Attachment Anxiety and Reactions to Relationship Threat: The Benefits and Costs of Inducing Guilt in Romantic Partners

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The current research tested whether individuals high in attachment anxiety react to relationship threats in ways that can help them feel secure and satisfied in their relationship. Individuals higher in attachment anxiety experienced greater hurt feelings on days they faced partner criticism or conflict (Study 1) and during observed conflict discussions (Study 2). These pronounced hurt feelings triggered exaggerated expressions of hurt to induce guilt in the partner. Partners perceived the hurt feelings of more anxious individuals to be more intense than low anxious individuals' hurt and, in turn, experienced greater levels of guilt (Study 1). More anxious individuals were also rated by objective coders as exhibiting more guilt-induction strategies during conflict, which led to increases in partner guilt (Study 2). Moreover, partner guilt helped anxious individuals maintain more positive relationship evaluations. Although greater partner guilt had detrimental effects for individuals low in anxiety, more anxious individuals experienced more stable perceptions of their partner's commitment and more positive relationship evaluations when their partner felt more guilt. Unfortunately, these benefits were accompanied by significant declines in the partner's relationship satisfaction. These results illustrate that anxious reactions to threat are not uniformly destructive; instead, the reassuring emotions their reactions induce in relationship partners help anxious individuals feel satisfied and secure in their partner's commitment.

Keywords: attachment anxiety, relationship conflict, hurt feelings, guilt, anger

A mass of research indicates that attachment anxiety undermines the quality of adult romantic relationships. Individuals high in attachment anxiety yearn for closeness and acceptance but harbor deep-seated fears that they will be rejected or abandoned (Bowlby, 1969, 1973, 1980). Such fears create hypersensitivity to rejection and undermine coping when faced with relationship challenges (Mikulincer & Shaver, 2003; Simpson & Rholes,

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2012). For example, highly anxious individuals experience more intense and prolonged distress and behave in less constructive ways during conflict (e.g., Campbell, Simpson, Boldry, & Kashy, 2005; Overall & Sibley, 2009; Simpson, Rholes, & Phillips, 1996; Tran & Simpson, 2009). Unfortunately, such destructive reactions tend to incite aggressive and rejecting responses in the partner (Downey, Frietas, Michaelis, & Khouri, 1998), which prevents desired closeness and is likely to foster dissatisfaction in both partners.

Yet, anxious individuals are also likely to respond to relationship threats in ways that are more conducive to their overarching goal to gain and maintain closeness. Relationship insecurities can simultaneously activate opposing motivations, including the motivation to protect against expected rejection, which tends to trigger anger and hostility, as well as the motivation to restore connection (Murray & Holmes, 2009). The combined rejection fears and need for closeness at the core of attachment anxiety exemplifies this motivational ambivalence. Accordingly, in situations which typically activate self-protection goals, such as separating from a romantic partner, anxious individuals also exhibit strong approach tendencies to maintain closeness (Mikulincer, Shaver, Bar-On, & Ein-Dor, 2010). Indeed, the emotionally-charged responses shown by anxious individuals during conflict likely represent protest at the potential loss of the relationship bond and attempts to ensure partners attend to the self and modify hurtful behavior—that is, sustain relationship connections (Ainsworth, Blehar, Waters, & Wall, 1978; Bowlby, 1973; Cassidy & Berlin, 1994; Mikulincer, 1998; Rholes, Simpson, & Oriña, 1999; Simpson & Rholes, 2012).

The current research was designed to isolate the specific emotional and behavioral responses to relationship threat that should (a) arise from anxious individuals' doubts about their partner's commitment and intense motivation to secure closeness and (b) be relatively successful in obtaining the reassurance and care anxious individuals crave. When faced with relationship threatening events, we predicted that anxious individuals would feel more hurt by their partner and try to repair closeness by strategically expressing their hurt feelings to induce guilt in their partner. Moreover, we expected that such guilt-induction strategies would provide anxious intimates the reassurance they need to feel secure and satisfied in their relationship, and thus help anxious individuals maintain more positive relationship evaluations across time. However, we also expected that these strategies might be accompanied by declining satisfaction in the partner. We outline the foundation for these predictions below.

Attachment Anxiety and Reactions to Relationship Threat

Bowlby (1969, 1973, 1980) theorized that an innate attachment system motivates humans to seek proximity to caregivers in times of need, but the outcome of those proximity-seeking efforts shapes the functioning of the attachment system. Optimal functioning is assumed to occur when proximity-seeking efforts have typically been successful in gaining responsive care. In adulthood, secure individuals trust their partners to be responsive and supportive, and confidently approach relationship challenges with positive expectations and pro-relationship motivations (Mikulincer & Shaver, 2003; Simpson & Rholes, 2012). When facing relationship conflict or hurtful partner behavior, secure individuals maintain faith that they are valued (e.g., Collins, Ford, Guichard, & Allard, 2006) and consequently adopt more constructive, problem-focused strategies to repair intimacy and connection (e.g., Simpson et al., 1996).

Attachment anxiety is believed to arise when attachment figures have responded inconsistently to bids for love and support (Ainsworth et al., 1978; Cassidy & Berlin, 1994; Fraley, Roisman, Booth-LaForce, Owen, & Holland, 2013). Individuals high in attachment anxiety deeply desire closeness and intimacy but fear that, regardless of their attempts to secure love, their partners may reject or abandon them (Mikulincer & Shaver, 2003). As a result, the attachment systems of anxious individuals become hyperactivated, which is characterized by chronic proximity-seeking to secure the acceptance they crave. For example, anxious individuals talk more about their relationships during routine conversations with their partners (Tan, Overall, & Taylor, 2012), continually seek reassurance of their partner's regard (Shaver, Schachner, & Mikulincer, 2005), and feel better about their relationship when their partner is being supportive or explicitly communicating affection (Campbell et al., 2005; Lemay & Dudley, 2011).

Hyperactivation also involves vigilant monitoring of the partner's availability and an acute sensitivity to rejection, which produces more extreme reactions to relationship threat. Anxious individuals experience more pronounced feelings of rejection, stress, and hurt during conflict (Campbell et al., 2005; Overall & Sibley, 2009; Tran & Simpson, 2009), and their heightened distress is evident to objective observers (Campbell et al., 2005; Simpson et

al., 1996) and apparent using physiological measures (Mikulincer, 1998; Powers, Pietromonaco, Gunlicks, & Sayer, 2006). This affective reactivity also leads to less constructive behavioral responses. Anxious individuals report engaging in more hostile behavior during conflict (e.g., Feeney, Noller, & Callan, 1994; Gaines et al., 1997; Overall & Sibley, 2009; Scharfe & Bartholomew, 1995; Simpson et al., 1996), and their conflict behavior has been rated by independent observers as less constructive and lower in quality (Creasey, 2002; Simpson et al., 1996; Tran & Simpson, 2009). These destructive reactions are understood to be a central reason why attachment anxiety can undermine relationship satisfaction and stability.

Despite a reputation that the links between attachment anxiety and hostile reactions to conflict are well-established, several studies have found no associations between adult attachment anxiety and observed destructive behaviors during conflict (e.g., Bouthillier, Julien, Dube, Belanger, & Hamelin, 2002; Campbell et al., 2005; Roisman et al., 2007; Simpson et al., 1996) and no (e.g., Pietromonaco & Feldman Barrett, 1997; Roisman et al., 2007) or weak indiscriminant (Creasey, 2002; Paley, Cox, Burchinal, & Payne, 1999) links with negative emotions. These null or weak effects are probably the result of gathering global measures that combine a range of negative and positive emotions or behaviors. While sensitivity to rejection produces heightened distress and hostility (Downey et al., 1998; Murray & Holmes, 2009), anxious individuals' strong motivation to forge and sustain closeness should also generate emotions and behaviors that are directed toward restoring relationship bonds (Mikulincer et al., 2010). Broad indices combining responses will fail to detect the resulting mix of both negative reactivity and relationship preservation efforts (Guerrero, 1998; Overall & Sibley, 2009; Pietromonaco & Feldman Barrett, 1997; Pistole, 1989). The goal of the current research was to identify the specific emotional and behavioral responses that should arise from anxious individuals' obsessive proximity-seeking, and test whether these responses provide the reassurance anxious individuals' need to maintain satisfying relationships.

Attachment Anxiety, Hurt Feelings, and Guilt Induction Strategies

Recent research has demonstrated the importance of differentiating between specific types of interpersonal emotions and behavior by showing that related emotions, such as hurt and anger, can have distinct antecedents and consequences. Across four studies, Lemay, Overall, and Clark (2012) illustrated that strong commitment and relationship dependence was associated with feeling greater hurt when partners behaved in rejecting ways, such as being critical or cold. In contrast, greater anger was associated with lower dependence and concern about the relationship. Moreover, hurt and anger were linked with different goals and interpersonal consequences. Individuals who felt more hurt were motivated to restore their partner's acceptance and exhibited less hostile responses, such as partner derogation. Greater hurt also triggered guilt in the partner and associated reductions in the partner's hurtful behavior. In contrast, anger predicted motivations to control the partner and more reciprocal hostility and destructive responses by the partner, including lower commitment and reduced motivation to repair the relationship.

These distinct motivations and consequences have implications for understanding the reactions of anxious individuals when they encounter threats to their relationship. Anxious individuals yearn for closeness and security, are overly dependent on their partner's support and acceptance, are strongly committed to sustaining their relationships, but tend to perceive devaluation by their partners. This combination should render anxious people particularly prone to experiencing pronounced hurt feelings when facing partner rejection, criticism or conflict. Supporting this prediction, the studies reporting significant associations between attachment anxiety and affective responses to threat have assessed self-reported or observer ratings of stress, upset, and hurt (e.g., Campbell et al., 2005; Feeney, 2005; Simpson, Ickes, & Grich, 1999; Simpson et al., 1996) or feelings of rejection (Campbell et al., 2005; Overall & Sibley, 2009; Tran & Simpson, 2009).

Perhaps more important is the interpersonal outcomes associated with hurt feelings. Hurt feelings signal dependence, vulnerability, and commitment and in turn elicit pro-relationship motivations by the partner, evident by greater guilt and more positive and caring behavior (Lemay et al., 2012). This process is consistent with the relationship maintenance orientation of anxious individuals, and thus their hurt-based emotional reactions might actually help to restore the connection they crave. Moreover, given that relationship threats and associated hurt feelings will intensify anxious individuals' need to secure proximity and reassurance, and hurt feelings tend to produce exactly what anxious individuals desire (i.e., responsive repair efforts from their partners), anxious individuals may purposively and overtly express their hurt to elicit reassurance and repair efforts from the partner.

This possibility is consistent with the hyperactivation strategies that define attachment anxiety. Hyperactivation of the attachment system involves vigilant and compulsive proximityseeking in order to secure partner responsiveness. Relationship threatening contexts, therefore, should trigger forms of "protest" by anxious individuals, including overt emotional displays and insistent attempts to regain (or even coerce) care and attention from the partner (Bowlby, 1969, 1973; Mikulincer & Shaver, 2003; Simpson & Rholes, 2012). A central proximitymaintaining strategy theorized to operate in infancy (Cassidy & Berlin, 1994), adolescence (Kobak, Cole, Ferenz-Gillies, Fleming, & Gamble, 1993), and adulthood (Shaver & Mikulincer, 2007) involves exaggerated emotional displays that emphasize dependence and vulnerability—precisely the qualities that hurt signals to relationship partners (Lemay et al., 2012). However, no prior research has provided evidence that anxious individuals intentionally communicate or exaggerate their hurt feelings in order to induce guilt and, in turn, to obtain reassurance and reparative responses from their partner.

Guilt-induction strategies, including exaggerated expressions of hurt, are commonly employed in close relationships to influence others (Baumeister, Stillwell, & Heatheron, 1994, 1995; Vangelisti, Daly, & Rudnick, 1991). Sometimes referred to as manipulation and supplication (e.g., Bui, Raven, & Schwarzwald, 1994; Howard, Blumstein, & Schwartz, 1986; Overall, Fletcher, Simpson, & Sibley, 2009), guilt-induction strategies involve conveying or amplifying emotional expressions of hurt (e.g., tears, sulking, making sad face, pouting); stressing the negative impact the partner's behavior or the situation is having on the self ("how much it hurts me"); and appealing to the partner's love, concern, and

relationship obligations. All of these tactics involve highlighting hurt, dependence, and vulnerability to guilt the partner into taking responsibility, attending to the self, and soothing hurt feelings. Moreover, because guilt powerfully motivates people to make amends, guilt-induction strategies tend to be successful in getting close others to apologize, cease hurtful behavior, and comply with goals and desires (Baumeister et al., 1994, 1995; Tangney, Wagner, Fletcher, & Gramzow, 1992; Vangelisti et al., 1991).

Not only do guilt-induction strategies lead to interpersonal benefits, such outcomes might be even more beneficial for individuals high in attachment anxiety. The immediate outcome of expressions of hurt and other guilt-induction strategies should be greater guilt in the partner. Partner guilt is likely an important and desirable endpoint for anxious individuals because successfully inducing guilt provides evidence of the partner's caring. Guilt-inducing tactics only work to the extent that the targeted partner cares about and is committed to the relationship (Baumeister et al., 1994, 1995). Accordingly, the feeling and expression of guilt, even in the absence of reparative actions, can improve the hurt person's emotional state because guilt communicates concern and commitment (Baumeister et al., 1994). This is likely to be the primary impetus for anxious individuals' guilt-induction strategies; guilt ensures the partner is motivated to maintain the relationship and provides essential reassurance of the partner's regard. For these reasons, the partner's guilt might have positive effects on anxious individuals' felt-security and relationship satisfaction. We consider this possibility next.

Attachment Anxiety and the Long-Term Consequences of Guilt

In examining the causes and consequences of guilt and guiltinduction strategies, prior research has relied on retrospective accounts of guilt-related experiences (Baumeister et al., 1995; Leith & Baumeister, 1998; Tangney, Miller, Flicker, & Hill-Barlow, 1996; Vangelisti et al., 1991), reactions to hypothetical scenarios (e.g., Covert, Tangney, Maddux, & Heleno, 2003; Lopez et al., 1997), self-reported use of guilt-based strategies (e.g., Bui et al., 1994; Howard et al., 1986), and associations with individual differences in guilt proneness (e.g., Covert et al., 2003; Tangney et al., 1992; Tangney, Wagner, Hill-Barlow, Marschall, & Gramzow, 1996). The results across studies indicate that guilt is associated with greater closeness and commitment to relationship partners, more empathy and concern, lower aggression, and more constructive problem solving and making amends. For these reasons, guilt is typically seen as a prosocial emotion that functions to maintain and enhance relationships. However, no prior research has examined how guilt experienced within important relationship interactions might shape relationship outcomes across time, or whether the outcomes of guilt depend on who is eliciting or feeling guilt.

