies, and Communication Behaviour.



-interaction appraisals of the problem-solving discussions, respectively, over and above the effects of actual communication behaviour, marital satisfaction, and depression. Specifically, more positive expectancies prior to the conflict discussions were expected to be related to more positive appraisals of these discussions when they were over.

Once again, we also examined partner effects by looking at whether or not individuals' own expectancies would influence their partners' post-discussion appraisals. However, we made no predictions for these exploratory investigations.

It should be noted that in order to account for confounding effects due to topic choice, where people may behave differently when discussing an issue more important to them, we allowed both spouses to choose the topics for discussion. In order to examine the influence of topic choice, we included this variable as a covariate in all of our analyses (Footnote 3).

Method

Participants

A total of 76 heterosexual married and cohabitating couples participated in this study. All participants were recruited from the community from a mid-sized city in Ontario, Canada. Since the present study was part of a larger project examining the influence of depression and marital satisfaction on various relationship outcomes, an attempt was made to recruit a sample that varied in its levels of depressive symptoms as well as relationship satisfaction. A variety of methods were used to recruit study participants, including newspaper advertisements, letters to local mental health care providers, and fliers in local stores, social services agencies and hospitals. Prospective volunteers were contacted by a trained research assistant for screening.

In order to meet criteria for the study, subjects had to be: a) either married or living with a partner in a committed relationship, b) willing to participate in the study together with their romantic partners, and c) able to read and write in English. Individuals were excluded from participation if they met Diagnostic and Statistical Manual of Mental Disorders-IV (DSM-IV) criteria for: (1) past or present Bipolar Disorder; (2) past or present psychosis (including schizophrenia, schizophreniform disorder, schizoaffective disorder or delusional disorder); (3) organic brain syndrome; (4) substance dependence in the past 6 months; (5) intellectual disability; (6) anorexia or bulimia. The exclusionary criteria that we used are consisted with past research using depressive samples and are designed to ensure that the findings are specific to depression. In addition, those who were deemed to be at imminent risk of suicide, or were currently receiving psychotherapy were also excluded from the study under the rationale that these individuals' acute treatment needs would take precedence over their research participation.

As a result of the recruitment efforts, 92 couples communicated interest in the study. However, three of these couples were excluded because one of the relationship partners was unwilling to participate and an additional four couples were excluded because one partner either met criteria for bipolar disorder or endorsed psychotic symptoms during screening. Furthermore, nine couples missed their scheduled appointments, resulting in a total of 76 couples participating in the actual study. Of those who participated, three couples were excluded from the analyses due to missing data. Thus, the final sample contained a total of 72 married and cohabitating couples.

The mean age of participants in this final sample was 32.87 (*SD* = 11.26) for females and 35.86 (*SD* = 11.68) for males. Wives had completed 14.83 years (*SD* = 2.67) of schooling and made Cd $1576.25 per month (*SD* = $1378.80) on average. Husbands had completed 14.49 years (*SD* = 3.29) of education on average and had a mean monthly income of Cd $2427.72 (*SD* = $2015.11). In terms of ethnic identity, 84.7% of wives and 84.4% of husbands self-identified as Caucasian. Of the remaining wives, 1.3% identified as African-Canadian, 2.8% as Hispanic, 2.8% as Asian, 1.3% as First Nation, and 6.3% endorsed the "other" category. For the remaining husbands, 1.3% self-identified as Hispanic, 2.6% as Asian, 1.3% as First Nation, and 2.6% endorsed the "other" category. On average, couples in the sample had been together for 8.86 years (*SD* = 7.75) and had 1.48 (*SD* = 0.88) children.

Measures

Since this study was part of a larger project on marital satisfaction, mood, and communication, there were many additional measures collected that will not be discussed here. The measures relevant to the present study are as follows:

Screening Questionnaire. This instrument was administered over the telephone in order to assess whether prospective participants met all of the inclusion and exclusion criteria of the present study. All items from this questionnaire were taken from the Structured Clinical Interview for DSM-IV Axis I Disorders (SCID; First, Gibbon, Spitzer, Williams, 1997). Individuals deemed eligible for study participation completed the remaining measures in the laboratory.

Demographics Questionnaire. This measure was utilized to obtain basic information on basic demographic variables including sex, age, education level, occupational status, length of relationship, number of children, and other relevant information.

The Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996, see Appendix A). This 21-item self-report inventory assesses the presence and severity of depressive symptoms. Considerable psychometric evidence supports the concurrent and discriminant validity of this questionnaire as a measure of depression (Beck, Steer, & Garbin, 1988). In the present study, this measure demonstrated a high internal consistency (α = .90 for wives and .89 for husbands)

Dyadic Adjustment Scale (DAS; Spanier, 1976, see Appendix A). The DAS is a 32-item instrument that assesses spouses' perceptions of cohesion, consensus, satisfaction, and affective expression in their marriage. Higher scores on the DAS are indicative of greater marital satisfaction. The DAS has been widely used as a measure of general relationship satisfaction, demonstrating a high level of internal consistency across studies. It has also been shown to reliably differentiate distressed couples from those who are not distressed (Spanier, 1976). In the current study, the internal consistency of the DAS was high (α = .90 for husbands and .95 for wives).

Desired Changes Questionnaire (DCQ; Heavey, Lane, & Christensen, 1993, see Appendix A). The DCQ is a widely used instrument designed to help couples choose which topics they would like to discuss during the marital problem discussions. It lists twenty different areas that represent common domains of desired change in romantic partners (e.g., "Get together with my friends"; "Assume responsibility for finances."). For each area, participants rated how much they wanted their partner to change on a 7-point scale (1 = No change; 7 = Much more change). They were also asked to come up with at least two more issues they would like their partner to change. Participants' rankings of their three most important issues were used to select the topics of the conflict discussions. Research assistants chose topics that received the highest ratings while maintaining a rating discrepancy of 2 or less points between partners. The latter rule is based on past research (Christensen & Heavey, 1990) and is intended to reduce the confounding effect of topic importance across partners (i.e., ensuring that the observed behaviours across husband and wife topic are not due to different levels of importance placed on the topics selected).

Pre-Interaction Questions (see Appendix A). This measure was completed after participants were informed of the discussion topic, but prior to engaging in the actual problem-solving discussions. They included a list of 15 items of positive and negative affect designed to measure "anticipatory affect" in response to the conflict interactions. Participants were asked to provide ratings on these affective items while thinking about the upcoming problem-solving discussion they were about to engage in with their partner. In addition, there were 8 items asking individuals about their expectancies for the upcoming interaction, such as how likely they think it is that they will be able to resolve the problem being discussed and how satisfied they think that they will be with the outcome. These 8 items were adapted from the Post Discussion

Questionnaire (PDQ; Heavey, Layne & Christensen, 1993) and were used to assess participants' "cognitive expectancies" for the conflict discussions. All pre-interaction items were rated on a scale from 1 (Not at all) to 9 (Very much).

Communication Behaviours. Participants' problem-solving discussions were videotaped and later coded in order to obtain ratings of positive and negative communication behaviours. The codes were adapted from the Marital Interaction Coding System (MICS; Weiss & Summers, 1983) by collapsing the MICS codes into two categories: negative and positive communication behaviour. "Negative Communication Behaviour" was characterized by belligerent, domineering, contemptuous, hostile, frustrated, defensive, whining, or nagging behaviour. On the other hand, "Positive Communication Behaviour" was characterized by expressions of affection, validation, understanding, collaboration, humour and warmth. Codes were made using Noldus Observer 5.0 by recording onset and offset times for the target behaviours. These times were then converted into percentages, which represented the proportion of each discussion that individuals spent exhibiting either positive or negative communication behaviours. In order to obtain these behavioural ratings, a group of five coders was trained for 8 weeks until they reached a sufficiently high level of interrater reliability (i.e., a kappa of > .70) before they began coding actual data. In addition, coding meetings were held and reliability analyses were conducted weekly throughout the entire coding process in order to ensure that ratings remained fairly consistent. Reliability analyses on a random selection of 23% of all interactions revealed Kappa interrater agreements were acceptable and as follows: negative communication behaviours = .75; positive communication behaviours = .77).

