Attachment Anxiety and the Curvilinear Effects of Expressive Suppression on Individuals’ and Partners’ Outcomes


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Abstract:

Suppressing the expression of negative emotions tends to undermine individuals’ and their partners’ wellbeing. However, sometimes expressive suppression may be relatively innocuous given that individuals commonly withhold negative emotions in order to maintain close relationships, and this may be especially the case when expressive suppression is enacted by people who exhibit amplified expressions of negative emotions, such as those high in attachment anxiety. The current research examined when and for whom expressive suppression may be more or less costly by testing whether the curvilinear effect of individuals’ expressive suppression on individuals’ and partners’ outcomes is moderated by individuals’ attachment anxiety. Our results across 3 dyadic studies revealed a linear effect of expressive suppression when predicting individuals’ outcomes: greater expressive suppression had costs for individuals (lower relationship satisfaction, reported responsiveness and discussion success, and greater discussion threat). Furthermore, in 4 of the 5 models, a moderated curvilinear effect of expressive suppression emerged when predicting partners’ outcomes. For individuals low in attachment anxiety, low levels of expressive suppression did not incur costs for their partners’ relationship satisfaction, perceptions of individuals’ responsiveness, discussion success, and greater discussion threat. Once expressive suppression surpassed moderate levels, however, greater expressive suppression had a detrimental effect on partners’ outcomes. In contrast, for individuals high in attachment anxiety, the negative effect of moderate-to-high levels of expressive suppression on partners’ outcomes was attenuated. These novel results demonstrate how considering curvilinear methods can uncover when and for whom expressive suppression may be more or less costly in intimate relationships.

Keywords: emotion regulation | expressive suppression | attachment anxiety | curvilinear effects
Intimate relationships can be challenging because couple members often contest with differing thoughts, feelings, and opinions. In fact, managing negative thoughts and feelings that occur routinely in intimate relationships is important, if not necessary, for better relationship functioning (Gross & John, 2003; Gross, 2015). One commonly used emotion regulation strategy involves consciously hiding or inhibiting the outward expression of emotions—a strategy called expressive suppression (Gross & John, 2003; John & Gross, 2004). While a large body of literature has documented the negative impact that expressive suppression has for individuals’ wellbeing (for meta-analytic reviews see Aldao, Nolen-Hoeksema, & Schweizer, 2010; Webb, Miles, & Sheeran, 2012), the impact that expressive suppression has for partners is mixed. On the one hand, empirical research provides strong evidence of the negative impact that expressive suppression has for interpersonal functioning (for a meta-analytic review see Chervonsky & Hunt, 2017). On the other hand, people commonly withhold negative emotions from their partners in order to maintain close relationships (Cloven & Rollof, 1994; English, Lee, John, & Gross, 2017; Rollof & Cloven, 1990), which can be beneficial for relationship functioning (Butler, Young, & Randall, 2010; Geisler & Schröder-Abé, 2015; Le & Impett, 2013; Weckbacher & Baker, 2018; Winterheld, 2017). Thus, the overarching message that expressive suppression is ‘costly’ ignores the possibility that it is not always harmful for social functioning (see Aldao, 2013; Butler & Gross, 2004).

One way to capture when expressive suppression is more or less costly for relationship partners is to model the curvilinear impact of expressive suppression (Girme, 2020). In particular, low to moderate levels of expressive suppression that help manage routine negative emotions may have interpersonal benefits that outweigh the interpersonal costs of expressive suppression (English et al., 2017; Lundgren & Rudawsky, 2000; Rollof & Cloven, 1990). Above average levels of expressive suppression, however, may disrupt social functioning in ways that produce strong interpersonal costs that outweigh (and even interfere with) any relational benefits of shielding partners from negativity (Gross & John, 2003; John & Gross, 2004). Yet, there may also be contexts in which even high levels of expressive suppression may be relatively innocuous by offsetting the typical interpersonal costs of expressive suppression, such as when expressive suppression is enacted by individuals who typically exhibit amplified expressions of their negative emotions and whose partners may benefit (rather than suffer) from their attempts to conceal their negativity. Attachment anxiety is one example of an individual difference that has been linked to greater outward expressions of distress, hurt, and anger (Campbell, Simpson, Boldry, & Kashy, 2005; Simpson, Rholes, & Phillips, 1996), which undermines partners’ relationship wellbeing (Jayamaha, Antonellis, & Overall, 2016; Overall, Girme, Lemay, & Hammond, 2014). Thus, the relational benefits of above average levels of expressive suppression
by highly anxious individuals may counteract the detrimental relational consequences their partners typically contend with.

In the present research, we examined the effects of expressive suppression during couples’ daily and in-lab interactions on individuals’ and their partners’ outcomes. We aimed to replicate the robust costs of expressive suppression on individuals’ outcomes (i.e., the linear effect of expressive suppression). More importantly, we examined whether (1) different levels of expressive suppression (i.e., the curvilinear effect of expressive suppression) may reveal whether low levels of expressive suppression have little impact on partners’ outcomes, but above average or high levels of expressive suppression have increasing costs, and (2) whether the costs of high levels of expressive suppression on partners’ outcomes are attenuated when individuals are high in attachment anxiety (i.e., attachment anxiety moderating the curvilinear effect of expressive suppression on partners’ outcomes). We tested our hypothesized effects in three dyadic studies in important relationship contexts: daily interactions (Study 1), support-relevant discussions (Study 2), and relationship-threatening discussions (Study 3).

The Personal and Relational Costs of Expressive Suppression

Experimental and behavioral studies have demonstrated that expressive suppression incurs personal costs for individuals, likely because hiding outwardly expressions of negative emotions is an effortful task that is cognitively taxing and internalizes peoples’ negative feelings (Gross & John, 2003; John & Gross, 2004). Experimental work on expressive suppression involves asking individuals to suppress their emotions while watching a sad film (Richards & Gross, 2000) or during social interactions discussing the content of films (Butler et al., 2003; Peters & Jamieson, 2016). These experimental paradigms demonstrate that individuals asked to engage in expressive suppression (vs. control or comparison conditions) experience worse memory recall (Richards & Gross, 1999, 2000), greater physiological arousal (Ben-Naim, Hirschberger, Ein-Dor, & Mikulincer, 2013; Butler et al., 2003; Gross & Levenson, 1993, 1997; Richards & Gross, 1999) and greater physiological responses associated with avoidance-motivated threat states (Peters & Jamieson, 2016; Peters, Overall, Girme, & Jamieson, 2019; Peters, Overall, & Jamieson, 2014). Similarly, selfreported tendencies to engage in expressive suppression are associated with increases in depressive symptoms and decreases in self-esteem and life satisfaction over time (Gross & John, 2003).

People’s use of expressive suppression in the context of intimate relationships can also undermine personal outcomes and interfere with relationship wellbeing. A recent meta-analysis provides clear evidence that expressive suppression during interpersonal interactions is associated with individuals reporting worse first impressions, lower social support, and lower satisfaction with social interactions and romantic partners (Chervonsky & Hunt, 2017; also see Chervonsky & Hunt, 2019). Expressive suppression during couples’ discussions and daily life is also associated with worse personal outcomes, including greater negative affect, fatigue, and negative memory biases, and lower self-esteem, competence, personal goal efforts and success,
and life satisfaction, as well as worse relational outcomes, including lower feelings of acceptance, perceptions of support, closeness, and relationship satisfaction (e.g., Cameron & Overall, 2018; Impett et al., 2012; Low, Overall, Hammond, & Girme, 2017; Velotti et al., 2016).

**The Interpersonal Costs and Benefits of Expressive Suppression**

Although research has shown consistent personal and relational costs of expressive suppression for individuals, the impact on interaction partners is more varied. On the one hand, numerous studies have demonstrated that expressive suppression similarly harms interaction partners. In experimental studies, instructed expressive suppression (vs. control or instructed emotion expression conditions) when discussing a sad or distressing film with an opposite sex stranger or romantic partner leads to greater physiological responses indicative of psychological threat for both dyad members (Peters et al., 2014; Peters & Jamieson, 2016), disrupts communication and relationship formation in nonromantic dyads (Butler et al., 2003), and reduces couples’ intimacy behaviors during a postdiscussion touch task (Peters & Jamieson, 2016). These interpersonal costs likely occur because the cognitive demands of expressive suppression interfere with people’s ability to be responsive and engaged during social interactions, which likely translate to partner’s perceptions of individual’s responsiveness. Indeed, individuals who engage in greater expressive suppression are viewed by their partners as less responsive (Impett, Le, Kogan, Oveis, & Keltner, 2014; Peters & Jamieson, 2016) and less authentic (English & John, 2013; Impett et al., 2012, 2014; Richards, Butler, & Gross, 2003; Righetti, Balliet, Visserman, & Hofmann, 2015).

On the other hand, suppressing negative emotions might also shield partners from negative feelings and thoughts (English et al., 2017), which can benefit relationship partners. For example, on days that overweight women kept their emotions to themselves, they also reported eating more than usual (probably as a coping mechanism), consistent with the personal costs associated with expressive suppression, but their male partners viewed them less negatively (Butler et al., 2010). For individuals with high (but not low) self-regulatory control, expressive suppression is associated with greater constructive responses during couples’ conflict discussions, which facilitates partners’ relationship satisfaction (Geisler & Schröder-Abé, 2015). Furthermore, individuals who hide worries from their partners for their own benefit experience worse mental health and wellbeing outcomes (Winterheld, 2017), but these harmful costs are attenuated for both couple members when people hide their worries to protect their partners (Winterheld, 2017). Similarly, concealing negative thoughts and feelings in order to avoid upsetting insecure partners can help those partners feel more valued and accepted (Lemay & Dudley, 2011). These interpersonal benefits likely occur because suppressing negative thoughts and feelings may prevent partners from being burdened by individuals’ concerns, worries, or problems (Le & Impett, 2013; Winterheld, 2017).
The Curvilinear Effect of Expressive Suppression on Partner Outcomes

The inconsistent interpersonal costs and benefits of expressive suppression for relationship partners suggest that there are likely two opposing mechanisms underlying the interpersonal consequences of expressive suppression: (1) whether expressive suppression is costly because it undermines partners’ perceptions that people are responsive versus (2) whether expressive suppression is beneficial by protecting partners from negativity. One way to capture when expressive suppression is more or less costly for relationship partners is to model the curvilinear effect of expressive suppression (see Girme, 2020); that is, testing whether the effect of expressive suppression on partners’ outcomes varies across low to high levels. A curvilinear pattern might reveal at exactly what level the costs of expressive suppression start outweighing the benefits for relationship partners (or vice versa).

We argue that relatively low levels of expressive suppression may not incur the typical interpersonal costs associated with expressive suppression. For instance, when the demands of expressive suppression are low, individuals have sufficient resources to be responsive to their partners’ needs while also shielding partners from negativity. Thus, partners are more likely to evaluate their relationship interactions more positively and perceive individuals as being more responsive to their needs (i.e., interpersonal benefits outweigh the costs). Our argument that relatively low levels of expressive suppression may not be costly is consistent with other perspectives that demonstrate that withholding negative thoughts and feelings is a common strategy that people use in close relationships. For example, individuals tend to engage in expressive suppression when trying to avoid conflict with close others (English et al., 2017). Similarly, in dating relationships, 40% of people report withholding irritations about their partner (Roloff & Cloven, 1990), especially when dealing with minor relationship annoyances and irritations (Cloven & Roloff, 1994; Solomon & Samp, 1998; Theiss & Solomon, 2006). In another study, individuals recalled being more likely to withhold their thoughts and feelings from a peer when negative events were perceived as less important or if they thought expressing feelings would have negative consequences for their friendship (Lundgren & Rudawsky, 2000).

In contrast, expressive suppression may start to incur costs once it reaches moderate (or average) levels, when relatively higher levels of expressive suppression undermine partners’ perceptions of individuals’ responsiveness (i.e., interpersonal costs outweigh the benefits). Indeed, engaging in high levels of expressive suppression is more demanding for the suppressor (Gross & John, 2003; John & Gross, 2004), which can interfere with their ability to provide responsive support and care to partners (Butler et al., 2003; Geisler & Schröder-Abé, 2015; also see Impett et al., 2014; Peters & Jamieson, 2016). High levels of expressive suppression also make individuals’ efforts to suppress their negative emotions more visible to their partners (Impett et al., 2014), which can raise concerns about the authenticity of individuals’ responses and undermine partners’ relationship quality (Impett et al., 2014). In fact, partners’ awareness about individuals’ attempts to hide or conceal their negativity may counteract any protective benefits of expressive suppression, and exacerbate partners’ worries or concerns (Le & Impett,
2013; Winterheld, 2017). Thus, at above average levels of expressive suppression, the costs of expressive suppression may outweigh (and interfere with) the interpersonal benefits of expressive suppression.