Benefits and Costs of the Partner Feeling Guilty

The relationship-enhancing processes described above suggest that the partner's guilt will have a variety of benefits for the hurt individual. As outlined above, in addition to repairing specific transgressions, partner guilt can signal care and commitment (Baumeister et al., 1994). This commitment-signaling function might be particularly important in building feelings of relationship

security and satisfaction. Prior research has shown that partner responsiveness during relationship conflict builds trust, commitment, and satisfaction over time (Wieselquist, Rusbult, Foster, & Agnew, 1999). On the other hand, there is also reason to suspect that the partner's guilt should undermine satisfaction. Guilt might repair specific transgressions, but high levels of guilt also signify the partner's responsibility and fault for hurtful transgressions, and may direct attention to the existence of high levels of conflict, hurtful partner behavior, and negative emotions in both partners (Baumeister et al., 1994). Greater negativity and partner transgressions have a deleterious impact on relationship quality (e.g., Karney & Bradbury, 1995; Kluwer & Johnson, 2007)—damage that may not be easily overcome regardless of how guilty the partner feels or what the partner does to make amends. Thus, greater partner guilt may also forecast more negative perceptions of the partner's commitment and the relationship.

Responses to a partner's guilt may depend on individuals' level of attachment anxiety and associated source of that partner's guilt. We predicted that a key way anxious individuals manage relationship threats is to purposively elicit guilt to coerce the partner's care and test their partner's commitment. Successfully inducing guilt in the partner should, therefore, provide highly anxious individuals desired evidence of their partner's commitment, and these benefits may overshadow any costs of the partner's guilt. Accordingly, greater partner guilt might help sustain feelings of security and relationship satisfaction for anxious individuals. In contrast, individuals low in attachment anxiety are not preoccupied with their partner's acceptance, are unlikely to seek reassurance via guiltinduction strategies, and, when guilt occurs, are less likely to focus on their partner's guilt as evidence of their partner's care. Hence, for low anxious individuals, the partner's guilt may not have benefits. Instead, when not induced by low anxious individuals, the existence of high levels of partner guilt represents the partner's culpability for hurtful transgressions, and thus is likely to foster relatively negative evaluations of the partner and relationship. In sum, we expected that greater partner guilt would predict more negative partner and relationship evaluations for individuals low in anxiety, but that the negative impact of guilt would be attenuated for individuals high in anxiety because, for them, the partner's guilt also has the benefit of providing needed reassurance of their partner's concern and commitment.

Benefits and Costs of Feeling Guilt

Guilt is also likely to be associated with a mix of positive and negative outcomes for the partner who feels guilty. On the positive side, prior research has shown that feeling guilt is associated with empathic concern, commitment, and closeness, and triggers reparative actions that should enhance relationships. People who are more committed and responsive to their partners, and who engage in more constructive relationship maintenance behavior, tend to foster healthier and happier relationships (e.g., Karney, & Bradbury, 1995; Rusbult, Bissonnette, et al., 1998; Wieselquist et al., 1999). Thus, the pro-relationship orientation underpinning guilt might mean that greater guilt will be associated with maintaining satisfying relationships. In contrast, to the degree that low guilt reflects lack of care and motivation to make amends, it should predict declines in relationship quality.

On the other hand, there is also evidence that feeling guilty can have negative consequences. Frequently feeling guilt implies frequent negative experiences, which should undermine relationship satisfaction. Indeed, self-report data indicate that guilt-related cognition and behavior, such as perspective-taking and relationship maintenance efforts, are linked with positive relationship outcomes, but the (aversive) affective experience of guilt is not (Leith & Baumeister, 1998). Guilt is also often accompanied by other negative affective states, such as resentment, disappointment, low self-worth, and depressed mood (Jones & Kugler, 1993), particularly when guilt has been induced by others (Baumeister et al., 1994, 1995). Guilty partners might also feel that they cannot expect love and care from their partner, which combined with a focus on making amends, could result in receiving comparatively less relationship rewards (e.g., support and affection; Jones & Kugler, 1993).

As before, whether guilt has these potential benefits and costs is likely to depend on the context of guilt experiences. When guilt is created by one's own care and concerns for the relationship and reflects authentic or internally-generated pro-relationship motivation, it is likely associated with maintaining relationships. This should be the case for partners of individuals low in anxiety because it is unlikely their guilt will be intentionally induced. In contrast, when guilt is induced or amplified by anxious reactions, the negative consequences of guilt should be more likely. People feel guilty even when they do not intentionally hurt others or when they think the hurt reaction is unreasonable, and this situation tends to highlight discrepancies between couple members' expectations (Baumeister et al., 1994, 1995). When the hurt individuals' expectations are perceived to be unreasonable, the hurt is disproportionate to the offense, and guilt is induced to gain reassurance, feeling guilty will be an overall negative experience. These conditions all reflect the induced guilt we hypothesized would be associated with attachment anxiety, and so we expected that feeling guilty would lead to declines in satisfaction for the partners of highly anxious individuals.

Summary and Research Overview

The central goal of individuals high in attachment anxiety is to obtain closeness and acceptance—a goal that is served by intense proximity-seeking designed to secure the partner's care and attention. Our primary aim was to isolate the emotional and behavioral reactions to relationship threat that capture this primary motivation for connection. Their dependence and intense desire to obtain closeness should lead anxious individuals to experience greater hurt feelings when faced with relationship threats and, in turn, enact exaggerated expressions of hurt to induce guilt and reassurance from their partner. Moreover, although partner guilt should tend to have relatively negative effects on relationships across time, successfully inducing partner guilt should provide anxious individual's evidence of their partner's care and commitment. Thus, we predicted that the partner's guilt should help anxious individuals maintain feelings of security and satisfaction in their relationship.

To test these predictions, we assessed both individuals and their partner's emotional and behavioral reactions to relationship threats, including when encountering hurtful partner behavior and conflict during daily life (Study 1) and when discussing aspects of the self the partner desired to change (Study 2). We expected that anxious individuals would experience more hurt feelings in these

threatening contexts and, when hurt, purposively communicate or exaggerate their hurt to induce guilt in their partner. We also predicted that such guilt-induction attempts would be successful in producing feelings of guilt in the partner.

We also tested whether guilt experienced across couple's daily lives (Study 1) and during conflict-related discussions (Study 2) predicted longitudinal changes in relationship security and satisfaction. To the extent that the partner's guilt reflects the partner's culpability for hurtful partner transgressions, the more partners tend to feel high levels of guilt across couples' interactions, the more individuals should experience declines in partner and relationship evaluations. However, because successfully inducing guilt provides desired evidence of the partner's care and concern, we predicted that the partner's guilt would reassure anxious individuals of their partner's commitment and help them maintain more positive relationship evaluations. Unfortunately, we did not expect that these benefits would extend to anxious intimates' partners. Instead, because their induced guilt should be disproportionate to their intentions and behaviors, we expected that when partners of anxious individuals feel greater guilt they would experience sharper declines in satisfaction.

In both studies, we contrasted hurt feelings and guilt-induction strategies to two other common responses to relationship threat: anger and hostile behavior. We isolated hurt and guilt-induction as specific responses arising from the dependence and motivation to sustain relationships central to attachment anxiety. In contrast, anger is associated with lower dependence, is motivated by a desire to attain personal control, and triggers hostile behavior that generates distance and reciprocal animosity in the partner (Gottman, 1998; Lemay et al., 2012). Nonetheless, despite these opposing antecedents and consequences, hurt and anger are often strongly associated (see Lemay et al., 2012), and anxious intimates report greater anger and hostility during conflict (Feeney et al., 1994; Mikulincer, 1998; Overall & Sibley, 2009; Simpson et al., 1996). Indeed, anxious individuals' intense need to obtain closeness and reactivity to rejection might simultaneously generate hurt-based guilt-induction attempts and anger-based hostility (Mikulincer et al., 2010; Murray & Holmes, 2009). Thus, we controlled for the links across hurt and anger to illustrate the specificity of the predicted effects.

Finally, we also examined whether the predicted results could be due to other forms of insecurity. Another form of attachment insecurity, called avoidance, is characterized by a deep distrust of others, rigid self-reliance, and withdrawal from intimacy (Mikulincer & Shaver, 2003), and it has been shown to predict greater anger and defensive behavior during threatening interactions (Overall, Simpson, & Struthers, 2013; Simpson et al., 1996). Low self-esteem also shares similarities to attachment anxiety including sensitivity to rejection and reactivity to relationship threats (e.g., Murray, Rose, Bellavia, Holmes, & Kusche, 2002). Despite positive associations with avoidance and self-esteem, we expected that the specific hyperactivating strategies and resulting consequences of inducing guilt we targeted would be specific to attachment anxiety.

Study 1

In Study 1, we asked both members of committed couples to report their emotions and threatening relationship events at the end

of each day for three weeks. This method allows an examination of anxious reactions to relationship threat as they naturally occur across couples' lives and provides a window to how these responses typically result in the partner feeling guilty. We predicted that individuals higher in attachment anxiety would respond to threatening relationship events with heightened hurt feelings. We also hypothesized that anxious individuals' pronounced hurt feelings would trigger hyperactivating strategies in the form of exaggerated expressions of hurt to induce guilt in the partner. In Study 1, we tested this prediction by assessing whether, on days when people experienced and therefore might express or exaggerate hurt, individuals higher in anxiety were perceived by their partner to be feeling more hurt compared to individuals lower in anxiety who reported equivalent levels of hurt. If partners perceive more anxious individuals to feel greater hurt than low anxious individuals facing comparable levels of hurt, this suggests that anxious individuals express and exaggerate their hurt more to their partner. We also expected these guilt-inducing expressions would lead to anxious individuals' partners feeling greater guilt.

Our final aim was to investigate whether partner's guilt has more positive effects for individuals high versus low in anxiety. To do this, we tested whether the partner's guilt assessed during the 3-week diary was associated with relationship satisfaction gathered 9 months following the completion of the daily reports. By averaging across the diary period, we gathered an index of the degree to which couples' interactions across the course of their normal life resulted in the partner feeling guilty, which should be associated with later satisfaction if guilt has important implications for how people come to feel and think about their relationship. Because greater guilt by the partner across daily life reflects more frequent and severe transgressions, and signals the partner's fault for those transgressions, we expected that greater partner guilt would be typically associated with lower relationship satisfaction. However, because successfully inducing guilt communicates commitment and care, we expected that anxious intimates would fare better (i.e., experience lower declines or maintain levels of satisfaction) when their partner reported feeling greater guilt. However, we also expected that attempts to make partners feel guilty would have detrimental effects on the partner and, thus, partners of anxious intimates would feel less satisfied when they felt greater levels of guilt across the diary period.

Method

Participants. Seventy-eight heterosexual couples who replied to campus-wide advertisements were offered \$90NZD for completing all phases of the study (an initial session, a 3-week daily diary, and a follow-up questionnaire 9 months later). Participants were on average 22.44 years of age (SD = 4.81) and were involved in serious romantic relationships (11% married, 33% cohabiting,

¹ This sample has been used previously to investigate the links between depressive symptoms and perceptions of daily behavior (Overall & Hammond, 2013), but there is no overlap in the questions, measures, or aims of this research, and the results presented are entirely unique. The longitudinal data have not been reported before.

50% serious, 6% steady) that were on average 2.57 years in length (SD = 1.96).²

Materials and procedure. During an initial session, couples completed the scales described below and were given detailed instructions for completing a 3-week daily diary.

Relationship satisfaction. Participants rated five items developed by Rusbult, Martz, and Agnew (1998) assessing their relationship satisfaction (e.g., "I feel satisfied with our relationship"; "Our relationship is close to ideal"; 1 = strongly disagree, 7 = strongly agree). Items were averaged to index relationship satisfaction (M = 6.01, SD = 0.83, $\alpha = .86$).

Attachment security. The Adult Attachment Questionnaire (AAQ; Simpson et al., 1996) was competed with reference to romantic relationships in general. Nine items assessed attachment anxiety (e.g., "I often worry that my romantic partners don't really love me"), and eight items assessed avoidance (e.g., "I'm not very comfortable having to depend on romantic partners"; 1 = strongly disagree, 7 = strongly agree). Anxiety (M = 2.99, SD = 1.05, $\alpha = .80$) and avoidance (M = 2.92, SD = 1.04, $\alpha = .77$) were positively associated (r = .14, p = .08).

Self-esteem. Participants also completed Rosenberg's (1965) 10-item self-esteem scale (e.g., "On the whole, I am satisfied with myself"; M = 5.24, SD = 1.08, $\alpha = .89$).

Daily diary. At the end of the day for the following 21 days participants completed a web-based questionnaire assessing their relationship-related feelings and behavior that day. On average, participants completed 19.3 diary entries.

Daily feelings. Participants were asked to rate the degree to which they experienced various emotions when interacting with their partner that day, including hurt feelings ("I was hurt by my partner"), anger ("I was angry at my partner"), and guilt ("I felt guilty"; $1 = not \ at \ all$, $7 = very \ much$). Participants also rated the degree to which they perceived their partner felt hurt that day ("My partner was hurt by me").

Relationship threatening events. We assessed relationship threatening events in two ways. Both couple members rated two items assessing the degree to which they behaved in a potentially hurtful manner toward their partner (e.g., "I acted in a way that could be hurtful to my partner"; "I was critical or unpleasant toward my partner"; 1 = not at all, 7 = extremely). We used the partner's reports of hurtful behavior to predict individual's emotional reactions. Participants also reported the amount of relationship conflict experienced that day ("I experienced conflict or disagreement with my partner"; 1 = not at all, 7 = extremely), which provided an additional index of rejection-related events that threatened the relationship.

Longitudinal follow-up. Nine months after completing the diary, both couple members were contacted separately via e-mail and asked to complete an online questionnaire consisting of the relationship satisfaction measure described above. Fifteen couples dissolved within the 9-month longitudinal period, and a further 13 couples were either not able to be contacted or chose not to complete the follow-up questionnaire, leaving a sample of 50 couples for the longitudinal analyses reported below. Intact versus dissolved couples did not significantly differ across the study variables, with two exceptions: Attachment anxiety and daily hurt feelings were higher for dissolved couples (ts > 2, p < .05). Retained couples maintained high levels of relationship satisfaction across the follow-up period (M = 5.92, SD = 1.09, $\alpha = .92$).