Post-Interaction Questions (see Appendix A). These questions were very similar to the pre-interaction items, only they asked subjects to reflect back on each marital discussion after it

ended and rate how they thought it went. There were 15 affective items and 8 cognitive items, all of which are rated on a scale from 1 to 9. The affective and cognitive items were used to assess "reflective affect" and "cognitive appraisals" regarding the problem-solving discussions, respectively.

Procedure

When couples arrived at the laboratory, after jointly being informed about the purpose of the study and completing the informed consent procedures, each spouse was taken into a different room in order to fill out a series of self-report measures, including the BDI-II, DAS, and DCQ. Based on each spouse's responses to the DCQ, two topics of discussion were selected, with one topic representing an area that the wife would like her husband to change in, and the other topic reflecting the husband's desired area of change for his wife. The order of the husband and wife discussion was randomized so that half of the couples in our study first discussed the husband topic and the other half first discussed the wife topic of desired change.

Based on the randomization list, the assessors presented the couple with either the husband or wife topic first to ensure that both partners were comfortable discussing that issue with each other while being videotaped. Once both partner's consent was obtained, they were asked to answer the pre-interaction questions while keeping in mind the topic they were about to discuss. With the exception of the informed consent, debriefing, and marital discussion components of the study, wives and husbands completed all study questionnaires in different rooms so that they would not influence each others' responses. Once the pre-interaction questions were completed, husbands and wives were brought together in order to engage in their first marital problem-solving discussion. The discussions took place in front of cameras set up to videotape both spouses as they sat on chairs facing each other. They were then asked to return to

their respective rooms to complete the post-discussion questionnaire. The same procedure was then repeated for the other partner's topic. Participants were told to try and come to a solution for these requests for change within an 8 minute discussion. After the first discussion ended, husbands and wives were separated again while they completed the post-interaction questions on MediaLab. Next, participants were provided with some filler questionnaires, before being informed of their second discussion topic. At this time, both spouses completed the pre-interaction questions for the second problem-solving discussion. They were then reunited once again in order to engage in this second marital conflict discussion, which also lasted for 8 minutes. Finally, partners were split up one last time at the end of the second interaction in order to complete the last set of post-interaction questionnaires.

Results

Preliminary analyses

Table 1 presents the correlations between the major variables examined in the present study, including depression, marital satisfaction, pre-discussion cognitive expectancies, anticipatory affect, post-discussion cognitive appraisals, and reflective affect. For both wives and husbands, the pre-discussion expectancy and post-discussion appraisal measures were positively associated with relationship satisfaction and negatively associated with depressive symptoms. Furthermore, marital satisfaction and depression were found to be negatively correlated with each other.

There were no significant differences between wives and husbands in terms of depressive symptoms or levels of marital satisfaction, $t(69) = 0.78$, *ns,* and $t(69) = 1.27$, *ns*, respectively. The mean score on the DAS was 109.61 for wives ($SD = 16.92$) and 108.17 for husbands ($SD = 13.37$). In addition, the mean depression score for wives was 11.08 ($SD = 10.86$) and for husbands was 9.76 ($SD = 9.43$). Although there were no gender differences for depression or marital satisfaction, both negative communication behaviours and anticipatory affect were found to differ significantly by gender (Footnote 4). Specifically, wives engaged in more negative communication behaviours overall ($M = 9.01$; $SD = 12.44$) than husbands ($M = 6.27$; $SD = 10.00$), $t(269.54) = 2.05$, $p<.05$. Furthermore, wives felt worse about their upcoming conflict discussions ($M = 77.85$; $SD = 32.16$) than husbands did ($M = 104.77$; $SD = 18.19$), $t(219.04) = -8.63$, $p<.001$.

Anticipatory affect was also found to differ according to topic order, $t(240.05) = -9.29$, $p<.001$, with participants feeling significantly better in anticipation of the second problem-solving discussion ($M = 105.54$; $SD = 20.00$) compared to the first ($M = 77.07$; $SD = 30.35$).

Since we did not make any predictions regarding order of conflict discussion, we decided not to

Table 1

Correlations Among Major Study Variables

Variable	1	2	3	4	5	6
Dyadic Adjustment Scale		-.51**	.08	.55**	.45**	.33**
Beck Depression Inventory-II	-.36**		-.11	-.30**	-.25**	-.14**
Anticipatory Affect	.47**	-.34**		.01	-.00	.02
Cognitive Expectancies	.53**	-.32**	.57**		.50**	.64**
Reflective Affect	.39**	-.36**	.67**	.53**		.60**
Cognitive Appriasals	.29**	-.19*	.30**	.62**	.60**	

Note. Correlations for women (n = 69) are presented above the diagonal; correlations for men (n = 70) are below the diagonal.
*p<.05. **p<.01.

include topic order as a predictor in the analyses. However, the results also showed that there were higher levels of positive behaviour when one's own topic was being discussed (M = 4.08; SD = 7.20) as compared to the partner's topic (M = 1.13; SD = 2.84), $t(184.13) = 4.54$, $p<.001$. Thus, topic choice (i.e. whose topic is being discussed) was included as a covariate in all subsequent analyses.

Data Analytic Plan

The present study used a hierarchically structured design, with individuals nested within couples. In addition, each participant engaged in two conflict discussions, resulting in repeated observations for the variables of interest. Thus, the data were organized according to two levels: the level of the couple or dyad, and the level of the individual. Multilevel structures imply interdependence of data, which violates the assumption of standard regression procedures that observations are completely independent of each other. Therefore, we used mixed models analyses to examine our research questions. This enabled us to account for the interdependence of partner and repeated measures data, as well as to assess interactions between effects at different levels. We used separate models to address each of the three main research questions and analyzed all dependent variables individually. All models were structured according to couple number as the dyad variable and spouse and topic order as the repeated (individual) variables. In addition, all of the continuous variables included in the models were centered in order to reduce multicollinearity, as suggested by Aiken and West (1991). Due to heterogeneous variance of the repeated measures variables across time, the covariance type was specified as heterogeneous compound symmetry (Kenny, Kashy, & Cook, 2006).

Research Question 1 (Cognitive expectancies and anticipatory affect)

We hypothesized that both marital satisfaction and depressive symptoms would have unique effects on cognitive expectancies (Hypothesis 1a) and affective expectancies (Hypothesis 1b). In addition, we wanted to determine whether marital satisfaction and depression would interact to predict these expectancies (Hypotheses 1c and 1d). The model that was used to predict cognitive expectancies and anticipatory affect included four continuous predictor variables: actor depression, partner depression, actor relationship satisfaction, and partner relationship satisfaction. In addition, the categorical repeated measures variable, topic choice, was effects-coded (Own Topic = +1, Spouse's Topic = -1) and included as a covariate. Finally, all possible interactions between depressive symptoms (i.e. BDI-II scores) and marital satisfaction (i.e. DAS scores) were included as predictors (Footnote 5). The overall model can be represented by the following equation:

$$Y' = \beta_0 + ß_1U + ß_2V + ß_3W + ß_4X + ß_5Z + ß_6V*X + ß_7V*Z + ß_8W*X + ß_9W*Z$$

where Y' is the predicted value of the dependent variable (in this case, either cognitive expectancies or anticipatory affect); β_o represents the intercept; β_1 is the regression coefficient for the covariate variable topic choice (U); β_2 is the coefficient for actor marital satisfaction (V); β_3 represents the coefficient for partner relationship satisfaction (W); β_4 is for actor depressive symptoms (X); β_5 is for partner depressive symptoms (Z); β_6 represents the interaction between actor relationship satisfaction and actor depressive symptoms (V*X); β_7 is for the interaction between actor relationship satisfaction and partner depressive symptoms (V*Z); β_8 is for the interaction between partner relationship satisfaction and actor depressive symptoms (W*X); and β_9 is for the interaction between partner relationship satisfaction and partner depressive symptoms (W*Z).

Anticipatory Affect. (See Table 2). There was a significant main effect for actor relationship satisfaction, whereby individuals who were more satisfied with their relationships felt significantly better about an upcoming problem-solving discussion than those who were less satisfied, $\beta = .43$, $t(201.66) = 4.18$, $p<.0001$. Furthermore, there was a significant main effect for actor depressive symptomatology such that individuals who had higher levels of depressive symptoms felt worse about an upcoming conflict discussion with their partner than individuals who were less depressed, $\beta = -.43$, $t(149.38) = -3.13$, $p<.01$.

