

THE ROLES OF SELF-ESTEEM AND ALCOHOL
IN RELATIONSHIP CONFLICT AND AGGRESSION:
DO INSECURITY AND INTOXICATION LEAD TO LASHING OUT?

by

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Dedication

This work is dedicated to Barb, who gets my jokes and makes me feel loved.

The Roles of Self-Esteem and Alcohol in Relationship Conflict and Aggression: Do Insecurity and Intoxication Lead to Lashing Out?

Abstract

The goal of this dissertation is to focus on how relationship conflicts are influenced by two factors that the literature suggests contribute to an increased likelihood of aggression in relationships: low self-esteem and alcohol. This thesis improves on past work examining the influence of self-esteem and alcohol on relationship conflict and aggression by considering what interactive effects the two variables might have, and by using chiefly experimental methods which are designed to help assess whether or not self-esteem and alcohol play causal roles.

According to dependency regulation theory (Murray, Holmes, MacDonald, & Ellsworth, 1998) low self-esteem individuals should be more likely to fear rejection from close others. Alcohol myopia theory (Steele & Josephs, 1990) predicts that intoxicated individuals, as a result of reduced cognitive capacity, will be prone to becoming more focused on the most salient cues in their environment. By considering these two theories in tandem, I hypothesize that intoxicated, low self-esteem people will become highly focused on their insecurities when engaging in relationship conflict, resulting in a more aggressive response to conflict.

I conducted four studies to test this hypothesis. Study 1 is an experiment which shows that threats to the sense that they are valued by their partners cause low self-esteem people to react defensively to relationship conflict. In Study 2, an experiment designed to test the causal role of alcohol in influencing relationship conflict, intoxicated,

low self-esteem people randomly assigned to an alcohol condition became more insecure in their partners' affections, and more blaming for a conflict incident.. Study 3, a survey, showed that low self-esteem people report using more aggression in conflict when they have been drinking, while high self-esteem people report using less aggression in intoxicated conflicts. Finally, although Study 4, a replication and extension of Study 2, was not successful in replicating the previous studies in some respects, it did provide some evidence that the combination of alcohol and threats to the sense that one is valued by one's partner can be causal factors in relationship aggression.

The discussion highlights the contribution of this dissertation to implicating alcohol and low self-esteem as causal factors in heightened relationship conflict and aggression, while emphasizing the fact that more work needs to be done to determine the exact causal impact of each factor individually. I suggest that future research on this topic would benefit greatly from a closer look at the role of feelings of hurt in the alcohol-aggression link.

Table of Contents

Introduction	1
Self-Esteem	2
Dependency Regulation Theory	3
Alcohol	6
Alcohol Myopia Theory	8
Study 1: Overview	12
Method	13
Participants	13
Procedure	14
Independent Measures	15
Dependent Measures	15
Results	17
Discussion	20
Study 2	22
Method	23
Participants	23
Procedure	24
Independent Measures	25
Dependent Measures	26
Results	27
Discussion	29

Study 3	31
Method	31
Participants	31
Procedure	31
Independent Measures	32
Dependent Measures	32
Results	32
Discussion	33
Study 4	34
Method	35
Participants	35
Procedure	36
Independent Measures	38
Dependent Measures	38
Results	40
Discussion	46
General Discussion	51
Limitations	52
Implications of the Present Research	54
Directions for Future Research	57
References	61
Endnotes	65
Tables	67

Figure	73
Appendices	74

List of Tables

Table 1: Study 1 Results Broken Down by Gender	67
Table 2: Study 1 Results Collapsed Across Gender	68
Table 3: Study 2 Results Controlling for Love	69
Table 4: Study 4 Results Including Low Self-Esteem Alcohol Only Condition Controlling for Relationship Satisfaction	70
Table 5: Study 4 Results Not Including Alcohol Only Group Controlling for Relationship Satisfaction	71
Table 6: Study 4 Within-Cell Correlations	72

List of Figures

Figure 1: Study 3 Results

73

List of Appendices

Appendix A: Questions and Feedback for the Princeton Partner Negativity Scale	74
Appendix B: Rosenberg Self-Esteem Scale	75
Appendix C: Dependent Measures from Study 1	76
Appendix D: Study 2 Measures	78
Appendix E: The Modified Conflict Tactics Scale from Study 3	79
Appendix F: Study 4 Measures	80

Introduction

As romantically involved couples attempt to negotiate the intricacies of interdependence, it is inevitable that conflict will occur (Levitt, Silver, & Franco, 1996). However, not only is conflict within relationships inevitable, it is also potentially destructive. High levels of conflict (Kurdek, 1996; Surra & Longstreth, 1990) and conflict avoidance (Noller et al., 1994) have been shown to be associated with lower relationship satisfaction. More ominously, Leonard and Senchak (1996) demonstrated that high levels of conflict, and especially maladaptive conflict styles, are predictive of violence within close relationships. Sadly, such violence is an all too common occurrence in close relationships. One review of the couple violence literature found estimates of the incidence of violence to range from 12 to 57 percent (Arriaga & Oskamp, 1998). In fact, one survey of high school students found that 59% of them had already experienced some form of physical violence within a dating relationship (Jezl, Molidor, & Wright, 1996). Clearly, then, it is important to understand how conflicts can be so mishandled as to degenerate to the point where violence is used.

The goal of this thesis is to focus on how relationship conflicts are influenced by two factors that the literature suggests contribute to an increased likelihood of aggression in relationships: low self-esteem and alcohol. This thesis improves on past work examining the influence of self-esteem and alcohol on relationship conflict and aggression in two ways. First, nowhere in the literature has consideration been given to what combined or interactive effects the two variables might have. By employing dependency regulation theory (Murray, Holmes, MacDonald, & Ellsworth, 1998) and alcohol myopia theory (Steele & Josephs, 1990), I hypothesize that alcohol heightens the preexisting insecurities of low self-esteem individuals, causing them to react more negatively to relationship conflict, and leaving them more prone to

commit aggressive acts as a result. Second, past work on this topic has been conducted almost exclusively through correlational studies, which has left the question of causality in doubt. This thesis presents one survey in which participants act as their own controls, and three experiments which are designed to help assess whether or not self-esteem and alcohol play causal roles in heightened conflict and aggression in relationships.

Self-Esteem

Despite recent theorizing that high self-esteem individuals are more likely to commit aggressive acts than low self-esteem individuals (Baumeister, Smart, & Boden, 1996), there are several reasons to believe that in the context of romantic relationships, low self-esteem is more likely to be linked to more negative conflict and aggression. First, low self-esteem people's relationships are more likely to be strewn with negativity than those of high self-esteem people. Low self-esteem has been shown to predict lower satisfaction in relationships (Kelly & Conley, 1987; Vera & Betz, 1993; Murray, Holmes, & Griffin, 1996; McCarthy, 1999), and low self-esteem people report more negative views of their partners than high self-esteem people (Murray, Holmes, & Griffin, 1996). It seems quite plausible that these negative attitudes reported by low self-esteem individuals towards their partners can create an environment in which conflict is more likely. In terms of aggression, several correlational studies have indicated that abusive individuals are more likely to have low self-esteem than nonabusive individuals (Goldstein & Rosenbaum, 1987; Vaselle-Augenstein & Ehrlich, 1992; Pirog-Good, 1992; National Research Council, 1993). Further, individuals with insecure attachment styles, a construct highly related to low self-esteem (Shaver & Hazan, 1993), have been shown to be more likely to commit relationship violence (Kesner & McKenry, 1998). In fact, later in this section I will discuss how

even Baumeister et al.'s (1996) own data better support the interpretation that it is actually low self-esteem individuals who are more likely to commit aggression in their relationships.

Why, then, would low self-esteem individuals be inclined to aggress within their relationships? This is an interesting question that at first glance seems counterintuitive. Low self-esteem individuals are likely to be seeking validation, and when they are involved in relationships, their partners, by the very act of wanting to be with them, offer at least the potential for this much needed positive reinforcement. So, why would low self-esteem people be so ready to hurt the one person who seems most capable of soothing their self-doubts? When seen in the light of dependency regulation theory, the mystery of why low self-esteem individuals may show more negativity in relationship conflict, and a higher tendency to aggress than high self-esteem people, becomes more clear.

Dependency Regulation Theory

Murray and Holmes' dependency regulation model (Murray et al., 1998) provides insight into the mechanisms that permit close attachment in relationships. According to dependency regulation theory, romantic relationships are a "high risk, high reward" proposition. Close relationships require a deep level of intimacy, and thus leave romantic partners extremely emotionally vulnerable. In order to manage the tension between their vulnerability and their dependence on their relationships, people need to feel certain that they are valued and cared for by their romantic partners. However, this sense of felt security is conditional, to a large extent, on a person's own sense of self-worth. People who feel positively about themselves can more easily accept that their partners would also view them positively. Free of fears of rejection, high self-esteem individuals can pursue the sort of closeness and intimacy that is integral to a satisfying romantic relationship. On the other hand, those who feel negatively about themselves

are more likely to doubt that their partners can see them positively. Afraid of rejection from their partners, low self-esteem individuals adopt a defensive stance, reducing their dependence on their relationships and maintaining an emotional distance to reduce the sting such a rejection would bring. Unfortunately, such emotional distancing short-circuits the intimacy process, and keeps low self-esteem individuals from experiencing the validation of a loving romantic relationship that they need.

This theory has been supported by recent research. As previously discussed, self-esteem has been shown to predict satisfaction in relationships (Kelly & Conley, 1987; Vera & Betz, 1993; Murray, Holmes, & Griffin, 1996; McCarthy, 1999). In fact, this link has been shown to be completely mediated by perceptions of a partner's affections, or "reflected appraisals" (Murray, Holmes, & Griffin, 2000). In a series of experimental studies, Murray et al. (1998) demonstrated one way in which low self-esteem can disrupt intimacy in romantic relationships. In one study, half the participants received a threat to their self-esteem (failure on an academic test) completely unrelated to their current romantic relationships. Those in a control group received no such threat. Participants then evaluated their close relationships and relationship partners. Low self-esteem people who had experienced a self-esteem threat felt more insecure in their partners' affections, as compared to controls. As a result, those who experienced the threat distanced themselves from their relationships by devaluing the relationships' importance for their identities. High self-esteem people, on the other hand, did not have their confidence in their partners' affections shaken, and thus did not attempt to distance themselves from their relationships. Indeed, they used their perceptions of their partners' positive regard as a self-affirmational resource to diminish the relevance of their failure.

In the light of dependency regulation theory, Baumeister et al.'s (1996) evidence that high self-esteem is more likely to lead to aggression in close relationships than low self-esteem merits reconsideration. In their review of the self-esteem and domestic violence literature, Baumeister et al. claim that much domestic violence arises out of situations where the abuser is of lower status than the abused. For example, they cite a study by Hornung, McCullough, and Sugimoto (1981) that found that women who had higher job status than their husbands were six times more likely to be subjected to life-threatening violence. They interpreted findings like this to mean that the violence arose from husbands who believed in their own superiority (i.e., had high self-esteem), but felt they needed to be violent to establish themselves as "the boss." I view this same data as more likely representing a threat to reflected appraisals: partners who are of higher status will have more alternatives and more opportunities to leave the relationship. Indeed, it is low self-esteem people who should be more likely to feel this kind of a reflected appraisals threat. Thus, I believe that relationship violence is more likely to represent an attempt on the part of the abuser to prevent a partner from taking advantage of the opportunity to leave (which might well mean the realization of feared rejection), rather than to assert a sense of superiority. In fact, before they began their review, Baumeister et al. conceded that, "domestic violence seems like the most promising milieu in which to find evidence of aggression by people who lack self-esteem" (p. 7), and I believe they are right on this point.

There are several reasons that low self-esteem individuals are more likely to interpret relationship conflict as a threat to felt security, or reflected appraisals, than high self-esteem people. This may lead to more negativity in relationship conflict, and a higher chance for aggression, because it means that low self-esteem people will be more likely to feel rejected as a result of a conflict, and to react to this sense of rejection with aggressive responding. First, low

self-esteem individuals are more likely to take a conflict personally, and thus feel hurt by it. Low self-esteem people, who already feel tenuous about how much they are accepted by their partners, should thus be more likely than high self-esteem people to view conflict as a sign that their partners are rejecting them. In fact, Downey and Feldman (1996) found that low self-esteem people are generally more sensitive to rejection than high self-esteem people. Second, low self-esteem people view their partners more negatively than do high self-esteem people (Murray, Holmes, & Griffin, 1996). This makes it more likely that low self-esteem people will interpret their partners' behaviour critically, and thus more likely that they will see their partners' behaviour as threatening to the relationship. Third, low self-esteem individuals tend to distance themselves emotionally from their relationships in the face of a threat to reflected appraisals (Murray et al., 1998). By devaluing the importance of their partners, these individuals may perceive fewer costs to behaving negatively, thus facilitating the likelihood of aggression. While this sort of overreaction to relationship conflict is often a response to a perceived threat to reflected appraisals, such a response may be even more likely as a result of alcohol intoxication.

Alcohol

Alcohol has been implicated in several studies as a predictor of violence within relationships (Parker & Auerhahn, 1998), especially for men. In studies of heavy drinkers, alcohol has been shown to be related to relationship aggression; men who binge drink frequently have been found to be three times more likely to abuse their wives than non-drinkers (Kaufman Kantor, & Straus, 1987). Further, males in treatment for alcoholism were reported to be four times more likely to abuse their wives than demographically similar nonalcoholics (O'Farrell & Murphy, 1995). In fact, approximately 50% of abused wives report their husbands to be heavy drinkers (Pan, Neidig, & O'Leary, 1994). Alcohol has been shown to be related not just to the

incidence of violence, but also to the severity of aggression. For example, Leonard and Quigley (1999) found that wives reported their husbands to have been drinking in 10% of incidents of verbal aggression, 27% of incidents of moderate physical aggression, and 43% of incidents of severe physical aggression.

Although these studies seem to indict alcohol as an important factor in relationship conflict and aggression, they do not answer the question of causality. That is, despite the fact that the data cited above suggest the possibility that alcohol somehow causes increased conflict and aggression in relationships, the correlational nature of the work leaves open other possible explanations for the relation. The first is that the alcohol-violence relation is a function of a third variable. In other words, it is possible that the type of person who drinks is also the type of person who is violent in his or her relationship. Also, it is possible that it is, in fact, relationship violence which leads to heavy consumption of alcohol. Perhaps abusers, seeking solace from their horrible acts, turn to alcohol to ease their pain. These possible explanations were addressed by Leonard and Senchak (1996) in a longitudinal study of alcohol's effects on aggression in relationships. They demonstrated that a husband's alcohol use at time 1 is a unique predictor of violence within marriage at time 2, even when controlling for a myriad of factors including conflict styles and history of family violence. This suggests that alcohol leads to increased aggression, but what is unclear is exactly why that relation exists.

One popular view is that alcohol does not cause people to be more aggressive per se, but rather is used by male abusers as an excuse to exert control over their female partners. For example, in a document published by the Ontario government's Women's Directorate titled Wife Assault: Dispelling the Myths, the notion that alcohol causes men to assault their partners is labeled as a "myth" (Ontario Women's Directorate, 1993; p. 2). They go on to say that,

“Batterers often use alcohol as an excuse to avoid taking responsibility for violent behaviour” (p. 2). This is a curious claim, given that the kind of research necessary to prove this kind of a statement, controlled experimental work comparing intoxicated subjects with those receiving a placebo, has rarely been conducted in the context of relationship conflict and aggression. Further, what work has been done seems to contradict the excuse-making hypothesis. Leonard and Roberts (1998) conducted an experiment in which men who had been identified as either having been aggressive or nonaggressive in their relationships were randomly assigned to either an alcohol, placebo, or no drink condition, and then were observed as they discussed a disagreement with their partners. According to the excuse-making hypothesis, because they believe that alcohol is an excuse for aggression, men who had demonstrated aggression in the past who were consuming either alcohol or a placebo should have evidenced more negativity in the discussion than those in the sober condition. However, intoxicated men, whether they were aggressive in the past or not, exhibited more negativity in the discussion than those in either the sober or placebo groups. Although this study is a long way from proving that alcohol causes aggression, considering that it was the only piece of experimental evidence weighing directly on the question until this dissertation, it does cast doubt on the excuse-making hypothesis. Given that the literature suggests that alcohol is a causal factor in heightening relationship conflict, possibly even to the point of violence, how does it do so? I believe that the best explanation for alcohol’s effect on relationship conflict and aggression is offered by alcohol myopia theory (Steele & Josephs, 1990).