Results

Daily analyses: Attachment anxiety, hurt feelings, and partner guilt. Our daily analyses tested whether, compared to individuals low in attachment anxiety, individuals higher in anxiety (1) experienced greater hurt feelings on days they faced threatening relationship events and, when hurt, (2) were perceived by their partners as experiencing higher levels of hurt (suggesting that anxious intimates exaggerated their hurt) and, in turn, (3) had partners who felt greater guilt. We expected these effects to be specific to hurt and not anger. All analyses followed Kenny, Kashy, and Cook's (2006) recommendations for analyzing repeated measures dyadic data using the MIXED procedure in SPSS 20. We included a number of covariates across analyses. To control for shared variance across different forms of insecurity, we controlled for the main effect of attachment avoidance. To isolate the unique associations of hurt, we controlled for the positive association between hurt and anger (hurt \rightarrow anger B = .72, t = 52.51, p < .01) by either controlling for anger when predicting hurt (and vice versa) or including hurt and anger as simultaneous predictors (see Lemay et al., 2012). To capture residual change in the outcome variables, we also controlled for the level of the outcome variables the prior day. The intercept was modeled as random, and because we wanted to make direct comparisons across high and low anxiety at the same levels of relationship threat or hurt feelings, all predictors were grand-mean centered.3,4

Anxious reactions to threatening relationship events. To illustrate the analysis strategy, we tested the degree to which anxious individuals reacted with greater hurt feelings when encountering hurtful partner behavior by modeling hurt feelings on day i as a function of (a) hurt feelings on day i-1, (b) anger on day i to ensure the associations were specific to hurt, (c) attachment avoidance, (d) attachment anxiety, (e) hurtful behavior reported by the partner on day i, and (f) the interaction between the partner's hurtful behavior and attachment anxiety. The results are shown in the top left of Table 1. The predicted interaction between anxiety and partners' hurtful behavior was significant and is plotted in Panel A of Figure 1. We

² The results reported did not differ according to age, relationship length (log-transformed), and relationship status (cohabiting vs. not), with the exceptions that the greater hurt and lower anger reported by anxious individuals when facing daily conflict were stronger when participants were older and (for anger) in longer, cohabiting relationships.

³ Comparable results emerged using person-mean centering and when conducting the analyses excluding these covariates. The one exception involved the links between attachment anxiety and anger (see Table 1): When hurt feelings were not controlled, the main and interaction effects of anxiety on anger were not significant. These null effects remain supportive of our overall conclusion that hurt is a primary response of individuals high in attachment anxiety and suggest that prior investigations capturing "negative" reactions of anxious individuals were more likely to be assessing hurt-based responses rather than anger. Moreover, this pattern highlights the importance of controlling for the associations between emotions that inevitably covary but have differential antecedents and consequences, such as hurt and anger (see Lemay et al., 2012).

⁴ We also tested the main and interaction effects of gender across analyses. Only two effects significantly differed between men and women. The interaction between attachment anxiety and daily conflict on hurt feelings shown in Table 1 was stronger for men (B = .08, t = 6.39, p < .01) than women (B = .03, t = 2.32, p < .05), but both were significant. The relatively lower anger in response to hurtful partner behavior by more anxious individuals was also significant for men (B = -.07, t = -4.13, p < .01) but not for women (B = .01, t = -0.54, p = .59), despite this same reaction to conflict replicating for both men and women.

Table 1

The Effects of Attachment Anxiety and Threatening Relationship Events on Daily Feelings of Hurt and Anger (Study 1)

	P	redictin	g hurt	Predicting anger		
achment anxiety and threatening relationship events		SE	t	В	SE	t
Response to partner's hurtful behavior						
Prior day criterion	.05	.01	3.93**	.09	.01	6.16**
Other emotion	.63	.01	46.18**	.70	.02	45.60*
Avoidance	.03	.03	0.98	.07	.03	2.39*
Anxiety	.08	.03	2.94*	06	.03	-2.09*
Partner's hurtful behavior	.14	.02	8.98**	.11	.02	6.68*
Anxiety × Partner's Hurtful Behavior	.06	.01	4.45**	04	.01	-3.04*
Response to conflict						
Prior day criterion	.05	.01	3.98**	.08	.01	6.74*
Other emotion	.55	.02	34.75**	.55	.02	34.42*
Avoidance	.01	.03	0.49	.06	.03	2.37*
Anxiety	.07	.02	2.86**	06	.03	-2.31*
Conflict	.15	.01	12.35**	.25	.01	21.26*
Anxiety \times Conflict	.05	.01	6.15**	03	.01	-3.96*

^{*} p < .05. ** p < .01.

consider two sets of simple effects to evaluate the meaning of the interaction. First, comparing the slopes of the lines in Figure 1A, the effect of hurtful partner behavior on hurt feelings was greater for individuals higher (dashed line; b=.20, t=10.01, p<.01) versus lower (solid line; b=.08, t=3.53, p<.01) in anxiety. Second, contrasting the differences between low and high in anxiety on days of low (left side of Figure 1A) versus high (right side of Figure 1A) hurtful partner behavior, anxious intimates felt greater hurt when their partner behaved in hurtful ways (b=.16, t=4.99, p<.01) but felt the same low levels of hurt in the absence of hurtful partner behavior (b=.00, t=-0.05, p=.96). Thus, anxious individuals experienced greater hurt specifically on days they faced relationship threats.

Analogous models predicting daily anger revealed the opposite pattern (shown in the right top of Table 1 and Panel B of Figure 1). Comparing the effects of partners' hurtful behavior on anger at low

versus high anxiety, individuals lower in anxiety (solid line; b=.16, t=6.83, p<.01) responded with greater anger compared to individuals higher in anxiety (dashed line; b=.07, t=3.00, p<.01). Examining differences between low and high anxiety on days of low (left side of Figure 1B) versus high (right side of Figure 1B) hurtful partner behavior, intimates higher in anxiety reported less anger when their partner behaved in hurtful ways (b=-.12, t=-3.43, p<.01) and the same low levels of anger in the absence of hurtful partner behavior (b=-.01, t=-0.13, p=.90). Thus, intimates higher in anxiety responded to relationship threats with less anger compared to individuals lower in anxiety.

The pattern shown in Figure 1 was replicated when assessing reactions to conflict and disagreement with the partner (see bottom half of Table 1). Individuals higher in attachment anxiety reacted with greater hurt and less anger compared to intimates lower in

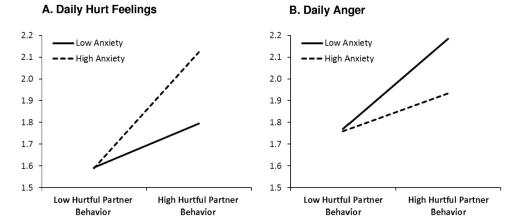


Figure 1. The moderating effect of individuals' attachment anxiety on the links between daily levels of partner's hurtful behavior and individuals' daily feelings of hurt (Panel A) and anger (Panel B) reported every day for a 3-week period (Study 1). This figure presents two separate two-way interactions (see the top half of Table 1). Panel A graphs predicted values of individuals' hurt feelings, and Panel B graphs predicted values of individuals' anger, as a function of their partner's hurtful behavior and individuals' level of attachment anxiety. High and low values are indexed at 1 SD above and below the mean.

anxiety. These results support that hurt feelings constitute a primary response to threatening events by anxious intimates, consistent with their dependence and relationship maintenance concerns.

Attachment anxiety and guilt induction. Next, we tested whether (a) anxious intimates hurt was perceived to be more intense than the same level of hurt experienced by individuals low in anxiety and, thus, (b) generated greater guilt in the partner. Given equivalent levels of hurt, if partners perceive anxious individuals to feel more hurt than low anxious individuals, this may indicate that anxious intimates express and exaggerate their hurt more. However, anxious individuals should exaggerate hurt only when they are actually feeling hurt and not on days of no or low hurt when the threat that triggers hyperactivating strategies is absent. Thus, the expected difference should emerge on days of greater hurt feelings and not on days of very low levels (or no) hurt. This predicted pattern would be supported by a significant interaction between individuals' anxiety and self-reported hurt feelings.

Adopting the same dyadic approach as above, we predicted the partner's perceptions of the individual's hurt feelings on day i by (a) the partner's perceptions on day i-1, the individual's (b) attachment avoidance, (c) attachment anxiety, and (d) hurt feelings on day i, and (e) the interaction between attachment anxiety and hurt on day i, which tests our primary prediction. To show the hypothesized exaggerated expressions were specific to hurt, we also included the individual's (f) anger on day i, and the (g) Anxiety \times Anger interaction.

The results shown in the first column of Table 2 support our prediction. The significant interaction is displayed in Figure 2, Panel A. Partners perceived greater hurt feelings on days individuals' experienced greater hurt, but this was stronger when individuals were high (b = .40, t = 11.03, p < .01) versus low (b = .29, t = 9.19, p < .01) in attachment anxiety. Revealing the hypothesized distinction, on days individuals experienced high levels of hurt (see right side of Figure 2A), anxious intimates' hurt was perceived by their partners as more intense than non-anxious intimates hurt experiencing the same high levels of hurt (b = .13, t = 2.60, p < .01). At very low (or no) hurt, when the lack of threat means guilt-induction strategies are not needed, there were no differences in the partner's perceptions of hurt feelings across levels of anxiety (left side of Figure 2A; b = -.02, t = -0.37, p = .71).

We conducted parallel analyses predicting the partner's guilt to test whether the partners of high (vs. low) anxious individuals felt greater guilt on days that individuals reported experiencing hurt. The results are shown in the second column of Table 2, and the significant interaction shown in Panel B of Figure 2. Partners generally reacted to individuals' hurt feelings with greater guilt, but this tendency was significantly more pronounced for partners of individuals high (b = .22, t = 5.46, p < .01) versus low (b = .02) .11, t = 2.99, p < .01) in anxiety. Specifically, on days that individuals experienced hurt feelings (right side of Figure 2B), the partners of anxious intimates reported greater guilt than partners of non-anxious intimates (b = .13, t = 1.96, p = .05), but there were no differences in levels of partner guilt when individuals were not experiencing hurt feelings (left side of Figure 2B; b = -.03, t =-0.46, p = .65). This pattern supports that when anxious individuals are hurt they express their hurt in ways that magnify the resulting guilt felt by their partner.

We also tested whether the heightened guilt in partners of anxious individuals occurred because partners perceived anxious individuals to be more hurt—the indicator that anxious individuals were strategically expressing hurt to induce guilt. To do this, we reran the analyses predicting partner guilt, including the partner's perceptions of hurt feelings as an additional predictor, and used procedures recommended by MacKinnon, Fritz, Williams, and Lockwood (2007) to compute asymmetric confidence intervals for the indirect effects. The interaction between anxiety and hurt feelings on partner's guilt was no longer significant (B = .04, t =1.59, p = .11) when partner's perceptions of hurt were controlled (a strong predictor of the partner's guilt; B = .38, t = 19.89, p <.01), suggesting that the greater hurt perceived by partners of anxious intimates lead to the greater guilt felt by those partners on days anxious individuals experienced high levels of hurt (indirect effect = .02, 95% CI [.01, .03]).

Taken together, these results suggest that anxious intimates express or exaggerate their hurt, which leads to partners perceiving more intense hurt feelings and subsequently feeling greater guilt. In addition, although greater anger was also associated with greater perceptions of hurt and guilt in the partner, this was not magnified for individuals high in attachment anxiety (see Table 2) indicating that these guilt-inducing dynamics are specific to anxious individuals' experiences and strategic expression of hurt rather than anger.

Longitudinal analyses: Anxiety, partner's guilt, and relationship satisfaction across time. Our final set of analyses examined whether the partner's guilt experienced across the diary period was associated with changes in relationship satisfaction across the subsequent 9 months.⁶ Averaging partner guilt across the 3-week period provided an index of the degree to which couples' interactions across the course of their day-to-day life typically resulted in the partner feeling guilty, which our diary analyses illustrated was amplified by anxious individuals' expressions of hurt. Thus, any negative links between partners' guilt and later satisfaction would indicate that these guilt-relevant processes can undermine relationship satisfaction (or vice versa). We first

⁵ An alternative test is to examine whether partners perceive anxious individuals to feel more hurt than the hurt actually reported by those individuals. The most up-to-date technique for testing bias in perceptions (West & Kenny, 2011) involves an equivalent analytic strategy with the exception that the partners' perceptions of individuals' hurt feelings (the dependent variable) are first centered on individuals' actual self-reported hurt feelings (the predictor) so that the predicted values (as plotted in Panel A of Figure 2) represent the difference between partners' perceptions of hurt feelings and individuals' actual self-reported hurt feelings. Accordingly, this approach produced an identical pattern. On days individuals experienced high levels of hurt, partners of anxious intimates were more likely to overestimate the intensity of that hurt compared to partners of non-anxious intimates, indicating that anxious individuals express more hurt than they are actually feeling.

⁶ We also tested whether the same effects occurred when predicting diary-rated relationship evaluations. There was no evidence that partner's guilt protected anxious individuals' relationship evaluations in the short-term as it did across time in Studies 1 and 2. However, the appeasing benefits of guilt will be muted in the short-term aftermath of specific relationship threats because any reassurance provided by partner guilt may simply dampen but not reverse the heightened reactivity of anxious individuals. Instead, the reassurance provided by partner guilt will build across time as anxious intimates typically encounter partner guilt in response to their proximity-seeking efforts.

Table 2
The Effects of Attachment Anxiety and Daily Feelings of Hurt and Anger on the Partner's Perceptions of Hurt and Partner's Own Feelings of Guilt (Study 1)

		dicting parceptions		Predicting the partner's guilt			
Attachment anxiety and daily feelings	В	SE	t	В	SE	t	
Prior day criterion	.09	.02	5.55**	.10	.02	5.49**	
Avoidance	.00	.04	0.06	.05	.05	0.92	
Anxiety	.06	.04	1.40	.05	.05	0.87	
Hurt	.34	.02	14.18**	.16	.03	5.96**	
Anxiety \times Hurt	.05	.02	2.36*	.05	.02	2.20^{*}	
Anger	.22	.02	9.41**	.12	.03	4.78**	
Anxiety \times Anger	03	.02	-1.42	05	.02	-1.87	

^{*} p < .05. ** p < .01.

tested the associations between the partner's guilt and individual's relationship satisfaction. Following guidelines by Kenny et al. (2006), we regressed relationship satisfaction gathered 9 months post-diary completion (Time 2) on (1) relationship satisfaction gathered immediately prior to the diary (Time 1), (2) the partner's guilt averaged across the diary, (3) attachment anxiety, and (4) the interaction between the partner's guilt and anxiety. The results are shown in the top half of Table 3.

As predicted, there was a significant interaction between the partner's guilt and attachment anxiety, which is displayed in Figure 3, Panel A. The more their partner felt guilty across the diary period, the less individuals low in attachment anxiety were satisfied 9 months later (b = -.60, t = -2.56, p < .02). In contrast, the partner's guilt did not have a detrimental impact on the satisfaction of individuals high in attachment anxiety, who instead showed a non-significant trend in the opposite direction (b = .20, t = 1.03, p = .31). Thus, at low levels of the partner's guilt (see the left side of Figure 3A), there were no differences in Time 2 satisfaction across individuals low versus high in anxiety (b = -.05, t = -0.39, p = .70), but when partner's guilt were high (see the right side of Figure 3A), less anxious individuals reported lower satis-

faction than more anxious individuals (b = .50, t = 3.13, p < .01). These results indicate that partner's guilt will typically be associated with lower satisfaction for individuals low in anxiety but not for individuals high in anxiety, in which case partner guilt might help to maintain satisfaction.