Cognitive Expectancies. (See Table 3). There was a main effect for actor relationship satisfaction, where greater relationship satisfaction predicted more positive cognitive expectations for an upcoming conflict discussion with one's partner, $\beta = .39$, $t(194.26) = 6.88$, $p<.0001$. No other significant main effects or interactions were found.

Research Question 2 (Positive and negative communication behaviour)

In our second hypothesis, we predicted that cognitive expectancies (Hypothesis 2a) and anticipatory affect (Hypothesis 2b) would influence communication behaviour, even after controlling for marital satisfaction and levels of depressive symptoms. We measured two types of communication behaviour: positive and negative. Due to the weak correlation between these two types of behaviour in our sample ($r = -.02$, $p<.05$) and in order to reduce the number of predictors for our relatively small sample size, we conducted separate analyses for positive and negative behaviour. The model for predicting both types of behaviour included the same four continuous predictors and categorical repeated measures variable described above. However, there were four additional continuous variables incorporated in this model (actor and partner cognitive expectancies, as well as actor and partner anticipatory affect). Due to the small sample

Table 2

Summary of Linear Mixed-Model Analysis with Anticipatory Affect as the Dependent Variable

Predictor	*Df*	*Coefficient*	*SE*	*T*
Topic Choice	130.60	0.31	1.08	0.29
Actor DAS	201.66	0.43	0.10	4.18***
Partner DAS	202.56	0.02	0.10	0.17
Actor BDI-II	149.38	-0.43	0.14	-3.13***
Partner BDI-II	144.77	-0.02	0.13	-0.18
Actor DAS x Actor BDI-II	138.69	0.00	0.00	0.10
Actor DAS x Partner BDI-II	182.39	0.00	0.01	0.41
Partner DAS x Actor BDI-II	182.21	-0.02	0.01	-1.72
Partner DAS x Partner BDI-II	139.63	-0.00	0.01	-0.55

***p<.001.

Table 3

Summary of Linear Mixed-Model Analysis with Cognitive Expectancies as the Dependent Variable

Predictor	*Df*	*Coefficient*	*SE*	*t*
Topic Choice	198.85	-0.49	0.53	-0.93
Actor DAS	194.26	0.39	0.06	6.88***
Partner DAS	194.69	0.01	0.06	0.15
Actor BDI-II	118.50	-0.12	0.08	-1.55
Partner BDI-II	114.31	-0.04	0.08	-0.58
Actor DAS x Actor BDI-II	113.30	0.00	0.01	0.74
Actor DAS x Partner BDI-II	150.68	-0.00	0.01	-0.38
Partner DAS x Actor BDI-II	149.94	-0.01	0.01	-0.86
Partner DAS x Partner BDI-II	108.96	0.00	0.00	1.27

***p<.001.

size and the number of main effects considered, no interactions were examined. Thus, the general model for the second aim of this study can be represented as:

$$Y' = \beta_0 + \beta_1 Q + \beta_2 R + \beta_3 S + \beta_4 T + \beta_5 U + \beta_6 V + \beta_7 W + \beta_8 X + \beta_9 Z$$

where Y' is the predicted value of the dependent variable (either positive or negative behaviour); β_o is the intercept; β_1 is the regression coefficient for topic choice (Q); β_2 is for actor marital satisfaction (R); β_3 is for partner relationship satisfaction (S); β_4 is for actor depressive symptoms (T); β_5 is for partner depressive symptoms (U); β_6 is for actor cognitive expectancies (V); β_7 is for partner cognitive expectancies (W); β_8 is for actor anticipatory affect (X); and β_9 is for partner anticipatory affect (Z).

Negative Behaviours. (See Table 4). There were significant main effects for both actor and partner depressive symptoms on negative behaviours. Specifically, individuals who had greater depressive symptoms engaged in significantly more negative communication behaviours during the problem-solving discussions with their partners, $\beta = .18$, $t(109.69) = 2.11$, $p<.05$. However, those individuals whose partners had higher levels of depressive symptoms actually engaged in fewer negative communication behaviours during the conflict discussions than individuals whose partners were less depressed, $\beta = -.22$, $t(105.29) = -2.63$, $p<.05$. In addition, there was a significant main effect for actor cognitive expectancies, where individuals who expected their discussions to go well used fewer negative forms of communication, $\beta = -.14$, $t(251.78) = -2.06$, $p<.05$. No other main effects or interactions were found to be significant.

Positive Behaviours. (See Table 5). Results revealed a significant main effect for topic choice, $\beta = 1.16$, $t(177.27) = 4.26$, $p<.0001$, indicating that individuals were more likely to engage in positive forms of communication during the problem-solving discussions if they were

Table 4

Summary of Linear Mixed-Model Analysis with Negative Behaviour as the Dependent Variable

Predictor	*Df*	*Coefficient*	*SE*	*t*
Topic Choice	187.96	0.63	0.56	1.12
Actor DAS	200.17	0.02	0.06	0.38
Partner DAS	188.37	-0.11	0.06	-1.69
Actor BDI-II	109.69	0.18	0.08	2.11*
Partner BDI-II	105.29	-0.22	0.08	-2.63*
Actor Anticipatory Affect	147.17	-0.01	0.02	-0.56
Partner Anticipatory Affect	155.00	0.03	0.02	1.41
Actor Cognitive Expectancies	251.78	-0.14	0.07	-2.06*
Partner Cognitive Expectancies	231.25	-0.06	0.06	-0.89

*p<.05.

Table 5

Summary of Linear Mixed-Model Analysis with Positive Behaviour as the Dependent Variable

Predictor	*Df*	*Coefficient*	*SE*	*t*
Topic Choice	177.27	1.16	0.27	4.26***
Actor DAS	205.35	0.05	0.03	1.87
Partner DAS	202.99	0.00	0.03	0.16
Actor BDI-II	150.59	0.05	0.03	1.58
Partner BDI-II	150.12	0.04	0.03	1.36
Actor Anticipatory Affect	156.15	-0.01	0.01	-0.67
Partner Anticipatory Affect	157.55	-0.01	0.01	-1.15
Actor Cognitive Expectancies	214.36	0.03	0.03	0.97
Partner Cognitive Expectancies	194.36	0.01	0.03	0.43

***p<.001

discussing their own topic for change, as opposed to their partners' topic. There were no other significant main effects or interactions.

Research Question 3 (Post-discussion cognitive appraisals and reflective affect)

For our third research question, we hypothesized that both communication behaviours (Hypotheses 3a & 3b) and pre-discussion expectancies (Hypotheses 3c & 3d) would have unique effects on post-discussion appraisals, even after controlling for the influence of marital satisfaction and depression. The model used to predict cognitive and affective appraisals of the discussions in order to investigate this third question included seven continuous predictors (actor relationship satisfaction, partner relationship satisfaction, actor depressive symptoms, partner depressive symptoms, actor cognitive expectancies OR anticipatory affect, partner cognitive expectancies OR anticipatory affect, and communication behaviour). Positive and negative communication behaviours were included separately, resulting in four sets of analyses. Furthermore, all two-way interactions between marital satisfaction and behaviour and between depressive symptoms and behaviour were considered. The categorical repeated measures variable representing topic choice was included as a covariate. This final model can be represented as:

$$Y' = \beta_0 + ß_1R + ß_2S + ß_3T + ß_4U + ß_5V + ß_6W + ß_7X + ß_8Z + ß_9R*Z + ß_{10}S*Z + ß_{11}T*Z + ß_{12}U*Z$$

where Y' is the predicted value of the dependent variable (either cognitive appraisals or reflective affect) β_o is the intercept; β_1 is the regression coefficient for topic choice (R); β_2 is for actor marital satisfaction (S); β_3 is for partner relationship satisfaction (T); β_4 is for actor depressive symptoms (U); β_5 is for partner depressive symptoms (V); β_6 is for either actor

cognitive expectancies or actor anticipatory affect (W); β_7 is for either partner cognitive expectancies or partner anticipatory affect (X); β_8 is for either positive or negative communication behaviour (Z); β_9 is for the interaction between actor marital satisfaction and behaviour (R*Z); β_{10} is for the interaction between partner marital satisfaction and behaviour (R*Z); β_{11} is for the interaction between actor depressive symptoms and behaviour (R*Z); and β_{12} is for the interaction between partner depressive symptoms and behaviour (R*Z).