Alcohol Myopia Theory

This theory posits that alcohol reduces cognitive functioning, and thus leaves one able to process only a limited amount of information at one time. Therefore, intoxicated individuals’

decision making will be most influenced by whatever environmental cues are most salient to them, and these individuals will ignore more subtle, but potentially important information. For example, T. MacDonald et al. (in press) found that intoxicated individuals were more likely to endorse unprotected sex than sober individuals, but only if they were sexually aroused. It was theorized that these intoxicated individuals attended to the most salient cue in their environment (their own sexual arousal), while ignoring more subtle cues such as the danger of sexually transmitted diseases, or of an unwanted pregnancy. Interestingly, participants who were intoxicated but not sexually aroused indicated that they were somewhat less likely to engage in unprotected sex. This is an important aspect of alcohol myopia theory – it posits that by making inhibiting cues (such as negative arousal, or the threat of STDs) salient to intoxicated individuals, they can be guided to make better decisions.

A number of studies have provided evidence that the alcohol myopia framework does indeed apply to aggression. For example, in a meta-analysis of alcohol's effect on a number of social behaviours, including aggression, Steele and Southwick (1985) found that alcohol increased the extremity of behaviour only when salient, impelling cues to behave extremely were present. Further, Leonard (1989) examined alcohol's influence on aggressive responding when either impelling or inhibiting cues to act aggressively were made salient. In this study, participants selected shock levels for an opponent (no opponent was actually present, but was simulated using an audio recording over an intercom) in a reaction time task should they defeat the opponent on the task. Participants were told that their opponent would also select a shock level for them. In the condition where inhibiting cues were more salient (i.e., the opponent verbally indicated an intention to use the lowest level of shock and did so), intoxicated participants behaved no more aggressively than sober participants. However, when cues to

aggress were made salient (i.e., the opponent verbally indicated an intention to use the highest level of shock), intoxicated participants responded with significantly more aggression than sober participants. This increased aggression occurred despite the presence of a subtle inhibiting cue, a light indicating that the opponent had actually selected the minimum shock level. Intoxicated participants in this study seemed to attend to the salient cue to aggress, without processing the more subtle inhibiting cue. Sober participants, on the other hand, attended to the subtle inhibiting cue, even if they had first been presented with a salient, aggressive cue. In a different study investigating husbands' drinking as a predictor of aggression in relationships, Quigley and Leonard (1999) found an interesting interaction between alcohol consumption and the level of conflict within the marriage. For couples high in conflict, more drinking was predictive of more aggression in the relationship. Thus, in relationships with many salient negative cues (i.e., high conflict couples), aggression was more likely when the narrowed focus of intoxication was regularly imposed. However, for couples low in conflict, more drinking was actually predictive of less aggression in the relationship. Thus, in relationships where positive cues were more likely to be salient (i.e., low conflict couples), the increased focus brought on by alcohol intoxication seemed to be responsible for reducing the likelihood of aggression. However, without direct experimental evidence, the correlational nature of this study necessitates caution in accepting this causal interpretation.

The key, then, to predicting how people will react to relationship conflict under the influence of alcohol is understanding what kinds of cues will be most salient to them. As discussed earlier, relative to high self-esteem people, those with low self-esteem are more likely to perceive negative cues when engaging in conflict with their partners. Low self-esteem individuals are generally engaged in less satisfying relationships, are more critical of their

partners, and are more likely to interpret conflict as a sign their partners will reject them. All of these factors should contribute to making negative cues (i.e., feelings of rejection) salient to low self-esteem people when they are engaged in relationship conflict. It appears that these negative cues are likely to serve as impelling cues to aggress, and thus should increase the likelihood that intoxicated low self-esteem individuals will respond to relationship conflict with both increased negativity and aggression. Further, because low self-esteem individuals are more likely to devalue their partners by distancing themselves emotionally in the face of a conflict, an important cue which would normally inhibit aggression (i.e., a feeling of attachment) is reduced. Also, other cues that might normally inhibit aggression during a conflict, such as mitigating factors for a partner's behaviour, or the long term consequences of aggressing, are generally not as salient at the time of the conflict as are impelling cues such as feelings of rejection. Thus, I predict that as a result of increased focus on salient negative cues and the decreased salience of important inhibiting cues, intoxicated low self-esteem people should be more likely to exhibit negativity and aggression when faced with relationship conflict than when they are sober.

In contrast, high self-esteem people are more likely to have more satisfying relationships, and more positive evaluations of their partners. Importantly, high self-esteem people also respond to difficulty in their relationships much differently than people with low self-esteem. According to work by Murray and Holmes, high self-esteem individuals are more likely to create idealized conceptions of their partners (Murray, Holmes, & Griffin, 1996). These authors have also theorized that negativity is often the catalyst for this process of developing highly positive views of a partner (Murray & Holmes, 1993, 1994). For example, observing something in a partner that could be considered a fault motivates an individual to reinterpret the characteristic in a more charitable manner; a lazy partner becomes a "relaxed" partner, and an obstinate partner

becomes a “principled” partner. Relationship conflict may serve as the grain of sand that starts the pearl for high self-esteem people. That is, high self-esteem people may counter the negativity they encounter in relationship conflict by calling on their confidence in their partners’ affections to buffer them. As a result, high self-esteem people in relationship conflict may actually have quite positive cues available to them. If they then focus on these positive cues as a result of alcohol intoxication, they could actually show lower levels of negativity and aggression than when they are sober.

As previously discussed, the goal of this dissertation is to test these hypotheses using chiefly experimental methods in order to be able to draw conclusions about causality. Study 1 is an experiment designed to test my hypothesis that reflected appraisal threats will cause low self-esteem people to react defensively to relationship conflict. In Study 2, in order to test the causal role of alcohol in influencing relationship conflict, people in relationships are randomly assigned to an alcohol, placebo, or no alcohol condition, then evaluate actual past conflicts from their relationships. Study 3 consists of a survey of people in relationships to investigate whether they report more severe intoxicated conflicts than sober conflicts. Finally, Study 4 is an experiment that combines reflected appraisals and alcohol manipulations in an attempt to investigate their causal influences on relationship conflict and aggression.

Study 1

Overview

As discussed earlier, strong correlational evidence exists that perceptions of a partner’s affections strongly influence satisfaction in relationships, and that these perceptions stem largely from a person’s self-views (Murray, Holmes, & Griffin, 2000). However, there is still no experimental evidence to show conclusively that high and low self-esteem individuals differ in

how they respond to direct threats to how much they feel they are valued by their partners. Further, there is also little in the way of direct evidence to support the notion that low self-esteem individuals differ in their response to relationship conflict than high self-esteem people. Study 1 is designed to address these two shortcomings. In this study, high and low self-esteem participants in close relationships were randomly assigned to either receive feedback that their partners were upset with them (the reflected appraisals threat condition) or no feedback (the control condition). They then evaluated real conflict from their relationships. The investigation into dating partners' evaluations of conflict in this study was meant to provide insight in both theoretical and applied terms. First, conflict is an interesting area to investigate from a theoretical standpoint because relationship conflict provides a common, naturalistic potential threat to people's perceptions of how much they are valued by their partners. Further, as mentioned earlier, the mishandling of conflict has been shown to predict dissatisfaction and even aggression in relationships (Leonard & Senchak, 1996), so Study 1 will help to provide an understanding of some of the dynamics that may underlie escalating negativity and aggression in conflicts. I predicted the threat to reflected appraisals in this study would cause low self-esteem people to withdraw from their partners with defensive and blaming reactions, whereas high self-esteem people would compensate for the threat by actually drawing their partners closer.

Method

Participants

Students enrolled in introductory psychology classes who indicated in a mass testing session that they were involved in an exclusive dating or marriage relationship of at least three months in length were selected for recruitment. Those who agreed to participate were given one

course credit. Forty-eight people (29 women and 19 men) agreed to participate with an average age of 19.5 years, and an average relationship length of 17 months.

Procedure

The study was a 2 (reflected appraisals: threat vs. control) by 2 (self-esteem: high vs. low) design. Participants, who were run individually, began by filling out a package of paper and pencil measures about themselves and their relationships. Because self-esteem was assessed in this initial package, the experimenter was blind to self-esteem condition. The final page in this package asked participants to nominate a conflict that had occurred in their relationships for which both themselves and their partners were somewhat at fault. Further, they were asked to describe the conflict in only brief terms, without submitting their own opinions about the event. After completing this package, participants moved to a computer to fill out another series of measures. The reason for completing the computer-based questionnaires, they were told, was because a sizable number of participants from past studies had expressed an interest in obtaining feedback on the scales they completed. Thus, the computer would randomly insert questionnaires into their packages on which they would receive feedback. For participants in the *reflected appraisals threat* condition ($n = 24$), the first computer scale presented was actually the reflected appraisals manipulation. This scale asked participants to describe their partners' behaviour during the conflict they had nominated earlier. The scale included 10 behaviours which are quite common in relationship conflict such as, "At times during the conflict, my partner avoided eye contact with me" (see Appendix A). Further, the response scale was subtly biased so that participants would score very highly on this measure. After completing the 10 items, participants were told that the scale was called the Princeton Partner Negativity Scale (PPNS), and that it was an accurate measure of how upset their partners had been with them

during the conflict. Finally, they were given feedback as to the meaning of their scores (see Appendix A). Specifically, they were told that their partners had been extremely upset with them during the conflict, probably even more so than the participants had realized at the time. No participants indicated suspicion about the feedback. Those in the *control* condition ($n = 24$) did not fill out the PPNS, and did not receive any feedback about their partners' behaviour. All participants then completed a series of dependent measures, which are listed below. At the end of the session participants were thoroughly and carefully debriefed to ensure they understood that any feedback they received was prefabricated and randomly assigned, so that the feedback could not reflect on the actual state of their relationships.

Independent Measures

The following measure was assessed before the reflected appraisals manipulation. Please see Appendix B for the complete scale.

Self-esteem. Participants completed the Rosenberg (1979) self-esteem scale (Cronbach's $\alpha = .88$). The scale consists of 10 questions (e.g., "I take a positive attitude toward myself"), and answers were given on a 9-point scale (1 = *very strongly disagree* to 9 = *very strongly agree*). Participants were classified as either low self-esteem ($M = 6.11$) or high self-esteem ($M = 8.07$) based on a median split.

Dependent Measures

The following eight measures were assessed following the reflected appraisals manipulation.¹ Please see Appendix C for the complete scales.

Conflict seriousness. Using a single item measure, participants were asked to indicate the seriousness of the conflict they described. Participants responded to the item, "How serious was the incident," on a 9-point scale (1 = *very serious* to 9 = *not at all serious*), reverse scored.

Partner blame. Participants rated the extent to which they believed their partners were to blame for the incident using a three item scale (Cronbach's $\alpha = .79$). Participants evaluated such items as “My partner was wrong to act like he/she did” on a 9-point scale (1 = *not at all true* to 9 = *very true*).

Self blame. The self blame scale (Cronbach's $\alpha = .75$) consisted of six items (e.g., “I caused my partner to behave negatively”) designed to measure the extent to which they blamed themselves for the conflict. Responses were provided along a 9-point scale (1 = *not at all true* to 9 = *very true*).

Optimism. On a five item scale (Cronbach's $\alpha = .75$) participants evaluated their optimism that their partners would not behave negatively in the future (e.g., “My partner will disappoint me”). Responses were provided along a 9-point scale (1 = *not at all likely* to 9 = *very likely*). The entire scale was reverse scored so that higher scores indicate more optimism.

Perceptions of partner. This twenty item scale (Cronbach's $\alpha = .83$) assessed participants' evaluations of their partners' qualities (e.g., patient, lazy, distant). Responses were provided along a 9-point scale (1 = *not at all characteristic* to 9 = *very characteristic*). Negative items (e.g., lazy) were reverse scored so that higher scores indicate more positive attitudes towards the partner.

Forgiving a transgression. This five item scale (Cronbach's $\alpha = .72$) asked participants how willing they would be to forgive a hypothetical transgression by their partners (i.e., if the partner criticized them publicly). Participants responded to items such as, “How much would your partner need to sacrifice to make this up to you,” and “How much would you blame your partner for this episode,” along 9-point scales relevant to each question.

My partner is right for me. Participants responded to the single item, “Sometimes I wonder whether my partner is the ‘right’ person for me,” on a 9 point scale (1 = *not at all true* to 9 = *very true*). The item was reverse scored so that higher scores represent more certainty.

Results

Participants described a wide array of conflict incidents, ranging from small misunderstandings to infidelity. As the manipulation was successful in altering people’s interpretations of the seriousness of the incident, specific examples will be given later to supplement the manipulation check. Analyses were conducted using a 2 (reflected appraisals: negative vs. control) by 2 (self-esteem: low vs. high self-esteem) by 2 (gender: male vs. female) analysis of variance (ANOVA). Although some three variable interactions were found in the data, these should be interpreted with extreme caution as the sample size makes the interpretation of these interactions problematic.

In order to test the effectiveness of the manipulation, the data for ratings of conflict seriousness were analyzed. The ANOVA revealed a significant main effect of reflected appraisals condition, $F(1, 39) = 5.95, p = .02$. Participants in the negative reflected appraisals condition ($M = 5.21$) believed the conflict to be more serious than those in the control condition ($M = 4.00$).² As an example of how specific conflicts were evaluated by participants, the following incident was evaluated as a “2” by a control group participant:

“I was telling my boyfriend about something (that) happened to me that day on the phone and then he mentioned that he was tired and wanted to go to sleep.”

The following comparable incident was evaluated as a “5” by an experimental participant:

“Talking on the phone. I wanted to talk longer. He got irritable that I wouldn’t answer the question of what time I was going to be at his house later on. Finally just said that he had to go. Called back to explain himself.”

As a further example, the following incident was evaluated as a “7” by a control participant:

“When his good friend hung himself in his girlfriend and her daughter’s house. My boyfriend was upset with me as I would not go to the wake as I had my biology exam the next morning and I also felt that what his friend did was horrible and disrespectful to his girlfriend and the little girl who were the ones to find him. My boyfriend was very upset when I said I couldn’t go.”

That incident can be contrasted with the following conflict, which was evaluated as an “8” by an experimental participant:

“When my boyfriend told me that he would be going to school in South Carolina for baseball, I told him I did not know if I could handle a long distance relationship. He got angry ‘cause he wanted to stay together. I never realized how much this relationship mattered to him. So we stayed together and that was over a year ago... I felt as though I had hurt the one I love and so I regretted saying anything. Finally, I found I had to make things better. now I’ve never been happier.”

Further analyses revealed a marginally significant three variable interaction on the measure of partner blame, $F(1, 39) = 3.96, p = .054$ (see Table 1 for Study 1 results broken down by gender). For men, low self-esteem individuals (LSEs) in the control condition ($M = 5.67$) and high self-esteem individuals (HSEs) in the control condition ($M = 4.00$) did not differ in their blame assessments, $t = 1.59, ns$. However, male LSEs in the negative reflected appraisals, or negativity, condition ($M = 6.28$) were significantly more blaming than male HSEs in the negativity condition ($M = 2.83$), $t(39) = 2.43, p < .05$. Phrased alternatively, male LSEs in the negativity condition were significantly more blaming than male LSE controls, $t(39) = 2.27, p < .05$. Male HSEs in the negativity condition, however, were marginally less blaming than male HSE controls, $t(39) = 1.95, p = .06$. For women, HSEs in the negativity condition ($M = 3.92$) were significantly less blaming than LSEs in the negativity condition ($M = 5.92$), $t(39) = 2.31, p < .05$. No other comparisons were significant for women on this measure.