We ran analogous models predicting the partner's relationship satisfaction across time (see bottom half of Table 4). A significant interaction emerged and is shown in Panel B of Figure 3. The pattern suggested that experiencing greater guilt was associated with higher satisfaction for partners of individuals low in anxiety (b = .46, t = 1.89, p = .06) but lower satisfaction for partners of individuals high in anxiety (b = -.23, t = -1.16, p = .25), although neither of these slopes were significant. However, focusing on partners who experienced high levels of daily guilt (see the right side of Figure 3B), partners of individuals high (vs. low) in attachment anxiety were less satisfied when experiencing guilt (b = -.42, t = -2.70, p = .01). There were no differences in satisfaction when partners felt low levels of guilt (see the left side of Figure 3B; b = .07, t = 0.51, p = .62). This pattern provides some support that feeling greater guilt has more detrimental effects for partners of individuals high in attachment anxiety.

A. Partner's Perceptions of Hurt Feelings

B. Partner's Guilt

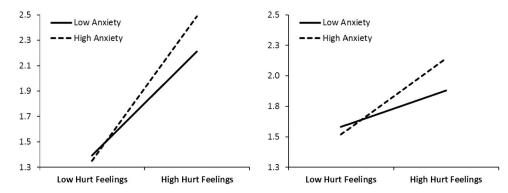


Figure 2. The moderating effect of individuals' attachment anxiety on the links between individuals' daily levels of hurt feelings on their partner's perceptions of hurt feelings (Panel A) and their partner's guilt (Panel B) reported every day for a 3-week period (Study 1). This figure presents two separate two-way interactions (see Table 2). Panel A graphs predicted values of the partner's perceptions of hurt feelings, and Panel B graphs predicted values of the partner's guilt feelings, as a function of individuals' level of hurt feelings and attachment anxiety. High and low values are indexed at 1 SD above and below the mean.

Table 3
The Effects of the Partner's Guilt and Attachment Anxiety on
Relationship Satisfaction 9 Months Post-Completion of the Daily
Diary (Study 1)

Partner's guilt and attachment anxiety	B	SE	t
Predicting own relationship satisfaction			
Own satisfaction at Time 1	.86	.14	6.16**
Avoidance	20	.10	-1.54
Anxiety	.23	.10	2.34*
Partner's guilt	20	.14	-1.44
Anxiety × Partner's Guilt	.40	.16	2.41^{*}
Predicting the partner's relationship satisfaction			
Partner's satisfaction at Time 1	.87	.15	5.60**
Avoidance	.10	.10	1.02
Anxiety	17	.09	-1.89
Partner's guilt	.11	.16	0.73
Anxiety × Partner's Guilt	34	.16	-2.16^*

^{*} p < .05. ** p < .01.

Alternative explanations and additional analyses. Additional analyses illustrated that the daily and longitudinal effects of anxiety were not attributable to other forms of relationship insecurity. Avoidance predicted greater anger and not hurt (see Table 1), and adding avoidance interaction terms across models revealed that avoidant individuals' hurt feelings were associated with lower perceived hurt (B = -.06, t = -2.36, p = .02) and lower guilt (B = -.05, t = -1.81, p = .07) by their partner (strengthening the effects of anxiety). Adding main and interaction terms of self-esteem revealed that low self-esteem was associated with greater anger (not hurt) on days of conflict (B = .03, t = 3.02, p < .01) and greater partner guilt regardless of levels of anger or hurt (B = -.15, t = -2.88, p < .01). Despite the link between anxiety and self-esteem (r = -.32, p < .01), the effects of anxiety in Tables 1 and 2 remained significant or (in two cases) marginally significant.

Additional analyses also supported that the focal effects were not due to the presence of more severe transgressions or conflict in relationships involving individuals high in attachment anxiety. Greater attachment anxiety was linked with more conflict and hurtful partner behavior (Bs = .14 and .11, $t \ge 1.87$, p < .07), but controlling average levels of conflict and partner's hurtful behavior across the diary period did not alter the effects of threatening events for anxious intimates shown in Table 1. Conflict and partner's hurtful behavior were strongly associated with the partner's guilt (Bs = .17 and .42, t > 11.87, p < .01). Additional analyses revealed that greater levels of conflict did not reduce or modify the impact of anxious individuals' hurt on partner guilt shown in Table 2, but a three-way interaction revealed that anxious individuals' hurt led to heightened guilt in the partner when that partner had engaged in hurtful behavior (b = .09, t = 2.43, p =.02). This latter effect might indicate that partners only feel exacerbated guilt when they trace the source of anxious individuals' hurt to their own behavior or when guilt-induction tactics focus specifically on actions of the partner.

Finally, additional analyses revealed that the longitudinal effects of partner guilt were not due to individuals' own guilt or hurt feelings, levels of conflict, or the partner's hurt, anger, or hurtful behavior. Own guilt and hurt across the diary did not have independent effects on Time 2 satisfaction, and the effects in Table 3 and Figure 3 remained when these variables were controlled. The partner's hurt and anger, or levels of conflict and partner's hurtful behavior, also did not yield the same effects as partner's guilt. These analyses support that the differential effects shown in Figure 3 are specific to the partner's guilt.

Discussion

Study 1 provided initial support for our predictions. More anxious individuals felt greater hurt on days they encountered relationship threats and, when they were more hurt, their partners perceived their hurt to be more intense and subsequently felt more guilt (compared to partners of low anxious intimates facing the same levels of hurt). These results provide preliminary evidence

A. Individuals' Relationship Satisfaction

B. Partners' Relationship Satisfaction

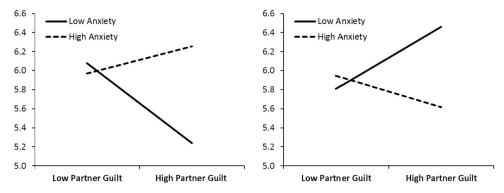


Figure 3. The moderating effect of individuals' attachment anxiety on the links between partner guilt and individuals' relationship satisfaction (Panel A) and partner guilt and partners' relationship satisfaction (Panel B) gathered 9 months post-diary completion (Study 1). This figure presents two separate two-way interactions (see Table 4). The left panel graphs predicted values of individuals' relationship satisfaction 9 months post-diary controlling for pre-diary levels of individuals' relationship satisfaction. The right panel graphs predicted values of partners' relationship satisfaction 9 months post-diary controlling for partners' pre-diary levels of relationship satisfaction. High and low values are indexed at 1 SD above and below the mean.

Table 4

Descriptive Statistics for All Measures (Study 2)

Measure	Initial session $(N = 180)$		3-month $(N = 176)$		6-month $(N = 154)$		9-month $(N = 139)$		12-month (N = 124)	
	M	SD	M	SD	M	SD	M	SD	M	SD
Questionnaire measures										
Relationship quality	6.07	0.66	5.91	0.86	5.92	0.90	5.90	0.90	5.99	0.83
Perceptions of the partner's commitment	6.42	0.80	6.32	0.91	6.38	0.83	6.30	0.91	6.38	0.86
Attachment anxiety	3.06	1.09								
Attachment avoidance	2.84	0.98								
Self-esteem	5.25	1.04								
Problem severity	5.52	1.10								
Discussion variables (averaged across discussion)			M			SI	D			Range
Hurt			1.83			1.2	20			1–6.57
Anger			1.66			1.1	2			1-6.14
Partner's hurt			1.73			1.1	9			1-6.86
Partner's anger			1.65			1.1	3			1-6.57
Partner's guilt			1.81			1.0)6			1-6.21
Guilt induction strategies			1.91			0.8	30			1 - 5.05
Hostile communication			1.77			0.9	91			1-4.95

that anxious individuals express hurt feelings to induce guilt in their partners. In Study 2, we tested this possibility more directly by coding the use of guilt-induction strategies observed during couples' conflict discussions.

Study 1 also provided evidence that the partner's guilt was associated with more positive outcomes for intimates high versus low in attachment anxiety. Consistent with higher partner guilt across daily life reflecting more frequent and severe partner transgressions, greater partner guilt was associated with lower relationship satisfaction 9 months later for individuals low in anxiety. However, greater partner guilt did not have a negative impact on the satisfaction of individuals high in anxiety, which provides support for our hypothesis that partners' guilt will have a more salubrious effect for anxious intimates because guilt provides desired evidence of the partner's commitment. Study 2 more directly tested this hypothesis by assessing whether partner's guilt during conflict was associated with changes in perceptions of the partner's commitment as well as evaluations of relationship quality across time.

Finally, although partner's guilt did not undermine anxious individuals' satisfaction, the pattern when examining the partners' satisfaction suggested it might be harmful for the partners of anxious intimates. Partners who experienced high levels of guilt during daily life were more satisfied when they were paired with low anxious individuals, probably because those who experience internally-generated guilt have a more pro-relationship orientation toward their relationships. However, partners of individuals higher in anxiety who felt more guilt were not more satisfied and instead demonstrated the reverse trend. As the diary results suggest, the guilt experienced by partners of anxious intimates is induced by anxious individuals' exaggerated expression of hurt feelings, and therefore has potentially negative effects for partners. We sought to provide a stronger test of this predicted pattern in Study 2 by assessing the partner's relationship evaluations repeatedly across a 12-month period.

Study 2

In Study 2, couples were video-recorded discussing two ongoing relationship problems arising from one partner (the agent of desired change) desiring some type of change in the other partner (the target of desired change). Being targeted for change is particularly threatening and hurtful because it signals that the partner is dissatisfied with some aspect of the self, which could elicit rejection anxieties and signal a threat to the relationship. Thus, we tested whether individuals who were higher in anxiety experienced greater hurt feelings when targeted for change by their partner. In addition, a primary goal of Study 2 was to provide more direct evidence that anxious individuals respond to hurt feelings by attempting to make their partner feel guilty, and these guiltinduction attempts trigger greater guilt in the partner. To assess emotions experienced during couples' discussions, participants reviewed their video-recorded discussions and reported how much they had experienced hurt, anger and guilt during each 30-s interval of the discussion. Trained coders rated the degree to which individuals' exhibited guilt-induction and hostile communication strategies. We predicted that anxious individuals would experience greater hurt when targeted for change, engage in more guiltinduction strategies when feeling hurt, and be successful in their attempts to make their partner feel guilty. We also expected that these effects would be specific to hurt and guilt-induction strategies and not anger and more hostile behavior.

Our final aim was to test whether the partner's tendency to feel high levels of guilt during threatening interactions (as captured in the video-recorded discussions) was associated with changes in perceptions of the partner's commitment and relationship quality assessed repeatedly over the following year. Relationship evaluations typically decline across time (e.g., Karney & Bradbury, 1997; McNulty & Russell, 2010) and so we evaluated our predicted effects in terms of whether the partner's guilt was associated with steeper declines versus more stable relationship evaluations. Because the partner's guilt represents partner transgressions and

culpability for those transgressions, and because partner guilt does not have the benefit of bolstering feelings of security for people low in attachment anxiety, we predicted that partner guilt would be associated with more pronounced declines for low anxious individuals. However, because anxious individuals need evidence of their partner's care and commitment, and induce guilt in the partner for this purpose, we predicted that greater partner guilt would predict more stable perceptions of the partner's commitment and relationship quality for individuals high in attachment anxiety. Unfortunately, replicating Study 1, we also expected greater guilt would have the opposite effects for anxious individuals' partners who we expected to experience drops in relationship quality.

Method

Participants. Participants were 180 heterosexual couples who responded to paper and electronic announcements posted across a New Zealand university and student-based organizations (e.g., employment agencies and health centers). Couples had to be involved for at least 1 year, with the mean relationship length of 2.95 years (SD = 2.26). Thirty percent of couples were married, 32% were cohabiting, and the remainder rated their relationship as serious. Age ranged from 18 to 45 years (M = 23.07, SD = 4.18). Couples were paid NZ\$70 for an initial 3-hr session described below, and then NZ\$30 for each follow-up assessment.

Procedure. During an initial laboratory session, participants completed the scales described below, and they identified and ranked (in order of importance) three aspects of their partner they wanted improved. Following a warm-up interaction, couples had two 7-min discussions involving (1) the most important-ranked feature the man wanted to change about his female partner, and (2) the most important feature the woman wanted to change about her male partner (order counterbalanced across couples). Couples were instructed to talk about the issue as they normally would and were reassured of the confidentiality of their data.

After completing both discussions, partners were led to separate rooms where each individual reviewed the discussions and rated the degree to which they remembered feeling hurt, anger, and guilt during each 30-s interval of each discussion. This type of review procedure provides a sensitive measure of participants' subjective emotions during their discussions (Welsh & Dickson, 2005). Following the initial session, couples were contacted every 3 months over the following year and were asked to complete, via post, the same scales used at the initial session to assess perceived partner commitment and relationship quality.

Measures.

Relationship quality. Items tapping satisfaction, commitment, intimacy, trust, passion, love, and romance (e.g., "How satisfied are you with your relationship?"; $1 = not \ at \ all$, 7 = extremely) from the perceived relationship quality components (PRQC) inventory (Fletcher, Simpson, & Thomas, 2000) were averaged to provide an overall index of relationship quality ($\alpha = .83$).

Perceptions of the partner's commitment. Five items developed by Rusbult, Martz, and Agnew (1998) to assess commitment were worded to assess perceptions of the partner's commitment (e.g., "My partner is committed to maintaining our relationship"; $1 = strongly\ disagree$, $7 = strongly\ agree$). Items were averaged to index perceived commitment ($\alpha = .84$).

Attachment security. The AAQ (Simpson et al., 1996; see Study 1) assessed anxiety ($\alpha = .81$) and avoidance ($\alpha = .76$), which were positively correlated (r = .35, p < .01).

Self-esteem. Rosenberg's (1965) self-esteem scale assessed self-esteem ($\alpha = .89$), which was negatively associated with anxiety and avoidance (rs = -.35 and -.25, p < .01).

Problem severity. Prior to the discussions, the partner who identified the targeted feature as a problem in the relationship rated three items that measured problem severity, including the degree to which (a) the topic/issue to be discussed was a serious problem in the relationship $(1 = not \ at \ all \ serious, 7 = extremely \ serious)$, (b) they desired change in the targeted feature $(1 = no \ desire, 7 = strong \ desire)$, and (c) it was important that the targeted feature was changed $(1 = not \ at \ all, 7 = extremely)$. The three ratings were averaged $(\alpha = .82)$.