Reflective Affect. (See Table 6 and Table 7). A significant effect emerged for actor relationship satisfaction when negative behaviour was included in the model, $\beta = .38$, $t(146.22) = 4.28$, $p<.0001$,whereby individuals who were more satisfied with their relationships felt better about the problem-solving discussions after they had ended. Furthermore, there was a main effect for negative behaviour, $\beta = -.39$, $t(183.80) = -4.15$, $p<.0001$. However, this effect was qualified by an interaction between negative behaviour and partner relationship satisfaction, $\beta = 0.02$, $t(184.42) = 2.70$, $p<.01$ (see Figure 5). Simple slopes analysis revealed that when one's partner was less satisfied with the relationship, then the more negative behaviours the couple engaged in during their conflict discussion, the worse they felt about that discussion afterwards ($z = -5.72$, $p<.05$). There was no such effect for individuals whose partners had high levels of marital satisfaction ($z = -0.78$, $p=0.43$).

Similar effects were found when the analyses were repeated using positive behaviours as a predictor. Once again, a significant effect for actor relationship satisfaction emerged ($\beta = .38$, $t(154.33) = 3.84$, $p<.0001$), where individuals who were more satisfied with their relationships felt better about the problem-solving discussions after they had ended. Similarly, there was a significant interaction between positive behaviour and partner relationship satisfaction, $\beta = -.04$,

Table 6

Summary of Linear Mixed-Model Analysis with Reflective Affect as the Dependent Variable (Including Negative Behaviours)

Predictor	*Df*	*Coefficient*	*SE*	*t*
Topic Choice	173.09	1.14	0.76	1.50
Actor DAS	146.22	0.38	0.09	4.28***
Partner DAS	150.78	0.12	0.09	1.38
Actor BDI-II	93.08	-0.12	0.13	-0.91
Partner BDI-II	99.69	-0.17	0.13	-1.30
Actor Anticipatory Affect	193.85	0.02	0.03	0.80
Partner Anticipatory Affect	165.24	0.02	0.03	0.74
Negative Behaviour	183.80	-0.39	0.09	-4.15***
Actor DAS x Negative Behaviour	216.64	-0.01	0.01	-1.54
Partner DAS x Negative Behaviour	184.42	0.02	0.01	2.70**
Actor BDI-II x Negative Behaviour	212.61	-0.01	0.01	-0.64

Partner BDI-II x Negative Behaviour	190.05	-0.00	0.01	-0.16

***p<.001. **p<.01.

Table 7

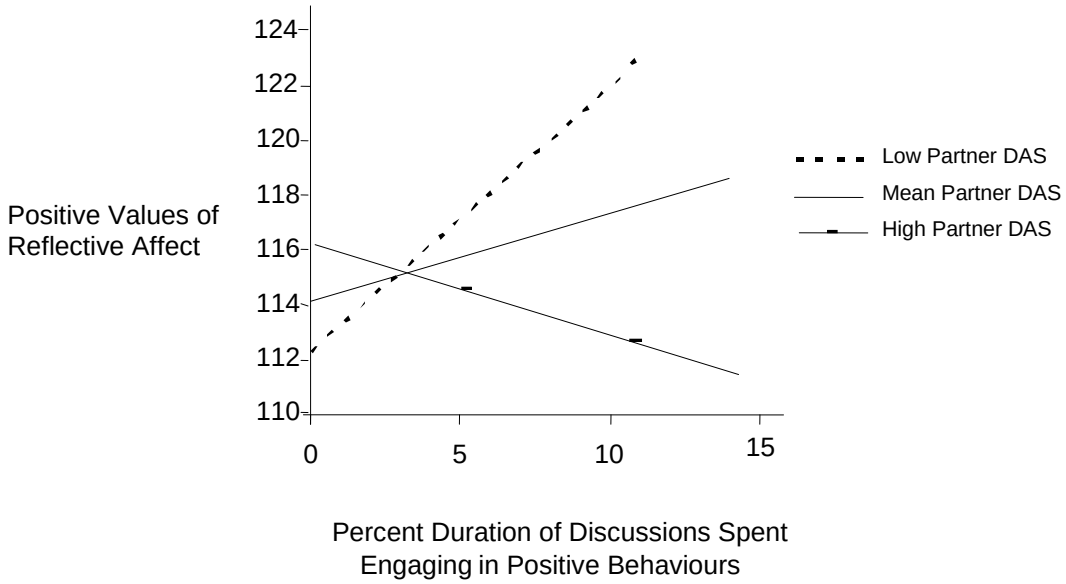
Summary of Linear Mixed-Model Analysis with Reflective Affect as the Dependent Variable (Including Positive Behaviours)

Predictor	*Df*	*Coefficient*	*SE*	*t*
Topic Choice	178.77	0.44	0.84	0.53
Actor DAS	154.33	0.38	0.10	3.84***
Partner DAS	157.19	0.13	0.10	1.36
Actor BDI-II	91.01	-0.25	0.14	-1.79
Partner BDI-II	94.74	-0.06	0.15	-0.44
Actor Anticipatory Affect	185.07	0.03	0.03	1.14
Partner Anticipatory Affect	159.39	0.01	0.03	0.48
Positive Behaviour	200.94	0.32	0.23	1.37
Actor DAS x Positive Behaviour	162.85	0.02	0.02	1.04
Partner DAS x Positive Behaviour	186.08	-0.04	0.02	-2.04*
Actor BDI-II x Positive Behaviour	137.74	-0.01	0.02	-0.57

Partner BDI-II x Positive Behaviour	166.82	-0.01	0.01	-0.46

***p<.001. *p<.05.

Figure 5. Reflective Affect as a function of Partner Relationship Satisfaction (DAS) and average duration of the problem-solving discussions spent engaging in Negative Communication Behaviours.



t(186.08) = -2.04, *p*<.05 (see Figure 6). Analysis of simple slopes showed that higher levels of positive communication behaviours were related to more positive feelings regarding the conflict discussions after they ended, but only for individuals whose partners were less satisfied with their relationships (z = 0.98, *p*<.05). This effect was not significant among individuals whose partners endorsed higher levels of relationship satisfaction, (*z* = -0.34, *p*=0.36).

Cognitive Appraisals. (See Table 8 and Table 9). In the model including negative behaviours as a predictor, there was a significant main effect for actor cognitive expectancies, β = .42, t(243.93) = 8.82, p<.0001. Specifically, individuals who expected their discussions to go well beforehand also rated these discussions more positively after they were over. Likewise, there was a main effect for partner cognitive expectancies, β = .15, *t*(243.51) = 3.21, *p*<.001. In this case, individuals rated their discussions more positively after they ended if their *partners* expected the discussions to go well beforehand. There was also a main effect for negative communication behaviour, such that participants who engaged in more negative behaviours during their problem-solving discussions viewed these discussions in a more negative light after they were over, β = -.19, *t*(237.20) = -4.00, *p*<.0001.

All of the effects mentioned above were also obtained when the analyses were conducted using positive communication behaviours in place of negative behaviours. Again, there was a significant main effect for actor cognitive expectancies (β = .38, *t*(154.33) = 3.84, *p*<.0001), with participants who had more positive expectancies for their conflict discussions reporting greater satisfaction with these discussions after they ended. In addition, there was a main effect for partner cognitive expectancies (β = .16, *t*(240.15) = 3.41, *p*<.001) such that individuals were more satisfied with the discussions when they were over if their partners expected the

Figure 6. Reflective Affect as a function of Partner Relationship Satisfaction (DAS) and average duration of the problem-solving discussions spent engaging in Positive Communication Behaviours.