A significant two variable interaction of reflected appraisals condition and self-esteem was found on the measure of self blame, $F(1, 39) = 6.31, p = .02$ (see Table 2 for Study 1 results collapsed across gender). In the control condition, LSEs ($M = 4.81$) and HSEs ($M = 4.01$) were

equally self-blaming, $t(39) = 1.42$, *ns*. In the negativity condition, however, LSEs ($M = 3.26$) were significantly less self-blaming than HSEs ($M = 4.59$), $t(39) = 2.11$, $p < .05$. Expressed differently, LSEs in the negativity condition were less self-blaming than LSE controls, $t(39) = 2.79$, $p = .01$. However, HSEs in the negativity condition were equally as self-blaming as HSE controls, $t < 1$, *ns*.

An ANOVA revealed a significant two variable interaction of reflected appraisals condition and self-esteem for participants' optimism for their partners' future behaviour, $F(1, 40) = 4.27$, $p = .05$.³ In the control condition, LSEs ($M = 7.84$) and HSEs ($M = 7.57$) were equally optimistic, $t < 1$, *ns*. However, in the negativity condition, LSEs ($M = 7.50$) were significantly less optimistic than HSEs ($M = 8.54$), $t(40) = 2.07$, $p < .05$. Alternately phrased, LSEs in the negativity condition did not differ in their optimism from LSE controls, $t < 1$, *ns*. However, HSEs in the negativity condition were significantly more optimistic than HSE controls, $t(40) = 2.39$, $p < .05$.

A three variable interaction was found for participants' overall ratings of their partners' qualities, $F(1, 39) = 5.52$, $p = .02$. For men, in the control condition, LSEs ($M = 6.86$) and HSEs ($M = 6.10$) were equally positive about their partners, $t(39) = 1.85$, *ns*. However, after a reflected appraisals threat, male LSEs ($M = 5.88$) evaluated their partners significantly more negatively than male HSEs ($M = 7.55$), $t(39) = 3.01$, $p < .01$. Stated differently, male LSEs in the negativity condition evaluated their partners significantly worse than male LSE controls, $t(39) = 2.49$, $p < .05$. On the other hand, male HSEs in the negativity condition evaluated their partners significantly more positively than male HSE controls, $t(39) = 2.56$, $p < .05$. No significant comparisons were found for women.

An ANOVA revealed a significant two variable interaction of reflected appraisals condition and self-esteem on the measure of participants' willingness to forgive a future transgression by their partners, $F(1, 39) = 16.91, p < .01$. In the control condition, LSEs ($M = 6.30$) and HSEs ($M = 5.52$) indicated an equal willingness to forgive, $t(39) = 1.37, ns$. However, in the negativity condition, LSEs ($M = 5.46$) were significantly less willing to forgive their partners than HSEs ($M = 7.33$), $t(39) = 2.94, p < .01$. That is, LSEs in the negativity condition were, if anything, less forgiving than LSE controls, $t(39) = 1.50, ns$. However, HSEs in the negativity condition were significantly more forgiving than HSE controls, $t(42) = 2.80, p < .01$.

Finally, a significant two variable interaction of reflected appraisals condition and self-esteem was found on the measure of whether participants felt their partners were the right people for them, $F(1, 40) = 5.15, p = .03$. In the control condition, LSEs ($M = 6.26$) were somewhat more certain that their partners were right for them than HSEs ($M = 4.93$), $t(39) = 1.65, p = .10$. However, in the negativity condition, LSEs ($M = 5.20$) were somewhat less certain their partners were right than HSEs ($M = 6.65$), $t(39) = 1.57, ns$. Although no specific contrasts are significant, LSEs in the negativity condition became less certain than LSE controls, $t(39) = 1.35, ns$, whereas HSEs in the negativity condition became more certain than HSE controls, $t(39) = 1.83, p < .10$.

Discussion

The results of Study 1 show that a person's level of self-esteem greatly influences how that person reacts to a reflected appraisals threat, particularly in the context of a relationship conflict. As predicted, low self-esteem participants reacted defensively to feedback that their partners were upset with them. Compared to controls, low self-esteem men in the negative feedback condition blamed their partners more for the conflict incident, and evaluated their

partners more harshly. Low self-esteem men and women in the negativity condition also indicated less self-blame, less willingness to forgive a transgression by their partners, and less certainty that their partners were right for them. It seems that these low self-esteem individuals, faced with the prospect of a potentially rejecting partner, distanced themselves from their relationships by devaluing their partners. This sort of strategy may bring short-term solace to low self-esteem individuals by reducing the potential sting rejection would bring. The danger is that adopting this kind of a stance in an actual relationship conflict may serve to increase the chance that they will, in fact, be rejected. Expression of the sorts of angry and blaming reactions indicated by low self-esteem people in this study would be likely to put their partners on the defensive, and thus heighten the level of conflict.

High self-esteem people, on the other hand, did not respond to the threat to their felt security with angry and blaming reactions. Instead, high self-esteem men in the reflected appraisals threat condition reduced the blame they attributed to their partners, and indicated more positive evaluations of their partners. All high self-esteem participants in the negativity condition reported increased optimism in the future of their relationships, more willingness to forgive their partners' transgressions, and more certainty that their partners were right for them compared to controls. High self-esteem people seemed to call on their confidence in their partners' affections in order to buffer the potential threat, and thus were able to compensate for the threat by bringing their partners closer. This sort of response to negativity in an actual relationship conflict would be a far more adaptive strategy than that evidenced by low self-esteem individuals. By not foisting the blame for the conflict onto their partners, and thus not putting their partners on the defensive, high self-esteem people should be more likely to create an environment in which the issue could be worked out calmly. Further, by increasing the amount

that they value their partners, high self-esteem people would actually become more motivated to work out the conflict.

Unexpectedly, the findings for partner blame and overall evaluations of the partners' qualities only applied to men in this sample. It is possible that men, used to avoiding conflict by withdrawing from it (Christensen & Heavy, 1990), reacted more strongly than women to the negativity manipulation because they were in the unfamiliar position of having to deal with a serious conflict head-on. However, the three variable interactions were only found for two of the six dependent variables, and should be interpreted with caution because of the small cell sizes that result from the 2 x 2 x 2 analysis. In any case, Study 1 provides experimental evidence that self-esteem is, indeed, an important factor in influencing interpretations of relationship conflict, especially when there is a potential threat to felt security.

Study 2

The next question for this dissertation is whether the consumption of alcohol can lead to the perception of this sort of reflected appraisals threat, and thus to an increased likelihood of anger and blame for low self-esteem individuals. In Study 2, I address this question by randomly assigning high and low self-esteem individuals in relationships to either a sober, placebo, or alcohol condition, before they evaluate real conflicts from their own relationships.

Consistent with alcohol myopia theory, I believe that alcohol intoxication can lead to increased negativity in relationship conflict by focusing individuals more exclusively on their negative feelings. That is, because negative emotion is a highly salient experience during a relationship conflict, intoxicated individuals should be more likely to attend to negative emotional cues and thus report more negative feelings about the conflict than sober individuals. Further, because a partner's expressions of negativity should also be relatively salient in

relationship conflict, intoxicated individuals should also be more likely to attend to their partners' negative cues and thus report perceiving their partners to be more upset about the conflict than sober individuals. However, according to dependency regulation theory, perceiving your partner to be upset with you represents a threat to reflected appraisals. Intoxicated, low self-esteem individuals, whose confidence in their partners' affections is easily shaken, should therefore report less security in their partners' affections in response to this threat, and as threatened low self-esteem participants in Study 1, distance themselves from their relationships by becoming more blaming of their partners for the conflict incident. High self-esteem people, who are more confident in their partners' feelings for them, should remain secure in their partners' affections when intoxicated and thus not defensively blame their partners for the conflict.

Method

Participants

Male students enrolled in introductory psychology classes at the University of Waterloo who indicated in a mass testing session that they were involved in an exclusive dating or marriage relationship were selected for recruitment. They were contacted by telephone, at which point they were asked if they were presently involved in a heterosexual relationship of at least six months duration, and if they consumed alcohol. Those who met both criteria were invited to participate. Those who agreed to participate were given one course credit, as well as \$5 for those assigned to the sober condition or \$15 for those assigned to the placebo or intoxicated conditions. Fifty-six men agreed to participate. Four participants in the placebo condition were removed due to suspicion that their drinks did not actually contain alcohol. Participants averaged 20.1 years of age, and had been involved in their relationships for an average of 21.7 months. Because of the

potentially negative health consequences of consuming alcohol during pregnancy, female participants were not included in this experiment. ⁴

Procedure

Participants were run in groups of up to four people. The study began in a common room, where the procedure was explained, and informed consent was obtained. Those in the placebo and alcohol conditions were weighed at this time so that an appropriate amount of beverage could be prepared. Each participant was then taken to an individual room to complete a series of premeasures. As in Study 1, a measure of self-esteem was included in this package, so the experimenter was blind to self-esteem condition. The final page of this package asked participants to nominate a serious conflict that had occurred in their relationships, one for which both they and their partners were somewhat at fault. As in Study 1, participants were instructed to describe the conflict briefly, in objective terms, without writing about their own reactions to the incident so as to minimize the amount of thought participants would give to the conflict at that time..

Those in the *intoxication* condition ($n = 18$) returned to the common room after completing the premeasures, and were given a dose of alcohol (vodka, 40% alc/ vol) which had been prepared while they were completing the premeasures. Lemon-lime soda was used to dilute the alcohol, with 2 parts soda per 1 part alcohol. Each participant consumed three drinks, with 20 minute intervals between each. Twenty minutes after the final drink, participants were taken back to the room in which they had completed the premeasures. They were instructed to re-read their conflict nomination, then complete a new packet of questionnaires containing the dependent measures. These measures asked for evaluations of the conflict incident. After completing these questionnaires, participants once again returned to the common room and their blood alcohol

level (BAL) was measured using an Alco-Sensor IV breathalyzer (manufactured by Intoximeters, Inc.). The BAL for participants in the intoxication condition was 0.076% (SD = 0.010). These participants estimated their BAL to be 0.108% (SD = 0.043).

The procedure for participants in the *placebo* condition (n = 15) was identical to that in the intoxication condition, with the following exceptions. Rather than alcohol, flattened tonic water was mixed with the soda for placebo participants. Further, alcohol was sprayed in the common room so that the smell of alcohol would be present. Finally, drinking glasses were rimmed with alcohol, and a very small amount of alcohol was floated on top of the drinks so that participants would smell and taste alcohol when taking their first sip of each drink. On average, placebo participants estimated their BAL to be 0.046% (SD = 0.029). Participants in the *sober* condition (n = 19) completed the series of dependent measures immediately upon completing the conflict nomination. Participants were given a thorough and careful debriefing, with extra care taken to ensure that participants in the intoxication condition understood that any increased negativity they may have felt about the conflict was likely caused by the alcohol, and not by problems with their relationships or their partners.

Independent Measures

The following two measures were assessed before the alcohol manipulation (see Appendix D for all Study 2 measures).

Self-esteem. Participants completed the Rosenberg (1979) self-esteem scale (Cronbach's $\alpha = .91$). Participants were classified as either low self-esteem (M = 6.51) or high self-esteem (M = 8.43) based on a median split.

Love for partner. The love scale (Cronbach's $\alpha = .86$) consisted of three items (e.g., "I am very much in love with my partner") designed to measure participants' love for their partners.

Responses were provided along a 9-point scale (1 = *not at all true* to 9 = *extremely true*). The love measure was used as a covariate in our analyses, as we believed that it would be valuable to control for individual differences in relationship quality. Although one good strategy would have been to hold overall relationship satisfaction constant, the love variable was chosen because a check of the data revealed that random assignment had not succeeded in distributing love scores entirely evenly between conditions.

Dependent Measures

The following six measures were assessed following the alcohol manipulation.

Self emotion. Using a single item measure, participants were asked how thinking about the reasons that the conflict occurred made them feel. Participants responded to the item. "When I think about the reasons behind the conflict I feel..." on a 9-point scale (1 = *more positively* to 9 = *more negatively*).

Partner's emotion. Participants rated their perceptions of their partners' emotional reaction to the conflict on a four-item scale (Cronbach's $\alpha = .67$). Participants evaluated dimensions of their partners' emotions on bipolar scales. For example, anger was measured on a 9-point scale from 1 = *not at all angry* to 9 = *very angry*.

Insecurity in partner's affections. The general insecurity scale (Cronbach's $\alpha = .63$) consisted of eight items (e.g., "This conflict made me wonder how much my partner wanted to be with me," "My trust in my partner was damaged by this conflict") designed to measure participants' level of insecurity in their partners' affections. Responses were provided along a 9-point scale (1 = *not at all true* to 9 = *very true*).

Blame. The blame measure (Cronbach's $\alpha = .57$) consisted of six items (e.g., "My partner is responsible for the conflict") designed to measure participants' level of anger

surrounding the conflict. Responses were provided along a 9-point scale (1 = *not at all true* to 9 = *very true*).

Conflict seriousness. Participants evaluated the seriousness of the conflict incident using a single item, “How serious a conflict was this?”. Responses were provided along a 9-point scale (1 = *not very serious* to 9 = *very serious*). This measure was used to classify incidents as either high seriousness ($M = 7.29$) or low seriousness ($M = 3.36$) based on a median split. Although the seriousness measure was administered after the alcohol manipulation took place, it was not significantly related to alcohol condition, self-esteem condition, or their interaction, all F 's < 1, ns.

Results

Analysis of the data revealed no significant differences between the sober and placebo conditions on any of the measures. Thus, the two groups were collapsed into one “no alcohol” group ($n = 34$). Analyses were conducted using a 2 (alcohol condition: alcohol vs. no alcohol) by 2 (self-esteem: low vs. high self-esteem) analysis of covariance (ANCOVA). As stated earlier, participants initial feelings of love for partner were held constant in these analyses.

The ANCOVA revealed a significant main effect of alcohol condition on the measure of participants' own feelings about the conflict, $F(1, 47) = 4.66, p = .04$ (see Table 3 for all Study 2 analyses). Participants who had consumed alcohol ($M = 6.13$) reported feeling more negatively about the conflict than those who had not consumed alcohol ($M = 4.93$). The covariate was not significant for the self emotion measure, $F < 1, ns$. A significant main effect of alcohol condition was also found for participants' evaluations of their partners' emotions surrounding the conflict, $F(1, 47) = 7.41, p = .01$. Those who had consumed alcohol ($M = 5.26$) reported that they perceived their partners to be more upset about the conflict than those in the no alcohol

group ($M = 4.06$). The covariate was significant for the partner emotion measure, $F(1, 47) = 5.33$, $p = .03$. Participants who reported more love for their partners believed their partners to be less upset about the conflict.

Further analyses revealed a significant interaction of alcohol condition and self-esteem on the measure of general insecurity in partner's affections, $F(1, 47) = 4.74$, $p = .03$. LSEs who had not consumed alcohol ($M = 3.53$) and HSEs who had not consumed alcohol ($M = 3.63$) reported similar levels of insecurity, $t < 1$, ns. However, intoxicated LSEs ($M = 4.72$) reported significantly higher levels of insecurity than intoxicated HSEs ($M = 3.34$), $t(47) = 2.54$, $p < .05$. Phrased differently, HSEs in the alcohol group reported similar levels of insecurity as those HSEs who had not consumed alcohol, $t < 1$, ns. However, LSEs, who had consumed alcohol reported significantly higher levels of insecurity than LSEs in the no alcohol group, $t(47) = 2.43$, $p < .05$. The covariate was not significant for the insecurity in partner's affections measure, $F(1, 47) = 2.21$, ns.

A marginally significant interaction was revealed for the measure of blame, $F(1, 47) = 3.17$, $p = .08$. Although simple effects tests yielded marginal results, a more focused test revealed that LSEs who had consumed alcohol ($M = 4.98$) reported significantly more blame than the other three cells combined ($M = 4.15$), $t(47) = 2.06$, $p < .05$. The covariate was significant for the two way analysis of the blame measure, $F(1, 47) = 5.58$, $p = .02$. Participants who reported more love for their partners were less blaming of their partners for the conflict incident.