Assessing hurt, anger, and guilt in the discussion. Participants watched both of their discussions. For each discussion, the video-recording was stopped 14 times (every 30 s), and participants rated how "hurt," "angry," and "guilty" they felt during that 30-s portion of the discussion $(1 = not \ at \ all, 7 = extremely)$.

Coding procedure. Six trained coders independently rated the extent to which individuals targeted for change by their partner exhibited guilt-induction strategies. The specific verbal and nonverbal behaviors coded were developed from prior research examining tactics designed to induce guilt in the partner (e.g., Bui et al., 1994; Howard et al., 1986; Overall et al., 2009), including (a) using or exaggerating emotional expressions of hurt (e.g., sulking, making sad face, pouting); (b) appealing to the partner's love, concern, commitment, or relationship obligations; (c) portraying self as needing help and being less capable, worthy, or powerful than partner (e.g., "I'm worse off"); (d) emphasizing the negative consequences the partner's behavior or situation has on the self (e.g., "how much it hurts me"); and (e) reminding the partner of

⁷ This sample has been used previously to assess the links between attachment avoidance, anger, and withdrawal (Overall et al., 2013). There is no overlap in the focus and measures of the current research, with the exception that we control for avoidance and anger in this study and the prior article reported analyses controlling for attachment anxiety. This sample was also used by Lemay et al. (2012, Study 4) to examine the constructive versus destructive behaviors enacted following feelings of hurt versus anger. Although we draw upon arguments presented in that article, the focus of the current article is entirely different: We focus on attachment anxiety as predictors of individuals' hurt, anger, and guiltinduction behaviors, which are novel to the current article, and none of the central analyses overlap. The only two effects that are considered in both articles involve the associations between hurt, anger, and hostile communication, which are included here as part of a larger model to illustrate that the links between anxiety, hurt, and guilt-induction strategies are distinct from hostile communication (see Table 5, second column). Our examination of the predictors and consequences of guilt is also unique, and these measures and the longitudinal component of this study have not been reported before.

⁸ Younger people were more likely to engage in guilt-induction attempts, particularly when they were higher in attachment anxiety, were more successful in inducing guilt in the partner, and experienced sharper declines in relationship quality across time. Anxious people also reported more hurt and anger in cohabiting relationships. No other results differed according to age, relationship length, or relationship status (cohabiting vs. not).

past transgressions or the love and care the individual has given the partner.

Coders also rated the degree to which participants exhibited hostile communication strategies. The behaviors coded were selected for their consistency across major coding systems designed to assess conflict behavior and established ability to predict problem resolution and relationship quality (e.g., Gottman, 1998; Heyman, 2001; Overall et al., 2009). These included (a) derogating, criticizing, or blaming the partner; (b) threatening or commanding the partner; (c) expressing anger and irritation; (d) rejecting or invalidating the partner's point of view; and (e) being domineering and taking a non-negotiable stance.

Coders were given detailed descriptions of the behaviors and tactics associated with guilt-induction and hostile communication strategies, and then they globally rated the presence of guilt-induction and hostility for each 30-s segment of the discussion (1-2 = low, 3-5 = moderate, 6-7 = high). The behaviors exhibited by men and women were coded in separate viewings. For half of the discussions, men were coded first; for the other half, women were coded first. Two to four coders from the team of six rated each participant, and ratings were averaged across coders to index the amount of guilt-induction (intraclass correlation coefficient [ICC] = .87) and hostile (ICC = .91) behavior exhibited in each 30-s segment of the discussion.

Longitudinal follow-up. During the next 12 months, each couple member was contacted four times at 3-month intervals via e-mail and/or telephone to check the status of their relationship (intact vs. dissolved). Participants from intact couples were posted a questionnaire consisting of the measures of perceived partner commitment and relationship quality assessed in the initial session. Table 4 provides the number of couples' sampled at each phase. Thirty-two couples broke up over the course of the year, and 24 couples chose not to complete at least one of the follow-up questionnaires. Compared to couples who remained intact, couples who dissolved over the year reported lower relationship satisfaction and perceptions of the partner's commitment at the initial session, and they reported greater hurt and anger during the discussions (ps < .05). The multilevel analyses described below account for sample attrition, and so we were able to include all couples that had at least one follow-up (N = 176; see Table 4). This helps to rule out the possibility that the long-term effects of guilt and attachment anxiety arise only for those who remain together (a possibility that could not be addressed in Study 1).

Results

Table 4 displays the descriptive statistics for all measures, including emotional and behavioral reactions averaged across couples' conflict discussions.

Conflict discussion analyses: Attachment anxiety, hurt feelings, and guilt induction. The structure of our data is similar to that of the daily analyses in Study 1, except that the repeated measures consist of the ratings for each 30-s interval of the discussions rather than days. Our analytic strategy mimicked that of Study 1, including controlling for (a) the main effect of attachment avoidance, (b) the association between hurt feelings and anger (hurt \rightarrow anger B = .29, t = 24.40, p < .01), and (c) the level of the criterion in the prior discussion interval, so we were predicting residual change in the outcome variables. The inter-

cept was modeled as random, and all predictors were grand-mean centered.⁹

Attachment anxiety and hurt feelings. Attachment anxiety was associated with both greater hurt (B = .14, t = 2.91, p < .01) and anger (B = .14, t = 2.98, p < .01), whereas avoidance predicted anger (B = .11, t = 2.15, p < .05) but not hurt (B = -.01, t = -0.24, p = .81).

Attachment anxiety, guilt-induction strategies, and partner's guilt. A central goal of Study 2 was to more directly show that anxious individuals engage in guilt-induction strategies when they are feeling more hurt. The results of these analyses are shown in the left side of Table 5. The predicted effects emerged, with the significant interaction between attachment anxiety and hurt feelings shown in Figure 4. When intimates higher in anxiety felt greater hurt (but not anger) during the discussion, they engaged in greater guilt-induction strategies (b = .08, t = 5.17, p < .01), whereas individuals low in anxiety did not respond to hurt with guilt-induction attempts (b = .01, t = 0.23, p = .82). Analogue analyses predicting hostile behavior (right side of Table 5) revealed that these effects were specific to hurt and guilt-induction attempts. The more individuals were hurt, the less they exhibited hostile behavior, and anxiety did not have significant main or moderating effects.

The results of analyses testing whether anxious individuals' guilt-inductions strategies were successful in making their partners feel guilty during the discussion are shown in Table 6. Partners felt greater guilt when individuals were high in anxiety and when they engaged in more guilt-induction attempts. Moreover, a significant interaction (see Figure 5) revealed that anxious intimates' guilt-induction attempts were particularly effective at inducing guilt (b = .10, t = 5.37, p < .01) compared to individuals low in anxiety (b = .03, t = 1.35, p = .18).

Longitudinal analyses: Anxiety, partner's guilt, and relationship outcomes across time. Our final analyses assessed whether the tendency for couples' conflict interactions to result in high levels of partner guilt (as captured in the laboratory discussions) was associated with changes in perceptions of the partner's commitment and relationship quality across time. We predicted that greater partner guilt would typically predict more pronounced declines in perceived partner commitment and relationship quality, but be associated with more stable relationship evaluations for individuals high in attachment anxiety. We conducted latent growth curve analyses to predict the trajectory of relationship outcomes across the 12-month follow-up period. Following pro-

⁹ As in Study 1, equivalent results emerged when using person-mean centering and excluding these covariates. We also tested whether the effects differed across men and women. Women reported greater hurt (t = 2.35, p = .02), but the effect of anxiety on feelings of hurt did not differ across men and women (B = .04, t = 0.74, p = .46). Women also exhibited greater guilt-induction strategies (t = 7.63, p < .01), but the links between anxiety and guilt-induction strategies when feeling hurt shown in Figure 5 did not differ across gender (B = .01, t = 1.18, p = .24). Indeed, of the 36 focal effects reported in the text and tables across Study 2, only one effect significantly differed across men and women. Partners' guilt predicted significant declines in men's (B = -.03, t = -2.17, p < .05), but not women's (B = .01, t = 0.61, p = .54), relationship quality. The other six effects on individuals' relationship quality (see middle column of Table 7), including the three-way interaction shown in Figure 7, did not significantly differ by gender.

Table 5
The Effects of Attachment Anxiety and Feelings of Hurt and Anger on Observed Guilt-Induction Strategies and Hostile Behavior During a Conflict Discussion (Study 2)

	Predic	cting guilt- strategie		Predicting hostile behavior			
Attachment anxiety and feelings	В	SE	t	В	SE	t	
Prior segment criterion	.32	.01	23.12**	.34	.01	25.02**	
Avoidance	04	.03	-1.08	.03	.03	0.91	
Anxiety	.04	.03	1.49	03	.03	-0.96	
Hurt	.04	.01	3.29**	03	.01	-2.21^{*}	
Anxiety \times Hurt	.04	.01	3.26**	.00	.01	0.08	
Anger	.08	.02	5.44**	.15	.01	10.70**	
Anxiety \times Anger	01	.01	-0.90	02	.01	-1.75	

^{*} p < .05. ** p < .01.

cedures to model repeated measures dyadic data (Kenny et al., 2006), and using perceptions of the partner's commitment to illustrate, the multiple ratings of perceived commitment were modeled as a function of an intercept and a slope representing time. Time was coded 0 at the initial session through to 4 for the final 12-month follow-up; thus, the intercept represents levels of perceived commitment at the initial session and the slope for time represents whether perceived commitment increased, decreased, or remained stable across the year. Partner's guilt across the discussion, individuals' attachment anxiety, and the interactions between the partner's guilt and attachment anxiety (grand-mean centered) were entered as predictors of the intercept (levels of perceived commitment) and the effect of time (change in perceived commitment across time). Our primary prediction is tested by whether the partner's guilt and attachment anxiety interact to predict changes in perceived commitment (Partner's Guilt × Attachment Anxiety × Time). The intercept and time were modeled as random, and guilt and anxiety predictors were grand-mean centered.

The results from analyses predicting perceptions of the partner's commitment are shown in the first column of Table 7. As expected, on average across the sample, perceptions of the partner's commitment declined across the year, and the predicted three-way interaction between the partner's guilt, attachment anxiety, and

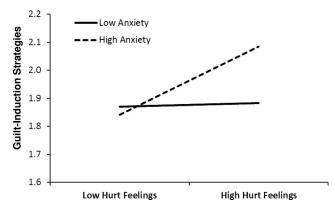


Figure 4. The moderating effect of individuals' attachment anxiety on the links between individuals' hurt feelings and guilt-induction strategies during observed conflict discussions (Study 2). High and low values are indexed at 1 SD above and below the mean.

time was significant. This interaction is shown in Figure 6. Shown in Panel A, individuals low in attachment anxiety perceived their partner's commitment to decline across time when their partner's experienced greater guilt during the conflict discussions (b = -.10, t = -3.70, p < .01), whereas perceived partner commitment remained stable across the year for low anxious intimates whose partners reported low guilt (b = -.01, t = -0.43, p = .66). The opposite pattern emerged for individuals high in attachment anxiety (shown in Panel B of Figure 6). Greater attachment anxiety was associated with declines in perceived partner commitment when the partner's guilt was low (b = -.09, t = -2.65, p < .01) but remained stable when the partner's guilt was high (b = -.02, t = -1.01, p = .32). These results support our hypothesis that, although partner guilt typically undermines evaluations of the partner, guilt provides anxious individuals with evidence of their partner's care and commitment, and this reassurance helps maintain feelings of relationship security (i.e., perceiving that their partner is committed to them).

The results from analyses predicting individuals' relationship evaluations also provided support. Shown in the middle column of Table 7, relationship evaluations typically declined across time, and greater attachment anxiety and avoidance were associated with lower relationship evaluations in general. The predicted three-way interaction between the partner's guilt, attachment anxiety, and time was also significant. This interaction is shown in Figure 7. Shown in Panel A, individuals low in attachment anxiety experienced declines in perceived relationship quality when their partner's felt greater guilt during the conflict discussions (b = -.09,

Table 6
The Effects of Attachment Anxiety and Guilt-Induction Strategies on the Partner's Guilt During a Conflict Discussion (Study 2)

	Predicting the partner's guil						
Attachment anxiety and feelings	В	SE	t				
Prior segment partner guilt	.35	.01	26.23**				
Avoidance	03	.04	-0.69				
Anxiety	.12	.04	3.12**				
Guilt-induction strategies	.07	.01	4.70**				
Anxiety × Guilt-Induction Strategies	.04	.01	2.66**				

^{**} p < .01.

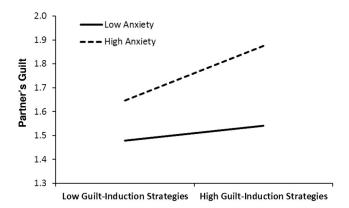


Figure 5. The moderating effect of individuals' attachment anxiety on the links between individuals' guilt-induction strategies and their partner's guilt during observed conflict discussions (Study 2). High and low values are indexed at 1 SD above and below the mean.

t=-3.06, p<.01), whereas relationship evaluations remained stable for low anxious intimates whose partners reported low guilt (b=-.00, t=-0.01, p=.99). In contrast, individuals high in attachment anxiety (see Panel B, Figure 7) experienced significant declines in relationship evaluations, but these declines were sharper when their partner's guilt was low (b=-.09, t=-3.77, p<.01) than when their partner's guilt was high (b=-.06, t=-2.95, p<.01). Examining levels of relationship quality at the end of the follow-up period (right side of Figure 7B), anxious individuals reported (marginally) higher levels of relationship quality 12 months later when partner guilt was high (b=.07, t=1.73, p=.09).

Our final analyses tested the effect of the partner's guilt on the partner's relationship evaluations. The results are shown in the last column of Table 7 and in the significant three-way interaction plotted in Figure 8. Consistent with the pattern in Study 1, partners of individuals low in attachment anxiety (see Panel A of Figure 8) reported declines in relationship quality when they experienced lower guilt during conflict discussions (b = -.08, t = -3.07, p < .01), but their relationship evaluations remained stable when they experienced higher guilt (b = -.02, t = -0.97, p = .33). In

contrast, the partners of individuals high in anxiety (see Panel B of Figure 8) reported significant declines in relationship quality when they felt greater guilt (b = -.09, t = -3.97, p < .01) but not when guilt was low (b = -.02, t = -0.71, p = .48). Thus, for partners of low anxious individuals, guilt likely represents pro-relationship motives, maintaining perceived relationship quality over time. In contrast, the guilt-induction subjected to partners of highly anxious intimates means their guilt is likely disproportionate to any offense and accordingly is associated with more negative relationship evaluations over time.