**Interpersonal Benefits of Expressive Suppression May Offset the Costs of Expressive Suppression for Individuals High in Attachment Anxiety**

Nevertheless, there may be contexts in which the interpersonal benefits of expressive suppression may be heightened, thereby attenuating the costs associated with high levels of expressive suppression. For example, high levels of expressive suppression may be rendered innocuous when expressive suppression is enacted by individuals high in attachment anxiety who typically exhibit amplified expression of negative emotions, and whose partners may benefit the most from the suppression of this negativity (i.e., interpersonal benefits negate the costs). Individuals high in attachment anxiety tend to have histories of receiving inconsistent or unpredictable care, which leads them to become hypervigilant to signs of possible rejection and continually search and seek for evidence that they are loved by their partner (Bowlby, 1969, 1973, 1980; Mikulincer & Shaver, 2016). Unfortunately, highly anxious individuals’ fears that partners will not be consistently available and responsive, coupled with their intense desire for love and approval, means that they both exhibit greater distress and negative emotions in response to threatening situations and are more likely to engage in emotion regulation strategies that cause them to fixate on and amplify hurt feelings in order to elicit (or even coerce) responsiveness from close others (Mikulincer & Shaver, 2019; Mikulincer, Shaver, & Pereg, 2003; Shaver & Mikulincer, 2002; also see Girme, Jones, Fleck, Simpson, & Overall, 2020; Low, Overall, Cross, & Henderson, 2019).

Individuals high in attachment anxiety report feeling greater and more intense negative emotions such as distress, hurt, or insecurity (Campbell et al., 2005; Overall et al., 2014; Pietromonaco & Barrett, 1997; Simpson, 1990; Simpson, Ickes, & Grich, 1999; Tran & Simpson, 2009). Providing evidence that these negative feelings are expressed outwardly, independent observers also rate highly anxious individuals higher on displays of distress and hurt when discussing relationship problems compared to individuals lower in attachment anxiety (Campbell et al., 2005; Simpson et al., 1996). Thus, highly anxious individuals experience and express more intense negative emotions. Such greater expressions of negativity are consistent with theoretical perspectives suggesting that highly anxious individuals overtly express negative emotions as a form of chronic proximity seeking, and that these are learnt and ingrained strategies that are automatically activated in stressful situations (Mikulincer & Shaver, 2019; Mikulincer et al., 2003; Shaver & Mikulincer, 2002). Supporting this perspective, infants who displayed inconsistent attachment patterns with their mothers were observed to show hyper emotion expression 20 – 35 years later during relationship-threatening discussions with their romantic partners, including exaggerating emotional expressions, ruminating, and focusing on their own
desires and needs (Girme et al., 2020). Thus, highly anxious individuals have likely developed heightened expressiveness of distress based on their caregiving histories.

There is also evidence that highly anxious individuals amplify the expression of negative emotions as a way of securing (or even coercing) reassurance from close others that they are loved (Jayamaha et al., 2016; Overall et al., 2014). For example, during couples’ discussions, highly anxious individuals are more likely to engage in behaviors associated with amplified emotional expressions, such as seeking excessive reassurance from partners about whether they are truly valued, worthy, and cared for by partners (Davila, 2001; Shaver, Schachner, & Mikulincer, 2005), or manipulative strategies that exaggerate hurt, highlight the negative impact on the self, appeal to the partner’s love and concern, and purposefully induce guilt (both as observed by objective coders and reported by anxious individuals; Jayamaha et al., 2016; Overall et al., 2014). Providing additional evidence that these involve exaggerated expressions of the intensity of negative emotions, partners perceive anxious individuals to be more hurt than the hurt feelings anxious individuals actually report experiencing (Overall et al., 2014; also see Jayamaha et al., 2016).

Given the emotionally destructive responses that highly anxious individuals tend to exhibit, it is not surprising that partners of anxious individuals report worse relationship outcomes, such as lower satisfaction, feelings of love, interdependence, and autonomy (Butzer & Campbell, 2008; Carnelley, Pietromonaco, & Jaffe, 1996; Hadden, Rodriguez, Knee, DiBello, & Baker, 2016; Simpson, 1990). The exaggerated emotional expressions, and the difficulties these cause in couples’ interactions, are central to the costs experienced by partners of highly anxious individuals. Partners of highly anxious individuals experience declines in relationship satisfaction as a result of the guilt, resentment and lack of problem-solving produced by highly anxious individuals’ exaggerated emotional displays (Jayamaha et al., 2016; Overall et al., 2014). Partners of anxious individuals also experience greater physiological threat in anticipation of having a conversation with anxious individuals about an emotionally negative film clip (Peters et al., 2019), suggesting that partners anticipate the emotional behavior of highly anxious individuals will be challenging. The toll on partners from dealing with exaggerated expressions of negative emotions is precisely why we hypothesize that partners of highly anxious individuals may be protected from the exaggerated negativity they typically deal with when highly anxious individuals suppress the outward expression of their negativity, and thus reduce the net negativity present during couples’ interactions.

Expressive suppression and emotion expression are distinct emotion regulation processes (Cameron & Overall, 2018), so why might highly anxious individuals’ typical amplification of emotions help explain why expressive suppression might have interpersonal benefits? The potential independence between expressive suppression and emotion expression does not rule out that expressive suppression and emotion expression may often work in concert to shape interpersonal interactions. In particular, at times people may suppress the intensity of their emotional expressions, while continuing to express negative thoughts and feelings. At other times, people may suppress the expression of negative emotions, and not express any thoughts
and feelings at all. The potential for different combinations of levels of expressive suppression and emotion expression is likely important in understanding why suppression of particularly negative interpersonal emotional dynamics (such as exaggerated emotional expression) is important. For example, the amplified expression of negative emotions undermines a balanced expression of emotions, producing a context where expressive suppression should be relevant to pull back negativity for more productive and positive interactions with partners (Geisler & Schröder-Abé, 2015; also see Girme et al., 2020; Low et al., 2019).

Situations in which expressive suppression and emotion expression combine or work in tandem is particularly relevant for highly anxious individuals, who are driven by dual attachment concerns about securing connection and avoiding rejection. Highly anxious individuals have an excessive need for reassurance and evidence that they are loved (Mikulincer & Shaver, 2016). This self-focus undermines highly anxious individuals’ ability to regulate their emotions during couples’ interactions (Girme et al., 2020; Low et al., 2019), especially in attachment-threatening situations (Girme et al., 2020; Overall et al., 2014; Shallcross, Howland, Bemis, Simpson, & Frazier, 2011; Simpson & Rholes, 2012). Rather than focusing on their partners’ needs, individuals high in attachment anxiety provide support for self-focused reasons, such as to ensure they are loved, valued and appreciated in their relationship (Feeney, Collins, Van Vleet, & Tomlinson, 2013; Jayamaha, Girme, & Overall, 2017). Of course, highly anxious individuals are not oblivious to the burden and dissatisfaction their insecurities create for their partners (Lemay & Clark, 2008), and their concerns about rejection are likely a key reason why anxious individuals may engage in expressive suppression during couples’ interactions. Taken together, although expressive suppression should be equally demanding for highly anxious individuals, suppressing their tendencies to exhibit amplified negativity may protect their partners from the exaggerated negativity they typically contend with. By reducing the net negativity that often accompanies highly anxious individuals’ support attempts (Feeney et al., 2013; Jayamaha et al., 2017), partners may also perceive highly anxious individuals as (at least trying to be) more constructive and responsive (i.e., heightened benefits negate the costs of expressive suppression).

**The Current Research**

In the current research, we investigated when and by whom expressive suppression may be more or less costly for individuals and their relationship partners. We did this by examining the curvilinear effect of expressive suppression on individuals’ and partners’ outcomes, and testing whether this effect was moderated by individuals’ attachment anxiety. Given the robust personal costs associated with expressive suppression, we predicted that greater expressive suppression would be associated with costs (i.e., a linear effect of expressive suppression). However, given that expressive suppression has mixed interpersonal costs and benefits, we predicted a curvilinear effect of individuals’ expressive suppression on partners’ outcomes that would be moderated by individuals’ attachment anxiety.
For individuals low in attachment anxiety, we expected that low to moderate levels of expressive suppression that are not too taxing or demanding would be unlikely to undermine partners’ perceptions of individuals’ responsiveness, and may also protect partners from negativity during couples’ interactions (i.e., interpersonal benefits outweigh the costs). However, once expressive suppression increases beyond low levels, increasing levels of expressive suppression from moderate to high levels should increasingly interfere with individuals’ ability to be responsive and shield partners from negativity, and so undermine partners’ evaluations of individuals’ responsiveness and relationship interactions (i.e., interpersonal costs outweigh the benefits). Furthermore, although particularly high levels of expressive suppression should be equally demanding for highly anxious individuals, high levels of expressive suppression should temper highly anxious individuals’ typically exaggerated emotional expressions. The reduction in highly anxious individuals’ expressed negativity should provide partners relief from the exaggerated negativity they typically contend with and hence partners should evaluate their interactions with highly anxious individuals more positively (i.e., interpersonal benefits negate the costs).

Furthermore, these interpersonal processes should occur in contextually relevant situations where the failure to manage negative emotions may be particularly problematic to partners. Table 1 highlights the methods, contexts, and measures of three existing dyadic studies in which we tested our predictions. Study 1 provided the initial test of these predictions in a dyadic diary study where couples reported on their daily expressive suppression and relationship satisfaction every day for 21-days. We first focused on couples’ daily life as it reflects the use of expressive suppression during routine interactions with partners (Cameron & Overall, 2018; Chang, Overall, Madden, & Low, 2018; Girme, Overall, Simpson, & Fletcher, 2015; Impett et al., 2012, 2014; Thomson, Overall, Cameron, & Low, 2018), where people engage in expressive suppression naturally and spontaneously to manage daily negative feelings and thoughts (Brans, Koval, Verduyn, Lim, & Kuppens, 2013; Brockman, Ciarrochi, Parker, & Kashdan, 2017; Nezlek, & Kuppens, 2008).

In Study 2, we focused on couples’ support-relevant discussions where partners took turns discussing an important personal goal they were trying to achieve. Support providers in this context often have to withhold negative thoughts and emotions that may appear too critical or controlling and undermine recipients’ goal pursuits (Feeney & Thrush, 2010; Girme et al., 2015). For individuals low in attachment anxiety, trying to provide effective support provides a challenging context where suppressing negativity or frustrations at low levels may be helpful in encouraging and supporting partners’ goals, but where the demands of high levels of expressive suppression may interfere with providing responsive support to partners (English & John, 2013; Gross & John, 2003; Impett et al., 2012, 2014; John & Gross, 2004; Peters & Jamieson, 2016; Righetti et al., 2015). Furthermore, prioritizing partners’ personal goals may be particularly difficult for individuals high in attachment anxiety who find providing support challenging, and when expressive suppression may be helpful to counteract the expression of typically self-focused negative emotions that would otherwise interfere with responsive support provision.
and successful discussions (Jayamaha et al., 2017; also see Collins & Feeney, 2000; Feeney & Collins, 2001; Feeney et al., 2013).

In Study 3, couple members took turns disclosing a hypothetical positive event that occurred (i.e., landing their dream graduate school program or job). Importantly, we experimentally manipulated the level of threat in discussions—one condition purposefully posed a threat (the dream school/job required the discloser to move away), whereas the other did not threaten the relationship (the dream school/job did not require the discloser to move away). Given that the amplified expression of negative emotions is central to our predictions, we did not expect the hypothesized effects to arise in the no-threat condition where individuals are typically happy for their partner (Gable & Reis, 2010; Gable, Gonzaga, & Strachman, 2006; Peters, Reis, & Gable, 2018) and the situation does not represent an attachment threat (Girme et al., 2020; Overall et al., 2014; Shallcross et al., 2011; Simpson & Rholes, 2012). Instead, we expected that our hypothesized effects would only arise in the threatening condition in which responders are more likely to experience negative feeling and concerns, such as worries about what this opportunity means for the relationship or sacrifices that might need to be made (Impett et al., 2012, 2014; Le & Impett, 2013; Righetti et al., 2015). For individuals low in attachment anxiety, these relationship dilemmas provide a challenging context where suppressing negativity at low levels may be helpful in suppressing concerns about the relationship in order to prioritize the partner’s needs (Geisler & Schröder-Abé, 2015; Le & Impett, 2013), but where high levels of suppression may appear unresponsive and make the discussion more threatening and challenging for partners (Impett et al., 2012, 2014; Righetti et al., 2015). Furthermore, relationship-threatening contexts are particularly relevant for highly anxious individuals who worry about abandonment and tend to be unresponsive during capitalization discussions (Shallcross et al., 2011), but where expressive suppression may help counteract amplified displays of negative emotions, provide partners relief from the exaggerated negativity they typically contend with, and help partners feel like anxious individuals were being more constructive, forgoing self-interest, and being responsive to their good news (Tran & Simpson, 2009; Simpson et al., 1996).
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Lastly, across all three studies, we sought to rule out an important alternative explanation for the hypothesized effects raised during the review process. Given that individuals lower in attachment anxiety generally experience fewer and less intense negative emotions (Campbell et al., 2005; Overall et al., 2014; Pietromonaco & Barrett, 1997), greater negative emotions (and thus greater expressive suppression) by less anxious individuals could be more diagnostic of pressing relationship problems and so lead to greater immediate costs for partners. In contrast, because individuals high in attachment anxiety typically express greater negative emotions, their experience and expression of negative emotions may be less diagnostic of current relationship problems, thereby raising fewer concerns in partners who may acclimate to the greater negative emotional climate they typically face. Of course, prior research highlights that, regardless of the diagnosticity of negative emotions, highly anxious individuals’ intensified emotional expressions are detrimental to their partners (Jayamaha et al., 2016; Peters et al., 2019; Overall et al., 2014), and it is the amplified or disproportionate nature of anxious individuals’ emotional expressions that appear to breed this dissatisfaction (Overall et al., 2014). For these reasons, we expected that controlling for the intensity of individuals’ felt negative emotions would not reduce the effects of expressive suppression.