Based on findings from Study 1 showing that low self-esteem individuals responded to an experimental manipulation of conflict seriousness by becoming more blaming of their partners in the face of a more serious conflict, we believed it would be valuable to examine the influence of

conflict seriousness on the blame measure. To this end, a 2 (alcohol condition: alcohol vs. no alcohol) by 2 (self-esteem: low vs. high self-esteem) by 2 (seriousness of conflict: high vs. low seriousness) ANCOVA was conducted. A significant three variable interaction was found, $F(1, 43) = 4.17, p = .05$. Of particular interest in this analysis were the blame ratings for highly serious conflicts. When not intoxicated and evaluating a conflict of high seriousness, LSEs ($M = 3.96$) and HSEs ($M = 4.67$) were equally blaming, $t(43) = 1.24, ns$. However, when intoxicated and evaluating a conflict of high seriousness, LSEs ($M = 5.50$) were significantly more blaming than intoxicated HSEs ($M = 3.69$), $t(43) = 2.35, p < .05$. No differences were found for conflicts of low seriousness.⁵

Discussion

The data support the hypothesis that alcohol can play a causal role in exacerbating relationship conflict. Intoxicated individuals in this study felt more negatively about a conflict incident. Importantly, in their state of reduced cognitive functioning, these intoxicated participants seemed to project this negativity onto their partners, and indicated a belief that their partners were also more upset about the incident. The negativity that is inherent in relationship conflict appeared to dominate the perceptions of intoxicated individuals in this study. Regardless of level of self-esteem, intoxicated individuals became more focused on the cues that were most salient to them when they considered a conflict, specifically, negative cues.

However, self-esteem did seem to influence how individuals processed these perceptions. Taken in the light of dependency regulation theory (Murray et al., 1998), focusing on a partner's negativity can carry with it dangerous consequences. An angry partner can also be a rejecting partner. Because a partner's anger can be a sign of dissatisfaction with the relationship, it can serve to act as a threat to felt security. My data show that although high self-esteem served as a

resource that buffered individuals from this threat, low self-esteem individuals, without such a buffer, reacted in a maladaptive fashion. Low self-esteem participants who had consumed alcohol became more insecure about their partners' feelings for them. This insecurity led low self-esteem participants to adopt a defensive posture, as revealed in their self-protective tendency to blame their partners for the conflict incident. Further, this blaming reaction was especially true for those low self-esteem individuals who perceived the conflict to be a serious one, paralleling the findings from Study 1 in which conflict seriousness was manipulated experimentally.

Once again, low self-esteem individuals' reactions to this threat to their felt security could very well lead to a self-fulfilling prophecy. By expressing anger and blame in the middle of a heated, serious conflict, people with low self-esteem are unlikely to defuse the situation and may well heighten the level of conflict. High self-esteem individuals, on the other hand, evidenced a more adaptive response to the reflected appraisals threat. Although alcohol did cause even those with high self-esteem to perceive their partners as being upset about the conflict, by not turning this perception into insecurity about their partners' affections they were able to ward off a defensive reaction. High self-esteem participants, if anything, became more secure in their partners' affections after consuming alcohol. Thus, these high self-esteem participants, even while intoxicated and facing a serious conflict, did not increase the amount of blame they attributed to their partners. By not blaming their partners, and thus not putting their partners on the defensive, high self-esteem individuals can use their cognitive and emotional resources to better resolve a conflict situation and keep their relationships intact.

Study 3

Study 2, then, provides compelling evidence that the interactive influences of self-esteem and alcohol intoxication result in increased anger and blame for low self-esteem individuals. Although past work showing that conflict predicts aggression in relationships (Leonard & Senchak, 1996) suggests that this anger and blame makes low self-esteem individuals more likely to aggress against their partners, there is not yet direct evidence to support this claim. Study 3 addresses this point by surveying individuals in relationships about the level of aggression that was present in their past conflicts that either did or did not involve alcohol. Consistent with the blame results from Study 2, I hypothesized that low self-esteem individuals would report increased use of aggression for conflicts in which they had been drinking. Further, I hypothesized that high self-esteem people, who if anything showed increased security and decreased blame while intoxicated, should not report increased aggression during intoxicated conflicts, and may even report reduced aggression when intoxicated because of an increased focus on positive cues.

Method

Participants

Students enrolled in introductory psychology classes who indicated that they were involved in an exclusive dating or marriage relationship of at least three months in length were selected for recruitment. Those who agreed to participate were given one course credit. Thirty people (17 women and 13 men) agreed to participate.

Procedure

Participants came to the lab for a study on their relationship views, again with the experimenter blind to self-esteem condition. Participants began the session by briefly describing

either the last conflict they had with their partners while they were sober, or the last conflict they had with their partners while they were intoxicated (order was counterbalanced). They then indicated the number of aggressive tactics they used during that conflict. Finally, participants described and evaluated the remaining type of conflict (i.e., either sober or intoxicated). After the session, participants were carefully debriefed before they were excused.

Independent Measures

Self-Esteem. Rosenberg (1979) Self-Esteem Scale scores were collected during a mass testing session (reliability information for this sample is not available). Participants were classified as either LSE ($M = 5.61$) or HSE ($M = 8.03$) based on a tertile split (participants in the middle range of self-esteem were removed from the analyses).

Dependent Measures

Modified Conflict Tactics Scale. As can be seen in Appendix E, participants described their own behaviour during the conflict on a modified version Conflict Tactics Scale (Straus, 1979) which asked participants to indicate which of 32 hurtful behaviours they performed during the conflict (e.g., “I purposely ignored my partner,” “I slapped my partner”); Cronbach’s $\alpha = .85$). Scores on this measure were calculated by summing the number of behaviours performed.

Results

Because initial analyses revealed no influence of gender or order, the data were analyzed using a 2 (within participants variable, type of conflict: sober vs. intoxicated) by 2 (between participants variable, self-esteem: high vs. low) mixed model ANOVA, collapsing across gender and order. The ANOVA revealed a significant interaction on the conflict tactics measure, $F(1, 17) = 5.06, p = .04$. As can be seen in Figure 1, LSEs ($M = 4.60$) and HSEs ($M = 4.00$) reported engaging in an equivalent number of hurtful behaviours during the sober conflict, $t < 1, ns$.

However, LSEs ($M = 5.70$) reported engaging in more hurtful behaviours than HSEs ($M = 2.89$) during the intoxicated conflict, $t(17) = 1.40$, ns.⁶ Although no specific contrasts are significant. LSEs exhibited more hurtful behaviours in intoxicated conflicts than in sober conflicts, $t(17) = 1.63$, ns, whereas HSEs report less hurtful behaviours in intoxicated conflicts than in sober conflicts, $t(17) = 1.56$, ns.

In an alternate analytic strategy designed to be more powerful by including all participants and utilizing self-esteem as a continuous variable, self-esteem was regressed on to the aggression scores from the intoxicated conflict, after the variance accounted for by the aggression scores from the sober conflict had been partialled out. This method was chosen to test for a difference between high and low self-esteem people's aggression in intoxicated conflicts, while still reflecting the within-subjects nature of the sober-intoxicated conflict dimension. That is, by using this method subjects literally acted as their own controls. The aggression scores from the sober conflict did, in fact, significantly predict aggression scores from the intoxicated conflict in step 1 of the analysis, $\beta = .76$ ($R^2 = .58$), $p < .001$. Self-esteem was a significant predictor of aggression scores from the intoxicated conflict in step 2, $\beta = .75$ ($\Delta R^2 = .07$), $p = .03$. Aggression scores from the sober conflict remained a significant predictor in the second step. $\beta = .75$, $p < .001$.

Discussion

The results from Study 3 suggest that the combined influences of self-esteem and alcohol can affect the level of aggression in real life relationship conflict, a situation where threats to felt security are very likely to occur. Low self-esteem individuals, who showed insecure and blaming reactions while under the influence of alcohol in Study 2, indicated using more aggression in their past real life conflicts that occurred when they had been drinking. High self-esteem people.

who did not show increased insecurity or blame when intoxicated in Study 2, actually indicated using a lower level of aggression in real relationship conflicts in which they had been drinking. This result highlights the most interesting aspect of alcohol myopia theory – how alcohol can actually lead to more prosocial behaviour. High self-esteem people, who as we have seen are able to control their levels of negativity during relationship conflict, and who may actually increase their positive feelings in the face of conflict, appeared to focus even more on this positivity during their intoxicated conflicts, resulting in a reduced likelihood of aggression. Low self-esteem people, on the other hand, seemed to increase their focus on the negativity they displayed in Studies 1 and 2 when involved in these real life conflicts, leading to an increased likelihood of aggressive responding.

Study 4

However, despite the fact that the pattern of results from Study 3 seems to mirror and extend that of Study 2, there is not yet direct experimental evidence that the combination of self-esteem and alcohol can actually cause changes in the probability that relationship partners will aggress physically. Study 4 is intended to remedy this shortcoming, as well as others remaining from the first three studies. In order to create the strongest test yet that alcohol and self-esteem interact to influence the likelihood of relationship aggression, two things were needed. First, experimental manipulations of both alcohol intoxication and threats to reflected appraisals were required. Thus, in Study 4, I combined the reflected appraisals manipulation from Study 1 and the alcohol manipulation from Study 2. Although ideally I would have combined these two factors along with the two levels of self-esteem into the full factorial design, time and financial limitations necessitated that I not do this. Instead, Study 4 is a 2 (self-esteem: low vs. high) by 4 (experimental condition: sober, placebo, alcohol, alcohol/negative reflected appraisal feedback)

design. I designed the study this way to attempt to conceptually replicate Study 3, as well as test the effect of a direct threat to reflected appraisals under intoxication. Although this design does not allow for an examination of the effects of the reflected appraisals manipulation on participants who have not been drinking, those effects can be essentially gleaned from examining Study 1. Further, I feel that this design allows for the most ecological validity: intoxicated individuals in a real life relationship conflict more than likely would be facing some sort of fairly direct reflected appraisals threat. The second element that was needed for Study 4 was a more direct measure of aggression than had been used in our previous experiments. Thus, the modified conflict tactics scale from Study 3 was further modified for use in this experiment. The version of the scale used in Study 4 measures how tempted participants would feel to use a number of the aggressive tactics from the original scale. Finally, throughout this dissertation I have been conjecturing that a person's sense of rejection or hurt feelings might help to account for aggressive responding in relationship conflict. Thus, in Study 4 a new measure designed to assess participants' level of hurt was included.

Method

Participants

Male students enrolled in introductory psychology classes at the University of Waterloo who indicated in a mass testing session that they were involved in an exclusive dating or marriage relationship were selected for recruitment. They were contacted by telephone, at which point they were asked if they were presently involved in a heterosexual relationship of at least six months duration, and if they consumed alcohol. Those who met both criteria were invited to participate. Those who agreed to participate were given one course credit, as well as \$5 for those assigned to the sober condition or \$10 for those assigned to the placebo or intoxicated conditions.

Sixty-two men agreed to participate. Participants averaged 20 years of age, and had been involved in their relationships for an average of 19 months. Again, for health reasons, female participants were not included in this experiment.

Procedure

As in Study 2, participants were run in groups of up to four people. The study began in a common room, where the procedure was explained. All participants who were to receive either placebo or alcohol drinks were weighed at this time so that an appropriate amount of beverage could be prepared. Each participant was then taken to an individual room to complete a series of premeasures. The final page of this package (the next to last page for the alcohol/feedback group, as will be explained below) again asked participants to nominate a serious conflict that had occurred in their relationships, one for which both they and their partners were somewhat at fault. Participants were again instructed to describe the conflict briefly, in objective terms, without writing about their own reactions to the incident so as to minimize the amount of thought participants would give to the conflict at that time.

Those in the *alcohol* ($n = 20$) condition returned to the common room after completing the premeasures, and were given a dose of alcohol in a manner parallel to Study 2. Twenty minutes after the final drink, participants were taken back to the room in which they had completed the premeasures. They were instructed to re-read their conflict nominations, then complete a new packet of questionnaires containing the dependent measures. After completing these questionnaires, participants once again returned to the common room and their blood alcohol level (BAL) was measured. The BAL for participants in the alcohol condition was 0.065% ($SD = 0.013$).⁷ Alcohol participants estimated their BAL to be 0.11% ($SD = 0.063$).

Those in the *alcohol/feedback* condition ($n = 21$) were exposed to exactly the same procedure as those in the alcohol group, with the following additions. Before informed consent was received from participants in this group, they were told that participants in our studies were often interested in receiving feedback about the scales they filled out, so as a pilot project we were going to give them feedback on one of their questionnaires. They were instructed to complete the last scale of the premeasure package (the Princeton Partner Negativity Scale which was only seen by those in the alcohol/feedback group) using a computer card so it could be analyzed by our computer, and feedback could be provided. Only then was informed consent obtained. After completing the premeasures, and then their drinks, alcohol/feedback participants were instructed that the feedback was waiting for them in the room in which they would complete the dependent measures. They were asked to read this feedback, answer a three item questionnaire about it, and return the questionnaire before re-reading their conflict nominations, or completing the dependent measures. The three questions were ostensibly to help the researchers gauge how participants found the feedback, but were actually devised to ensure that participants would read the feedback before completing the questionnaires. The BAL for participants in the alcohol/feedback condition was 0.067% ($SD = 0.013$). Alcohol/feedback participants estimated their BAL to be 0.17% ($SD = 0.28$).

Participants in the *placebo* condition ($n = 10$)⁸ again received flattened tonic water instead of vodka, alcohol was sprayed in the common room so that the smell of alcohol would be present, and a very small amount of alcohol was floated on top of the drinks so that participants would smell and taste alcohol when taking their first sip of each drink. On average, placebo participants estimated their BAL to be 0.09% ($SD = 0.15$). Participants in the *sober* condition ($n = 11$) completed the series of dependent measures immediately upon completing the conflict

nomination. The debriefing processes from Study 1 and Study 2 were combined to ensure that participants in Study 4 were debriefed properly.

Independent Measures

Self-esteem. Participants completed the Rosenberg (1979) Self-Esteem Scale (Cronbach's $\alpha = .87$) as part of a package of premeasures. Participants were classified as either low self-esteem ($M = 6.46$) or high self-esteem ($M = 8.25$) based on a median split.

Relationship Satisfaction. In the same mass testing session that participants indicated whether or not they were in a romantic relationship, they also indicated their satisfaction with the relationship on the one-item measure, "How satisfied are you with your current relationship?" (see Appendix F for all Study 4 measures). Responses were given on a 7 point scale (1 = *not at all satisfied* to 7 = *very satisfied*). As in Study 2, we believed that it would be valuable to control for individual differences in relationship quality. However, unlike Study 2, random assignment worked in this study in that scores on the love variable were evenly distributed between conditions. Thus, all analyses for this study were done holding overall relationship satisfaction constant.

Dependent Measures

Conflict Seriousness. Participants evaluated the seriousness of the conflict incident they had nominated using one item, "How serious was the incident?". Answers were given on a nine point scale (1 = *not at all serious* to 9 = *very serious*).

Independent Ratings of Seriousness. Two independent raters (one male, one female) who were blind to condition read the conflict nominations given by participants and evaluated them along the same 9 point scale (1 = *not at all serious* to 9 = *very serious*). The raters evidenced a good level of agreement, $r = .82$, $p < .001$.

Self emotion. Using a single item measure, participants were asked how thinking about the reasons that the conflict occurred made them feel. Participants responded to the item, "When I think about the reasons behind the conflict I feel..." on a 9-point scale (1 = *more negatively* to 9 = *more positively*, reverse scored).

Partner emotion. Participants evaluated how they believed their partners felt about the conflict in question on a four item scale (Cronbach's $\alpha = .76$). Participants evaluated dimensions of their partners' emotions on bipolar scales. For example, anger was measured on a 9-point scale from 1 = *not at all angry* to 9 = *very angry*.

Insecurity in partner's affections. This five item scale (Cronbach's $\alpha = .60$) measured participants' insecurity in their partners' affections as a result of the conflict (e.g., "This conflict made me wonder how much my partner wanted to be with me"). Responses were given on a 9-point scale (1 = *not at all true* to 9 = *very true*)

Blame. The blame measure (Cronbach's $\alpha = .68$) consisted of five items (e.g., "This conflict had a negative effect on my relationship"). Responses were given on a 9-point scale (1 = *not at all true* to 9 = *very true*).