Alternative explanations and additional analyses. As in Study 1, avoidance predicted greater anger and not hurt, and was not associated with guilt-induction strategies or the partner's guilt (see Tables 5 and 6). When adding avoidance interaction terms across models, only one significant interaction emerged: In contrast to the effects of attachment anxiety shown in Figure 5, avoidant individuals reported significant declines in perceived commitment at high levels of partner's guilt (b = -.11, t = -3.30, p < .01) and maintained perceived commitment when partner's guilt was low (b = .00, t = -0.02, p = .98). The concomitant three-way interaction for anxiety remained (B = -.08, t = -2.75, p < .01). Controlling for the main and interaction effects of self-esteem also did not alter any of the effects of attachment anxiety, and the two significant interaction effects that emerged for self-esteem were distinct: The links between both hurt and anger with hostile behavior (see Table 5) were stronger for individuals higher versus lower in self-esteem. Thus, the pattern associated with anxiety was not attributable to other forms of insecurity.

We next wanted to ensure that the greater hurt and partner guilt associated with attachment anxiety was not due to the issues discussed being more problematic. Partners did report more severe problems when individuals were higher in anxiety (r = .19, p < .05), and targets felt more hurt (B = .09, t = 1.74, p = .08) and more angry (B = .13, t = 2.69, p < .01) when problems were more serious. When hurt, anxious individuals were also more likely to exhibit guilt-induction attempts when problems were more (b = .09, t = 4.25, p < .01) versus less (b = .05, t = 1.93, p = .05) serious. Nonetheless, the significant effects reported in Tables 5–7 did not change when including the main and interaction effects of problem severity.

Table 7

The Effects of the Partner's Guilt and Attachment Anxiety on Perceptions of the Partner's Commitment and Relationship Quality Across Time (Study 2)

	Predicting perceptions of the partner's commitment			Predicti	ng relations	ship quality	Predicting the partner's relationship quality		
Measure	В	SE	t	В	SE	t	В	SE	t
Time	05	.01	-3.84**	06	.01	-4.41**	05	.01	-3.51**
Avoidance	02	.03	-0.48	15	.03	-4.81^{*}	.07	.03	2.16*
Avoidance × Time	.01	.01	0.97	.01	.01	0.71	.00	.01	0.35
Anxiety	24	.03	-7.39**	07	.03	-2.39^{*}	02	.03	-0.64
Anxiety \times Time	01	.01	-0.42	02	.01	-1.42	00	.01	-0.27
Partner's guilt	.00	.03	0.02	.00	.03	0.07	03	.03	-1.11
Partner's Guilt × Time	00	.01	-0.05	01	.01	-1.40	00	.01	-0.11
Anxiety × Partner's Guilt	07	.03	-2.53*	.02	.03	0.78	00	.03	-0.08
Anxiety \times Partner's Guilt \times Time	.03	.01	2.81**	.03	.01	2.29*	03	.01	-2.62**

Note. Predicted three-way interaction is presented in bold.

^{*} p < .05. ** p < .01.

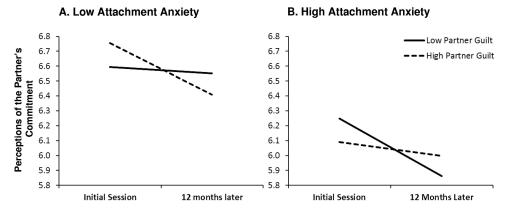


Figure 6. The moderating effect of individuals' attachment anxiety on the links between partner guilt during conflict discussions and individuals' perceptions of the partner's commitment across the following year (Study 2). This figure presents a significant three-way interaction (p < .01) from a single analysis (see the first column of Table 7). Panel A graphs predicted values of perceived commitment for individuals high in attachment anxiety; Panel B graphs predicted values of perceived commitment for individuals high in attachment anxiety. High and low values are indexed at 1 SD above and below the mean.

Finally, additional analyses also demonstrated that the effects were specific to the partner's guilt and not the partner's negative affect in general. Partners of anxious individuals experienced more hurt (B=.10, t=2.66, p<.01) and anger (B=.11, t=2.93, p<.01), but guilt-induction strategies and associated interactions with anxiety did not significantly predict the partner's hurt or anger, and controlling for the partner's hurt and anger did not alter the effects shown in Table 6 and Figure 5. The longitudinal effects shown in Figures 5–7 were also specific to guilt. Neither individuals' nor partners' hurt or anger predicted differential changes in individuals' perceived partner commitment or either partners' relationship quality, with a single exception: Partners' anger revealed the same three-way interaction when predicting partners' relationship quality (B=-.02, t=-2.22, p<.05), but when modeling together the effects of partners' guilt shown in Figure 8 remained (B=

-.02, t = -2.01, p < .05), whereas the three-way interaction of partners' anger was eliminated (B = -.01, t = -1.09, p = .28).

Discussion

Study 2 replicated and extended Study 1 by showing that anxious individuals experienced greater hurt during threatening conflict discussions, and when hurt, exhibited greater guilt-induction strategies as rated by independent coders. Anxious individuals' guilt-induction strategies were also successful—the more anxious individuals engaged guilt-induction attempts, the more their partners felt guilty. As predicted, these results were specific to hurt and guilt-induction strategies and not to anger and hostility.

The longitudinal analyses also replicated and extended Study 1. As predicted, for low anxious individuals, greater partner guilt

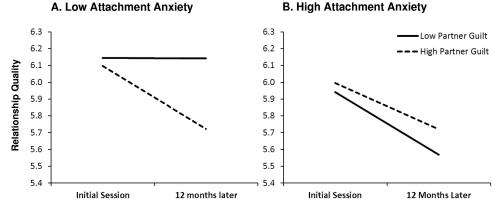


Figure 7. The moderating effect of individuals' attachment anxiety on the links between the partner's guilt during conflict discussions and individuals' relationship quality across the following year (Study 2). This figure presents a significant three-way interaction (p < .05) from a single analysis (see the middle column of Table 7). Panel A graphs predicted values of relationship quality for individuals high in attachment anxiety; Panel B graphs predicted values of relationship quality for individuals high in attachment anxiety. High and low values are indexed at 1 SD above and below the mean.

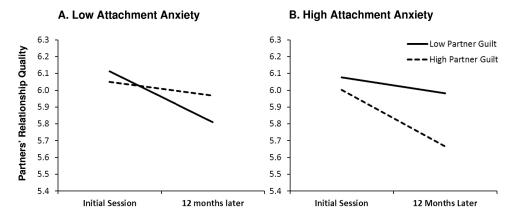


Figure 8. The moderating effect of individuals' attachment anxiety on the links between partners' guilt during conflict discussions and partners' relationship quality across the following year (Study 2). This figure presents a significant three-way interaction (p < .01) from a single analysis (see the final column of Table 7). Panel A graphs predicted values of the partners' relationship quality for individuals low in attachment anxiety; Panel B graphs predicted values of the partners' relationship quality for individuals high16 in attachment anxiety. High and low values are indexed at 1.5D above and below the mean

during conflict was associated with declines in perceived partner commitment and relationship quality across time, probably because the partner's internally-generated guilt (i.e., not induced by the other) accurately represented the presence of partner transgressions. In contrast, although anxious individuals reported lower perceived commitment overall, anxious individuals experienced more stable perceptions of the partner's commitment the more their partners felt guilty during relationship conflict. A similar pattern emerged for perceived relationship quality. The results suggest that the partner's guilt conveys commitment and reassurance to anxious intimates, and thus successfully inducing guilt can help anxious intimates maintain feelings of security in their relationship. Unfortunately, also as predicted, inducing guilt had costs. Partners of anxious intimates perceived declines in relationship quality the more they felt guilty during conflict.

General Discussion

Individuals high in attachment anxiety are preoccupied with securing closeness and intimacy. Ironically, prior research indicates that this need for connection produces emotions and behaviors that damage relationships and impede anxious individuals' ability to attain the acceptance they desire. The current research extended prior investigations by illustrating that anxious reactions to relationship threat can produce desired responses in the partner that help anxious individuals' maintain feelings of security and satisfaction in their relationship.

Consistent with prior research, anxious individuals experienced greater hurt feelings on days they faced partner criticism or conflict (Study 1) and during conflict discussions (Study 2). Advancing prior findings, in both studies these pronounced hurt feelings triggered behavioral strategies that secured evidence of the partner's care and commitment. In Study 1, we found suggestive evidence that anxious individuals exaggerate their hurt feelings to induce guilt in their partner: When they felt hurt, partners of anxious individuals perceived their hurt as more intense (relative to partners of low anxious individuals

facing comparable hurt) and, in turn, experienced greater levels of guilt. Study 2 delivered more direct verification by showing that when more anxious individuals were hurt they engaged guilt-induction strategies during conflict discussions (as rated by independent coders) and their partners experienced associated increases in guilt (Study 2).

Moreover, the longitudinal results across both studies indicate that successfully inducing partner guilt provides the reassurance that anxious individuals need to maintain feelings of security and satisfaction in their relationship. For individuals low in attachment anxiety, greater partner guilt across couples' daily life (Study 1) and during conflict discussions (Study 2) was associated with reductions in relationship evaluations across time. In contrast, more anxious individuals experienced relatively positive outcomes the more their partners felt guilty, including more stable perceptions of the partner's commitment and relationship satisfaction. These novel results demonstrate that the hyperactivating strategies arising from attachment anxiety will be reinforced because these strategies produce the felt-security anxious individuals' crave. Unfortunately, however, inducing guilt in the partner came with the cost of reduced satisfaction in the partner. Ironically, the strategies that help anxious individuals' obtain the reassurance they need also increases the long-term risk of the rejection they ultimately fear. We consider these paradoxical effects in more detail below.

Attachment Anxiety and Proximity-Seeking When Facing Relationship Threat

Contrasting hurt and guilt-induction strategies to anger and hostile behavior provided additional support that anxious reactions to relationship threat are closely bound to concerns of restoring proximity. In Study 1, people generally reported greater anger on days they faced more hurtful partner behavior than less hurtful behavior. However, this effect was attenuated for individuals high in attachment anxiety. Compared to low anxious individuals, more anxious individuals reported less daily anger and reacted with less

anger when encountering partner criticism and conflict. In Study 2, compared to low anxious individuals, more anxious individuals did experience greater anger during conflict discussions, but they did not exhibit more hostile behavior. This pattern might appear surprising because angry emotional displays have been viewed as a manifestation of anxious protest behavior in infancy (Ainsworth et al., 1978; Bowlby, 1973; Cassidy & Berlin, 1994) and adulthood (Mikulincer, 1998; Rholes et al., 1999). However, although some studies have found that anxious adults report greater anger in conflict-related contexts (Mikulincer, 1998; Simpson et al., 1996), this is not supported by objective ratings of anger or hostility (Rholes et al., 1999; Simpson et al., 1996). Moreover, dissecting the results of studies that have separately assessed constructive (e.g., problem solving, compromising) versus destructive (e.g., criticizing) responses reveal that attachment anxiety is associated with less constructive behavior but not greater hostile communication (Creasey, 2002; Rholes et al., 1999; Simpson et al., 1996; Tran & Simpson, 2009).

Our results, combined with these prior findings, suggest that anxious responses to threat are less angry and hostile than typically assumed. Indeed, in line with the immediate consequences of anger (Lemay et al., 2012), anxious individuals expect feelings of anger to lead to partner rejection and animosity, and such concerns should reduce both the experience and expression of anger (Bowlby, 1973; Mikulincer, 1998; Rholes et al., 1999). The current results also indicate that prior non-significant associations between anxiety and observed conflict reactions are due to previous measures failing to isolate the specific hurt-based guiltinducing responses associated with attachment anxiety. In contrast to anger and hostility, hurt and guilt-induction strategies offer a safer route to altering the partner's motivations and behavior by ensuring the partner adopts the same motivation to preserve the relationship (an established outcome of guilt). That said, although guilt-induction strategies help to limit immediate partner reactance, our longitudinal results show that the benefits partner guilt provides anxious individuals are also accompanied by partner dissatisfaction in the long-term.

Attachment Anxiety and the Long-Term Benefits and Costs of Inducing Partner Guilt

The present studies provide the first longitudinal investigation of the role of guilt in relationships. The implications of guilt are clearest when comparing the effects for individuals high in attachment anxiety to those low in anxiety. For individuals low in anxiety, greater partner guilt was associated with declines in relationship satisfaction and perceived partner commitment whereas low levels of partner guilt were associated with stable evaluations. Our daily and conflict analyses indicated that low anxious individuals did not engage in strategic guilt-induction, and so for these individuals, high levels of partner guilt most likely represent the partner's culpability for more hurtful transgressions. Thus, confirming Baumeister et al.'s (1994) suspicions, even though guilt may repair relationship bonds in the moment, the damage of transgressions by the partner may continue to harm trust and satisfaction, particularly if these transgressions continue to occur across time.

The partner's guilt had the reverse effect for individuals high in anxiety. In Study 1, anxious individuals did not experience dips in

satisfaction when partner guilt was high. In Study 2, which provided a more detailed and reliable assessment of change, anxious individuals experienced greater declines in perceived commitment and relationship quality when partner's guilt was low, but more stable relationship evaluations when partner's guilt was high. This pattern is particularly striking when considering that relationship evaluations typically decline across time, especially when people experience more negative emotions and behavior or are more insecure (Karney & Bradbury, 1995, 1997), and the impact of negativity is more severe for anxious individuals (Simpson & Rholes, 2012). In stark contrast to these standard patterns, and the effects of partner guilt for individuals low in anxiety, the presence of a negative emotion (i.e., guilt) predicted relatively positive outcomes for more anxious individuals, and the absence of a negative emotion forecasted relatively poorer outcomes.

Based on prior research and theory regarding the interpersonal consequences of guilt, and the underpinning reasons for anxious individuals' guilt-induction attempts, we think the partner's guilt helps to maintain anxious individuals' relationship evaluations because partner guilt provides needed reassurance of the partner's love and commitment. This interpretation is consistent with other partner behaviors that buffer insecurity. When committed partners behave with accommodation during conflict (Tran & Simpson, 2009) or hide their negative feelings and emphasize feelings of regard (Lemay & Dudley, 2011), anxious intimates report feeling more accepted and secure. All three of these responses—accommodation, affective exaggeration, and partner guilt—communicate that the partner loves, cares about and is committed to the self and will therefore continue to be responsive in the future (Baumeister et al., 1994; Reis, Clark, & Holmes, 2004; Wieselquist et al., 1999). Extending prior work, the current results demonstrate that anxious individuals pull these signs of commitment from their partners by inducing or intensifying a negative emotional state. Indeed, generation of partner guilt might be responsible for triggering the accommodative behaviors and exaggerated affection that prior research has shown boosts felt-security within the shortterm. Our novel results also illustrate that partner's guilt helps preserve anxious individuals' perceptions of the partner's commitment as relationships develop across time.