Study 1

Method

Sample size and statistical power. We drew on an existing dataset to test the current hypotheses. Power analyses were not conducted prior to data collected. Funding was received for the recruitment of 85 couples reflecting common standards in the field for dyadic diary samples at the time. However, due to not all couples completing the daily diary adequately, the final sample in this study was 73 couples (total \( N = 146 \)), who provided 2,782 observations for the current analyses.

Participants. Seventy-three heterosexual couples who replied to campus-wide advertisements at a New Zealand university were reimbursed $70NZD for completing the procedures described below. Couples were involved in committed (47% married or cohabiting), long-term (\( M = 3.20 \) years, \( SD = 3.56 \)) relationships, and were a mean age of 23.61 (\( SD = 6.87 \)) years. In terms of ethnicity, participants identified as NZ European (82.1%), Non-NZ European (9%), Asian (2.1%), Maori (.7%), Pacific Islander (.7%), or other ethnicities, including multiracial identities (5.5%).

Data from this sample has been used previously to examine the links between (a) attachment insecurity, biased perceptions of partners’ negative emotions, and hostile relationship behavior (Overall, Fletcher, Simpson, & Fillo, 2015; Study 2), (b) attachment avoidance and recipients’ reactions to support provision (Girme et al., 2015; Study 4), and (c) relationship conflict, perceived regard, and the use of expressive suppression (Thomson et al., 2018; Study 2). However, the linear or curvilinear effects of expressive suppression and attachment anxiety
on partner outcomes has never been reported, and are completely independent of the aims and analyses presented in prior papers. Thus, the results presented here are unique, and test novel and separate hypotheses, from the prior papers.

**Procedure and materials.** All procedures were performed in accordance with the University ethics committee standards.

**Attachment orientations.** During an initial testing session, participants completed the Adult Attachment Questionnaire (AAQ; Simpson et al., 1996) to assess attachment anxiety and avoidance. Nine items assessed attachment anxiety (e.g., “I often worry that my romantic partners don’t really love me”) and eight items assessed attachment avoidance (e.g., “I’m not very comfortable having to depend on romantic partners”; 1 = *strongly disagree*, 7 = *strongly agree*). Items were scored and averaged so that higher scores represent higher anxiety (Cronbach’s alpha [α] = .84) and avoidance (α = .72).

**Daily diary measures.** Participants then received instructions regarding an online daily diary that they were asked to complete every day for the next 21 days. On average, participants completed 19.82 diary entries (94.4%) to provide 2895 observations. However, due to partially completed diary entries and resulting missing data, we have a total of 2,782 observations for the current analyses (90.7% completion rate).

**Expressive suppression.** To assess the degree to which participants tried to suppress their feelings on a given day, participants rated three items derived from a validated self-report scale of expressive suppression (Gross & John, 2003) and used in a range of prior studies to assess expressive suppression during daily and lab-based social interactions (Cameron & Overall, 2018; Girme et al., 2015; Low et al., 2017; Low et al., 2019; Peters, Overall, Cameron, Hammond, Low, & Girme, 2019; Thomson et al., 2018). Participants reported on their expressive suppression during interactions with their partner that day: “I tried to hide my thoughts and feelings from my partner,” “I kept my negative emotions to myself,” and “I tried to control or suppress any negative emotions” (1 = *not at all*, 7 = *very much*). Items were averaged (between-person reliability estimate [R1F] = .84; reliability of change [RC] = .75).

**Relationship satisfaction.** Participants reported their relationship satisfaction with a single item: “How satisfied were you with your relationship today?” (1 = *not at all*, 7 = *extremely*; for similar 1-item measures of daily relationship satisfaction, see Downey, Freitas, Michaelis, & Khouri, 1998; Gable & Poore, 2008).

**Negative emotions.** Participants reported on the extent to which they felt “hopeless,” “anxious,” “lonely,” “sad,” “discouraged,” and “worried” that day (1 = *not at all*, 7 = *extremely*). The items were averaged to index daily negative emotions (R1F = .83; RC = .78).

**Results**

Descriptive statistics for all measures are shown in Table 2. Our data had a nested structure, with multiple daily reports (level 1) nested within each dyad (level 2). Thus, we tested our predictions following the recommendations for analyzing repeated measures dyadic data...
with indistinguishable dyads (Kenny, Kashy, & Cook, 2006). These analyses were conducted using *lme4* (Bates et al., 2019) and *lmerTest* (Kuznetsova, Brockhoff, & Christensen, 2017) in R (Version 3.6.1). We modeled both individuals’ daily relationship satisfaction and partners’ daily relationship satisfaction as a function of (a) the linear effect of individuals’ expressive suppression, (b) the quadratic effect of the individuals’ expressive suppression, (c) individuals’ attachment anxiety, and the interactions between individuals’ anxiety and (d) the linear and (e) quadratic effect of individuals' expressive suppression. As is standard practice when examining effects of attachment insecurity, we isolated the effects of anxiety from avoidance by also including: (f) individuals’ attachment avoidance, and the interactions between individuals’ avoidance and (g) the linear and (h) quadratic effect of individuals’ expressive suppression.

Given that we were interested in contexts in which highly anxious individuals suppress the expression of their emotions more than they usually do, the daily level variables were person mean-centered. The quadratic expressive suppression variable was created by squaring the person mean-centered expressive suppression scores for each individual for each day. To isolate within-person effects, averages of expressive suppression were included as an additional predictor (Raudenbush & Bryk, 2002). We also included partners’ prior day relationship satisfaction in order to assess change in relationship satisfaction across days (Bolger & Laurenceau, 2013). We also modeled the main and interaction effects of gender (coded 1 for women, 1 for men) to test for differences across men and women. With the exception of four gender differences when predicting individuals’ relationship satisfaction (see online supplemental materials for more information), no other significant gender differences emerged, including for our focal interactions ($t_s = .11$ to $1.70$, $p_s = .91$ to .09).

When plotting any significant curvilinear moderated effects, we considered the meaning of each curve by (a) calculating the simple linear and curvilinear effects for individuals low versus high in attachment anxiety, and (b) calculating the inflection points for the curves for individuals low versus high in attachment anxiety (see Aiken & West, 1991; Stewart, 2011 for detailed information on standard unconstrained optimization techniques, and Girme et al., 2015 for an example of similar empirical applications). We also overlaid a scatterplot of the raw data for groups below versus above the mean on attachment anxiety to provide clarity about (a) the distribution of expressive suppression across the full scale range, and (b) rule out any concerns that any moderated curvilinear associations reported were driven by outliers.

**Individuals’ relationship satisfaction.** Our main predictions focus on the curvilinear effect of expressive suppression and moderation by attachment anxiety on partners’ outcomes, but for completeness we also present the actor effects. The results predicting individuals’ relationship satisfaction are presented in Table 3. Significant linear and curvilinear associations emerged between individuals’ expressive suppression and individuals’ relationship satisfaction. Consistent with prior work, the curvilinear effect of expressive suppression illustrated that as individuals’ expressive suppression increases, individuals report lower daily relationship satisfaction (inflection point -.67 $SD$ below the mean; absolute score 1.54). Furthermore, two unexpected interactions emerged between the linear effect of individuals’ expressive suppression
and attachment anxiety (Expressive Suppression \times \text{Attachment Anxiety}) predicting individuals’ relationship satisfaction, which was qualified by a higher order curvilinear effect of expressive suppression and gender interaction (Gender \times \text{Expressive Suppression}^2 \times \text{Attachment Anxiety}; B = -.04, SE = .01, t = -2.97, p = .003, 95% CI [-.06, -.01], r = .24). This interaction was significant for men’s (B = -.07, SE = .02, t = -2.97, p = .003, 95% CI [-.12, -.02], r = .28) and women’s (B = .03, SE = .01, t = 2.25, p = .02, 95% CI [.003, .05], r = .20) expressive suppression.

Plotting these effects revealed a similar pattern to the main curvilinear effect: low levels of expressive suppression were associated with small increases in individuals’ relationship satisfaction, but above average levels of expressive suppression undermined individuals’ relationship satisfaction for women low and high in attachment anxiety, and men high in attachment anxiety (linear effect: ts = 2.14 to -4.72, ps = .03 to < .001; curvilinear effect: ts = -2.55 to -4.44, ps .01 to < .001), with the exception of men low in attachment anxiety where expressive suppression was associated with linear decreases in individuals’ relationship satisfaction (linear effect: ts = -2.95, p = .003; curvilinear effect: ts = .56, p = .58). Given that we (1) did not hypothesize these interaction effects, (2) do not replicate these effects in the other studies, and (3) the findings can be explained most parsimoniously via the main linear and curvilinear effects of expressive suppression, we did not plot these effects (see online supplemental materials for gender-specific graphs).

**Partners’ relationship satisfaction.** Our primary analyses focused on the associations between individuals’ expressive suppression and partners’ relationship satisfaction. No linear or curvilinear effects on partners’ relationship satisfaction emerged (see Table 3). However, as predicted, the curvilinear association between individuals’ expressive suppression and partners’ relationship satisfaction was moderated by individuals’ attachment anxiety (Expressive Suppression^2 \times \text{Attachment Anxiety}). This interaction is plotted in Figure 1.

When individuals low in attachment anxiety engaged in low to moderate levels of expressive suppression (see left side of Figure 1), expressive suppression was not associated with partners’ relationship satisfaction. However, near average levels of expressive suppression (inflection point .31 = SD above the mean; absolute score = 2.52), increasing levels of expressive suppression were negatively associated with partners’ relationship satisfaction (see right side of Figure 1). The simple effects confirmed that this represented a significant curvilinear effect (see left side of Table 4). In contrast, the non-significant simple linear and curvilinear effects for individuals high in anxiety (see solid line in Figure 1; right side of Table 4) revealed that for individuals high in attachment anxiety, partners maintained their relationship satisfaction even at high levels of individuals’ expressive suppression.
Table 2
*Descriptive Statistics Across Measures (Studies 1–3)*

<table>
<thead>
<tr>
<th>Measures</th>
<th>Study 1</th>
<th>Study 2</th>
<th>Study 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M (SD)</td>
<td>Range</td>
<td>M (SD)</td>
</tr>
<tr>
<td>Individuals’ predictor variables</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td>3.10 (1.08)</td>
<td>1.00–5.89</td>
<td>3.07 (1.05)</td>
</tr>
<tr>
<td>Attachment avoidance</td>
<td>2.90 (0.92)</td>
<td>1.00–5.75</td>
<td>2.86 (1.02)</td>
</tr>
<tr>
<td>Expressive suppression</td>
<td>2.21 (1.46)</td>
<td>1.00–7.00</td>
<td>2.11 (1.32)</td>
</tr>
<tr>
<td>Negative emotions</td>
<td>1.97 (1.27)</td>
<td>1.00–7.00</td>
<td>1.60 (.99)</td>
</tr>
<tr>
<td>Individuals’ relational outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Individuals’ daily relationship satisfaction</td>
<td>5.89 (1.29)</td>
<td>1.00–7.00</td>
<td>—</td>
</tr>
<tr>
<td>Individuals’ responsiveness</td>
<td>—</td>
<td>—</td>
<td>5.55 (0.94)</td>
</tr>
<tr>
<td>Individuals’ discussion success</td>
<td>—</td>
<td>—</td>
<td>5.03 (1.13)</td>
</tr>
<tr>
<td>Individuals’ discussion threat</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>Partners’ relational outcomes</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partners’ daily relationship satisfaction</td>
<td>5.89 (1.29)</td>
<td>1.00–7.00</td>
<td>—</td>
</tr>
<tr>
<td>Partners’ perceptions of individuals’ responsiveness</td>
<td>—</td>
<td>—</td>
<td>5.77 (1.14)</td>
</tr>
<tr>
<td>Partners’ discussion success</td>
<td>—</td>
<td>—</td>
<td>4.81 (1.34)</td>
</tr>
<tr>
<td>Partners’ discussion threat</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
</tbody>
</table>

*Note.* All measures were assessed on a 7-point Likert scale with three exceptions in Study 3: Expressive Suppression was measured on a scale of 4 (strongly disagree) to -4 (strongly agree), Negative Emotions was measured on a scale of 1 (1) to 5 (i), and Discussion Threat reflects a threat-challenge ratio where scores above zero represent greater threat.
**Controlling for negative emotions.** Experiencing negative emotions, and thus the use of expressive suppression, might be more diagnostic of immediate relationship problems for individuals lower in attachment anxiety, and thus incur interpersonal costs. In contrast, individuals high in attachment anxiety typically express greater negative emotions, and thus the presence of negative emotions may be less diagnostic of immediate problems and less costly for partners who may acclimate to the greater negative emotional climate they typically face. To address this possible alternative explanation, we reran our analyses in Table 3 and controlled for the main effects (and associated gender interactions) of (a) individuals’ person-centered negative emotions to account for days that individuals experience greater negative emotions than usual, and (b) within-person averages of negative emotions to account for different average levels of negative emotions between individuals low versus high in attachment anxiety (Bolger & Laurenceau, 2013; Raudenbush & Bryk, 2002). Controlling for individuals’ negative emotions did not alter the focal interaction displayed in Figure 1 ($B = .03, t = 2.16, p = .03$), suggesting that the consequences of high levels of expressive suppression for individuals low versus high in attachment anxiety occur independently of the intensity of negative emotions individuals experience during daily life.