Aggression. This scale was a further modification of the Conflict Tactics Scale used in Study 3. This new scale (Cronbach's $\alpha = .91$) asked participants how tempted they would be to respond to their partners' actions with various aggressive actions. Participants responded to items such as "Lying to my partner," "Shouting or yelling at my partner," and "Slapping my partner." Responses were given on a 9-point scale (1 = *not at all tempted* to 9 = *very tempted*).

Hurt. This four item scale (Cronbach's $\alpha = .75$) was designed to measure how much participants' feelings were hurt by the conflict in question (e.g., "I felt like my partner let me down"). Responses were given along a 9-point scale (1 = *not at all true* to 9 = *very true*).

Results

Analyses of the data revealed no significant differences between the sober and placebo conditions on any of the measures. Thus, the two groups were collapsed into one "no alcohol" group ($n = 21$). Analyses were initially conducted using a 3 (alcohol condition: no alcohol, alcohol, alcohol/feedback) by 2 (self-esteem: low vs. high self-esteem) analysis of covariance (ANCOVA). As stated earlier, participants initial level of relationship satisfaction was held constant in these analyses.

The conflict seriousness measure was used as a manipulation check to test the effectiveness of the feedback manipulation (see Table 4 for results on all Study 4 measures). Those in the feedback group ($M = 5.07$) did not rate their conflicts to be any more serious than those in the no alcohol group ($M = 5.64$), or the alcohol only group ($M = 4.68$). $F < 1$, ns. Thus, at least by this measure, the manipulation did not appear to be successful. However, because differences were found on other measures between the alcohol only and alcohol/feedback conditions, and as was discussed earlier, because the measure of seriousness may actually be a conservative test of the power of the manipulation, these conditions were not combined in further analyses.

Further tests were conducted to attempt to replicate the results of Study 2. The ANCOVA revealed a marginal main effect of alcohol condition in the opposite of the predicted direction for the measure of self-emotion, $F(2, 55) = 2.68$, $p = .08$. Participants in the no alcohol condition ($M = 5.83$) reported significantly more negativity than participants in the alcohol/feedback condition ($M = 4.59$), $t(55) = 2.08$, $p = .04$, and marginally more negativity than participants in the alcohol only condition ($M = 4.64$), $t(55) = 1.92$, $p = .06$. The alcohol only condition did not differ from the alcohol/feedback condition, $t < 1$, ns. No effect of self-

esteem, nor the higher order interaction was found. The covariate was significant for the self-emotion measure, $F(1, 55) = 4.02, p = .05$. Participants higher in relationship satisfaction felt less negatively about the conflict. No significant effects were found for the measure of partner emotion.

A marginally significant main effect of alcohol condition was found on the measure of insecurity in partner's emotions, $F(2, 55) = 3.00, p = .06$. Participants in the no alcohol group ($M = 4.25$) reported significantly more insecurity than those in the alcohol/feedback group ($M = 3.12$), $t(55) = 2.32, p = .02$, and marginally more insecurity than those in the alcohol only group ($M = 3.31$), $t(55) = 1.83, p = .07$. The alcohol only condition did not differ from the alcohol/feedback condition, $t < 1, ns$. No effect of self-esteem nor the higher order interaction was found. The covariate was not significant for the insecurity measure. No significant effects were found for the measure of partner blame.

The ANCOVA revealed a marginally significant interaction on the measure of temptation to aggress, $F(2, 55) = 2.32, p = .11$. LSEs in the alcohol/feedback condition ($M = 2.81$) reported marginally higher temptation to aggress than HSEs in the alcohol/feedback condition ($M = 1.70$), $t(55) = 1.85, p = .07$. No other comparisons were significant. The covariate was marginally significant for the aggression measure, $F(1, 55) = 3.52, p = .07$. Participants higher in relationship satisfaction reported less temptation to aggress against their partners.

In an attempt to account for the peculiar results in the present study, I examined the means for conflict seriousness more closely. Indeed, this examination revealed that seriousness scores were not evenly distributed. Specifically, ratings of conflict seriousness for LSEs in the alcohol only group ($M = 4.37$) were marginally below both LSEs in the no alcohol group ($M = 6.37$), $t(53) = 1.51, p = .14$, and LSEs in the alcohol/feedback group ($M = 6.23$), $t(53) = 1.36, p$

= .18. In fact, LSEs in the alcohol only condition were the only LSE group whose mean seriousness rating fell below the midpoint of the scale. This pattern of findings was confirmed by our independent raters' ratings of conflict seriousness. Again, LSEs in the alcohol only group ($M = 4.79$) were judged to have nominated somewhat (though nonsignificantly) less serious conflicts than either LSEs in the no alcohol group ($M = 6.05$), $t(53) = 1.17$, $p = .23$ or LSEs in the alcohol/feedback group ($M = 6.44$), $t(53) = 1.24$, $p = .22$. Once more, LSEs in the alcohol only group were the only participants whose average conflict seriousness fell below the midpoint, including all HSE groups in this case.

Although the differences between the seriousness of the conflicts for LSEs in the alcohol only condition and LSEs in the other two groups were marginal, we still considered these differences worrisome. First, as discussed earlier, it is quite possible that the conflict seriousness measure is actually a conservative test of the experience of reflected appraisals threats. The manipulation of reflected appraisals did not cause LSE participants in Study 1 to radically alter their perceptions of conflict seriousness, but it did cause changes in their perceptions of their conflicts and relationships in other ways. Thus, it is quite plausible that the marginal differences between the seriousness ratings indicates a larger psychological impact than is suggested by conventional significance tests. Further, as was shown in Study 2, conflict seriousness has an important effect on the conflict evaluations of low self-esteem individuals. Only when conflicts were of high seriousness (i.e., $M = 7.29$) did LSE's defences seem to be activated. Similarly, Forgas (1994), in his examination of the effects of mood on judgements of conflict in close relationships found that, "the more extensive processing associated with complex and serious conflicts resulted in enhanced, rather than reduced, mood effect on these judgements" (p. 66). An analogous process may occur with self-esteem as well as mood. That is, it is quite plausible

that only when LSEs are challenged to confront a serious conflict will their perceptual and attributional biases reveal themselves. Comparing LSEs in the alcohol only group to LSEs in the other two groups may not be a fair comparison, then, given that the conflicts of LSEs in the alcohol group were judged by themselves, and more importantly, by independent raters not to be very serious.

Thus, it seemed important to account for the low ratings of conflict seriousness for LSEs in the alcohol only group. One possible strategy was to control for conflict seriousness in an ANCOVA. However, I do not believe this would have addressed the key issue. Specifically, if highly serious conflicts cause LSE's defences to be activated, this is not something that can be accounted for through statistical control. That is, if these defensive processes are only activated at some threshold level, then without that level of seriousness actually present in the mind of the LSE person, we could not expect the data to reveal the sort of hostility I predicted for intoxicated LSEs, whether seriousness was held constant or not. Another strategy given consideration was to separate participants into high and low seriousness groups based on a median split. However, given the difficulty with random assignment and the fact that the study was not designed for analysis at the three variable level, the result would have been cell sizes as low as two participants. I did not feel comfortable making claims about violence in romantic relationships based on such small cell sizes. Thus, we decided to remove the LSE alcohol only group from the analyses. As a result, the following exploratory analyses were conducted in two steps. First, a 2 (alcohol condition: no alcohol vs. alcohol/feedback) by 2 (self-esteem: low vs. high self-esteem) ANCOVA was conducted, holding constant initial relationship satisfaction. Although the alcohol only condition in the present study allows for the truest procedural replication of Study 2, because the present alcohol only group did not perceive their partners to be more upset (as the

alcohol group in Study 2 did) and thus did not receive any kind of reflected appraisals threat. Analyzing the 2 x 2 with the alcohol/feedback group compared to the no alcohol group can be considered a better test for replication of the psychological experience of participants in Study 2. Further, this strategy also allows us to test for replication of the aggression results from Study 3, where alcohol and reflected appraisals threats were experienced in tandem. Second, where a significant interaction between alcohol and self-esteem was found, a oneway ANCOVA (five levels: no alcohol HSE, alcohol only HSE, alcohol/feedback HSE, no alcohol LSE, alcohol/feedback LSE) was conducted, followed by focused contrasts between the three HSE conditions, in order to test whether any differences between no alcohol HSEs and alcohol/feedback HSEs could be attributed only to alcohol, and not to feedback.

Again, analyses were conducted to attempt to replicate the results of Study 2. For the measure of self emotion, the ANCOVA revealed, contrary to the results of Study 2, that those in the alcohol/feedback condition ($M = 4.66$) reported marginally less negativity about the conflict incident than participants in the no alcohol condition ($M = 5.91$), $F(1, 37) = 3.91$, $p = .06$ (see Table 5 for all Study 4 analyses not including the alcohol only group). Neither an effect of self-esteem, nor the interaction between self-esteem and intoxication, was found. The covariate was not significant for the self emotion measure, $F(1, 37) = 2.77$, *ns*. Also contrary to Study 2, no differences were found on the measure of partner emotion. Participants in the alcohol/feedback group ($M = 4.40$) did not perceive their partners to be any more upset than participants in the no alcohol group ($M = 4.51$), $F < 1$, *ns*. Neither an effect of self-esteem, nor the interaction between self-esteem and intoxication, was found. The covariate was not significant for the partner emotion measure, $F(1, 37) = 1.99$, *ns*.

A significant main effect of alcohol condition was found for the measure of insecurity in partner's affections, $F(1, 37) = 5.03, p = .03$. Those in the alcohol/feedback condition ($M = 3.13$) reported significantly less insecurity than those in the no alcohol condition ($M = 4.26$). Although this effect appeared to be fuelled largely by HSE participants⁹, no self-esteem or higher order interaction effects were found. The covariate was not significant for this measure, $F < 1, ns$. No significant effects were found for the measure of partner blame.

The ANCOVA revealed a significant interaction on the measure of aggression, $F(1, 37) = 4.66, p = .04$. In the no alcohol condition, LSEs ($M = 2.13$) and HSEs ($M = 2.32$) indicated equal levels of temptation to aggress against their partners, $t(37) < 1, ns$. However, in the alcohol/feedback condition LSEs ($M = 2.86$) reported significantly higher levels of temptation to aggress than HSEs ($M = 1.72$), $t(37) = 1.95, p < .05$. Phrased differently, HSEs in the alcohol group reported non-significantly lower temptation to aggress than HSEs who did not receive alcohol, $t(37) = 1.31, ns$. However, LSEs in the alcohol group reported marginally higher temptation to aggress than LSEs who did not receive alcohol, $t(37) = 1.65, p < .06$. The covariate was marginally significant for this measure, $F(1, 37) = 2.87, p = .10$. Participants higher in relationship satisfaction reported less temptation to behave aggressively. Focused contrasts using the oneway ANCOVA technique revealed that HSEs in the alcohol/feedback group reported significantly lower temptation to aggress than HSEs in the alcohol only group ($M = 2.40$), $t(48) = 2.21, p = .04$. No alcohol HSEs did not differ from HSEs in the alcohol only group, $t < 1, ns$.

In an effort to understand these aggression results, within-cell correlation analyses were conducted (see Table 6 for within-cell correlations). Although the ANCOVA revealed no significant differences on the measure of hurt feelings, an examination of the within-cell

correlations between hurt feelings and aggression revealed a striking pattern. This correlation was significantly stronger for LSEs in the alcohol/feedback group ($r = .91$) compared to LSEs in the no alcohol group ($r = .45$), $z = 2.33$, $p < .05$, HSEs in the no alcohol group ($r = .32$), $z = 2.43$, $p < .05$, and HSEs in the alcohol/feedback group ($r = .56$), $z = 2.05$, $p < .05$. The correlation for the LSE alcohol/feedback group was marginally higher than the HSE alcohol only group ($r = .67$), $z = 1.56$, $p = .12$. No other comparisons were significant. Thus, the correlation between hurt and aggression was strongest for intoxicated LSEs who had received negative feedback. That is, how hurt LSEs in the alcohol/feedback group felt, and how aggressive they were tempted to be were related in nearly a one-to-one fashion.

Within-cell correlation analyses of the relation between the measure of partner blame and aggression also revealed an interesting pattern. This correlation was higher for LSEs in the alcohol/feedback group ($r = .86$) than for either LSEs in the no alcohol group ($r = .40$), $z = 1.95$, $p < .06$, HSEs in the no alcohol group ($r = -.19$), $z = 3.01$, $p < .01$, HSEs in the alcohol only group ($r = .25$), $z = 2.26$, $p < .05$, or HSEs in the alcohol/feedback group ($r = .37$), $z = 2.07$, $p < .05$. Thus, intoxicated LSEs who had received negative feedback showed a significantly stronger relation than any other condition between how much they blamed their partners for the conflict incident and how tempted they were to aggress. For correlations between hurt and blame see Table 6.

Discussion

Curiously, the manipulation of reflected appraisals that was so successful in Study 1 did not succeed in altering alcohol/feedback participants' perceptions of the seriousness of the conflicts they were evaluating in this study. Although the data provide no direct explanation of why the manipulation did not appear to be as successful in Study 4, perhaps the best answer lies

in an examination of the differences in implementing the manipulation in the two studies. In Study 1, participants received feedback immediately after completing the questionnaire about their partners' behaviour. Presumably, then, participants' answers (and thus, their concerns about the meaning of their partners' behaviour) were very salient when the feedback was received. In Study 4, participants did not receive the feedback until roughly an hour after they completed the scales assessing their partners' behaviour. Further, because they had been drinking during this hour, their memory for their responses to the questionnaire may have deteriorated further. Thus, concerns about their partners' behaviour would not have been as "hot" when the feedback itself was received in Study 4 as in Study 1. Additionally, participants had far more time to rationalize away the meaning of their partners' behaviour (and thus be more prepared for negative feedback) in Study 4, meaning the impact of the feedback was more likely to be reduced. Again, it should be kept in mind that the seriousness measure may represent a conservative test of the power of the manipulation. Thus, it is possible that the manipulation in the present study did alter perceptions of threats to reflected appraisals in ways that our measures could not detect. Indeed, on the key aggression measure, HSE participants in the alcohol only condition differed from HSE participants in the alcohol/feedback condition.

Study 4 provided an intriguing and challenging set of results. Unlike Study 2, alcohol did not cause participants to become more negative about the conflict incident: if anything, they became less negative. On the surface, this is particularly surprising given that this effect was largely driven by participants who had received negative feedback. Although there is little in the data to provide a direct explanation for this marginal effect, I believe a good explanation lies in the seemingly unsuccessful attempt to manipulate reflected appraisals. Because participants' evaluations of conflict seriousness did not appear to be influenced by the attempted manipulation

of partner's anger, it is possible that this manipulation may have actually served to temporarily bolster participants' evaluations of the relationship to some extent by making them feel that they had navigated a potentially dangerous relationship conflict. Whatever the reason for the lowered negativity, though, this did not necessarily translate into reduced aggression as might be expected. Further, alcohol did not cause participants to perceive their partners to be more upset. Less surprising was the finding that intoxicated participants, especially those who received negative feedback, became more secure in their partners' affections as a result of the conflict. given that this result was fuelled largely by high self-esteem participants. In Study 2, intoxicated high self-esteem participants showed a trend toward more security in their partners' affections, and when reflected appraisals were threatened in the present study, that trend was significant. It seems that high self-esteem people who had consumed alcohol and had been threatened did, indeed, focus on their positive feelings for their partners resulting in increased security. However, unlike Study 2, low self-esteem participants in the alcohol/feedback condition did not report less security in their partners' affections, again, possibly because of the seemingly unsuccessful reflected appraisals manipulation. Further, intoxication did not alter the evaluations of partner blame for either high or low self-esteem individuals.