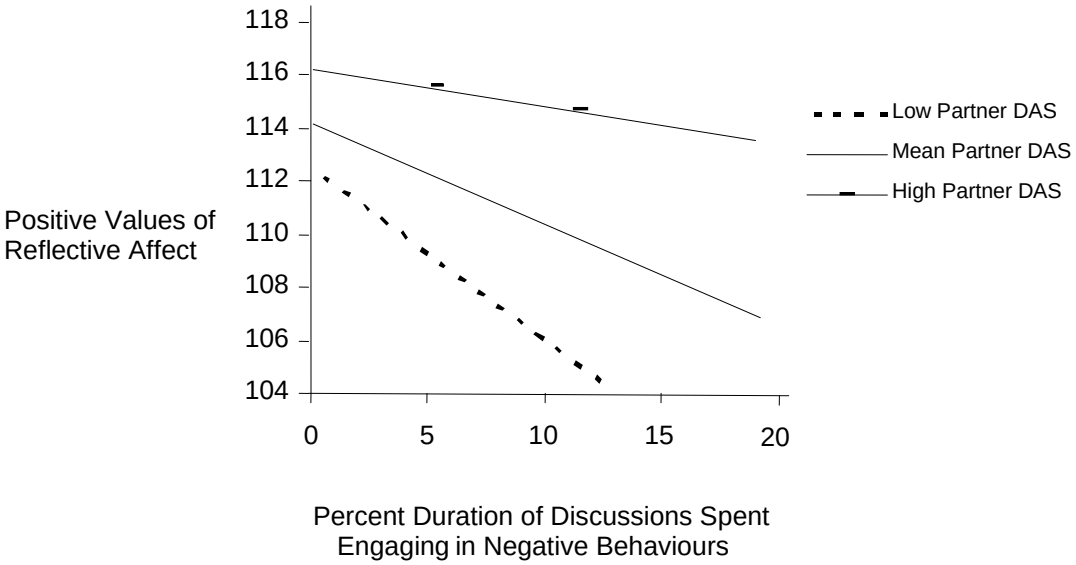


Table 8

Summary of Linear Mixed-Model Analysis with Cognitive Appraisals as the Dependent Variable (Including Negative Behaviours)

Predictor	*Df*	*Coefficient*	*SE*	*t*
Topic Choice	183.09	0.11	0.40	0.29
Actor DAS	206.69	-0.04	0.05	-0.84
Partner DAS	200.08	0.02	0.05	0.44
Actor BDI-II	113.68	0.07	0.06	1.25
Partner BDI-II	110.70	-0.03	0.06	-0.56
Actor Cognitive Expectancies	243.93	0.42	0.05	8.82***
Partner Cognitive Expectancies	243.51	0.15	0.05	3.21***
Negative Behaviour	237.20	-0.19	0.05	-4.00***
Actor DAS x Negative Behaviour	230.16	-0.00	0.00	-0.35
Partner DAS x Negative Behaviour	199.93	0.00	0.00	0.42
Actor BDI-II x Negative Behaviour	238.31	0.00	0.00	0.48

Partner BDI-II x Negative Behaviour	192.93	0.00	0.01	0.37

***p<.001.

Table 9

Summary of Linear Mixed-Model Analysis with Cognitive Appraisals as the Dependent Variable (Including Positive Behaviours)

Predictor	*Df*	*Coefficient*	*SE*	*t*
Topic Choice	187.23	-0.38	0.43	-0.87
Actor DAS	209.00	-0.05	0.05	-1.17
Partner DAS	210.54	0.03	0.05	0.63
Actor BDI-II	110.91	0.04	0.06	0.64
Partner BDI-II	114.16	-0.00	0.06	-0.03
Actor Cognitive Expectancies	245.06	0.46	0.05	9.74***
Partner Cognitive Expectancies	240.15	0.16	0.05	3.41***
Positive Behaviour	234.13	0.34	0.12	2.90***
Actor DAS x Positive Behaviour	164.49	0.01	0.01	0.66
Partner DAS x Positive Behaviour	202.11	-0.02	0.01	-1.44
Actor BDI-II x Positive Behaviour	167.65	-0.00	0.01	-0.09

Partner BDI-II x Positive Behaviour	178.91	-0.01	0.01	-1.97

***p<.001.

discussions to go well beforehand. Finally, there was a main effect for communication behaviour, indicating that participants who engaged in more positive behaviours during the discussions were more satisfied with those discussions when they ended, $\beta = .34$, $t(234.13) = 2.90$, $p<.001$.

Discussion

The overall goal of the current study was to examine, in the context of marriage, the associations between the distal variables of relationship satisfaction and depressive symptoms, and proximal event-specific expectancies for conflict resolution. In addition, we wanted to determine how these variables would influence behaviour during a conflict discussion, as well as appraisals of the discussion once it ended. Within this broader framework, we had three sets of research questions. First, we investigated the impact of both marital satisfaction and depression on couples' marital problem-solving expectancies. Second, we wanted to determine whether these event-specific expectancies would impact immediate communication behaviour, after controlling for levels of marital satisfaction and depression. Finally, we investigated whether these appraisals would be predicted by couples' expectancies going into the conflict discussion and by actual communication behaviour, after depression levels and marital satisfaction were controlled for. Using multilevel modelling, we were able to find support for many of our hypotheses within each research question.

Our first question focused on whether marital satisfaction and depression would predict individual's expectancies for conflict resolution. We hypothesized that individuals who had high levels of depressive symptoms and low levels of marital satisfaction would have more negative expectancies (both cognitive and affective) for their upcoming conflict discussions (Hypotheses 1a and 1b). In addition, we predicted that marital satisfaction and depressive symptoms may interact to influence cognitive and affective expectancies (Hypotheses 1c and 1d). Contrary to our predictions, we did not find an interaction between depression and marital satisfaction. However, consistent with findings reported by Vanzetti et al. (1992) and Fincham et al. (1995), we found that marital satisfaction predicted individuals' cognitive expectancies and anticipatory

affect regarding upcoming conflict discussions with their partner. Specifically, participants who were more satisfied with their relationships expected to communicate more positively during the upcoming problem-solving discussion and expected to be more satisfied with their marital problem-solving discussions. In addition, higher levels of marital satisfaction were associated with more positive affect in anticipation of the problem-solving discussions. Depression was not found to impact cognitive expectancies once marital satisfaction was controlled for. However, it did have an influence on anticipatory affect, such that individuals with higher levels of depressive symptoms felt worse about their upcoming conflict discussions. Furthermore, *partner* marital satisfaction and depression were not found to influence one's own expectancies specific to marital conflict discussions. Thus, before engaging in a marital problem-solving discussion, individuals' expectations for the discussion were mostly predicted by their own levels of marital satisfaction.

In our second research question, we examined whether expectancies for conflict resolution would go on to influence communication behaviour, even after controlling for the more global influence of marital satisfaction and depressive symptoms. We predicted that expectancies would have a unique effect on actual communication behaviour, above and beyond the possible influence of relationship satisfaction and depression (Hypothesis 2). With respect to positive communication, our results showed that positive behaviours were not predicted by global evaluations of the marriage, depressive symptoms, or expectancies. In fact, the only predictor for positive behaviours was the topic being discussed; participants engaged in more positive behaviours when they were negotiating their own topic for change than when they were responding to their partner's request for change. One reason for this finding could be that participants were more invested in negotiating the changes that they wanted, and thus were more

likely to behave in an affable manner during their own topics in order to persuade their partners to change. With regards to *negative* communication, however, we found that both actor and partner depression influenced the amount of negative communication participants engaged in during the problem-solving discussions (Footnote 6). Predictably, those who endorsed more depressive symptoms engaged in more negative forms of communication. This result is consistent with previous findings that depressed individuals engage in a variety of aversive interpersonal behaviours, such as being hostile towards or disrespecting their partners during communication (see Gotlib & Beach, 1995 for a review). Interestingly, however, those whose partners endorsed more depressive symptoms were less likely to engage in negative behaviours during the marital conflict discussions. Perhaps individuals whose partners were depressed were cognizant of their spouses' sensitivity to negative remarks and were thus more careful when communicating during the conflict discussions. Alternatively, individuals with a depressed spouse may have attributed the causes of their spouse's behaviour towards the illness. As a result, according to Hooley's (1987) "symptom-controllability" model, these individuals may have been less critical of their spouse's actions during the problem-solving discussions because they were deemed to be outside their partner's control.

With respect to the role of expectancies in predicting behaviour, there was a main effect for actor cognitive expectancies on negative communication. Overall, more positive expectations for an upcoming conflict discussion were associated with less negative communication behaviours during the discussion. Therefore, in support of Hypothesis 2a, cognitive expectancies were found to have a unique effect on communication behaviour, even after controlling for marital satisfaction and depression in both partners. In fact, we did not find any effect of marital satisfaction on behaviour when it was included together with depression and expectancies.