**Study 2**

Study 1 provided initial evidence that the costly effects of individuals’ expressive suppression do not occur until moderate-to-high levels, and that these negative effects of high levels of expressive suppression are attenuated among individuals who are high in attachment anxiety. Study 2 aimed to replicate this effect within support-relevant discussions—a context in which suppressing negativity at low levels may be helpful in being responsive and supportive of partners’ goals, especially for individuals high in attachment anxiety, whose own negative emotions interfere with responsive support provision and discussion success.

**Method**

**Sample size and statistical power.** We drew on an existing dataset to test the current hypotheses. A sample size of 100 couples was determined a priori to data collection to ensure adequate power to detect the typical size of dyadic effects shown in prior research (Kenny et al., 2006). Data collection stopped once we reached 100 heterosexual couples. We ran Monte Carlo simulations modeling effects of each dyad member with equality constraints, which demonstrated that a sample of 100 dyads yields good statistical power ($\sim .83$ to $.99$) to detect small-to-medium effect sizes ($r \sim .20$ to $.30$) for 2-way interaction effects. However, these a priori analyses did not differentiate between linear versus curvilinear effects, and so do not account for the additional number of parameters involved in the models run here (Bolger & Laurenceau, 2013; Lane & Hennes, 2018).
Participants. One-hundred heterosexual couples responded to campus-wide advertisements at a New Zealand University and were paid NZ$80 for participating. Couples were involved in committed (13% married, 36% cohabiting, 47% serious dating relationships), long-term ($M = 3.28$ years, $SD = 4.16$) relationships, and were a mean age of $22.64$ ($SD = 6.51$) years. In terms of ethnicity, participants identified as NZ European (59.2%), Non-NZ European (10.2%), Asian (10.2%), Maori (5.6%), Indian (4.6%), Pacific Islander (2%) or another ethnicity, including multiracial identities (8.2%).

Data from this sample has been used previously to examine the links between (a) attachment avoidance and recipients’ reactions to partners’ support provision (Girme et al., 2015; Study 2; Girme, Overall, & Hammond, 2019), (b) attachment anxiety, relational value, and support provision (Jayamaha et al., 2017; Study 2), (c) support recipients’ expressive suppression on support recipient outcomes (Low et al., 2017, Study 2), and (d) the association between habitual and situational expressive suppression (Peters et al., 2019, Study 1). However, the linear or curvilinear effects of support providers’ expressive suppression and attachment anxiety on partners’ outcomes has never been reported. Thus, the results presented in the current paper are unique, and test novel and separate hypotheses, from the prior papers.

Procedure and materials. All procedures were performed in accordance with the University ethics committee standards.

Attachment orientations. Participants first completed the same AAQ as in Study 1 (Simpson et al., 1996) to assess attachment anxiety ($\alpha = .78$) and avoidance ($\alpha = .76$).
Participants then identified and ranked (in order of importance) three current personal goals they had been trying to achieve, which they were told they might discuss with their partner. The top-ranked personal goal was selected for discussion. After a short warm-up discussion each couple was video-recorded engaging in two 7-min discussions about each partner’s personal goal. Half of the couples discussed the woman’s goal first, and half discussed the man’s goal first. Both partners were instructed to discuss the issue as they normally would. We refer to the partner whose goal was discussed as the “support recipient,” and their partner who could be supportive as the “support provider.”

**Support providers’ expressive suppression.** Immediately after the discussion, support providers rated the same three items used in Study 1 to assess their expressive suppression attempts during the discussion. These ratings were averaged ($\alpha = .88$).

**Support providers’ and recipients’ perceptions of responsive support.** Support providers were asked to think about how their thoughts, feelings and behavior made their partner feel during the discussion and rated the extent to which they made their partner feel “helped,” “supported,” and “comforted/reassured,” and also responded to the item “To what extent do you feel you were responsive during the discussion?” ($1 = not at all, 7 = very$) to assess whether support providers felt they were responsive to their partner’s needs during the discussion (Reis, Clark, & Holmes, 2004; Reis & Gable, 2015; see Debrot, Cook, Perrez, & Horn, 2012, for a similar measure). The items were averaged to index providers’ responsive support ($\alpha = .78$). Support recipients completed analogous measures to assess whether support recipients felt that their partner was supportive and responsive during the discussion. The items were averaged to index recipients’ perceptions of providers’ responsive support ($\alpha = .87$).

**Support providers’ and recipients’ discussion success.** Support providers rated three items regarding how successful the couple was in making progress toward their partner’s goal during the discussion: “How successful was the discussion in making progress towards your partner’s goal?,” “In your discussion, how successful were you in making progress towards your partner’s goal?,” and “In your discussion, how successful was your partner in making progress towards your partner’s goal?” ($1 = not at all successful, 7 = very successful$). Items were averaged to form an index of discussion success perceived by support providers ($\alpha = .87$). Support recipients completed analogous measures to assess how successful the couple was in making progress toward their goal during the discussion. Items were averaged to index of discussion success perceived by support recipients ($\alpha = .89$).

**Support providers’ negative emotions.** Support providers reported on the extent to which they felt “sad,” “hurt,” “frustrated,” and “angry” in regard to their partner’s goal during the discussion ($1 = not at all, 7 = very$). The items were averaged ($\alpha = .84$).
Table 3
**The Effects of Expressive Suppression and Attachment Anxiety on Individuals' and Partners' Daily Relationship Satisfaction (Study 1)**

<table>
<thead>
<tr>
<th>Effects</th>
<th>Individuals’ relationship satisfaction</th>
<th>Partners’ relationship satisfaction</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( B )</td>
<td>( t )</td>
</tr>
<tr>
<td>Expressive suppression</td>
<td>-.08</td>
<td>-3.69**</td>
</tr>
<tr>
<td>Expressive suppression(^2)</td>
<td>-.06</td>
<td>-5.04**</td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td>-.11</td>
<td>-1.60</td>
</tr>
<tr>
<td>Expressive Suppression ( \times ) Attachment Anxiety</td>
<td>.09</td>
<td>4.28**</td>
</tr>
<tr>
<td>Expressive Suppression(^2) ( \times ) Attachment Anxiety</td>
<td>-.01</td>
<td>-.70</td>
</tr>
<tr>
<td>Attachment avoidance</td>
<td>-.07</td>
<td>-.94</td>
</tr>
<tr>
<td>Expressive Suppression ( \times ) Attachment Avoidance</td>
<td>.03</td>
<td>1.15</td>
</tr>
<tr>
<td>Expressive Suppression(^2) ( \times ) Attachment Avoidance</td>
<td>.03</td>
<td>2.47*</td>
</tr>
</tbody>
</table>

*Note.* The variables marked with \(^2\) are curvilinear variables. Interaction effects presented in figures are in bold. Effect sizes \( (r) \) were computed using Rosenthal and Rosnow’s (2007) formula: \( r = \sqrt{t^2 / [t^2 + df]} \). CI = confidence interval. \(*p \leq .05. \ **p \leq .01.\)
<table>
<thead>
<tr>
<th>Partners’ outcomes</th>
<th>Figure</th>
<th>Low attachment anxiety (1 - SD)</th>
<th>High attachment anxiety (1 + SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Linear effect</td>
<td>Curvilinear effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>t</td>
</tr>
<tr>
<td><strong>Study 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partner’s relationship satisfaction</td>
<td>1</td>
<td>.03</td>
<td>.86</td>
</tr>
<tr>
<td><strong>Study 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Recipients’ perceptions of providers’ responsive support</td>
<td>2A</td>
<td>.01</td>
<td>.04</td>
</tr>
<tr>
<td>Recipients’ discussion success</td>
<td>2B</td>
<td>&lt;.001</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

*Note.* Effect sizes (*r*) were computed using Rosenthal and Rosnow’s (2007) formula: $r = \sqrt{(t^2/df)}$. Significant effects are in bold.
Results

Descriptive statistics are reported in Table 2. Since our data is nested within dyads, we followed the approach outlined by Kenny et al. (2006) to run dyadic multilevel models with indistinguishable dyads that accounted for the dyadic dependencies in the data. These analyses were conducted using lme4 (Bates et al., 2019) and lmerTest (Kuznetsova et al., 2017) in R (Version 3.6.1). We modeled support providers’ responsiveness, support providers’ discussion success, support recipients’ perceptions of providers’ responsive support, and support recipients’ discussion success as a function of: (a) the linear effect of providers’ expressive suppression, (b) the quadratic effect of the providers’ expressive suppression, (c) providers’ attachment anxiety, and the interactions between providers’ anxiety and (d) the linear and (e) quadratic effect of providers’ expressive suppression. As in Study 1, we isolated the effects of anxiety from avoidance by including: (f) providers’ avoidance and (g) the linear and (h) quadratic effect of providers’ expressive suppression. As in Study 1, we modeled the main effect and interaction effects of gender (coded - 1 for women, 1 - for men) to test for differences between men and women. One significant gender difference emerged for a focal interaction predicting recipients’ perceptions of providers’ responsive support (see below). No other significant gender differences emerged ($t$ scores = -.21 to -1.84, $p$ values = .83 to .07).

Support providers’ responsive support and discussion success. Our main predictions focus on the curvilinear effects of expressive suppression moderated by attachment anxiety on partners’ (support recipients’) outcomes, but for completeness we also present the actor (support provider) effects. The results from analyses predicting support providers’ responsive support are presented in the left column of Table 5. A significant linear association emerged between providers’ expressive suppression and providers’ responsive support provision. Consistent with prior work, as providers’ expressive suppression increased, providers reported providing less responsive support to their partners.

The results from analyses predicting support providers’ discussion success are presented in the right column of Table 5. Significant linear and curvilinear associations emerged between providers’ expressive suppression and providers’ reported discussion success. The linear effect demonstrated that greater expressive suppression was associated with providers’ reporting lower discussion success. However, the curvilinear effect demonstrated that while low to moderate levels of expressive suppression was associated with providers reporting lower discussion success, moderate to high levels of expressive suppression was associated with more successful discussions (inflection point = 1.34 SD above the mean; absolute score = 3.45). No significant interactions emerged.

Support recipients’ perceptions of providers’ responsive support. Our primary analyses focused on the partner outcomes associated with expressive suppression. The results from analyses predicting support recipients’ perceived responsive support are presented in Table 6 (see first column). The curvilinear association between providers’ expressive suppression and recipients’ perceptions of providers’ responsive support was moderated by providers’ attachment
anxiety. This interaction is plotted in Figure 2, Panel A. The curvilinear effect of providers’ expressive suppression for providers low in anxiety is depicted by the dashed line in Figure 2, Panel A. When providers relatively low in attachment anxiety engaged in low to moderate levels of expressive suppression, expressive suppression was not significantly associated with recipients’ perceptions of providers’ responsive support. However, at around average levels of expressive suppression (inflection point = .01 SD above the mean; absolute score = 2.12), increasing levels of expressive suppression started to predict sharp declines in recipients’ perceptions of providers’ responsive support. The simple effects confirmed that this pattern represented a significant simple curvilinear effect (see left side of Table 4). In contrast, the simple effects (see solid line in Figure 2, Panel A; right side of Table 4) revealed that when providers high in attachment anxiety engaged in low to moderate levels of expressive suppression, it was not significantly associated with recipients’ perceptions of providers’ responsive support. However, at around average levels of expressive suppression (inflection point = .62 SD above the mean; absolute score = 2.72), increasing levels of expressive suppression started to predict increases in recipients’ perceptions of providers’ responsive support. The simple effects confirmed that this pattern represented a significant simple curvilinear effect (see right side of Table 4).