On a more encouraging note, the exploratory analyses for the new aggression measure did replicate the results of Study 3. As in that survey study, the combination of alcohol and a threat to reflected appraisals was related to less aggression for high self-esteem people, and more aggression for low self-esteem people. That is, the conditions which most resemble real world intoxicated conflict (i.e., the alcohol/feedback conditions where intoxication was combined with a direct threat to reflected appraisals) were the conditions that replicated the real world conflict results of Study 3. The experimental nature of the present study allows me to conclude with

more certainty that the combination of alcohol and a potential threat to reflected appraisals can indeed cause more aggression for low self-esteem individuals, and less aggression for high self-esteem individuals. Unfortunately, however, because I was forced to remove low self-esteem participants in the alcohol only group it is difficult to determine the exact causal impact of alcohol and threats to reflected appraisals individually. Thus, it cannot be concluded with certainty that alcohol was a key factor behind the temptation to aggress indicated by low self-esteem participants, rather than only the reflected appraisals manipulation. This leaves open the possibility that reflected appraisals threats alone are sufficient to increase the risk of aggression for low self-esteem individuals, regardless of alcohol consumption. However, it should be kept in mind that in Study 3, low self-esteem participants evaluating conflicts in which they had not been drinking (but, presumably, reflected appraisals threats were present as a result of the conflict) did not differ in their self-reported aggression levels from high self-esteem participants. Further, despite the fact that low self-esteem participants in the alcohol only condition seemed to respond to the low seriousness level of their conflicts with very rosy evaluations, as can be seen in Table 4, on the aggression measure they did indicate a somewhat higher temptation to aggress than those in the no alcohol condition (although still less than the alcohol/feedback condition). As for high self-esteem people, the present results suggest that alcohol alone is not sufficient to produce a lowered risk of aggression, at least when alcohol does not lead to the perception of a reflected appraisals threat as it did in Study 2. Only when they received the negativity feedback in the present study, did intoxicated, high self-esteem individuals indicate a lowered temptation to aggress. Again, this leaves open the possibility that feedback alone may have produced the lowered risk of aggression (although in Study 3, alcohol seemed to be a crucial component). What can be concluded with some certainty for high self-esteem people, though, is that alcohol

does not create an increased risk of aggression. This seems to be true despite the litany of research discussed earlier showing that alcohol predicts aggression, which adds validity to the argument that self-esteem does indeed appear to be an important factor in the alcohol-aggression link.

Although the aggression findings provide support for the main hypothesis of this dissertation, it is somewhat curious as this temptation to aggress for low self-esteem people seemed to have surfaced in the absence of malice. That is, despite the fact that intoxicated low self-esteem people who received feedback reported somewhat less negative feelings about the conflict incident, they still indicated more of an urge to aggress against their partners. Thus, although the aggression findings for the feedback group were largely as predicted, questions as to process are still left in doubt. I hypothesized that aggression would arise out of intoxicated low self-esteem individuals' insecurity in their partners' affections, yet in this study they reported no increase in insecurity.

What, then, is driving this temptation to aggress? The aforementioned within-cell correlations may provide some insight into this question. The correlation of .91 between hurt feelings and aggression for intoxicated, low self-esteem people in the feedback condition suggests that feelings of rejection translate almost perfectly into aggression for this group.¹⁰ Interestingly, though, there were no mean differences on the measure of hurt feelings between any of the groups in the experiment. Thus, although the combination of alcohol and low self-esteem does not seem to affect people's experience of rejection, it does seem to alter how they process that experience. Intoxicated, low self-esteem people, whose general relationship insecurities should be more salient when considering a relationship conflict, seem to be more likely to react to feeling hurt by trying to strike the first blow. That is, when sensing rejection

they seem to take a, "I'll hurt you before you hurt me," stance. Obviously, this aggressive approach may bring some short term solace for low self-esteem people, but would be absolutely disastrous for the relationship, thus cutting off an important source of potential validation for the low self-esteem person.

One final point regarding the within-cell correlation analyses. Because no measure of aggression was taken in Study 2, it cannot be said that the aggression results in Study 4 replicate the earlier experiment. However, the correlation of .86 between the blame measure and aggression for intoxicated, threatened, low self-esteem individuals in the present study suggests that, at least for intoxicated, insecure individuals, blame does indeed translate into temptation to aggress. Thus, the blame results from Study 2 seem even more powerful in this light.

General Discussion

Although much of this thesis has focused on whether low self-esteem causes violence to occur, I will begin by discussing the relationship of high self-esteem with alcohol and relationship aggression as the results for high self-esteem people were the most consistent. I have shown that high self-esteem people respond to a perceived threat to their partners' affections not by becoming blaming and angry in evaluating a relationship conflict, but rather by valuing their partners more (Study 1). Further, when a narrowed focus is imposed by alcohol intoxication in the face of potential threats to reflected appraisals, high self-esteem people seem to focus on positive cues, even when considering serious conflicts in their relationships. The result was more security in their partners' affections (Studies 2 and 4), and a reduced likelihood of aggression (Studies 3 and 4). Overall, my results suggest that high self-esteem individuals are able to use their confidence that they are loved by their partners as a buffer against negativity in relationship conflict, even (or, perhaps, especially) when their cognitive capacity is reduced by

alcohol intoxication. As suggested by Murray and Holmes (1993, 1994), it seems that high self-esteem people respond to relationship negativity, in this case relationship conflict, by bringing to mind their positive views of their relationships. These highly salient, positive cognitions received even more attention because of the reduced focus brought on by alcohol, resulting in a very adaptive response to relationship conflict. Indeed, intoxicated, high self-esteem individuals in my studies did not seem to consider the pain that could come from being rejected by a partner one feels so confident in, resulting in efforts to draw their partners closer.

Although the results for low self-esteem people were less consistent than those for high self-esteem people, one thing did seem clear; both Studies 3 and 4 indicated that the combination of low self-esteem and intoxication can cause an increased risk of relationship aggression, especially when there is a potential threat to reflected appraisals. Further, given the strong link between blame and aggression for intoxicated, low self-esteem individuals found in Study 4, the blaming reactions of intoxicated, low self-esteem participants in Study 2 are also suggestive of a more aggressive stance. What is still somewhat unclear at this point is exactly why. Although Study 2 suggested that alcohol intoxication causes low self-esteem individuals to be more insecure in their partners' affections, Study 4 failed to replicate this finding. However, what Study 4 did suggest was that feelings of rejection do play a very important role in the aggressive responses of intoxicated, low self-esteem individuals. For these participants, hurt feelings were related to aggression in almost a one-to-one fashion.

Limitations

Two chief limitations of the work contained in this dissertation relate to the samples studied. First, in both of our experimental studies involving alcohol our samples consisted only of male participants. Although it is not unusual for a study of relationship aggression to focus on

males, a consensus has been growing in the literature that women are equally likely to commit aggression in relationships as men (Straus, 1998). In fact, according to Straus (1998), although both partners exhibit some level of violence in the majority of violent households, in households where only one individual is violent it is more likely that the aggressor will be the woman. Thus, it seems to be important to understand the dynamics that lead to aggression for both men and women. However, it should be noted that beginning this kind of work by focusing on men is not without its merits. Study 1 suggested that men may react more strongly when they are required to engage in relationship conflict, perhaps because they are used to withdrawing when conflict gets too heated. Further, despite equal prevalence of violence for men and women, men are seven times more likely to physically injure their partners through aggression than women (Straus, 1998).

Consideration must also be given to the fact that in all four studies, a university sample was used. As a result, our samples consisted almost exclusively of young adults who were dating rather than married. Obviously, this makes it difficult to generalize our results to married couples. It is an open question whether or not the sort of threats to the sense that one is valued by one's partner would have the same impact on a person who has been married for twenty years as on a person that has been dating for two. Nevertheless, I believe that a young, unmarried sample is probably the best place to start when doing the sort of experimental work encompassed in this dissertation. Violence rates are higher for dating couples than for those who are married, at least partly because of the fact that those who are dating are more likely to be younger, and thus more immature (Straus, 1998). Thus, although our university sample limits the generalizability of the results, the age group studied here is at the highest risk for violence within relationships.

A notable limitation to the work presented in this thesis is that the studies were not able to focus on actual “live” conflict. That is, because of obvious, practical limitations, we were not able to conduct our experiments while participants were having spontaneous conflicts with their actual partners. The method we did choose, asking participants to recall past conflicts, was not without its strengths. For example, almost all participants were able to think of an example of such a conflict, and as a result we could study people’s reactions to actual conflicts that had occurred in their relationships. Nevertheless, it is entirely possible that people evaluating past conflicts will react differently than when they are actually “in the heat of the moment.” For example, work by Ross and Wilson (1999) suggests that people may alter their perceptions of their past conflicts in order to feel better about the present state of their relationships. Nevertheless, we believe consideration of past conflicts provides us with the necessary dynamic we wish to study (i.e., forcing individuals to consider to what extent they are valued by their partners). Further, although it is to some extent questionable how valid people’s responding will be in regards to a past conflict, I believe it is even more questionable how realistic a person’s responding will be if that person is asked to argue with his or her partner in front of a researcher or a video camera, two of the better alternatives for experimental work on the topic. Finally, it is far from unheard of for past conflicts to re-ignite into present conflicts in real relationships, adding further validity to the current procedure. Thus, although we believe our methodology was a good means of testing a difficult question, it needs to be kept in mind that the results represent people’s consideration of past conflicts.

Implications of the Present Research

The implications of this research for low self-esteem individuals are fairly clear: engaging in relationship conflict while intoxicated is a very dangerous enterprise. Although the mixed

results from the present set of studies have left it somewhat unclear as to exactly why this is the case, one possibility suggested by the current results is that alcohol heightens the preexisting rejection sensitivity of low self-esteem people, leaving them vulnerable to committing aggressive acts. Whether related to insecurity about being rejected by their partners as in Study 2, or feelings of hurt as in Study 4, alcohol and aggression seem to be linked for low self-esteem individuals. Further, my results point to alcohol as a causal factor in aggression. This dissertation along with the work by Leonard and his colleagues that was discussed earlier make the argument that alcohol simply works as an excuse for relationship violence less and less tenable because these studies have failed to find differences in levels of aggression between sober and placebo conditions. That is, placebo participants, who believe they have consumed alcohol and thus could use it to excuse their own aggression, are still no more likely to aggress than those who have not consumed alcohol, even if they have low self-esteem. This suggests, then, that abusers who show signs of both alcohol use and self-esteem issues need to be treated for both in order to give them a realistic chance of becoming functional in their relationships.

The implications of the results for people with high self-esteem are quite interesting. Indeed, using solely the results from the studies presented here, one could make the argument that high self-esteem people should drink before engaging in relationship conflict. When intoxicated, high self-esteem people consistently became more generous towards their partners (or at least did not change their views), and showed a reduced risk of aggression in the face of threats to reflected appraisals. Clearly, though, there are good reasons for questioning the conclusion that alcohol is the panacea for high self-esteem individuals' relationship troubles. First, the dose of alcohol consumed in my studies could probably be best described as moderate. Although high self-esteem people seemed to turn into "teddy bears" at this dosage, it is unclear

whether they could maintain this sort of stance given the extreme cognitive disruption at even higher doses of alcohol. Further, because alcohol myopia theory states that intoxicated individuals become very dependent on salient cues, it is reasonable that even intoxicated, high self-esteem people could quickly turn on their partners, depending on what cues become salient to them. Thus, high self-esteem people are still potentially dangerous when drunk. Because high self-esteem people do seem to function relatively well in their relationships when sober, it would not be this researcher's recommendation that high self-esteem people turn to the bottle regularly to try to improve their relationships.

Nevertheless, the above discussion highlights the fact that, as suggested by alcohol myopia theory, alcohol can lead to more prosocial behaviour under the right circumstances (Steele, Critchlow, & Liu, 1985). This suggests one possible method for reducing the likelihood of violence in real life drunk conflicts. Because it seems to be the salience of positive reflected appraisals that keep high self-esteem individuals from becoming aggressive in their relationships, it is seems plausible that clearly expressing affection during a heated conflict could reduce the chance of a violent incident. Although this suggestion is not intended to sound simplistic – clearly, relationship violence is a complicated issue that can never be solved easily – it is possible that such a method of reassuring one's partner that they are loved could be a useful survival tool if one senses an intoxicated conflict may get out of hand.

An interesting aspect of the present work is its ability to explain a type of relationship aggression that few other theories are able to shed much light on. Holtzworth-Munroe et al. (1998) classified people who aggress in their relationships into three types: those who aggress against their partners and others frequently, those who only aggress against their partners but do so frequently, and those who aggress against their partners one time only. Psychopathology is

usually used to explain the behaviour of those in the first category, and personality based theories are often proposed to explain the behaviour of those in the second (e.g., Dutton, 1996).

However, because of the social psychological nature of the present work, it is uniquely poised to help explain why someone may aggress one time, and never aggress again. Specifically, because of the important role that environmental cues play in alcohol myopia theory, it is an especially useful theory in explaining how someone who is not normally violent could lose control once by virtue of the presence of the right cues (i.e., fears of being rejected), and a vulnerability to them brought on by alcohol intoxication. However, because the hypotheses here attempt to synthesize a personality factor, self-esteem, along with environmental cues, their explanatory power is not limited only to those who abuse once. This work can also contribute to an understanding of why violence may be ongoing within a relationship if there is both chronic low self-esteem and chronic alcohol use.

Directions for Future Research

Although this thesis was successful in showing that the combination of alcohol and reflected appraisals threats can cause an increased risk of relationship aggression, particularly for low self-esteem people, because it is the first test of this notion, research designed to replicate and extend the present findings is needed. First, work is needed to clarify the individual causal contributions of alcohol and reflected appraisals threats. The aggression findings, which were relatively consistent in Studies 3 and 4, nevertheless confounded both factors. In Study 3, although both alcohol and threats to felt security likely influenced individuals' level of aggression, the survey format did not allow me to examine the two factors individually. In Study 4, the difficulties with random assignment for low self-esteem individuals in the alcohol only condition created a situation where meaningful results for intoxicated, low self-esteem

individuals were only available with reflected appraisals threats as a confound. Thus, work replicating and clarifying the results of Study 4 would be highly beneficial. To that end, an important lesson learned in this dissertation is that it would be best to deliver a manipulation of reflected appraisals quickly, so that participants do not have time to rationalize the manipulation away. Further, assuming the removal of the temporal and financial constraints on this project, conducting a study using the full factorial design, including a no alcohol/feedback condition to test the relative contributions of reflected appraisals threats and alcohol, would also be of great use.

Further, although the measure of temptation to aggress in Study 4 was very highly reliable, without further empirical work testing its validity, it is not entirely certain whether the temptations people indicated in that study are actually likely to translate into real world aggression. It is encouraging that the results from the temptation to aggress measure in Study 4 so closely mirrored the real life aggression results from Study 3, and that the items from the aggression measure in its original form (the Conflict Tactics Scale; Straus, 1979) have been widely accepted. However, at this time, it is difficult to expand beyond the conclusion that the combination of low self-esteem and alcohol intoxication causes individuals to be more tempted to aggress in the face of a threat to reflected appraisals. Thus, future research should concentrate both on validating the aggression measure used in Study 4, and on conceiving of new, ethical ways to measure aggression in relationships in the laboratory. The latter is a challenging task, indeed.

Perhaps the most important question left unclear by the studies presented here is exactly how alcohol causes low self-esteem people to be more likely to be vulnerable to committing relationship aggression. Both Studies 2 and 4 suggest that how low self-esteem people handle

feelings of rejection while intoxicated is critical to the process. However, in Study 2 this was manifested by increased reports of insecurity in partners' affections, whereas in Study 4 it was manifested in a high correlation between hurt feelings and aggressive responding. This latter finding appears to be the most promising avenue for future research. It makes sense that while under the cognitive restraints of intoxication, individuals should rely on more automatic processes in their decision making. Thus, investigating the sort of heuristics that low self-esteem individuals use in their relationships should provide insight into how those individuals will act when they are intoxicated. For example, Baldwin and Sinclair (1996) found that low self-esteem individuals are more likely than high self-esteem individuals to automatically link success with acceptance, and failure with rejection. It should follow, then, that this sort of automatic association would be more likely to manifest itself when the low self-esteem person is intoxicated, and thus has fewer resources available to control this association. Dependency regulation theory (Murray et al., 1998) would predict that low self-esteem people should be more likely than high self-esteem people to also automatically link feelings of rejection with the need to defend oneself from being hurt. In fact, Ayduk et al. (1999) found that for women who were highly rejection sensitive (a concept related to low self-esteem) thoughts of rejection facilitated thoughts of hostility. The notion of alcohol facilitating an association between emotional states and behaviour is not without precedent. For example, T. MacDonald et al. (in press) found that individuals' intentions to use condoms were more closely linked to the experience of sexual arousal when they were intoxicated rather than sober. Further, it is commonly speculated that the true goal of aggression in relationships is to control the partner, and thus prevent the partner from leaving the relationship. Thus, one way to view aggression in relationships is a means of countering fears of rejection through fight, rather than flight. In support of these ideas,

intoxicated low self-esteem people in Study 4 showed a significantly higher correlation between hurt feelings and aggression than high self-esteem people in both the drunk and sober conditions. Further, the correlation was highest for intoxicated, low self-esteem individuals. Clearly, then, one of the most promising avenues for learning about how the combination of low self-esteem and alcohol can lead to aggression is a closer investigation of the role of hurt feelings.