Similarly, Sanford (2006) found that the effect of marital satisfaction on couples' communication behaviour during conflict was weaker than the effect of conflict-specific expectancies. However, contrary to Hypothesis 2b, we did not find any effect for the influence of anticipatory affect on subsequent behaviour. Thus, our results suggest that thoughts about what is going to happen during an upcoming conflict discussion may play a greater role in influencing behaviour during that discussion than feelings about how it will go. Furthermore, our findings imply that cognitive expectancies for marital conflict resolution may have a more direct effect on communication behaviour than global evaluations of relationship quality or global depressive cognitions. An alternative explanation to note here for the association between expectancies and behaviour is that individuals are fairly good at predicting what is going to happen during a marital discussion. Therefore, instead of expectancies directly causing subsequent behaviour, expectations merely reflect accurate predictions for behaviour. Nevertheless, the strong association found between participants' pre-discussion expectancies and communication behaviour highlights the importance of expectancies in marital conflict resolution.

For our final research question, we explored participants' interpretations or appraisals of the marital problem-solving discussions. Understandably, individuals use their actual communication behaviour to evaluate their relationship interactions. However, couples' appraisals of their discussions have also been shown to depend on what they expected to happen immediately prior to these discussions. In addition, on a more global level, both relationship satisfaction and depression can influence how one interprets a marital discussion. In light of all of these influences, we wanted to determine whether participants' post-discussion appraisals of their conflict interactions would still be informed by their pre-discussion expectancies after behaviour was accounted for. Furthermore, we wanted to investigate whether event-specific

factors such as expectancies and communication behaviour would matter if the global influences of marital satisfaction and depression were controlled for. We predicted that both communication behaviour (Hypotheses 3a & 3b) and pre-discussion expectancies (Hypotheses 3c & 3d) would have unique effects on participants' post-discussion appraisals, even after controlling for the distal effects of marital satisfaction and depressive symptomatology.

As predicted, we found that cognitive appraisals of the conflict discussions were influenced by individuals' own expectancies going in to these discussions, as well as their partners' expectancies. Specifically, individuals who expected to have more satisfying problem-solving discussions before they began were also more likely to rate these discussions as satisfying when they over. This effect of expectancies emerged even though communication behaviour was controlled for in the analyses. Thus, it appears that participants' post-discussion appraisals were not solely based on actual behaviour during the discussions. This suggests that participants may have been engaging in perceptual confirmation of their expectancies by interpreting their conflict discussions in a manner consistent with their expectations. Similarly, when partners' expectancies for an upcoming problem-solving discussion were more positive, individuals also rated that discussion more positively when it was over.

It should be noted that no effects were found for the influence of anticipatory affect on post-discussion reflective affect. Thus, Hypotheses 3 was only partially supported in that cognitive expectancies predicted cognitive appraisals (Hypothesis 3c), but affective expectancies did not predict affective post-discussion appraisals (Hypothesis 3d).

Despite the fact that pre-discussion expectancies predicted post-discussion appraisals, a significant amount of the variance in appraisals was unaccounted for by expectancies. Consistent with previous findings, some of this variance was accounted for by actor marital satisfaction.

Specifically, higher levels of relationship satisfaction were associated with more satisfaction with the problem-solving discussions after they ended. Similarly, once anticipatory affect was controlled for, higher levels of relationship satisfaction predicted more positive affect regarding the conflict discussions when they were over. There was no effect of depression, as well as no significant interaction between depression and marital satisfaction to predict post-discussion appraisals. However, we did find support for Hypotheses 3a and 3b, as communication behaviours were also found to predict appraisals of the marital problem-solving discussions once expectancies were controlled for.

Those who spent more time during the conflict discussions engaging in positive behaviours and less time engaging in negative communication behaviours were more satisfied with the discussions afterwards. In addition, greater positive behaviours and less negative behaviours exhibited during the conflict discussions were associated with better feelings about the discussions immediately after they ended. However, there was an interesting interaction here, where communication behaviour only predicted post-discussion reflective affect for those individuals whose partners were *less satisfied* with their marriage. While the reasons for such an interaction are unclear, one explanation could be that the risks and/or benefits of discussing marital conflict were greater for individuals whose partners were unhappy with their relationship. As a result, individuals with less satisfied partners may have been more reactive to their spouses' behaviours during the discussions than those whose partners were more satisfied with their marriage. This increased responsiveness to one's communication behaviour could in turn have created a stronger association between communication behaviour during the discussion, and feelings about the conflict discussion afterwards. Therefore, our explorations on partner effects revealed that partner marital satisfaction had an influence on post-discussion affective appraisals.

In addition, our results showed that people do use actual communication behaviour to alter their appraisals of a marital conflict discussion from before to after. Furthermore, communication behaviour was found to influence post-discussion appraisals above and beyond satisfaction, depression status, and specific pre-discussion expectations. Nevertheless, a significant amount of the variance in post-discussion appraisals was unaccounted for by communication behaviour. As mentioned above, some of this variance was explained by the unique influence of expectancies on appraisals. Therefore, although participants likely used actual behaviour to evaluate their marital discussions, their appraisals may also have been slightly altered to match what they thought was going to happen in the discussions beforehand.

It should be noted that topic choice did not predict any of our dependent variables of interest, other than positive communication behaviour. Thus, our findings do not seem to depend on whether individuals were negotiating their own topic for change, or whether they were responding to their spouses' requests for change in the problem-solving discussions. In addition, none of the effects reported above were moderated by the gender of the spouse. This seems to be in contrast to previously reported findings that the link between specific expectancies and behaviour is stronger for wives (Sanford, 2003; 2006). However, Sanford (2006) did find that changes in attributions and expectancies were linked to changes in communication behaviour for husbands as well as wives. Thus, husband expectancies do seem to matter when it comes to behaviour, even if wives are more influenced by these event-dependent cognitions. Since we did not have enough power in the current study to control for gender in all of our analyses, the possible impact of gender on each of our findings should be explored further in future studies. Overall, the results from the current study suggest that how people *feel* about an upcoming conflict discussion with their spouse depends on both their global impressions of their

relationship, and their level of depressive symptomatology. However, after controlling for depression, marital satisfaction seems to drive *cognitive* expectancies for successful conflict resolution during a marital problem-solving discussion. Furthermore, affective and cognitive expectations specific to a problem-solving discussion were found to predict subsequent communication behaviour after controlling for global evaluations of one's marriage (i.e. relationship satisfaction) and more global negative affect (i.e. depression). Thus, immediate cognitions and affect were found to have an impact on immediate communication behaviour in conflict situations, over and above the influence of distal relationship cognitions and affect. In addition, participants' behaviour during their conflict discussions influenced their appraisals of these discussions after they ended. This effect emerged even when global relationship evaluations, levels of depression, and pre-discussion expectancies were controlled for. Specifically, although participants' post-discussion appraisals were influenced by what they expected to happen and what their partners expected to happen, they were also able to use actual communication behaviour to inform their appraisals or interpretations of their discussions. This result is promising in that it implies that appraisals of marital conflict resolution discussions are at least partially based on how couples actually communicate. Furthermore, these appraisals can go on to influence expectations, and in turn behaviour, for future discussions. Thus, in summary, the findings of the present study highlight the role of both distal and proximal factors in marital communication during conflict.

Taken together these results imply that, although depression and global evaluations of one's marriage influence marital communication patterns, spouses' situation-specific expectancies can also have a significant unique impact on how they communicate. Furthermore, expectancies seem to influence how couples interpret their interactions, above and beyond actual

communication behaviour during these interactions. Therefore, as has been suggested by others, our findings support the inclusion of specific expectancies for marital conflict resolution as targets for intervention with distressed couples (whether or not the spouses are depressed) (Sanford, 2006; Fincham, Harold & Gano Phillips, 2000; Doherty, 1981). The fact that we found partners' cognitive expectancies leading into a conflict had an impact on one's post-discussion interpretation of that conflict suggests that the expectancies for both partners may be useful avenues for intervention. Conflict resolution expectancies seem to be especially useful early intervention points for therapy because they can be easily accessed by asking individuals to note their thoughts and feelings prior to a conflict discussion. In addition, event-specific expectancies may be more amenable to change than longstanding symptoms of depression, relationship dissatisfaction, or poor communication skills.