Support recipients’ discussion success. As shown in Table 6 (see second column), the curvilinear association between support providers’ expressive suppression and support recipients’ discussion success was also moderated by support providers’ attachment anxiety. This interaction is plotted in Figure 2, Panel B. Specifically, the curvilinear effect of providers’ expressive suppression for providers’ low in anxiety is depicted by the dashed line in Figure 2, Panel B. When providers’ relatively low in attachment anxiety engaged in low to moderate levels of expressive suppression, expressive suppression was not significantly associated with recipients’ discussion success. However, at average levels of expressive suppression (inflection point = .001 SD above the mean; absolute score = 2.11), increasing levels of expressive suppression started to predict sharp declines in recipients’ discussion success (see right side of Figure 2, Panel B). The simple effects confirmed that this pattern represented a significant simple curvilinear effect (see left side of Table 4). In contrast, the simple effects (see solid line in Figure 2, Panel B; right side of Table 4) revealed that when providers’ high in attachment anxiety engaged in low to moderate levels, expressive suppression was not significantly associated with recipients’ discussion success. However, a significant simple effect revealed that at above average levels of expressive suppression (inflection point 1.07 = SD above the mean; absolute score = 3.18), increasing levels of expressive suppression started to predict increases in recipients’ discussion success.

Controlling for negative emotions. Similar to Study 1, we reran the primary analyses in Table 6 controlling for the main effect (and associated gender interactions) of support providers’ negative emotions. Controlling for providers’ negative emotions did not alter the focal interactions displayed in Figure 2, Panel A ($B = .12$, $SE = .05$, $t = 2.64$, $p = .009$) or Panel B ($B = .16$, $SE = .05$, $t = 2.95$, $p = .004$), suggesting that the effects of expressive suppression occur
independently of the intensity of negative emotions providers experienced during support-relevant discussions.

**Study 3**

Study 2 replicated the findings in Study 1; the costly interpersonal effects of individuals’ expressive suppression did not emerge until moderate-to-high levels, and such negative effects of high levels of expressive suppression were attenuated when individuals were high in attachment anxiety. In Study 3, we aimed to replicate these moderated curvilinear effects in a relationship-threatening situation. Couple members took turns disclosing a hypothetical positive event that occurred (landing their dream graduate school program or job). Importantly, we experimentally manipulated the level of threat in discussions: one condition purposefully posed a threat to the relationship (the dream school/job required the discloser to move away), whereas the other did not threaten the relationship (the dream school/job did not require the discloser to move away). Given that the expression of negative emotions is central to our predictions, we did not anticipate the hypothesized effects would occur in the no-threat condition where individuals are typically happy for their partner (Gable & Reis, 2010; Gable et al., 2006; Peters et al., 2018) and the situation should not activate attachment-related concerns about relationship stability or the partners’ commitment (Girme et al., 2020; Overall et al., 2014; Shallcross et al., 2011; Simpson & Rholes, 2012). Instead, we anticipated that the predicted effects would occur most strongly in the relationship threatening condition where partners are more likely to experience negative feelings and concerns, such as worries about what this opportunity means for the relationship. It is precisely within the relationship-threatening condition that the need to suppress the expression of negative feelings and concerns for the sake of the partner’s needs may be particularly relevant. For individuals low in attachment anxiety, low levels of expressive suppression should help disclosers feel supported and less threatened by the responder’s reactions, but above average or high levels of expressive suppression should interfere with responders’ ability to be responsive and create a more difficult, challenging, and threatening relational environment for partners. However, expressive suppression by highly anxious individuals should be particularly beneficial in these relationship threatening conditions given that highly anxious individuals’ expressive suppression may counteract the distress and amplified emotional reactions they typically exhibit in threatening contexts (Girme et al., 2020; Overall et al., 2014; Shallcross et al., 2011; Simpson & Rholes, 2012).

**Method**

We drew on an existing dataset to test the current hypotheses. Prior to data collection, a series of Monte Carlo simulations were conducted with equality constraints for the paths modeling effects of each dyad (Bolger & Laurenceau, 2013; Lane & Hennes, 2018) using past similar dyadic data sets to approximate effects. Focusing on 2-way interaction effects with an
estimated small-to-medium effect size ($r \sim 0.20$), 105 dyads were needed to achieve sufficient power (>0.80). Thus, a sample size of 105 couples was determined a priori to ensure sufficient power to detect the typical size of dyadic support effects shown in prior research (Kenny et al., 2006). However, these a priori analyses did not differentiate between linear versus curvilinear effects, or test for 3-way interactions, and so do not account for the additional number of parameters involved in the models run here or the smaller effect sizes of most 3-way interactions. We oversampled and recruited 112 dyads. However, due to not all participants meeting study criteria (see below), the final sample in this study was 201 individuals (97 dyads plus 7 individuals).
Table 5
The Effects of Support Providers’ Expressive Suppression and Attachment Anxiety on Support Providers’ Outcomes (Study 2)

<table>
<thead>
<tr>
<th>Effects</th>
<th>Responsive support</th>
<th></th>
<th></th>
<th>Discussion success</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>t</td>
<td>Low</td>
<td>High</td>
<td>r</td>
</tr>
<tr>
<td>Expressive suppression</td>
<td>-.22</td>
<td>-3.06**</td>
<td>-.36</td>
<td>-.08</td>
<td>.22</td>
</tr>
<tr>
<td>Expressive suppression²</td>
<td>.04</td>
<td>1.22</td>
<td>-.02</td>
<td>.11</td>
<td>.09</td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td>.03</td>
<td>.35</td>
<td>-.14</td>
<td>.20</td>
<td>.03</td>
</tr>
<tr>
<td>Expressive Suppression ✖ Attachment Anxiety</td>
<td>-.04</td>
<td>-.53</td>
<td>-.16</td>
<td>.09</td>
<td>.04</td>
</tr>
<tr>
<td>Expressive Suppression² ✖ Attachment Anxiety</td>
<td>.003</td>
<td>.09</td>
<td>-.07</td>
<td>.07</td>
<td>.01</td>
</tr>
<tr>
<td>Attachment avoidance</td>
<td>-.11</td>
<td>-1.17</td>
<td>-.28</td>
<td>.06</td>
<td>.09</td>
</tr>
<tr>
<td>Expressive Suppression ✖ Attachment Avoidance</td>
<td>.06</td>
<td>.87</td>
<td>-.07</td>
<td>.19</td>
<td>.07</td>
</tr>
<tr>
<td>Expressive Suppression² ✖ Attachment Avoidance</td>
<td>-.07</td>
<td>-1.64</td>
<td>-.16</td>
<td>.01</td>
<td>.12</td>
</tr>
</tbody>
</table>

Note. The variables marked with 2 are curvilinear variables. Effect sizes (r) were computed using Rosenthal and Rosnow’s (2007) formula: \( r = \sqrt{(t^2 / df + df)} \). CI = confidence interval. 
*p < .05. **p < .01.
Table 6
The Effects of Support Providers’ Expressive Suppression and Attachment Anxiety on Support Recipients’ Outcomes (Study 2)

<table>
<thead>
<tr>
<th>Effects</th>
<th>Responsive support</th>
<th></th>
<th>Discussion success</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>95% CI</td>
<td></td>
<td>95% CI</td>
<td></td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>t</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Expressive suppression</td>
<td>-.10</td>
<td>-1.11</td>
<td>.28</td>
<td>.08</td>
</tr>
<tr>
<td>Expressive suppression²</td>
<td>-.01</td>
<td>-.14</td>
<td>.09</td>
<td>.08</td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td>-.38</td>
<td>-3.31**</td>
<td>-.60</td>
<td>-.16</td>
</tr>
<tr>
<td>Expressive Suppression ✖ Attachment Anxiety</td>
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<td>-1.19</td>
<td>-.27</td>
<td>.06</td>
</tr>
<tr>
<td>Expressive Suppression² ✖ Attachment Anxiety</td>
<td>.17</td>
<td>3.53**</td>
<td>.08</td>
<td>.27</td>
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<tr>
<td>Attachment avoidance</td>
<td>.03</td>
<td>.28</td>
<td>-.19</td>
<td>.26</td>
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<tr>
<td>Expressive Suppression ✖ Attachment Avoidance</td>
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<td>-.18</td>
<td>-.18</td>
<td>.15</td>
</tr>
<tr>
<td>Expressive Suppression² ✖ Attachment Avoidance</td>
<td>.03</td>
<td>.59</td>
<td>-.08</td>
<td>.14</td>
</tr>
</tbody>
</table>

Note. The variables marked with $^2$ are curvilinear variables. Interaction effects presented in figures are in bold. Effect sizes (r) were computed using Rosenthal and Rosnow’s (2007) formula: $r = \sqrt{t^2/\left(t^2 + df\right)}$. CI = confidence interval.

**p < .01.
Figure 2. The moderating effect of support providers’ attachment anxiety on the curvilinear association between support providers’ expressive suppression on (A) support recipients’ perceptions of support providers’ responsiveness and (B) support recipients’ discussion success (Study 2). The values on the x-axis represent the range of grand-mean centered expressive suppression reported by support providers during support-relevant discussions in Study 2 (0 mean levels of expressive suppression). See the online article for the color version of this figure.
**Participants.** Two hundred and twenty-four participants in 112 dyads were recruited via an online study pool and posted flyers. Participants were compensated U.S. $10 or 2-hr of course extra credit for participation. After data collection, seven dyads revealed they were not actually involved in a romantic relationship and were excluded from analyses, seven participants were excluded from analyses for responding incorrectly to attentiveness questions (Maniaci & Rogge, 2014), and two participants were excluded from analyses for failing to complete any of the self-report questionnaires. Thus, our final sample consisted of 201 participants (97 dyads plus 7 individuals; 195 heterosexual participants). Participants were 103 females and 98 males. Participants were involved in relatively serious relationships (relationship length $M = 1.17$ years, $SD = 1.01$), and were a mean age of 20.17 ($SD = 1.26$) years. In terms of ethnicity, participants identified as Caucasian/White (53.7%), Asian/Asian American (26.4%), African/African American/Black (8.4%), Hispanic/Latino (7%), or other (2.5%) or mixed race (2%).

This sample has been used before to examine how (a) cardiovascular responses indicating threat impact partners’ responsiveness (Peters, Reis, & Jamieson, 2018), and (b) how individuals’ restrictiveness or dominance can exacerbate physiological responses indicating threat (Tudder, Gresham, Peters, Reis, & Jamieson, 2020). However, the linear or curvilinear effects of support providers’ expressive suppression and attachment anxiety on partners’ outcomes has never been reported. Thus, the results presented in the current paper are unique, and test novel and separate hypotheses, from the prior papers.

**Procedure and materials.** All procedures were performed in accordance with institutional review board ethical standards. Couples were escorted to individual, private testing rooms where they provided informed consent, and completed initial questionnaires. As part of these questionnaires, we asked participants, “Hypothetically, what is your dream job? Or, if you are planning to continue going to school after your undergraduate career, what would be your dream school to get in to?” Participants remained separated in their private testing rooms and were told they were about to discuss a hypothetical event with their romantic partner. Each couple member took turns being the discloser of good news and the responder to their partners’ good news. Experimenters incorporated the participants’ answers from the initial questionnaire and indicated to disclosers they had been hypothetically hired for their “dream” job or accepted into their “dream” graduate program.

After role assignment, we implemented a manipulation of the conversation context between couples. In the relationship-threat condition, couples were told to imagine having to live apart from their partners and endure a long-distance relationship. In the nonthreat condition, couples were told to imagine they could live together, with the news being positive for disclosers, responders, and the relationship. Participants were explicitly asked to discuss how this news would make each of them feel and how the news would impact their relationship in the short-term and the long-term. Couples engaged in a conversation for 5-min. After the conversation, couples were separated into their private testing rooms and completed postconversation questionnaires.
**Attachment orientations.** Before the discussions, participants completed the Experiences in Close Relationships Revised (ECR-R) questionnaire (Fraley, Waller, & Brennan, 2000) to assess anxiety and avoidance. Nine items assessed attachment anxiety (e.g., “I am afraid that I will lose my partner’s love”) and 9 items assessed attachment avoidance (e.g., “I do not feel comfortable opening up to romantic partners” 1 strongly disagree, 7 strongly agree). Items were scored and averaged so that higher scores represent higher attachment anxiety ($\alpha = .90$) and avoidance ($\alpha = .84$).

**Responders’ expressive suppression.** Partners in the responding role reported on their expressive suppression with a single, face-valid item: “I feel that I held back my emotions during the conversation task,” after each conversation (4 Strongly Disagree, 0 Neither Agree or Disagree, 4 Strongly Agree; see Peters et al., 2014; Peters & Jamieson, 2016 for a similar item used in experimental studies).