Overall, this dissertation has contributed to work on conflict and aggression in relationships by highlighting the importance of self-esteem and alcohol, and especially their interactive effects. Although it is still unclear exactly what mechanism these factors work through to influence conflict in relationships, the key seems to lie in how people respond to the hurt feelings that come from threats to the sense that one is valued by one's partner. Hopefully, the work contained here will provide a blueprint for clarifying these remaining questions.

References

- Arriaga, X. B., & Oskamp, S. (1998). The nature, correlates, and consequences of violence in intimate relationships. In X. B. Arriaga & S. Oskamp (Eds.) Violence in Intimate Relationships (pp. 3 – 16). Sage Publications: Thousand Oaks, CA.
- Ayduk, O., Downey, G., Testa, A., Yen, Y., & Shoda, Y. (1999). Does rejection elicit hostility in rejection sensitive women? Social Cognition, 17, 245 – 271.
- Baldwin, M. W., & Sinclair, L. (1996). Self-esteem and “if...then” contingencies of interpersonal acceptance. Journal of Personality and Social Psychology, 71, 1130 – 1141.
- Baumeister, B. F., Smart, L., & Boden, J. M. (1996). Relation of threatened egotism to violence and aggression: The dark side of high self-esteem. Psychological Review, 103, 5 – 33.
- Bushman, B. J., & Cooper, H. M. (1990). Effects of alcohol on human aggression: An integrative research review. Psychological Bulletin, 107, 341 - 354.
- Christensen, A., & Heavey, C. L. (1990). Gender and social structure in the demand/withdraw pattern of marital conflict. Journal of Personality and Social Psychology, 59, 73 - 81.
- Downey, G., & Feldman, S. I. (1996). Implications of rejection sensitivity for intimate relationships. Journal of Personality and Social Psychology, 70, 1327 – 1343.
- Dutton, D.G. (1998). The abusive personality: Violence and control in intimate relationships. The Guilford Press: New York.
- Forgas, J. P. (1994) Sad and guilty? Affective influences on the explanation of conflict in close relationships. Journal of Personality and Social Psychology, 66, 56 – 68.
- Goldstein, D., & Rosenbaum, A. (1985). An evaluation of the self-esteem of maritally violent men. Family Relations: Journal of Applied Family and Child Studies, 34, 425 – 428.
- Holtzworth-Munroe, A., Meehan, J. C., Herron, K., & Stuart, G. L. (1998). A typology of male batterers: An initial examination. In X. B. Arriaga & S. Oskamp (Eds.) Violence in Intimate Relationships (pp. 45 – 72). Sage Publications: Thousand Oaks, CA.
- Hornung, C. A., McCullough, B. C., & Sugimoto, T. (1981). Status relationships in marriage: Risk factors in spouse abuse. Journal of Marriage and the Family, 43, 675 - 692.
- Hull, J. G., & Bond, C. F., Jr. (1986). Social and behavioral consequences of alcohol consumption and expectancy: A meta-analysis. Psychological Bulletin, 99, 347 - 360.

Jezi, D. R., Molidor, C. E., & Wright, T. L. (1996). Physical, sexual and psychological abuse in high school dating relationships: Prevalence rates and self-esteem issues. Child and Adolescent Social Work Journal, 13, 69 – 87.

Kaufman Kantor, G., & Straus, M. A. (1987). The “drunken burn” theory of wife beating. Social Problems, 34, 213 – 230.

Kelly, E. L., & Conley, J. J. (1987). Personality and compatibility: A prospective analysis of marital stability and marital satisfaction. Journal of Personality and Social Psychology, 52, 27 - 40.

Kesner, J. E., & McKenry, P. C. (1998). The role of childhood attachment factors in predicting male violence toward female intimates. Journal of Family Violence, 13, 417 – 432.

Kurdek, L. A. (1996). The deterioration of relationship quality for gay and lesbian cohabiting couples: A five-year prospective longitudinal study. Personal Relationships, 3, 417 - 442.

Leonard, K. E. (1989). The impact of explicit aggressive and implicit nonaggressive cues on aggression in intoxicated and sober males. Personality and Social Psychology Bulletin, 15, 390 – 400.

Leonard, K. E., & Quigley, B. M. (1999). Drinking and marital aggression in newlyweds: An event based analysis of drinking and the occurrence of husband marital aggression. Journal of Studies on Alcohol, 537 – 545.

Leonard, K. E., & Roberts, L. J. (1998). The effects of alcohol on the marital interactions of aggressive and nonaggressive husbands and their wives. Journal of Abnormal Psychology, 107, 602 – 615.

Leonard, K. E., & Senchak, M. (1996). Prospective prediction of husband marital aggression within newlywed couples. Journal of Abnormal Psychology, 105, 369 - 380.

Levitt, M. J., Silver, M. E., & Franco, N. (1996). Troublesome relationships: A part of human experience. Journal of Social and Personal Relationships, 13, 523 – 536.

MacDonald, T. K., MacDonald, G., Zanna, M. P., & Fong, G. T. (in press). Alcohol, sexual arousal, and intentions to use condoms: Applying alcohol myopia to risky sexual behavior. Health Psychology.

McCarthy, G. (1999). Attachment style and adult love relationships and friendships: A study of a group of women at risk of experiencing relationship difficulties. British Journal of Medical Psychology, 72, 305 – 321.

Murphy, C. M., & O'Farrell, T. J. (1996). Marital violence among alcoholics. Current Directions in Psychological Science, 5, 183 – 186.

Murray, S. L., & Holmes, J. G. (1993). Seeing virtues in faults: Negativity and the transformation of interpersonal narratives in close relationships. Journal of Personality and Social Psychology, 65, 707 – 722.

Murray, S. L., & Holmes, J. G. (1994). Storytelling in close relationships: The construction of confidence. Personality and Social Psychology Bulletin, 20, 650 – 663.

Murray, S. L., Holmes, J. G., & Griffin, D. W. (1996). The self-fulfilling nature of positive illusions in romantic relationships: Love is not blind, but prescient. Journal of Personality and Social Psychology, 71, 1155 - 1180.

Murray, S. L., Holmes, J. G., & Griffin, D. W. (2000). Self-esteem and the quest for felt security: Perceived regard regulates the attachment process. Journal of Personality and Social Psychology, 78, 478 - 498.

Murray, S. L., Holmes, J. G., MacDonald, G., & Ellsworth, P. C. (1998). Through the looking glass darkly? When self-doubts turn into relationship insecurities. Journal of Personality and Social Psychology, 75, 1459 - 1480.

National Research Council (1993). Understanding and Preventing Violence. Washington, DC: National Academy Press.

Noller, P., Feeney, J. A., Bonnell, D., & Callan, V. J. (1994). A longitudinal study of conflict in early marriage. Journal of Social and Personal Relationships, 11, 233 - 252.

Ontario Women's Directorate (1993). Wife Assault: Dispelling the Myths.

Pan, H. D., Neidig, P. H., & O'Leary, K. D., (1994). Predicting mild and severe husband-to-wife physical aggression. Journal of Consulting and Clinical Psychology, 62, 975 - 981.

Parker, R. N., & Auerhahn, K. (1998). Alcohol, drugs, & violence. Annual Review of Sociology, 24, 291 – 311.

Pirog-Good, M. A. (1992). Sexual abuse in dating relationships. In E. C. Viano (Ed.) Intimate Violence: Interdisciplinary Perspectives (pp. 101 – 110). Hemisphere Publishing Corporation: Washington, DC.

Quigley, B. M., & Leonard, K. E. (1999). Husband alcohol expectancies, drinking, and marital-conflict styles as predictors of severe marital violence among newlywed couples. Psychology of Addictive Behaviors, 13, 49 – 59.

Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.

Ross, M. & Wilson, A. E. (1999). Constructing and appraising past selves. In D.L. Schacter, and E. Scarry (Eds.), Memory, Brain, and Belief (pp. 231 - 258). Cambridge, MA: Harvard University Press.

Shaver, P. R., & Hazan, C. (1993). Adult romantic attachment: Theory and evidence. In D. Perlman & W. Jones (Eds.), Advances in Personal Relationships (pp. 29 – 70). Jessica Kingsley Publishers: London, England.

Steele, C. M., Critchlow, B., & Liu, T. J. (1985). Alcohol and social behavior II: The helpful drunkard. Journal of Personality and Social Psychology, 46, 35 - 46.

Steele, C. M., & Josephs, R. A. (1990). Alcohol myopia: Its prized and dangerous effects. American Psychologist, 48, 18 - 34.

Steele, C. M., & Southwick, L. (1985). Alcohol and social behavior I: The psychology of drunken excess. Journal of Personality and Social Psychology, 48, 18 - 34.

Straus, M. A. (1979). Measuring intrafamily conflict and violence: The Conflict Tactics (CT) Scales. Journal of Marriage and the Family, 41, 75 - 88.

Straus, M. A. (1998). The controversy over domestic violence by women: A methodological, theoretical, and sociology of science analysis. In X. B. Arriaga & S. Oskamp (Eds.) Violence in Intimate Relationships (pp. 17 – 44). Sage Publications: Thousand Oaks, CA.

Surra, C. A., & Longstreth, M. (1990). Similarity of outcomes, interdependence, and conflict in dating relationships. Journal of Personality and Social Psychology, 59, 501 - 516.

Vaselle-Augenstein, R., & Ehrlich, A., 1992. Male batterers: Evidence for psychopathology. In E. C. Viano (Ed.) Intimate Violence: Interdisciplinary Perspectives (pp. 139 – 154). Hemisphere Publishing Corporation: Washington, DC.

Vera, E. M., & Betz, N. E. (1992). Relationships of self-regard and affective self-disclosure to relationship satisfaction in college students. Journal of College Student Development, 33, 422 – 430.

Wegner, D. M. (1994). Ironic processes of mental control. Psychological Review, 101, 34 – 52.

Endnotes

¹ Scales measuring specific conflict evaluations in Study 1 were created a priori specifically for this study, however, scales measuring general relationship attitudes were taken from Murray et al. (1998).

² Interestingly, although the condition by self-esteem interaction was not significant, the effect for seriousness ratings seemed to be greater for high self-esteem people than low self-esteem people. This is not to say that the manipulation was not effective for low self-esteem participants, as the manipulation had a strong effect on many of the subsequent scales. It is possible that the marginal interaction represents an effort by low self-esteem individuals in the experimental condition to deny or somehow repress the threat that was presented to them. If their initial reaction was indeed one of repressing their reflected appraisals worries, it is possible that these early efforts resulted in a “rebound effect” (Wegner, 1994), later making these same worries chronically accessible. In any case, it appears that the manipulation check represents a conservative test of the power of the manipulation.

³ One participant in this study left large portions of the dependent measures unanswered, resulting in the change in degrees of freedom seen here. However, given that participants were instructed that they were free to leave any questions they chose unanswered, it did not seem appropriate to remove this participant from the analyses.

⁴ This is in no way meant to imply that women should never be included in alcohol experiments. Since this study was conducted, ethical procedures for including female participants have come to my attention, and I hope to include female participants in my own future experimental work on alcohol.

⁵ Blame ratings for conflicts of low seriousness were as follows: no alcohol LSEs ($M = 4.46$), no alcohol HSEs ($M = 3.43$), intoxicated LSEs ($M = 4.45$), and intoxicated HSEs ($M = 4.22$).

⁶ An independent samples t-test run only for the intoxicated conflict revealed a significant difference between HSEs and LSEs, $t(17) = 2.12$, $p = .05$.

⁷ Near the end of running Study 4, the breathalyzer died. Before its death, participants' BAL readings had been consistently below .08% for the last half of the sample. Thus, it is unclear how accurate the BALs reported in study 4 actually are.

⁸ Because Study 2 revealed no differences between the sober and placebo conditions, in Study 4 half the number of participants were run in the sober and placebo conditions as in the alcohol or alcohol/feedback conditions. This was done with the intention of collapsing the sober and placebo conditions together in order to save resources.

⁹ A simple effects analysis revealed that HSEs in the alcohol/feedback condition ($M = 2.52$) reported less insecurity than HSEs who had not consumed alcohol ($M = 4.25$), $t(37) = 1.97$, $p = .06$. However, no differences were revealed for LSEs in the alcohol/feedback condition ($M = 3.75$) as compared to LSEs who did not consume alcohol ($M = 4.28$), $t < 1$, *ns*.

¹⁰ Despite the low level of conflict seriousness in the LSE alcohol only condition, the correlation for this group between hurt feelings and aggression was .92. This makes it difficult to attribute the .91 correlation in the LSE alcohol/feedback condition to the reflected appraisals manipulation only.

Table 1.

Study 1 results broken down by gender.

Variables	Men				Women				p values		
	High SE		Low SE		High SE		Low SE		Condition Main Effect	Condition x SE interaction	Condition x SE x Gender interaction
	Control n = 5	RA Threat n = 2	Control n = 6	RA Threat n = 6	Control n = 8	RA Threat n = 8	Control n = 4	RA Threat n = 8			
Self-Esteem	8.02	8.33	6.25	6.05	7.84	8.26	5.96	6.14	.43	.41	.76
Serious	4.00	7.50	4.83	5.00	3.88	6.00	3.00	4.00	.02	.12	.43
Partner Blame	5.67	2.83	4.00	6.28	4.00	3.92	5.33	5.92	.98	.01	.05
Self Blame	4.20	5.75	4.92	4.08	3.81	3.44	4.71	2.44	.26	.02	.77
Optimism	7.32	8.70	8.03	7.93	7.83	8.38	7.64	7.50	.12	.05	.46
Partner Ratings	6.10	7.55	6.86	5.88	7.11	7.49	7.16	7.16	.34	.003	.02
Forgiving	6.08	8.50	6.50	5.90	4.95	6.15	6.10	5.03	.26	.004	.67
Right for Me	4.20	6.50	6.44	4.28	5.67	6.79	6.07	6.13	.59	.03	.17

Table 2.

Study 1 results collapsed across gender.

Variables	High SE		Low SE	
	Control	RA Threat	Control	RA Threat
Self-Esteem	7.93	8.30	6.11	6.09
Serious	3.94	6.75	3.92	4.50
Partner Blame	4.83	3.38	4.67	6.10
Self Blame	4.01	4.59	4.81	3.26
Optimism	7.57	8.54	7.84	7.50
Partner	6.61	7.52	7.01	6.52
Forgiving	5.52	7.33	6.30	5.46
Right for Me	4.93	6.65	6.26	5.20

Table 3.

Study 2 results controlling for love.

Dependent Variables	High SE		Low SE		p values		
	No Alcohol	Alcohol	No Alcohol	Alcohol	Alcohol Main Effect	SE Main Effect	Alcohol x SE
Self-Emotion	4.74	5.72	5.13	6.55	.04	.28	.69
Partner Emotion	4.27	4.92	3.86	5.60	.01	.76	.22
Insecurity	3.63	3.34	3.53	4.72	.20	.07	.03
Blame	4.28	3.94	4.07	4.98	.43	.25	.08

Table 4.

Study 4 results including low self-esteem alcohol only condition controlling for relationship satisfaction.