There are a number of limitations that should be kept in mind when drawing conclusions from the present findings. First of all, since we are not aware of any other study that has examined all of these variables together, our findings need to be replicated. Furthermore, although we proposed certain directional relationships among variables, this study was correlational in nature. Therefore, we can't make any clear conclusions about causation or directional association. This point is underscored by the fact that our sample size was too small for us to analyze our data in a single model using path analysis or structural equation modelling procedures. Instead, we conducted separate sets of hierarchical multiple regression analyses. In order to test our general assumption that marital satisfaction and depression influence expectancies, which in turn influence behaviour, these variables should ideally be analyzed simultaneously in a single model. In this way, alternative competing models could also be tested and compared. One example of an alternative model would be one in which previous

communication behaviour informs people's expectations for conflict resolution, which in turn contribute to relationship satisfaction. This second model may be particularly relevant for couples that have been together for a long period of time, or for long-standing, intractable topics of conflict.

Another limitation of this study is that our design covered a brief window of time from immediately before to immediately after specific conflict discussions. Thus, we do not have any information about how the relationships between conflict resolution appraisals and communication behaviour change over long periods of time. Such an investigation could be pursued by future longitudinal studies. With regards to the generalizability of the current findings, we would also like to note that our sample was comprised of primarily non-depressed and non-distressed couples. In addition, we studied communication patterns among these couples in a laboratory context and asked them to communicate specifically in a problem-solving situation where one spouse requested change from the other and the goal was to come to a resolution. Therefore, our findings may not be applicable to couples who are more depressed or distressed, or to conflict discussions that are not constrained in the same way.

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Appendix A

Measures

Beck Depression Inventory-II

(Beck, Steer & Brown, 1996)

Instructions:

Please read each group of statements carefully, then pick out the **one statement** in each group which best describes the way you have been feeling during the **past week, including today**. Fill in the circle next to the statement you have picked.

If several statements in the group seem to apply equally well, simply fill in the circle next to the statement which has the largest number. Be sure that you do **not** fill in more than one circle for Item 16 (change in sleeping pattern) and Item 18 (change in appetite).

	1. Sadness		**2. Pessimism**
O	I do not feel sad. (0)	O	I am not discouraged about my future. (0)
O	I feel sad much of the time. (1)	O	I feel more discouraged about my future than I used to be. (1)
O	I am sad all the time. (2)	O	I do not expect things to work out for me.(2)
O	I am so sad or unhappy that I can't stand it.(3)	O	I feel my future is hopeless and will only get worse. (3)
	3. Past Failure		**4. Loss of Pleasure**
O	I do not feel like a failure.(0)	O	I get as much pleasure as I ever did from the things I enjoy. (0)
O	I have failed more than I should have.(1)	O	I don't enjoy things as much as I used to. (1)
O	As I look back, I see a lot of failures. (2)	O	I get very little pleasure from the things I used to enjoy. (2)
O	I feel I am a total failure as a person. (3)	O	I can't get any pleasure from the things I used to enjoy. (3)
	5. Guilty Feelings		**6. Punishment Feelings**
O	I don't feel particularly guilty. (0)	O	I don't feel I am being punished. (0)
O	I feel guilty over many things I have done or should have done. (1)	O	I feel I may be punished. (1)
O	I feel quite guilty most of the time. (2)	O	I expect to be punished. (2)

O	I feel guilty all of the time. (3)	O	I feel I am being punished. (3)
	7. Self Dislike		**8. Self Criticalness**
O	I feel the same about myself as ever.(0)	O	I don't criticize or blame myself more than usual. (0)
O	I have lost confidence in myself.(1)	O	I am more critical of myself than I used to be. (1)
O	I am disappointed in myself. (2)	O	I criticize myself for all of my faults.(2)
O	I dislike myself. (3)	O	I blame myself for everything bad that happens.(3)
	9. Suicidal Thoughts or Wishes		**10. Crying**
O	I don't have any thoughts of killing myself.(0)	O	I don't cry any more than I used to.(0)
O	I have thoughts of killing myself, but I would not carry them out.(1)	O	I cry more than I used to.(1)
O	I would like to kill myself.(2)	O	I cry over every little thing.(2)
O	I would kill myself if I had the chance.(3)	O	I feel like crying but I can't.(3)
	11. Agitation		**12. Lost of Interest**
O	I am no more restless or wound up than usual.(0)	O	I have not lost interest in other people or activities.(0)
O	I feel more restless or wound up than usual.(1)	O	I am less interested in other people or things than before.(1)
O	I am so restless or agitated that it's hard to stay still.(2)	O	I have lost most of my interest in other people or things.(2)
O	I am so restless or agitated I have to keep moving or do something.(3)	O	It's hard to get interested in anything.(3)
	13. Indecisiveness		**14. Worthlessness**
O	I make decisions about as well as ever.(0)	O	I do not feel I am worthless.(0)
O	I find it more difficult to make decisions than usual.(1)	O	I don't consider myself as worthwhile or useful as I used to.(1)
O	I have much greater difficulty in making decisions than I used to.(2)	O	I feel more worthless as compared to other people.(2)
O	I have trouble making any decisions.(3)	O	I feel utterly worthless.(3)
	15. Loss of Energy		**16. Change in Sleeping Pattern**
O	I have as much energy as ever.(0)	O	I have not experienced any change in my sleeping pattern.(0)

O I have less energy than I used to have.(1)
O I don't have enough energy to do very much.(2)
O I don't have enough energy to do anything.(3)

O I sleep somewhat more than usual.(1a)
O I sleep somewhat less than usual.(1b)

O I sleep a lot more than usual.(2a)

O I sleep a lot less than usual.(2b)

O I sleep most of the day.(3a)

O I wake up 1-2 hours early and can't get back to sleep.(3b)

17. Irritability

O I am no more irritable than usual.(0)
O I am more irritable than usual.(1)
O I am much more irritable than usual.(2)
O I am irritable all the time.(3)

18. Change in Appetite (mark one)

O I have not experienced any change in my appetite.(0)
O My appetite is somewhat less than usual.(1a)
O My appetite is somewhat greater than usual.(1b)
O My appetite is much less than before.(2a)
O My appetite is much greater than usual.(2b)
O I have no appetite at all.(3a)

19. Concentration Difficulty

O I can concentrate as well as ever.(0)
O I can't concentrate as well as usual.(1)
O It's hard to keep my mind on anything for very long.(2)
O I find I can't concentrate on anything.(3)

20. Tiredness or Fatigue

O I am no more tired or fatigued than usual.(0)
O I get more tired or fatigued more easily than usual.(1)
O I am too tired or fatigued to do a lot of things I used to do.(2)
O I am too tired or fatigued to do most of things I used to do.(3)

21. Loss of Interest in Sex

O I have not noticed any recent change in my interest in sex.(0)
O I am less interested in sex than I used to be.(1)
O I am much less interested in sex now.(2)
O I have lost interest in sex completely.(3)

Dyadic Adjustment Scale

(Spanier, 1976)

Dyadic Satisfaction Subscale: Items 16-23, 31 and 32.

Most persons have disagreements in their relationships. Please indicate the approximate extent of agreement or disagreement between you and your partner for each of the following items.

1. Handling family finances	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
2. Matters of recreation	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
3. Religious matters	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
4. Demonstrations of affection	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
5. Friends	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
6. Sex relations	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
7. Conventionality (right, good or proper conduct)	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
8. Philosophy of life	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
9. Ways of dealing with parents or in-laws	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
10. Aims, goals, and things believed important	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree

11. Amount of time spent together	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
12. Making major decisions	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
13. Household tasks	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
14. Leisure time interests and activities	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree
15. Career decisions	5 Always Agree	4 Almost Always Agree	3 Occasionally	2 Frequently Disagree	1 Almost Always Disagree	0 Always Disagree

16. How often do you discuss or have you considered divorce, separation, oterminating your relationship?	0 All the time	1 Most of the time	2 More often than not	3 Occasionally	4 Rarely	5 Never
17. How often do you or your mate leave the house after a fight?	0 All the time	1 Most of the time	2 More often than not	3 Occasionally	4 Rarely	5 Never
18. In general, how often do you think that things between you and your partner are going well?	0 All the time	1 Most of the time	2 More often than not	3 Occasionally	4 Rarely	5 Never
19. Do you confide in your mate?	0 All the time	1 Most of the time	2 More often than not	3 Occasionally	4 Rarely	5 Never
20. Do you ever regret that you married/lived together?	0 All the time	1 Most of the time	2 More often than not	3 Occasionally	4 Rarely	5 Never
21. How often do you and your partner quarrel?	0 All the time	1 Most of the time	2 More often than not	3 Occasionally	4 Rarely	5 Never
22. How often do you and your mate "get on each other's nerves"?	0 All the time	1 Most of the time	2 More often than not	3 Occasionally	4 Rarely	5 Never
23. Do you kiss your mate? →	4 Every day	3 Almost Every Day	2 Occasionally	1 Rarely	0 Never	

There are some things about which couples sometimes agree and sometimes disagree. Indicate if either of these two things caused differences of opinions or were problems in your relationship during the past few weeks.