**Disclosers’ perceptions of responders’ responsiveness.** Perceived partner responsiveness was measured using Reis and colleagues’ Perceived Partner Responsiveness (PPR) scale (Reis, Crasta, Rogge, Maniaci, & Carmichael, 2018). The PPR contained 12 items that examined the extent to which individuals perceived their partner as understanding, validating, and caring following the discussion (e.g., “. . . understands me,” “. . . is responsive to my needs”). Items were completed on 7-point scales (1 = not at all true, 7 = completely true) and were averaged to form a composite score for perceptions of responsiveness ($\alpha = .98$). Responders did not report on their perceptions of their own responsiveness.

**Responders’ and disclosers’ appraisals of discussion threat.** Participants completed nine items that assessed their appraisals about how threatening or challenging the discussion was (Beltzer, Nock, Peters, & Jamieson, 2014; Mendes, Gray, Mendoza-Denton, Major, & Epel, 2007). Five items assessed the extent to which the discussion was demanding or represented a threat (e.g., “I felt threatened by the task,” “The task was very demanding”; $\alpha = .819$), and four items assessed the extent to which they had the resources to cope or that the conversation represented a positive challenge (“I felt that the task challenged me in a positive way,” “I felt that I had the abilities to perform well in the task”; $\alpha = .71$). Participants responded using 7-point Likert scales (1 = strongly disagree, 4 = neutral, 7 = strongly agree). A threat-challenge ratio was created by dividing threat by challenge, such that higher scores represented greater threat appraisals (see Peters & Jamieson, 2016, for an identical approach).

**Responders’ negative emotions.** Participants reported on the extent to which they were feeling negative emotions with 10 items (e.g., angry, sad, threatened; 1= not at all; 5 = a great deal) from the Positive and Negative Affect Schedule (Watson, Clark, & Tellegen, 1988). Items were averaged to index a negative emotions composite ($\alpha = .88$).

**Results**

Descriptive statistics for all measures are shown in Table 2. Since our data is nested within dyads, we followed the approach outlined by Kenny et al. (2006) to run dyadic multilevel
models with indistinguishable dyads that accounted for the dyadic dependencies in the data. These analyses were conducted using lme4 (Bates et al., 2019) and lmerTest (Kuznetsova et al., 2017) in R (Version 3.6.1). We modeled responders’ discussion threat, disclosers’ perceptions of responders’ responsiveness, and disclosers’ discussion threat as a function of (a) the linear effect of responders’ expressive suppression, (b) the quadratic effect of responders’ expressive suppression, (c) responders’ attachment anxiety, the interactions between responders’ anxiety and (d) the linear and (e) quadratic effect of responders’ expressive suppression, (f) Condition (-1 = nonthreat, 1 relationship-threat), and the interactions between Condition and (g) the linear and (h) quadratic effect of responders’ expressive suppression and (i) responders’ attachment anxiety. To isolate the effects of anxiety from avoidance, we included: (j) responders’ attachment avoidance, and the interactions between responders’ avoidance and (k) the linear and (l) quadratic effect of the responders’ expressive suppression, (m) Condition, and the interactions between Condition and (n) the linear and (o) quadratic effect of responders’ expressive suppression and (p) responders’ attachment avoidance. Finally, as in Studies 1 and 2, we modeled the main effect and interaction effects of gender (coded -1 for women, 1 for men) to test for differences between men and women. There were no significant gender differences in the effects (ts < .01 to 1.95, ps < 1.00 to .051), with three exceptions not germane to the primary aims (see online supplemental materials for more details).

**Responders’ discussion threat.** Our main predictions focus on the curvilinear effects of expressive suppression moderated by attachment anxiety on partners’ (disclosers’) outcomes, but for completeness we also present the actor (responder) effects. The results from analyses predicting disclosers’ discussion threat are presented in Table 7. Consistent with prior work, a significant linear effect of expressive suppression demonstrated that greater disclosers’ expressive suppression was associated with support providers reporting greater discussion threat. No significant interaction effects emerged.

**Disclosers’ perceptions of responders’ responsiveness.** Our primary analyses focused on predicting partners’ (disclosers’) outcomes. The results from analyses predicting disclosers’ perceptions of responders’ responsiveness are presented in Table 8 (see first column). Counter to predictions, no curvilinear associations emerged between responders’ expressive suppression, responders’ attachment anxiety, and experimental condition on disclosers’ PPR. However, analyses did reveal a marginal linear interaction between responders’ expressive suppression and attachment anxiety on disclosers’ perceptions of responders’ responsiveness irrespective of experimental condition. This interaction is displayed in Figure 3. Although the simple slopes for responders low (B = .09, SE = .06, t = 1.55, p = .13, r = .13) and high (B = .07, SE = .06, t = 1.19, p = .24, r = .10) in attachment anxiety were not significant, the general pattern of results indicates that a lack of expressive suppression by highly anxious individuals was detrimental to their partners, which is consistent with our theoretical arguments. In particular, at lower levels (-1 = SD) of expressive suppression responders higher (vs. lower) in attachment anxiety were perceived by disclosers to be marginally less responsive (B = .26, SE = .14, t = 1.90, p = .06, r =
but this difference was eliminated at higher levels (+1 SD) of expressive suppression ($B = .05, SE = .14, t = .36, p = .72, r = .03$).

Disclosers’ discussion threat. The results from analyses predicting disclosers’
discussion threat are presented in Table 8 (see second column). As predicted, the curvilinear
association between responders’ expressive suppression and disclosers’ discussion threat was
moderated by responders’ attachment anxiety and condition (Expressive Suppression$^2 \times$
Attachment Anxiety \times Condition interaction). This interaction is plotted in Figure 4. The
curvilinear effect of responders’ expressive suppression for responders’ low in anxiety when in
the relationship-threat condition is depicted by the dashed line in Figure 4, Panel B. When
responders relatively low in attachment anxiety engaged in low to moderate levels of expressive
suppression (see Figure 4, left side of Panel B), expressive suppression was not associated with
disclosers’ threat appraisals. However, at below average levels of expressive suppression
(inflection point = .94 SD below the mean; absolute score = -2.08), increasing levels of
responders’ expressive suppression started to predict sharp increases in disclosers’ threat
appraisals (see Figure 4, right side of Panel B). The simple linear and curvilinear effects
confirmed that this pattern was significant (see left side of Table 9). In contrast, the simple
curvilinear effects for responders’ high in anxiety and in the relationship-threat condition (see
solid line in Figure 4, Panel B) revealed that when responders were high in attachment anxiety,
disclosers maintained lower levels of threat appraisals regardless of the level of expressive
suppression. The simple effects in the nonthreat condition were not significant.

Controlling for negative emotions. As in Studies 1 and 2, we reran our analyses in
Table 8 controlling for the main effect (and associated gender interactions) of responders’
negative emotions. Controlling for responders’ negative emotions reduced the linear interaction
displayed in Figure 3 to nonsignificance ($B = .06, SE = .03, t = 1.85, p = .07$), but did not alter
the interaction displayed in Figure 4 ($B = .009, SE = .005, t = 2.05, p = .04$). Thus, across studies,
the effects of expressive suppression generally occurred independently of the intensity of
negative emotions experienced during couples’ daily life and discussions.
### Table 7
The Effects of Responders’ Expressive Suppression and Attachment Anxiety on Responders’ Discussion Threat (Study 3)

<table>
<thead>
<tr>
<th>Effects</th>
<th>$B$</th>
<th>$t$</th>
<th>95% CI</th>
<th>$r$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expressive suppression</td>
<td>.06</td>
<td>5.50**</td>
<td>- .04</td>
<td>.08</td>
</tr>
<tr>
<td>Expressive suppression$^2$</td>
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<td>- .02</td>
<td>.002</td>
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<tr>
<td>Attachment anxiety</td>
<td>.03</td>
<td>.97</td>
<td>- .02</td>
<td>.08</td>
</tr>
<tr>
<td>Expressive Suppression × Attachment Anxiety</td>
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<td>-.72</td>
<td>- .02</td>
<td>.01</td>
</tr>
<tr>
<td>Expressive Suppression$^2$ × Attachment Anxiety</td>
<td>.004</td>
<td>.96</td>
<td>- .003</td>
<td>.01</td>
</tr>
<tr>
<td>Attachment avoidance</td>
<td>-.003</td>
<td>-.08</td>
<td>- .07</td>
<td>.06</td>
</tr>
<tr>
<td>Expressive Suppression × Attachment Avoidance</td>
<td>.01</td>
<td>.56</td>
<td>- .01</td>
<td>.03</td>
</tr>
<tr>
<td>Expressive Suppression$^2$ × Attachment Avoidance</td>
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<td>.04</td>
<td>- .01</td>
<td>.01</td>
</tr>
<tr>
<td>Condition</td>
<td>.08</td>
<td>2.45*</td>
<td>- .02</td>
<td>.14</td>
</tr>
<tr>
<td>Expressive Suppression × Condition</td>
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<td>3.06**</td>
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<td>.05</td>
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<td>.30</td>
<td>- .01</td>
<td>.01</td>
</tr>
<tr>
<td>Attachment anxiety × Condition</td>
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<td>1.27</td>
<td>- .01</td>
<td>.09</td>
</tr>
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<td>Expressive Suppression × Attachment Anxiety  Condition</td>
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<td>-1.59</td>
<td>- .03</td>
<td>.002</td>
</tr>
<tr>
<td>Expressive Suppression$^2$ × Attachment Anxiety  Condition</td>
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<td>-.96</td>
<td>- .01</td>
<td>.004</td>
</tr>
<tr>
<td>Attachment avoidance × Condition</td>
<td>-.08</td>
<td>-1.99*</td>
<td>- .14</td>
<td>- .01</td>
</tr>
<tr>
<td>Expressive Suppression × Attachment Avoidance  Condition</td>
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<td>.10</td>
<td>- .02</td>
<td>.02</td>
</tr>
<tr>
<td>Expressive Suppression$^2$ × Attachment Avoidance × Condition</td>
<td>.006</td>
<td>.89</td>
<td>- .01</td>
<td>.02</td>
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</table>

*Note. The variables marked with $^2$ are curvilinear variables. Interaction effects presented in figures are in bold. Coefficients that significantly differed between males and females are italicized. Effect sizes ($r$) were computed using Rosenthal and Rosnow’s (2007) formula: $r = \sqrt{t^2/[t^2 + df]}$. CI = confidence interval. 

* $p < .05$. ** $p < .01$. 
Table 8
The Effects of Responders’ Expressive Suppression and Attachment Anxiety on Disclosers’ Outcomes (Study 3)

<table>
<thead>
<tr>
<th>Effects</th>
<th>Perceptions of responders’ responsiveness</th>
<th>95% CI</th>
<th>Discussion threat</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>B</td>
<td>t</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Expressive suppression</td>
<td>-.01</td>
<td>-.25</td>
<td>-.08</td>
<td>.08</td>
</tr>
<tr>
<td>Expressive suppression^2</td>
<td>-.01</td>
<td>-.36</td>
<td>-.05</td>
<td>.02</td>
</tr>
<tr>
<td>Attachment anxiety</td>
<td>-.11</td>
<td>-.96</td>
<td>-.29</td>
<td>.09</td>
</tr>
<tr>
<td>Expressive Suppression × Attachment Anxiety</td>
<td>.06</td>
<td>1.92†</td>
<td>.005</td>
<td>.12</td>
</tr>
<tr>
<td>Expressive Suppression^2 × Attachment Anxiety</td>
<td>.02</td>
<td>1.30</td>
<td>-.01</td>
<td>.05</td>
</tr>
<tr>
<td>Attachment avoidance</td>
<td>-.02</td>
<td>-.15</td>
<td>-.26</td>
<td>.24</td>
</tr>
<tr>
<td>Expressive Suppression × Attachment Avoidance</td>
<td>.04</td>
<td>.92</td>
<td>-.04</td>
<td>.12</td>
</tr>
<tr>
<td>Expressive Suppression^2 × Attachment Avoidance</td>
<td>-.03</td>
<td>-1.05</td>
<td>-.07</td>
<td>.02</td>
</tr>
<tr>
<td>Condition</td>
<td>-.05</td>
<td>-.37</td>
<td>-.32</td>
<td>.21</td>
</tr>
<tr>
<td>Expressive Suppression × Condition</td>
<td>.06</td>
<td>1.44</td>
<td>-.01</td>
<td>.13</td>
</tr>
<tr>
<td>Expressive Suppression^2 × Condition</td>
<td>-.004</td>
<td>-.20</td>
<td>-.04</td>
<td>.03</td>
</tr>
<tr>
<td>Attachment anxiety × Condition</td>
<td>-.06</td>
<td>-.56</td>
<td>-.26</td>
<td>.12</td>
</tr>
<tr>
<td>Expressive Suppression × Attachment Anxiety × Condition</td>
<td>-.03</td>
<td>-.96</td>
<td>-.09</td>
<td>.03</td>
</tr>
<tr>
<td>Expressive Suppression^2 × Attachment Anxiety × Condition</td>
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<td>-.13</td>
<td>-.03</td>
<td>.03</td>
</tr>
<tr>
<td>Attachment avoidance × Condition</td>
<td>-.02</td>
<td>-1.28</td>
<td>-.44</td>
<td>.05</td>
</tr>
</tbody>
</table>
Expressive Suppression ✖ Attachment Avoidance ✖ Condition
-0.02 -0.47 -0.11 0.05 0.04 <0.001 0.01 -0.02 0.02 <0.001

Expressive Suppression² ✖ Attachment Avoidance ✖ Condition
0.01 0.26 -0.04 0.05 0.02 0.002 0.26 -0.01 0.02 0.02

Note. The variables marked with ² are curvilinear variables. Interaction effects presented in figures are in bold. Effect sizes (r) were computed using Rosenthal and Rosnow’s (2007) formula: \[ r = \sqrt{t^2/[t^2 + df]} \]. CI = confidence interval.