Dependent Variables	High SE				Low SE				p values		
	No Alcohol	Alcohol Only	Alcohol & Feedback	No Alcohol	Alcohol Only	Alcohol & Feedback	SE Main Effect	Alc. Main Effect	SE x Alc Interaction		
Participant Seriousness Rating	4.90	4.99	3.91	6.37	4.37	6.23	.50	.12	.18		
Independent Seriousness Rating	6.26	5.96	5.33	6.09	4.77	6.48	.56	.92	.31		
Self Emotion	5.75	5.20	4.97	5.91	4.08	4.21	.08	.27	.56		
Partner Emotion	3.97	5.32	4.27	4.72	4.10	4.65	.88	.84	.29		
Insecurity	4.23	3.68	2.50	4.26	2.95	3.73	.06	.67	.15		
Blame	4.04	3.87	3.72	4.07	3.09	4.10	.55	.78	.55		
Aggression	2.28	2.40	1.70	2.08	2.41	2.81	.81	.27	.11		
Hurt	4.63	4.38	3.32	4.30	2.47	3.98	.25	.33	.15		

Table 5.

Study 4 results not including alcohol only group controlling for relationship satisfaction.

Dependent Variables	High SE		Low SE		p values		
	No Alcohol	Alcohol/ Feedback	No Alcohol	Alcohol/ Feedback	Alcohol Main Effect	SE Main Effect	Alcohol x SE
Self-Emotion	5.82	5.02	5.99	4.23	.06	.67	.48
Partner Emotion	4.02	4.30	4.78	4.71	.85	.32	.75
Insecurity	4.25	2.52	4.28	3.75	.03	.24	.24
Blame	4.07	3.73	4.11	4.14	.80	.71	.76
Aggression	2.32	1.72	2.13	2.86	.83	.15	.04
Hurt	4.66	3.35	4.32	4.00	.18	.80	.41

Table 6.

Study 4 within-cell correlations.

1. Hurt and Aggression

	No Alcohol	Alcohol Only	Alcohol/Feedback
High SE	.32	.67*	.56*
Low SE	.45		.91**

2. Blame and Aggression

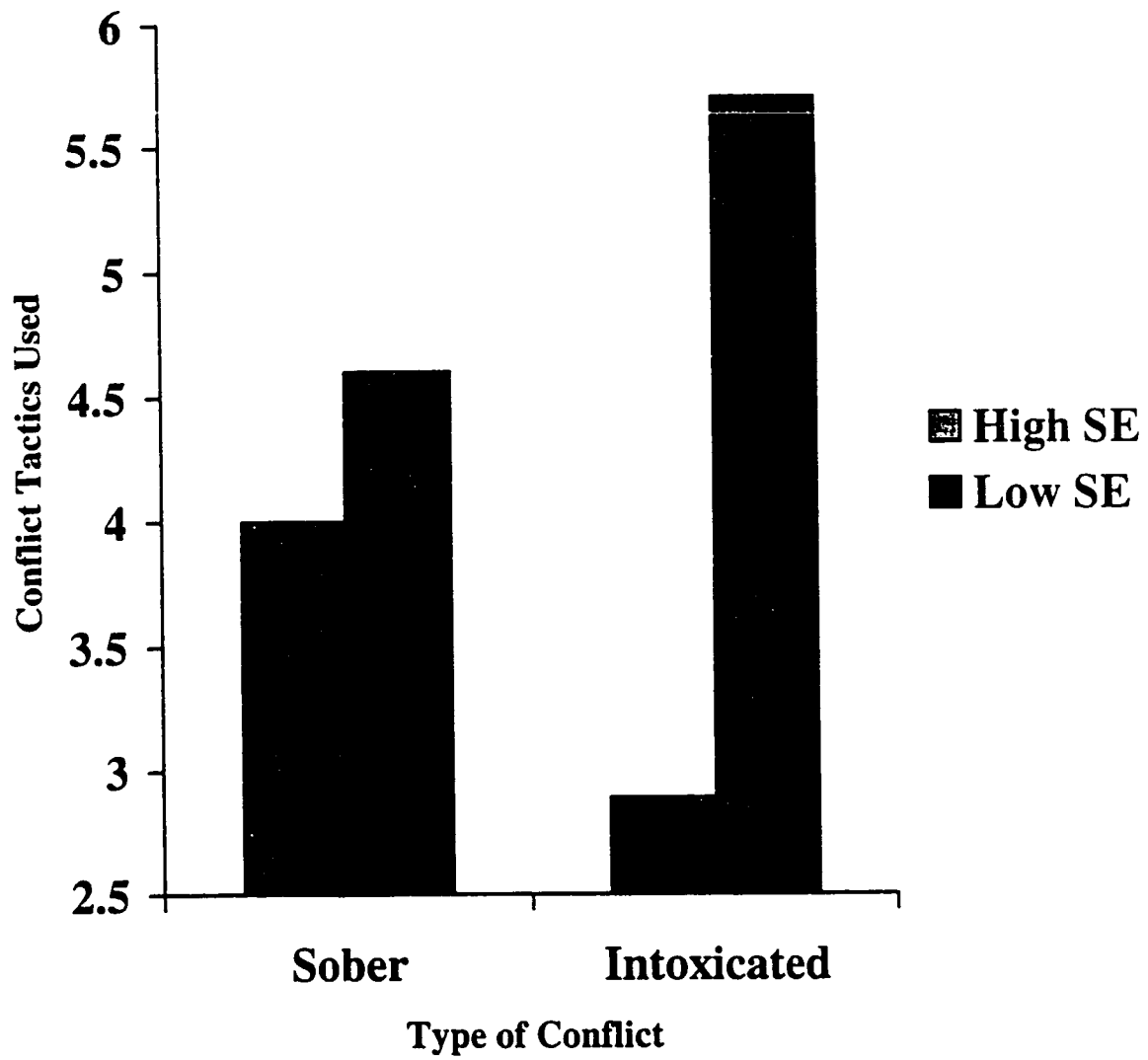
	No Alcohol	Alcohol Only	Alcohol/Feedback
High SE	-.19	.25	.37
Low SE	.40		.86**

3. Hurt and Blame

	No Alcohol	Alcohol Only	Alcohol/Feedback
High SE	.58	.24	.65*
Low SE	.74**		.88**

* $p < .05$, ** $p < .01$

Figure 1. Study 3 results.



Appendix A

Questions and Feedback for the Princeton Partner Negativity Scale

Questions

1. My partner cut me off during the conflict, not always allowing me to speak when I wanted to.
2. My partner distanced him/herself from me physically, (e.g., by taking a step backward, or withdrawing from me).
3. At times during the conflict, my partner avoided eye contact with me.
4. My partner used a tone of voice with me that he/she does not normally use.
5. My partner tried to break off the conflict without resolving it.
6. My partner became visibly distressed.
7. My partner expressed a desire for more 'space', or some time alone.
8. My partner was more hesitant than usual to see my point of view.
9. My partner was colder than he/she usually is.
10. My partner was somewhat impatient with me.

Feedback

When thinking about conflict in relationships, it is often difficult to assess the intentions of the person you are in conflict with. In the heat of the moment, a person is usually too wrapped up in his or her own thoughts and feelings to accurately determine how upset one's partner is. Research has shown that a person in conflict demonstrates negativity and anger not through what is said, but by what is done. Actions DO speak louder than words. The PPNS was constructed by observing couples in conflict, and recording exactly how angry partners display their negativity during and after conflict. By evaluating your partner on a specific conflict using the PPNS, it is possible to determine exactly how much negativity your partner was trying to communicate to you. That is, when the score is tabulated, you will have a measure of exactly how angry and upset your partner was. Because people are often blinded by their own feelings, and thus misinterpret their partner's actions, this measure has proven to be far more accurate in gauging negativity than people's direct ratings of their partner's feelings.

Your partner scored in the 'more negative than most others' range. Your partner's behaviour indicates that he/she was very angry with you during the incident you described, and that he/she considered the incident to be extremely upsetting. Sometimes, people who are that upset (like your partner was in this case) may understate their anger verbally. Thus, you may have perceived him/her to be less angry than he/she actually was. However, it is clear from comparing his/her actions to the hundreds of other people studied in our research that this incident was a major concern to him/her, and that he/she was very upset with you. Furthermore, your partner has most likely failed to put this issue behind him/her, so that should this sort of incident occur again, it could well raise his/her concern about you again.

Appendix B

Rosenberg (1979) self-esteem scale

Think about each statement that follows and rate the degree to which you agree or disagree with it on the following scale.

1	2	3	4	5	6	7	8	9
very strongly disagree	strongly disagree	moderately disagree	slightly disagree	neutral	slightly agree	moderately agree	strongly agree	very strongly agree

1. _____ I feel that I am a person of worth, at least on an equal basis with others.
2. _____ I feel that I have a number of good qualities.
3. _____ All in all I am inclined to feel that I am a failure.
4. _____ I am able to do things as well as most other people.
5. _____ I feel I do not have much to be proud of.
6. _____ I take a positive attitude toward myself.
7. _____ On the whole I am satisfied with myself.
8. _____ I wish I could have more respect for myself.
9. _____ I certainly feel useless at times.
10. _____ At times, I think I am no good at all.

Appendix C

Dependent measures from Study 1

Conflict Seriousness

1. How serious was the incident?

Partner Blame

1. My partner was wrong to act like he/she did.
2. My partner was unfair to me during the incident.
3. My partner acted harshly towards me during the incident.

Self-Blame

1. A person like me has to expect the sort of negativity my partner displayed.
2. I brought this negativity upon myself.
3. My partner was right to act the way he/she did.
4. I was not surprised my partner acted in a negative way towards me.
5. I know that I can't expect to live up to my partner's standards.
6. I caused my partner to behave negatively.

Optimism

1. My partner will do something that really upsets and angers me.
2. My partner will want more independence and pull away from me.
3. My partner will spend more time with his or her friends than I want him or her to.
4. My partner will disappoint me.
5. My partner will lie to me.

Perceptions of Partner

1. witty and humorous
2. kind and affectionate
3. critical and judgmental
4. open and disclosing
5. controlling and dominant
6. self-assured
7. patient
8. lazy
9. distant
10. emotional or moody
11. intelligent
12. warm
13. thoughtless
14. understanding
15. complaining
16. sociable; extroverted
17. irrational
18. tolerant and accepting
19. responsive
20. childish

Forgiving a Transgression

1. How likely is it that your partner would criticize or embarrass you in front of others?
2. How much would your partner need to sacrifice to make this up to you?
3. How much reassurance would you need to feel secure in your partner's affections?
4. I would believe this act revealed _____ about how much my partner respects and cares for me (scale from nothing at all to a great deal).
5. How much would you blame your partner for this episode?

My Partner is Right for Me

1. Sometimes I wonder whether my partner is the 'right' person for me.

Appendix D

Study 2 measures

Love Measure

1. I am very much in love with my partner.
2. I feel extremely attached to my partner.
3. I feel that I need my partner a great deal.

Self Emotion

1. When I think about the reasons behind the conflict I feel (scale from more positively to more negatively).

Partner Emotion

1. 1 = very negatively to 9 = very positively
2. 1 = not at all forgiving to 9 = very forgiving
3. 1 = not at all angry to 9 = very angry
4. 1 = not at all insecure to 9 = extremely insecure

Insecurity

1. This conflict made me wonder how much my partner wanted to be with me.
2. This conflict made me feel insecure in my partner's affections for me.
3. My partner did not consider my thoughts and feelings when this conflict arose.
4. My trust in my partner was damaged by the conflict.
5. A person like me has to expect the sort of negativity my partner displayed during the conflict.
6. I was not surprised that my partner acted in a negative way toward me.
7. This conflict showed me that my partner is a better person than I am.
8. This conflict made me wonder how well I really knew my partner.

Blame

1. My partner is responsible for the conflict.
2. I am responsible for the conflict. (reverse scored)
3. This conflict had a negative effect on my relationship.
4. This conflict affected my feelings for my partner negatively.
5. I feel like this conflict is still unsettled.
6. I feel like I should have asserted myself more during the conflict.

Conflict Seriousness

1. How serious a conflict was this?

Appendix E

The modified Conflict Tactics Scale from Study 3

Did this happen either **during** the fight, or **afterwards** as a consequence of the fight? Please indicate the appropriate number for each of the following questions.

1-Yes

2-No

- _____ 1. I lied to my partner.
- _____ 2. I was unfaithful to my partner.
- _____ 3. I broke a promise to my partner.
- _____ 4. I humiliated my partner in front of others (e.g., making jokes at partner's expense).
- _____ 5. I flirted with another person in front of my partner.
- _____ 6. I purposely ignored my partner.
- _____ 7. I questioned my partner about their actions or activities.
- _____ 8. I accused my partner of being unfaithful.
- _____ 9. I criticized my partner's friends and family to my partner.
- _____ 10. I called my partner fat or ugly.
- _____ 11. I did something to spite my partner.
- _____ 12. I stomped out of the room or house to get away from my partner.
- _____ 13. I hung up the phone on my partner.
- _____ 14. I said things I know will make my partner cry.
- _____ 15. I imposed rules on my partner.
- _____ 16. I purposely tried to make my partner feel guilty.
- _____ 17. I insulted or swore at my partner.
- _____ 18. I shouted or yelled at my partner.
- _____ 19. I threw something at my partner that could hurt.
- _____ 20. I destroyed objects in front of my partner.
- _____ 21. I punched a wall in front of my partner.
- _____ 22. I shook my fist at my partner.
- _____ 23. I restrained my partner from leaving.
- _____ 24. I twisted my partner's arm or hair.
- _____ 25. I pushed or shoved my partner.
- _____ 26. I destroyed something belonging to my partner.
- _____ 27. I slammed my partner against a wall.
- _____ 28. I grabbed my partner.
- _____ 29. I slapped my partner.
- _____ 30. I threatened to hit or throw something at my partner.
- _____ 31. I kicked my partner
- _____ 32. I used threats to make my partner have sex.

Appendix F

Study 4 measures

Relationship Satisfaction

1. How satisfied are you with your current relationship?

Conflict Seriousness

1. How serious was the incident?

Self Emotion

1. When I think about the reasons behind the conflict I feel (scale from more positively to more negatively).

Partner Emotion

1. 1 = very negatively to 9 = very positively
2. 1 = not at all forgiving to 9 = very forgiving
3. 1 = not at all angry to 9 = very angry
4. 1 = not at all insecure to 9 = extremely insecure

Insecurity

1. This conflict made me wonder how much my partner wanted to be with me.
2. This conflict made me feel insecure in my partner's affections for me.
3. My trust in my partner was damaged by the conflict.
4. This conflict showed me that my partner is a better person than I am.
5. This conflict made me wonder how well I really knew my partner.

Blame

1. My partner is responsible for the conflict.
2. I am responsible for the conflict. (reverse scored)
3. This conflict had a negative effect on my relationship.
4. This conflict had a negative effect on my feelings for my partner.
5. I feel like this conflict is still unsettled.

Aggression

Often, one thinks of the right way to respond to a conflict only after the conflict is over (like the great comeback you wish you'd thought of). Please indicate which of the following behaviours you would have been tempted to do in response to your partner's actions surrounding the conflict. Please indicate how tempted you would have been for each behaviour either **during** the fight, or **afterwards** as a consequence of the fight, using the following scale:

1	2	3	4	5	6	7	8	9
not at all tempted				somewhat tempted				very tempted

1. Lying to my partner.
2. Being unfaithful to my partner.
3. Humiliating my partner in front of others (e.g., making jokes at partner's expense).
4. Flirting with another person in front of my partner.
5. Purposely ignoring my partner.
6. Questioning my partner about their actions or activities.
7. Accusing my partner of being unfaithful.
8. Doing something to spite my partner.
9. Hanging up the phone on my partner.
10. Saying things I know will make my partner cry.
11. Imposing rules on my partner.
12. Purposely trying to make my partner feel guilty.
13. Insulting or swearing at my partner.
14. Shouting or yelling at my partner.
15. Throwing something at my partner that could hurt.
16. Destroying objects in front of my partner.
17. Punching a wall in front of my partner.
18. Restraining my partner from leaving.
19. Pushing or shoving my partner.
20. Destroying something belonging to my partner.
21. Grabbing my partner.
22. Slapping my partner.
23. Threatening to hit or throw something at my partner.

Hurt

1. I felt like my partner let me down.
2. It may not be easy to admit, but my partner really hurt me during this conflict.
3. It was only natural that my feelings would be hurt by what my partner did.
4. My partner tried to make me feel bad about myself during the conflict.