29. Being too tired for sex. ☐ YES ☐ NO

30. Not showing love. ☐ YES ☐ NO

31. The dots on the following line represent different degrees of happiness in your relationship. The middle point "happy" represents the degree of happiness of most relationships. Please circle the dot that best describes the degree of happiness, all things considered, of your relationship.

0	**1**	**2**	**3**	**4**	**5**	**6**
Extremely Unhappy	**Fairly Unhappy**	**A little Unhappy**	**Happy**	**Very Happy**	**Extremely Happy**	**Perfectly Happy**

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32. Which of the following statements best describes how you feel about the future of your relationship?

☐ I want desperately for my relationship to succeed, and <u>will go to almost any length</u> to see that it does.

☐ I want very much for my relationship to succeed, and <u>will do all I can</u> to see that it does.

☐ I want very much for my relationship to succeed, and <u>will do my fair share</u> to see that it does.

☐ It would be nice if my relationship succeeded, but <u>I can't do much more than I am doing</u> now to help it succeed.

☐ It would be nice if my relationship succeeded, but I <u>refuse to do any more than I am doing</u> now to keep the relationship going.

☐ My relationship can never succeed, and <u>there is no more that I can do</u> to keep the relationship going.

Desired Changes Questionnaire

(Heavey, Lane, & Christensen, 1993)

Please indicate on the 7-point scale how much you want your partner to change each of the following behaviors.

<-(1)----------(4)----------(7)->

No Change (do not want my partner to change in this area)

Somewhat More

Much More (want my partner to do this more)

		No Change (1)			**Somewhat More (4)**			**Much More (7)**
1.	Get together with my friends.	1	2	3	4	5	6	7
2.	Start interesting conversations with me.	1	2	3	4	5	6	7
3.	Go out with me.	1	2	3	4	5	6	7
4.	Show appreciation for things I do well.	1	2	3	4	5	6	7
5.	Get together with my relatives.	1	2	3	4	5	6	7
6.	Be more affectionate with me.	1	2	3	4	5	6	7
7.	Get together with our friends.	1	2	3	4	5	6	7
8.	Treat my relatives with greater respect.	1	2	3	4	5	6	7

	No Change (1)			Somewhat More (4)			Much More (7)
9. Give me attention when I need it.	1	2	3	4	5	6	7
10. Leave me time to myself.	1	2	3	4	5	6	7
11. Agree to do things I like when we go out together.	1	2	3	4	5	6	7
12. Assume responsibility for finances.	1	2	3	4	5	6	7
13. Accept praise.	1	2	3	4	5	6	7
14. Accomplish responsibilities promptly.	1	2	3	4	5	6	7
15. Express his/her emotions clearly.	1	2	3	4	5	6	7
16. Spend time with me not other men/women.	1	2	3	4	5	6	7
17. Spend time with me.	1	2	3	4	5	6	7
18. Participate in decisions about spending money.	1	2	3	4	5	6	7
19. Pay attention to his/her appearance.	1	2	3	4	5	6	7
20. Spend time in outside activities.	1	2	3	4	5	6	7

Please write in and rate at least two more changes that you would like in your partner's behavior.

		No Change (1)			**Somewhat More (4)**			**Much More (7)**
21.	_____	1	2	3	4	5	6	7
22.	_____	1	2	3	4	5	6	7
23.	_____ _____	1	2	3	4	5	6	7
24.	_____ _____	1	2	3	4	5	6	7
25.	_____ _____	1	2	3	4	5	6	7

Now, please go back and pick the three most important areas where you would like your partner to change. ***Pick only the areas that are most important to you from the topics listed or written above.*** Please do not make up new areas to list below. Please list these three choices below, in order of importance (i.e. #1 would be the area you want your partner to change the most in).

1.

2.

3.

Pre-Interaction Questions

While considering the upcoming interaction, please rate yourself on the following items using the scale provided.

9	8	7	6	5	4	3	2	1
Very Much		Somewhat		Moderately		Mildly		Not at All

To what extent do you feel:

1. Worried?
2. Happy?
3. Angry?
4. Pleased?
5. Tense?
6. Afraid?
7. Disgusted?
8. Calm?
9. On edge?
10. Annoyed?
11. Frustrated?
12. Relaxed?
13. Upset?
14. Anxious?
15. Glad?

Using the same scale please respond to the questions that follow.

16. In the discussion you are about to have, how likely is it that you and your partner will be able to resolve the problem?
17. When the discussion is over how satisfied do you think you will be with the outcome?
18. How optimistic are you that you and your partner will be able to work productively on the problem in the discussion?
19. How much progress do you think you and your partner will make toward solving the problem?
20. How well will you and your partner communicate in the discussion?
21. How positive will the emotional tone of the discussion be?
22. How negative will the emotional tone of the discussion be?
23. How likely is it that you will have a better understanding of this difficulty when the discussion is over?

Post Interaction Questions

While considering the interaction you just engaged in with your partner, please rate yourself on the following items using the scale provided.

9	8	7	6	5	4	3	2	1
Very Much		Somewhat		Moderately		Mildly		Not at All

To what extend do you feel:

1. Worried?
2. Happy?
3. Angry?
4. Pleased?
5. Tense?
6. Afraid?
7. Disgusted?
8. Calm?
9. On edge?
10. Annoyed?
11. Frustrated?
12. Relaxed?
13. Upset?
14. Anxious?
15. Glad?

Using the same scale please respond to the questions that follow.

16. To what degree did you and your partner resolve the problem?
17. How satisfied were you with the outcome of the discussion?
18. How disappointed are you with the discussion?
19. To what degree were you and your partner able to work productively on the problem in the discussion?
20. How much progress did you and your partner make toward solving this problem?
21. How well did you and your partner communicate in the discussion?
22. How positive was the emotional tone of the discussion?
23. How negative was the emotional tone of the discussion?
24. To what degree has your understanding of this difficulty improved as a result of this discussion?
25. How does this discussion compare with other discussions you have had with your spouse about this problem?

Footnotes

[1] The double headed arrows depicted in this figure represent associations or correlations between variables, and not reciprocal influence.

[2] In the past, expectancies and appraisals for marital conflict resolution have generally been measured using predominantly cognitive items. For example, participants may be asked how successful they *think* their problem-solving discussions will be. In the present study, however, we also included several items assessing how participants *feel* about the conflict discussions that they are about to have (or have just finished having). To account for the fact that individuals' thoughts and feelings regarding a conflict discussion may differ, we decided to divide these two components of expectancies and appraisals into "cognitive" and "affective" for this study.

[3] Although different terminologies have been used in the literature to refer to pre-discussion expectations and post-discussion cognitive appraisals, in the present paper we will refer to these variables as "cognitive expectancies" and "cognitive appraisals". In addition, to avoid confusion, the affective component of expectations will be referred to as "anticipatory affect" from here on, whereas affective appraisals will be referred to as "reflective affect".

[4] Due to the relatively small sample size and large number of predictors to be considered, as well as the fact that gender differences were not a major focus of this paper, gender was not included as a covariate in analyses. For all models described in the next section, we reanalyzed the data by including interactions of all significant effects with the categorical predictor variable spouse (i.e., wife or husband). Given that gender did not moderate any of the significant effects, we did not include the findings for spouse in the analyses that are presented in this paper.

[5] Due to our limited sample size and in order to maintain sufficient power, we had to be stringent in terms of the interactions we included in our models. Here, we included two-way interactions between depression and marital satisfaction because these were central to our hypotheses.

[6] The fact that depression levels were associated with negative behaviours, but not positive ones is consistent with previous research suggesting that negative communication behaviours are better at discriminating between distressed and/or depressed couples from non-distressed and non-depressed couples. In other words, research on marital communication suggests that negative behaviours are better barometers of relationship functioning than positive ones. This is not to say that positive behaviours are irrelevant.