†p < .06. *p < .05.

Figure 3. The moderating effect of responders’ attachment anxiety on the linear association between responders’ expressive suppression and disclosers’ perceptions of the responder’s responsiveness (Study 3). The values on the x-axis represent the grand-mean centered levels of expressive suppression (0 = mean levels of expressive suppression). See the online article for the color version of this figure.
General Discussion

Across three dyadic studies, we investigated when and by whom expressive suppression may be more or less costly for individuals and their relationship partners. Our results corroborate the extant literature by showing that expressive suppression was typically associated with costs to individuals’ relational outcomes (i.e., the linear effect of expressive suppression). Our results also provide novel evidence that the effect of expressive suppression on partners’ outcomes depend on different levels of expressive suppression (i.e., the curvilinear effect of expressive suppression) and attachment anxiety (i.e., the curvilinear effect moderated by attachment anxiety). For individuals low in attachment anxiety, relatively low levels of expressive suppression were not costly for relationship partners’ outcomes. Instead, expressive suppression only started to predict increasing relationship costs at moderate to high levels. The results across studies also support our proposition that the costs of high levels of expressive suppression will likely be attenuated when expressive suppression is enacted by individuals high in attachment anxiety, who tend to exhibit exaggerated emotional displays and whose partners may benefit from their attempts to conceal the outward expression of their negativity. In particular, for individuals high in attachment anxiety, the negative effect of moderate-to-high levels of expressive suppression on partners’ outcomes was attenuated. In the following sections, we discuss the theoretical and methodological implications of these findings.

Low Levels of Expressive Suppression May Be Innocuous, But Moderate to High Levels Are Likely Costly for Partners of Individuals Low in Attachment Anxiety

The current findings illustrate that the impact of expressive suppression by individuals low in attachment anxiety on partners’ outcomes may be best represented by a curvilinear pattern. For individuals low in attachment anxiety, as expressive suppression increases from low to moderate levels, their partners did not report changes in their relationship satisfaction during daily life (Study 1), perceptions of responsiveness during support discussions (Study 2), or discussion success/threat when discussing a personal goal/threat to the relationship (Studies 2 and 3). However, once expressive suppression reached average levels, increases in expressive suppression from moderate to high levels was associated with partners reporting lower relationship satisfaction during daily life (Study 1), lower perceptions of responsiveness and discussion success during couples’ support discussion (Study 2), and greater difficulty managing discussions about a relationship threat (Study 3). In contrast to robust evidence that expressive suppression is associated with interpersonal costs (Chervonsky & Hunt, 2017), the current findings provide novel evidence that low to average levels of expressive suppression during couples’ daily lives or discussions are not necessarily bad for relationship partners.
Figure 4. The moderating effect of responders’ attachment anxiety on the curvilinear association between responders’ expressive suppression and disclosers’ discussion threat in the nonthreat condition (Panel A) and relationship-threat condition (Panel B; Study 3). The values on the x-axis represent the grand-mean centered levels of expressive suppression (0 = mean levels of expressive suppression). See the online article for the color version of this figure.
Table 9
Simple Linear and Curvilinear Effects of Expressive Suppression on Partners’ Discussion Threat for Individuals Low Versus High in Attachment Anxiety in Nonthreat Versus Relationship-Threat Condition (Study 3)

<table>
<thead>
<tr>
<th>Experimental condition</th>
<th>Figure</th>
<th>Low attachment anxiety (-1 SD)</th>
<th>High attachment anxiety (+1 SD)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Linear effect</td>
<td>Curvilinear effect</td>
</tr>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>t</td>
</tr>
<tr>
<td>Non-threat</td>
<td>4A</td>
<td>.004</td>
<td>.17</td>
</tr>
<tr>
<td>Relationship-threat</td>
<td>4B</td>
<td>.06</td>
<td>2.66</td>
</tr>
</tbody>
</table>

Note. Effect sizes (r) were computed using Rosenthal and Rosnow’s (2007) formula: \( r = \sqrt{t^2/f^2 + df} \). Significant effects are in bold.
Why were low levels of expressive suppression not costly to partners? The potential interpersonal benefits of low levels of expressive suppression likely outweigh their interpersonal costs. In particular, low levels of expressive suppression are unlikely to be as demanding for suppressors and thus may not interfere with partners’ perceptions of the quality or authenticity of social interactions (English & John, 2013; Impett et al., 2012, 2014; Peters & Jamieson, 2016; Righetti et al., 2015). At the same time, low levels of expressive suppression likely reflect more routine efforts to manage negativity during contextually important relationship interactions, such as when individuals are annoyed that their partner left dirty dishes in the sink (Cloven & Roloff, 1994; English et al., 2017; Solomon & Samp, 1998; Theiss & Solomon, 2006) or when individuals need to put aside their personal needs in order to support their partners’ goals and aspirations (Le & Impett, 2013; Righetti et al., 2015). Our results are consistent with prior research showing that the spontaneous use of expressive suppression within intimate relationships can benefit relationship wellbeing by facilitating more positive relationship interactions (Geisler & Schröder-Abé, 2015) or protect relationship partners from personal or relationship worries (Butler et al., 2010; Le & Impett, 2013; Winterheld, 2017; also see English et al., 2017; Lemay & Dudley, 2011). Thus, low levels of expressive suppression may be an important way that individuals maintain relationship harmony.

The curvilinear effect of expressive suppression, however, clarifies that the negative effect of expressive suppression on relationship partners likely occurs when expressive suppression reaches and exceeds average (low) levels. Consistent with prior research highlighting the interpersonal costs of expressive suppression, our results suggest that moderate to high levels of expressive suppression will likely undermine partners’ relationship satisfaction during daily life (Butler et al., 2003; Peters & Jamieson, 2016), partners’ perceptions of responsiveness when partners need support (Peters & Jamieson, 2016; Impett et al., 2014), and partners’ confidence about pursuing their personal goals or managing a relationship-threatening discussion (Peters et al., 2014; Peters & Jamieson, 2016). Our results suggest that at moderate to high levels of expressive suppression, the costs associated with expressive suppression begin to outweigh, and possibility undermine, any protective interpersonal benefits of expressive suppression. In particular, above average levels of expressive suppression may be particularly demanding and thus begin disrupting partners’ perceptions of individuals being responsive to their needs, and thus negatively impact the quality of social interactions (English & John, 2013; Impett et al., 2012, 2014; Peters & Jamieson, 2016; Righetti et al., 2015). Expressive suppression may also be more visible to partners at higher levels, so partners may question the suppressors’ authenticity (Impett et al., 2014) or become aware of pent up negativity that individuals will not share (Le & Impett, 2013; Winterheld, 2017), thereby counteracting any protective benefits of expressive suppression. Future research is needed to examine these underlying mechanisms.

We do not mean to suggest that low to moderate levels of expressive suppression should be indiscriminately encouraged in intimate relationships. Expressive suppression is
primarily a strategy employed in response to emotional experiences (Gross, 2002, 2015), which was recently emphasized in studies showing that habitual measures of expressive suppression predict the use of expressive suppression in specific social interactions, particularly when people are experiencing negative emotions (see Peters et al., 2019). Thus, the contextual use of expressive suppression, such as when individuals need to manage their emotional experiences and expressions during social interactions (as assessed in the current studies), should be precisely when the relative interpersonal costs and benefits of expressive suppression emerge (Peters et al., 2019). Moreover, it is the contextual use of suppression that should primarily explain how habitual assessments of emotion suppression lead to immediate and long-term interpersonal outcomes (e.g., Low et al., 2017; also see Peters et al., 2019). Yet, even at low to moderate levels, the chronic use of expressive suppression irrespective of context is unlikely to produce interpersonal benefits given that chronic contextually insensitive expressive suppression may reflect rigid avoidance of addressing negativity (Gross & John, 2003) or reflect a blanket use of expressive suppression regardless of how people might be feeling during social interactions (Peters et al., 2019). In sum, the effects demonstrated in the current research reflect the mix of costs and benefits that context-specific use of expressive suppression may have within couples’ interactions. However, the pervasive use of expressive suppression regardless of social context or emotional relevance may be more detrimental, which is a beneficial direction for future research.

High Levels of Expressive Suppression May Not Be Costly for Partners of Individuals High in Attachment Anxiety

The effect of low to moderate levels of expressive suppression by individuals high in was similar to individuals low in attachment anxiety: as expressive suppression increased from low to moderate levels, partners did not report changes in their relationship satisfaction during daily life (Study 1), partners’ perceptions of responsiveness during support-relevant interactions (Study 2), or discussion success/threat when discussing personal goals/relationship threats (Studies 2 and 3). However, unlike individuals low in attachment anxiety, moderate to high levels of expressive suppression by individuals high in attachment anxiety did not predict negative relational and discussion outcomes for partners (Studies 1 and 3), and increased partners’ perceptions of responsiveness and confidence about achieving important personal goals (Study 2). These findings highlight that the interpersonal benefits associated with expressive suppression might be heightened for partners of highly anxious individuals, which may offset the typical interpersonal costs associated with expressive suppression.

These results add to recent perspectives, supported by a growing body of work, suggesting that expressive suppression is not always maladaptive and sometimes can help maintain relationship harmony (Aldao, 2013; Butler & Gross, 2004; Butler et al., 2010; Le
Here, we provide unique evidence that expressive suppression may be rendered innocuous depending on the characteristics of the person engaging in expressive suppression. Some people—such as individuals high in attachment anxiety—typically display amplified expressions of negative emotions (Campbell et al., 2005; Simpson et al., 1996), especially in contexts that threaten their self-perceived value as a supportive partner (Feeney & Collins, 2003; Feeney et al., 2013; Jayamaha et al., 2017; Simpson et al., 1996; Tran & Simpson, 2009). The effects of anxious individuals’ exaggerated emotional expressions impede interpersonal interactions, undermine relationship improvement, and damage their partners’ relationship quality (Jayamaha et al., 2016; Overall et al., 2014). However, particularly high levels of expressive suppression that likely temper the outward expression of these hyper-emotional responses may reduce the net negativity that their partners typically contend with, and allow partners to perceive highly anxious individuals as (at least trying to be) more constructive and responsive. Thus, highly anxious individuals’ expressive suppression may buffer the relationship costs that their partners typically experience (Butzer & Campbell, 2008; Carnelley et al., 1996; Hadden et al., 2016; Simpson, 1990).

These findings raise an interesting question: why do individuals high in attachment anxiety engage in high levels of expressive suppression and also display exaggerated expressions of emotions? As we discussed in the introduction, expressive suppression and emotion expression are distinct emotion regulation processes (Cameron & Overall, 2018) that may nonetheless operate in tandem during interpersonal interactions. Similarly, a hallmark of attachment anxiety is experiencing ambivalent responses to relationship-threatening situations which are rooted in dual concerns about love and rejection. Histories of inconsistent caregiving produce a hyperactivation of the attachment system, and anxious individuals learn to amplify emotions as a way of securing the reassurance and care they crave (Cassidy, 1994; Main, 1990; Mikulincer & Shaver, 2019; Mikulincer et al., 2003). Individuals high in attachment anxiety display amplified expressions of negative emotions (Campbell et al., 2005; Simpson et al., 1996), such as sadness or hurt, in order to garner (or even coerce) evidence of their partners’ love and commitment (Jayamaha et al., 2016; Overall et al., 2014). From an attachment perspective, these are learned and ingrained strategies that should be automatically activated in stressful situations (Mikulincer, Shaver, & Pereg, 2003; Simpson & Rholes, 2004, 2012).