Unfortunately, our longitudinal results demonstrated that the relative benefits of partner guilt for anxious individuals were accompanied by costs for their partner. The more partners of low anxious intimates experienced guilt, the more those partners maintained positive relationship evaluations across time, consistent with prior conceptualizations that non-induced guilt reflects relationship maintenance motivations. In contrast, greater guilt in partners of high anxious individuals was associated with declines in those partners' satisfaction across time. That partner guilt buttresses anxious intimates' relationship evaluations but undermines the guilty partner's satisfaction is consistent with retrospective reports of induced guilt simultaneously eliciting positive amendsmaking behavior but also resentment in partners (Baumeister et al., 1994, 1995). The pattern is also in line with prior demonstrations that partners can tire of anxious intimates need for reassurance. Partners report less satisfaction when they feel they have to exaggerate their affection to appease insecure intimates (Lemay & Dudley, 2011) or when they are the target of excessive reassurance seeking (Benazon, 2000; Katz & Beach, 1997; Lemay & Canon, 2012).

There are several reasons why we think the positive prorelationship outcomes of guilt are reversed for partners of anxiously attached intimates. First, as with affective exaggeration and other forms of reassurance, guilt experienced by the partners of anxious individuals will often be externally (vs. intrinsically) generated via hyperactivating strategies, and thus may impede feelings of autonomy and authenticity—a condition that breeds dissatisfaction (La Guardia, Ryan, Couchman, & Deci, 2000). Second, any resulting pro-relationship behavior is likely to be motivated by avoidance goals, such as to prevent further conflict and distress in the hurt partner or to alleviate one's guilt, rather than approach goals, such as creating intimacy and sustaining closeness. Even positive behavior motivated by avoidance goals is associated with lower satisfaction and personal well-being (Impett et al., 2010).

Third, induced guilt is likely to switch the partner's focus to the anxious individual's desires and goals, rather than their own, and thus limit the degree to which the partner's needs are fulfilled. Once guilt is elicited, for example, partners are likely to suppress their own negative reactions and dissatisfaction in order to appease anxious individuals' exaggerated distress. Suppressing negative emotions impedes closeness and satisfaction (Gross & John, 2003; Lemay & Dudley, 2011; Srivastava, Tamir, McGonigal, John, & Gross, 2009) and, although may minimize conflict in the shortterm, can exacerbate relationship problems. For example, accommodating responses that calm anxious individuals during conflict discussions (Tran & Simpson, 2009) can foster dissatisfaction in the partner because individuals do not recognize and therefore fail to address the partner's desires (Overall et al., 2009; Overall, Sibley, & Travaglia, 2010; Overall & Simpson, 2013). Thus, to the extent that feeling guilty leads people to prioritize making amends and reassuring insecure partners over attaining their own needs, guilt may create a dissatisfying imbalance in the rewards each partner is receiving from the relationship.

Finally, whereas functional guilt is a transitory response that motivates repair attempts and dissipates once connection is restored, guilt induced by anxious intimates may endure and culminate across time. For example, partners responded more sensitively to the guilt-induction tactics enacted by anxious individuals (see Figure 5), which could indicate that anxious individuals use particularly potent tactics. This pattern might also be because people possess knowledge of their partner's insecurities, feel responsible for compensating for such vulnerabilities, and feel worse when they fail to do so (Lemay & Canon, 2012; Lemay & Dudley, 2011). The burden of managing insecurities, coupled with the exaggerated and prolonged reactions of anxious intimates, may not only sharpen the sting of causing hurt but also create guilt that lasts beyond the interaction and continues to build each time exaggerated hurt is encountered. Enduring or chronic guilt is likely to damage personal and relationship well-being over time (Jones, Kugler, & Adams, 1995; Vangelisti & Sprague, 1998).

Remarkably, however, the detrimental effect of guilt for the partner did not override the benefits for anxious individuals. Increasing dissatisfaction in one partner should undermine the relationship security and satisfaction of the other partner, particularly for anxious individuals who are most vigilant and sensitive to signs of rejection. Perhaps the negative impact of the partner's increasing dissatisfaction diluted the positive impact partner guilt had for anxious intimates, and the benefits of partner guilt for anxious individuals would be much larger otherwise. Alternatively, some

behavioral manifestations of the partner's guilt, such as suppressing negativity to provide reassurance and avoid exacerbating hurt, may effectively conceal the partner's waning satisfaction. Importantly, the divergent outcomes across partners may be paradoxically why both anxious individuals' hyperactivating strategies and fears of rejection are perpetuated across time. The commitment the partner's guilt conveys reinforces guilt-induction strategies but, at the same time, the partner's concealed dissatisfaction may make rejection from the partner more likely and more unexpected. In short, the processes we identified demonstrate how hyperactivating strategies, and subsequent partner responses, are successful in helping anxious individuals feel more satisfied and secure while simultaneously contributing to the realization of their deepest fears—the partner's dissatisfaction.

Implications, Caveats, and Future Research Directions

The overall findings of this research have several important implications for understanding attachment processes and the role of guilt in close relationships. The results highlight that who and when guilt helps or harms depends on individual differences that shape the meaning of guilt. The results also demonstrate that understanding how attachment anxiety influences relationship functioning involves considering the reinforcing nature of anxious individuals' strategies to forge connection. Although the benefits of guilt-induction strategies were accompanied by declines in partners' satisfaction, anxious individuals might attempt to preserve the relationship in other ways that do not incur costs for the partner, such as obliging to the partner's requests (Pistole, 1989) or trying hard to fix relationship problems. Moreover, we focused on contexts that should activate rejection concerns, but in the absence of threat anxious individuals may seek proximity in ways that sustain both partners' satisfaction. For example, attachment anxiety is associated with greater relationship-orientated disclosure during couples' routine conversations, which enhances relationship quality over time (Tan et al., 2012). Such relationshipstrengthening behaviors might help counteract the damage of inducing guilt when faced with threat.

The pattern of diverging benefits and costs of guilt also has therapeutic implications. Attempting to alter what might be considered dysfunctional behavior could have unexpected and potentially damaging consequences if the underlying needs associated with that behavior are not addressed. For example, trying to reduce the use of guilt-induction strategies might produce more constructive problem-solving and bolster the satisfaction of the partner, but also remove a central way in which anxious individuals draw reassurance and security from their relationship. Similarly, fostering potentially positive behavior could have unintended consequences. In the current studies, partners of anxious intimates who did not feel guilty, perhaps because they did not take responsibility for the exaggerated hurt arising from anxious insecurities, maintained levels of satisfaction. However, this strength in the partner failed to convey needed reassurance and undermined anxious intimates' felt security and satisfaction. Thus, any intervention aimed at altering the experience and use of guilt and hurt-based strategies will need to devise alternative, perhaps more constructive, methods of reassurance to ensure concerns about the partner's commitment are not left unabated.

The presence and consequences of the processes we identified, however, will likely depend on a range of contextual factors. The experience, expression and hyperactivating strategies associated with hurt and guilt are likely to manifest differently across cultural contexts. They are also likely to vary depending on the degree to which partners understand the meaning and implications of one another's behavior. Our samples consisted of relatively young couples involved for 2.5 (Study 1) or 3 (Study 2) years on average, and only half of the couples across studies were cohabiting or married. Analyses revealed that older people in more established relationships were more likely to feel hurt and less likely to feel anger in response to daily events, particularly when they were high in anxiety (see Footnote 2). Thus, consistent with the functional role of hurt, hurt-based reactions might be more poignant when anxious individuals face threats to more important and interdependent relationships. On the other hand, older people were also less likely to engage in guilt-induction strategies (see Footnote 8) indicating that intimates might also learn to develop more effective ways to gain the reassurance and security they need. Whether hyperactivating strategies become more functional as relationships solidify over time is a valuable topic for future research.

Our findings might not generalize to couples experiencing very high levels of negative emotions or insecurity. Couples in our samples were relatively satisfied, and our longitudinal analyses are inevitably biased toward couples whose relationships remained intact. Greater hurt feelings (Studies 1 and 2), greater anxiety (Study 1), and lower perceived commitment (Study 2) predicted greater probability of dissolution. Thus, the success of anxious individuals' guilt-induction attempts and protective function of the partner's guilt may become moot when relationships become so acrimonious that self-protective motives override maintenance motivations or partners become so dissatisfied that they stop feeling guilty altogether. Indeed, some partners may respond to guilt-induction strategies with defensiveness and derogation, such as partners high in attachment avoidance who resent bids for care and reassurance (Rholes et al., 1999). Additional analyses testing this possibility revealed that the partners' avoidance or anxiety did not modify the relative effectiveness or consequences of guiltinduction attempts. Nonetheless, isolating the conditions in which anxious maintenance efforts reap benefits, proximity-seeking motivations are forestalled, and partners cease to be moved by guiltinduction and other reassurance-seeking attempts is an important direction for future investigations.

Finally, although the results replicated across two studies using different methods, measures and timeframe, these data are correlational. Longitudinal designs are the strongest way for assessing how typical responses to relationship threat naturally shape relationships over time, but they cannot establish that resulting guilt plays a causal role. For example, anxious intimates experiencing more relationship-specific difficulties, such as when they are more dissatisfied or perceive low commitment, might be less successful in eliciting partner guilt. In addition, although we illustrated that the pattern of effects were not accounted for by a range of potential alternative explanations—such as other emotional or behavioral responses, other forms of insecurity, or the severity of conflict couples faced—there may be other third variables that we did not rule out. Lastly, if our diary and observational methods capture how couples typically respond, as we believe they do, then the longitudinal findings might simply capture links between concurrent interaction patterns and relationship evaluations. In that case, however, the effects would continue to support that inducing partner guilt can provide benefits for people high versus low in attachment anxiety.

Conclusions

Attachment anxiety is associated with less satisfying and stable relationships, in part because anxious individuals' deep-seated fear of rejection and need for proximity produce greater reactivity to threatening relationship events. However, the current findings reveal that anxious intimates' reactions can help them feel secure and satisfied in their relationship. Anxious individuals experienced greater hurt feelings when faced with partner criticism and relationship conflict, but their pronounced hurt triggered guiltinduction strategies that secured evidence of their partner's commitment. The more their partners felt guilty, the more anxious individuals maintained stable and positive perceptions of their partner's commitment and their relationship across time. Unfortunately, inducing partner guilt was also associated with reduced satisfaction in the partner. Even so, the relative benefits of partner guilt for individuals high in anxiety highlights that conceptualizing insecure reactions as dysfunctional overlooks the needed reassurance such strategies provide. Moreover, both the benefits and costs of anxious strategies need to be considered to promote couples' well-being, including protecting partners from the dissatisfaction of induced guilt while ensuring insecure intimates receive the reassurance they need to feel satisfied and secure in their partner's commitment.

References

Ainsworth, M. D. S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.

Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1994). Guilt: An interpersonal approach. *Psychological Bulletin*, 115, 243–267. doi: 10.1037/0033-2909.115.2.243

Baumeister, R. F., Stillwell, A. M., & Heatherton, T. F. (1995). Personal narratives about guilt: Role in action control and interpersonal relationships. *Basic and Applied Social Psychology*, 17, 173–198.

Benazon, N. R. (2000). Predicting negative spousal attitudes toward depressed persons: A test of Coyne's interpersonal model. *Journal of Abnormal Psychology*, 109, 550–554. doi:10.1037/0021-843X.109.3.550

Bouthillier, D., Julien, D., Dube, M., Belanger, I., & Hamelin, M. (2002).
Predictive validity of adult attachment measures in relation to emotion regulation behaviors in marital interactions. *Journal of Adult Development*, 9, 291–305. doi:10.1023/A:1020291011587

Bowlby, J. (1969). Attachment and loss, Vol. 1: Attachment. New York, NY: Basic Books.

Bowlby, J. (1973). Attachment and loss, Vol. 2: Separation. New York, NY: Basic Books.

Bowlby, J. (1980). Attachment and loss, Vol. 3: Loss. New York, NY: Basic Books.

Bui, K. T., Raven, B. H., & Schwarzwald, J. (1994). Influence strategies in dating relationships: The effects of relationship satisfaction, gender, and perspective. *Journal of Social Behavior & Personality*, 9, 429–442.

Campbell, L., Simpson, J. A., Boldry, J., & Kashy, D. A. (2005). Perceptions of conflict and support in romantic relationships: The role of attachment anxiety. *Journal of Personality and Social Psychology*, 88, 510–531. doi:10.1037/0022-3514.88.3.510

- Cassidy, J., & Berlin, L. J. (1994). The insecure/ambivalent pattern of attachment: Theory and research. *Child Development*, 65, 971–991. doi:10.2307/1131298
- Collins, N. L., Ford, M. B., Guichard, A. C., & Allard, L. M. (2006).Working models of attachment and attribution processes in intimate relationships. *Personality and Social Psychology Bulletin*, 32, 201–219.
- Covert, M. V., Tangnery, J. P., Maddux, J. E., & Heleno, N. M. (2003). Shame-proneness, guilt-proneness, and interpersonal problem solving: A social cognitive analysis. *Journal of Social and Clinical Psychology*, 22, 1–12. doi:10.1521/jscp.22.1.1.22765
- Creasey, G. (2002). Associations between working models of attachment and conflict management behavior in romantic couples. *Journal of Counseling Psychology*, 49, 365–375. doi:10.1037/0022-0167.49.3.365
- Downey, G., Frietas, A. L., Michaelis, B., & Khouri, H. (1998). The self-fulfilling prophecy in close relationships: Rejection sensitivity and rejection by romantic partners. *Journal of Personality and Social Psychology*, 75, 545–560. doi:10.1037/0022-3514.75.2.545
- Feeney, J. A. (2005). Hurt feelings in couple relationships: Exploring the role of attachment and perceptions of personal injury. *Personal Relationships*, 12, 253–271. doi:10.1111/j.1350-4126.2005.00114.x
- Feeney, J., Noller, P., & Callan, V. J. (1994). Attachment style, communication and satisfaction in the early years of marriage. In K. Bartholomew & D. Perlman (Eds.), *Attachment processes in adulthood* (pp. 269–308). London, England: Jessica Kingsley.
- Fletcher, G. J. O., Simpson, J. A., & Thomas, G. (2000). The measurement of perceived relationship quality components: A confirmatory factor analytic approach. *Personality and Social Psychology Bulletin*, 26, 340– 354. doi:10.1177/0146167200265007
- Fraley, R. C., Roisman, G. I., Booth-LaForce, C., Owen, M. T., & Holland, A. S. (2013). Interpersonal and genetic origins of adult attachment styles: A longitudinal study from infancy to early adulthood. *Journal of Personality and Social Psychology*, 104, 817–838. doi:10.1037/a0031435
- Gaines, S. O., Jr., Reis, H. T., Summers, S., Rusbult, C. E., Cox, C. L., Wexler, M. O., . . . Kurland, G. J. (1997). Impact of attachment style on reactions to accommodative dilemmas in close relationships. *Personal Relationships*, 4, 93–113. doi:10.1111/j.1475-6811.1997.tb00133.x
- Gottman, J. M. (1998). Psychology and the study of marital processes. Annual Review of Psychology, 49, 169–197. doi:10.1146/annurev.psych 49 1 169
- Gross, J. J., & John, O. P. (2003). Individual differences in two emotion regulation processes: Implications for affect, relationships, and wellbeing. *Journal of Personality and Social Psychology*, 85, 348–362. doi:10.1037/0022-3514.85.2.348
- Guerrero, L. K. (1998). Attachment-style differences in the experiences and expression of romantic jealousy. *Personal Relationships*, 5, 273– 291. doi:10.1111/j.1475-6811.1998.tb00172.x
- Heyman, R. E. (2001). Observation of couple conflicts: Clinical assessment applications, stubborn truths, and shaky foundations. *Psychological Assessment*, 13, 5–35. doi:10.1037/1040-3590.13.1.5
- Howard, J. A., Blumstein, P., & Schwartz, P. (1986). Sex, power, and influence tactics in intimate relationships. *Journal of Personality and Social Psychology*, 51, 102–109. doi:10.1037/0022-3514.51.1.102
- Impett, E. A., Gordon, A. M., Kogan, A., Oveis, C., Gable, S. L., & Keltner, D. (2010). Moving toward more perfect unions: Daily and long-term consequences of approach and avoidance goals in romantic relationships. *Journal of Personality and Social Psychology*, 99, 948–963. doi:10.1037/a0020271
- Jones, W. H., & Kugler, K. (1993). Interpersonal correlates of the Guilt Inventory. *Journal of Personality Assessment*, 61, 246–258. doi: 10.1207/s15327752jpa6102_6
- Jones, W. H., Kugler, K., & Adams, P. (1995). You always hurt the one you love:

- Guilt and transgressions against relationship partners. In J. P. Tangney & K. Fischer (Eds.), *Self-conscious emotions: Shame, guilt, embarrassment, and pride* (pp. 301–321). New York, NY: Guilford Press.
- Karney, B. R., & Bradbury, T. N. (1995). The longitudinal course of marital quality and stability: A review of theory, method, and research. *Psychological Bulletin*, 118, 3–34. doi:10.1037/0033-2909.118.1.3
- Karney, B. R., & Bradbury, T. N. (1997). Neuroticism, marital interaction, and the trajectory of marital satisfaction. *Journal of Personality and Social Psychology*, 72, 1075–1092. doi:10.1037/0022-3514.72.5.1075
- Katz, J., & Beach, S. R. H. (1997). Romance in the crossfire: When do women's depressive symptoms predict partner relationship dissatisfaction? *Journal of Social and Clinical Psychology*, 16, 243–258. doi: 10.1521/jscp.1997.16.3.243
- Kenny, D. A., Kashy, D. A., & Cook, W. L. (2006). Dyadic data analysis. New York, NY: Guilford Press.
- Kluwer, E. S., & Johnson, M. D. (2007). Conflict frequency and relationship quality across the transition to parenthood. *Journal of Marriage and Family*, 69, 1089–1106. doi:10.1111/j.1741-3737.2007.00434.x
- Kobak, R. R., Cole, H. E., Ferenz-Gillies, R., Fleming, W. S., & Gamble, W. (1993). Attachment and emotion regulation during mother–teen problem solving: A control theory analysis. *Child Development*, 64, 231–245. doi:10.2307/1131448
- La Guardia, J. G., Ryan, R. M., Couchman, C. E., & Deci, E. L. (2000). Within-person variation in security of attachment: A self-determination theory perspective on attachment, need fulfillment, and well-being. *Journal of Personality and Social Psychology*, 79, 367–384. doi: 10.1037/0022-3514.79.3.367
- Leith, K. P., & Baumeister, R. F. (1998). Empathy, shame, guilt, and narratives of interpersonal conflicts: Guilt-prone people are better at perspective taking. *Journal of Personality*, 66, 1–37. doi:10.1111/1467-6494.00001
- Lemay, E. P., Jr., & Cannon, K. T. (2012). Dysphoric reassurance seeking breeds contempt: Experimental evidence. *Journal of Social and Clinical Psychology*, 31, 1023–1050. doi:10.1521/jscp.2012.31.10.1023
- Lemay, E. P., Jr., & Dudley, K. L. (2011). Caution: Fragile! Regulating the interpersonal security of chronically insecure partners. *Journal of Per*sonality and Social Psychology, 100, 681–702. doi:10.1037/a0021655
- Lemay, E. P., Jr., Overall, N. C., & Clark, M. S. (2012). Experiences and interpersonal consequences of hurt feelings and anger. *Journal of Per*sonality and Social Psychology, 103, 982–1006. doi:10.1037/a0030064
- Lopez, F. G., Gover, M. R., Leskela, J., Sauer, E. M., Schirmer, L., & Wyssmann, J. (1997). Attachment styles, shame, guilt, and collaborative problem-solving orientations. *Personal Relationships*, 4, 187–199. doi: 10.1111/j.1475-6811.1997.tb00138.x
- MacKinnon, D. P., Fritz, M. S., Williams, J., & Lockwood, C. M. (2007).
 Distribution of the product confidence limits for the indirect effect:
 Program PRODCLIN. *Behavior Research Methods*, 39, 384–389. doi:
 10.3758/BF03193007
- McNulty, J. K., & Russell, V. M. (2010). When "negative" behaviors are positive: A contextual analysis of the long-term effects of problemsolving behaviors on changes in relationship satisfaction. *Journal of Personality and Social Psychology*, 98, 587–604. doi:10.1037/a0017479
- Mikulincer, M. (1998). Adult attachment style and individual differences in functional versus dysfunctional experiences of anger. *Journal of Personality* and Social Psychology, 74, 513–524. doi:10.1037/0022-3514.74.2.513
- Mikulincer, M., & Shaver, P. R. (2003). The attachment behavioral system in adulthood: Activation, psychodynamics, and interpersonal processes. In M. P. Zanna (Ed.), *Advances in experimental social psychology (Vol. 35*, pp. 53–152). doi:10.1016/S0065-2601(03)01002-5
- Mikulincer, M., Shaver, P. R., Bar-On, N., & Ein-Dor, T. (2010). The pushes and pulls of close relationships: Attachment insecurities and relational ambivalence. *Journal of Personality and Social Psychology*, 98, 450–468. doi:10.1037/a0017366

- Murray, S. L., & Holmes, J. G. (2009). The architecture of interdependent minds: A motivation-management theory of mutual responsiveness. *Psychological Review*, 116, 908–928. doi:10.1037/a0017015
- Murray, S. L., Rose, P., Bellavia, G., Holmes, J., & Kusche, A. (2002).
 When rejection stings: How self-esteem constrains relationship-enhancement processes. *Journal of Personality and Social Psychology*, 83, 556–573. doi:10.1037/0022-3514.83.3.556
- Overall, N. C., Fletcher, G. J. O., Simpson, J. A., & Sibley, C. G. (2009).
 Regulating partners in intimate relationships: The costs and benefits of different communication strategies. *Journal of Personality and Social Psychology*, 96, 620–639. doi:10.1037/a0012961
- Overall, N. C., & Hammond, M. D. (2013). Biased and accurate: Depressive symptoms and daily perceptions within intimate relationships. *Personality and Social Psychology Bulletin*, 39, 636–650. doi:10.1177/0146167213480188
- Overall, N. C., & Sibley, C. G. (2009). Attachment and dependence regulation within daily interactions with romantic partners. *Personal Relationships*, 16, 239–261. doi:10.1111/j.1475-6811.2009.01221.x
- Overall, N. C., Sibley, C. G., & Travaglia, L. K. (2010). Loyal but ignored: The benefits and costs of constructive communication behavior. *Personal Relationships*, 17, 127–148. doi:10.1111/j.1475-6811.2010.01257.x
- Overall, N. C., & Simpson, J. A. (2013). Regulation processes in close relationships. In J. A. Simpson & L. Campbell (Eds.), Oxford handbook of close relationships (pp. 427–451). New York, NY: Oxford University Press.
- Overall, N. C., Simpson, J. A., & Struthers, H. (2013). Buffering attachment avoidance: Softening emotional and behavioral defenses during conflict discussions. *Journal of Personality and Social Psychology*, 104, 854–871. doi:10.1037/a0031798
- Paley, B., Cox, M. J., Burchinal, M. R., & Payne, C. C. (1999). Attachment and marital functioning: Comparison of spouses with continuous-secure, earned-secure, dismissing, and preoccupied attachment stances. *Journal* of Family Psychology, 13, 580–597. doi:10.1037/0893-3200.13.4.580
- Pietromonaco, P. R., & Feldman Barrett, L. (1997). Working models of attachment and daily social interactions. *Journal of Personality and Social Psychology*, 73, 1409–1423. doi:10.1037/0022-3514.73.6.1409
- Pistole, M. C. (1989). Attachment in adult romantic relationships: Style of conflict resolution and relationship satisfaction. *Journal of Social and Personal Relationships*, 6, 505–510. doi:10.1177/0265407589064008
- Powers, S. I., Pietromonaco, P. R., Gunlicks, M., & Sayer, A. (2006). Dating couples' attachment styles and patterns of cortisol reactivity and recovery in response to a relationship conflict. *Journal of Personality* and Social Psychology, 90, 613–628. doi:10.1037/0022-3514.90.4.613
- Reis, H. T., Clark, M. S., & Holmes, J. (2004). Perceived partner responsiveness as an organizing construct in the study of intimacy and closeness. In D. J. Mashek & A. Aron (Eds.), *Handbook of closeness and intimacy* (pp. 201–225). Mahwah, NJ: Erlbaum.
- Rholes, W. S., Simpson, J. A., & Oriña, M. M. (1999). Attachment and anger in an anxiety-provoking situation. *Journal of Personality and Social Psychology*, 76, 940–957. doi:10.1037/0022-3514.76.6.940
- Roisman, G. I., Holland, A., Fortuna, K., Fraley, R. C., Clausell, E., & Clarke, A. (2007). The Adult Attachment Interview and self-reports of attachment style: An empirical rapprochement. *Journal of Personality and Social Psychology*, 92, 678–697. doi:10.1037/0022-3514.92.4.678
- Rosenberg, M. (1965). Society and the adolescent self-image. Princeton, NJ: Princeton University Press.
- Rusbult, C. E., Bissonnette, V. L., Arriaga, X. B., & Cox, C. L. (1998).
 Accommodation processes during the early years of marriage. In T. N.
 Bradbury (Ed.), *The developmental course of marital dysfunction* (pp. 74–113). New York, NY: University of Cambridge Press.
- Rusbult, C. E., Martz, J. M., & Agnew, C. R. (1998). The Investment Model Scale: Measuring commitment level, satisfaction level, quality of alternatives, and investment size. *Personal Relationships*, 5, 357–387. doi:10.1111/j.1475-6811.1998.tb00177.x

- Scharfe, E., & Bartholomew, K. (1995). Accommodation and attachment representations in young couples. *Journal of Social and Personal Rela*tionships, 12, 389–401. doi:10.1177/0265407595123004
- Shaver, P. R., & Mikulincer, M. (2007). Adult attachment strategies and the regulation of emotion. In J. J. Gross (Ed.), *Handbook of emotion* regulation (pp. 446–465). New York, NY: Guilford Press.
- Shaver, P. R., Schachner, D. A., & Mikulincer, M. (2005). Attachment style, excessive reassurance seeking, relationship processes, and depression. *Personality and Social Psychology Bulletin*, 31, 343–359. doi: 10.1177/0146167204271709
- Simpson, J. A., Ickes, W., & Grich, J. (1999). When accuracy hurts: Reactions of anxious-ambivalent dating partners to a relationshipthreatening situation. *Journal of Personality and Social Psychology*, 76, 754–769. doi:10.1037/0022-3514.76.5.754
- Simpson, J. A., & Rholes, W. S. (2012). Adult attachment orientations, stress, and romantic relationships. In T. Devine & A. Plante (Eds.), Advances in experimental social psychology (Vol. 45, pp. 279–328). doi:10.1016/B978-0-12-394286-9.00006-8
- Simpson, J. A., Rholes, W. S., & Phillips, D. (1996). Conflict in close relationships: An attachment perspective. *Journal of Personality and Social Psychology*, 71, 899–914. doi:10.1037/0022-3514.71.5.899
- Srivastava, S., Tamir, M., McGonigal, K. M., John, O. P., & Gross, J. J. (2009). The social costs of emotional suppression. *Journal of Personality and Social Psychology*, 96, 883–897. doi:10.1037/a0014755
- Tan, R., Overall, N. C., & Taylor, J. K. (2012). Let's talk about us: Attachment, relationship-focused disclosure, and relationship quality. *Personal Relation-ships*, 19, 521–534. doi:10.1111/j.1475-6811.2011.01383.x
- Tangney, J. P., Miller, R. S., Flicker, L., & Hill-Barlow, D. (1996). Are shame, guilt, and embarrassment distinct emotions? *Journal of Personality and Social Psychology*, 70, 1256–1269. doi:10.1037/0022-3514.70 6.1256
- Tangney, J. P., Wagner, P., Fletcher, C., & Gramzow, R. (1992). Shamed into anger? The relation of shame and guilt to anger and self-reported aggression. *Journal of Personality and Social Psychology*, 62, 669–675. doi:10.1037/0022-3514.62.4.669
- Tangney, J. P., Wagner, P., Hill-Barlow, D., Marschall, D. E., & Gramzow, R. (1996). Relation of shame and guilt to constructive versus destructive responses to anger across the life-span. *Journal of Personality and Social Psychology*, 70, 797–809. doi:10.1037/0022-3514.70.4.797
- Tran, S., & Simpson, J. A. (2009). Pro-relationship maintenance behavior: The joint roles of attachment and commitment. *Journal of Personality and Social Psychology*, 97, 685–698. doi:10.1037/a0016418
- Vangelisti, A. L., Daly, J. A., & Rudnick, J. R. (1991). Making people feel guilty in conversations: Techniques and correlates. *Human Communication Research*, 18, 3–39. doi:10.1111/j.1468-2958.1991.tb00527.x
- Vangelisti, A., & Sprague, R. (1998). Guilt and hurt: Similarities, distinctions, and conversational strategies. In P. Anderson & L. Guerrero (Eds.), Handbook of communication and emotion: Research, theory, application, and contexts (pp. 123–154). New York, NY: Academic Press.
- Welsh, D. P., & Dickson, J. W. (2005). Video-recall procedures for examining subjective understanding in observational data. *Journal of Family Psychology*, 19, 62–71. doi:10.1037/0893-3200.19.1.62
- West, T. V., & Kenny, D. A. (2011). The truth and bias model of judgment. Psychological Review, 118, 357–378.
- Wieselquist, J., Rusbult, C. E., Foster, C. A., & Agnew, C. R. (1999). Commitment, pro-relationship behavior, and trust in close relationships. *Journal of Personality and Social Psychology*, 77, 942–966. doi: 10.1037/0022-3514.77.5.942

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