At the same time, highly anxious individuals are also hypervigilant to signs of rejection and want to protect themselves from abandonment (Mikulincer & Shaver, 2016). Highly anxious individuals are not oblivious to the burden and dissatisfaction their insecurities create for their partners (Lemay & Clark, 2008). Indeed, concerns about rejection are likely a key reason why anxious individuals may engage in expressive suppression during couples’ interactions. Supporting this argument, research demonstrates that expressive suppression is a response-focused emotion regulation strategy that people employ to control emotional expressions when emotion arise (see Gross, 2002, 2015; Gross
Furthermore, people who do not trust that their partners will be accepting or responsive are more likely to suppress their emotions during threatening interactions (Righetti et al., 2015; Thomson et al., 2018; Von Culin, Hirsch, & Clark, 2018), including individuals high in attachment anxiety (Clear & Zimmer-Gembeck, 2017; Holmberg, Lomore, Takacs, & Price, 2011; Low et al., 2019). Highly anxious individuals may also suppress the outward expression of relationship-threatening emotions, such as anger and frustration (Breen & Kashdan, 2011), but not proximity-seeking emotions, such as sadness and hurt (Jayamaha et al., 2016; Overall et al., 2014; also see Lemay, Overall, & Clark, 2012).

Taken together, existing theory and empirical research support our proposition that highly anxious individuals can exhibit both types of emotion regulation strategies during relationship interactions: automatic tendencies to exhibit amplified expressions of negative emotions in order to secure partners’ attention and care, and attempts to control expression of negative emotions in order to minimize partner rejection. Of course, we did not test the relative presence of hyperactivation strategies within the current studies, or whether expressive suppression was beneficial because partners of highly anxious individuals perceived less negative expressivity than typical. Nonetheless, our results demonstrate that it is important to consider the different emotion regulation strategies people might use within or across relationship interactions. In particular, our findings demonstrate that emotion regulation strategies often co-occur, and the consequences of one emotion regulation strategy may vary according to the relative presence or (as our results suggest) the typical enactment of a different type of emotion regulation behavior. Understanding how emotion regulation strategies work in concert to shape intrapersonal and interpersonal outcomes is an important direction for future emotion regulation research.

**Expressive Suppression Has Costs for Individuals**

Although our results highlight contexts in which expressive suppression is less costly for partners (such as at low levels or when high levels are enacted by individuals high in attachment anxiety), we are not suggesting that expressive suppression is beneficial for both dyad members. Consistent with a robust set of costs shown across prior studies, our results indicate that individuals’ expressive suppression is associated with individuals reporting worse individual outcomes (regardless of individuals’ level of attachment anxiety), including lower relationship satisfaction during daily life (Study 1), lower reported responsiveness and discussion success (Study 2), and greater difficulty managing relationship-threatening discussions (Study 3). These findings corroborate a wealth of extant research illustrating that engaging in expressive suppression can be a demanding and taxing regulation strategy (Aldao et al., 2010; Chervonsky & Hunt, 2017; Webb et al., 2012), which can interfere with individuals’ social functioning (Chervonsky & Hunt, 2017; also see Cameron & Overall, 2018; Impett et al., 2012; Low et al., 2017). Thus, the general pattern
of findings reported here highlight the importance of identifying whether and when expressive suppression can be beneficial for both partners before considering therapeutic interventions promoting the use of expressive suppression in dyadic contexts.

**Methodological Implications**

We employed curvilinear methods to help uncover when and for whom expressive suppression may be more or less costly in intimate relationships. Curvilinear methods offer nuanced ways of understanding the effect of regulation strategies and interpersonal behavior that extend beyond the typical linear effects often assumed in behavioral science (see Girme, 2020; Girme et al., 2015). It is possible that the effect of other regulation strategies may also depend on the level of the behavior. For example, another emotion regulation strategy, reappraisal, involves generating positive interpretations of a stressful situation and is considered a beneficial emotion-regulation strategy (Aldao et al., 2010; Gross, 1998). However, recent perspectives suggest that even reappraisal is not always successful depending on individual differences (e.g., the skill level of the reappraiser) and contextual factors (e.g., the controllability and intensity of the stressor; see Ford & Troy, 2019). These mixed effects suggest that low to moderate levels of reappraisal may not be enough to overcome the demands of certain situations, and instead moderate to high levels of reappraisal may be required to have any beneficial impact.

Notably, we calculated the significance of the simple linear and curvilinear effects and inflection points for the curves for individuals low versus high in attachment anxiety using traditional methods (see Aiken & West, 1991; Stewart, 2011 for detailed information on standard unconstrained optimization techniques; also see Girme et al., 2015 for an example of similar empirical applications). We do note, however, that modern techniques for evaluating these trends are also under development and should provide nuanced estimates of the breakpoint and tests of significance. For example, methods such as the two-lines test can calculate whether each portion of the curve is significant before versus after the inflection point to interpret the shape of curvilinear effects (Simonsohn, 2018). Further work is required to embed such methods within complex multilevel models with the added complexity of dyadic data and interactions between multiple predictors. Taken together, the current research opens avenues for future research that employ curvilinear methods to test boundary conditions for important interpersonal processes in the emotion regulation, attachment, and close relationships literatures.

**Strengths, Caveats, and Future Directions**

The current research has several notable strengths. We utilized data from three dyadic studies that assessed expressive suppression across contexts (e.g., daily life, support-relevant interactions, and relationship-threatening interactions), samples (e.g.,
college-aged dating couples and older established couples), and methods (e.g., daily diaries and behavioral interactions). Our research emphasizes the social nature of emotion regulation; expressive suppression does not occur in a bubble void of social context but is an inherently social emotion regulation strategy (Butler & Gross, 2004; Chervonsky & Hunt, 2017; Gross & John, 2003). Indeed, the results of the current studies illustrate how one person’s emotion regulation can have important (and potentially differential) effects on their own and their partner’s outcomes. Finally, additional analyses did not support that the results were due to the alternative explanation that the presence of negative emotions (which tend to accompany greater expressive suppression) is more diagnostic for individuals low versus high in attachment anxiety, and thus more costly for partners of individuals low in anxiety.

Despite these strengths, there are several caveats that should be considered. The association between individuals’ expressive suppression and partners’ outcomes was based on correlational associations, thus we cannot make any causal claims. However, our results are consistent with prior experimental work that demonstrate that manipulating expressive suppression impacts interpersonal outcomes (e.g., Butler et al., 2003; Peters et al., 2014, 2019; Peters & Jamieson, 2016). Nonetheless, it may be plausible that individuals low in attachment anxiety engage in high levels of expressive suppression when partners are dissatisfied, perceive individuals to be unresponsive, and when couples’ discussions are less successful or more threatening. However, it is less plausible that the opposite is true for individuals high in attachment anxiety; that is, it is improbable that highly anxious individuals engage in high levels of expressive suppression when partners are satisfied, perceive individuals to be responsive, and when couples’ discussions are successful or less threatening. Furthermore, although we controlled for individuals’ negative emotions in order to isolate the impact of expressive suppression from the relative intensity of negative emotions, it is difficult to know whether individuals’ negative emotions were an antecedent to, or the outcome of, emotion regulation processes (Gross, 2002, 2015). Future research may benefit from experimental studies that assess the causal impact of different levels (low, moderate, high) of expressive suppression on partners’ outcomes, and the impact of negative emotions induced prior to expressive suppression attempts.

Our sample sizes were relatively small, and may not have been sufficiently powered. Although we ran a priori power analyses for Studies 2 and 3, these analyses did not account for the complexity of the curvilinear moderated models we ran here. Thus, despite replicating our finding across studies, reporting multiple low powered studies can still reduce the robustness of our results (Schimmack, 2012). The size of our samples also had implications for the distribution of expressive suppression. Across our studies there were few data points at high levels of expressive suppression (e.g., values of 6 or 7), which may have implications for the reliability of our curvilinear effects. Of course, the inflection points across our three studies generally occurred above average levels (.001 to 1.07 $SD$ above the mean, with one exception of -.94 $SD$ below the mean in Study 3), which reflected
low absolute scores (2.11 to 3.18 on a 1 to 7 Scale, or -2.08 on a -4 to + 4 Scale) suggesting that the distinct trends we observed for individuals low versus high in attachment were not isolated to extremely high levels of expressive suppression. Furthermore, our observed range of expressive suppression most likely reflects natural variation in peoples’ use of expressive suppression within social contexts, and the curvilinear patterns replicated consistently across studies, which we think provides valuable initial evidence for these patterns in naturalistic social interactions. Future investigations would benefit from generating larger sample sizes, or studying contexts in which extreme levels (and thus greater spread in levels) of expressive suppression are likely to emerge, which are both difficult tasks when examining couples’ responses in actual interactions.

Our measurement of expressive suppression also included some inconsistencies: one of the three items in Studies 1 and 2 and the single item measure in Study 3 did not make reference to the valence of emotions being suppressed. These measures of expressive suppression have been previously used to test processes tightly linked to negative emotions (Girme et al., 2015; Low et al., 2017, 2019; Peters et al., 2014, 2019; Peters & Jamieson, 2016; Thomson et al., 2018), and prior research has demonstrated that the experience of negative emotions predicts increases in these assessments of expressive suppression (Peters et al., 2019). Nonetheless, these ambiguities may have left room for interpretation by participants about the kind of emotion being concealed. For example, it is possible that participants also reported on their expressive suppression of positive emotions, such as hiding joy about their partners’ achievements in efforts to induce guilt and reduce partners’ attention to their personal pursuits. This possibility might contribute to the costs of expressive suppression for partners of low anxious individuals, but it cannot explain why suppressing positive emotions would be relatively beneficial for partners of highly anxious individuals, who experience greater dissatisfaction from guilt-induction and reassurance seeking (Jayamaha et al., 2016; Overall et al., 2014). Although we do not anticipate that expressive suppression of positive emotions would reveal similar patterns to what we demonstrate here, future research may benefit from comparing the consequences of expressive suppression of negative versus positive emotions within relevant social interactions.

Finally, we examined the benefits of expressive suppression in a sample of relatively satisfied couples. The same effects may not occur for distressed couples. Our theoretical arguments operate under the assumption that the outward expression of negative emotions of highly anxious individuals is often excessive and maladaptive, which is why partners may benefit from these amplified emotional expressions being suppressed. However, negative emotions in relationships are often warranted, such as when they indicate the presence of important relationship problems (e.g., Overall, 2020). Bottling up these negative emotions over time avoids addressing important relationship issues, which can exacerbate relationship problems and undermine long-term relationship quality (Overall & McNulty, 2017; also see Thomson et al., 2018). Furthermore, many therapeutic approaches designed to help
distressed couples discourage the suppression of negative emotions, and instead focus on openly and constructively communicating negative feelings and thoughts (see Johnson, 2015). Exploring whether the benefits of expressive suppression outlined in the current research also occur when couples are dealing with serious problems is an important avenue for future research.

Conclusions

The primary focus of the current research was to examine whether the effect of expressive suppression on partners’ outcomes is best represented by a curvilinear pattern, and whether that curvilinear effect was moderated by individuals’ attachment anxiety. Replicating prior work, our results highlight that expressive suppression undermines individuals’ relationship outcomes. However, the current findings provide novel evidence that the effect of individuals’ expressive suppression on partners’ outcomes depends on different levels of expressive suppression (i.e., the curvilinear effect of expressive suppression) and individuals’ level of attachment anxiety (i.e., the moderating effect of attachment anxiety). The results indicate that, in important relationship contexts, low levels of expressive suppression may be an important component to sustaining healthy relationship functioning and thus do not incur costs to partners that are commonly assumed to arise from expressive suppression, such as lower relationship satisfaction or poorer felt support and responsiveness. Instead, our results also suggest that expressive suppression will likely incur increasing costs for partners from moderate to high levels, undermining partners’ relationship satisfaction and perceived responsiveness, at least when enacted by individuals low in attachment anxiety. However, when enacted by individuals high in attachment anxiety who typically exaggerate their negative emotions, the interpersonal costs of moderate-to-high levels of expressive suppression are likely to be attenuated protecting partners from the poorer relationship outcomes that often arise from anxious individuals’ outward expression of that negativity. These novel results offer an important demonstration that employing curvilinear methods can help uncover when and for whom high levels of expressive suppression may be more or less costly in intimate relationships.

Notes

1 Across all studies, the distribution of expressive suppression revealed a positive skew, where many individuals reported little use of expressive suppression. Nonetheless, the distribution of individuals’ expressive suppression did span the full scale range, and the distribution pattern was similar for groups low versus high on attachment anxiety suggesting that the range of expressive suppression reported is similar regardless of peoples’ level of attachment anxiety. Further information and histogram plots are contained in the online supplemental materials.
The interaction between Expressive Suppression and Attachment Anxiety displayed in Figure 2, Panel A was further moderated by gender ($B = .13, SE = .05, t = 2.69, p = .008, 95\%\ CI [.04, .22], r = .20$), which revealed that this interaction was significant for men’s expressive suppression ($B = .26, SE = .10, t = 2.69, p = .007, 95\%\ CI [.08, .45], r = .20$) but not for women’s expressive suppression ($B = .04, SE = .05, t = .81, p = .42, 95\%\ CI [.05, .13], r = .06$; see online supplemental materials for gender-specific graphs). However, given the pooled effect for both men and women was significant and that the focal moderated curvilinear effects (i.e., Expressive Suppression and Attachment Anxiety) did not differ across men and women for discussion success or in any of the other studies, we present the pooled effect.

References


