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Self-esteem and anxious responses to partner feedback: Parsing anticipatory and consummatory anxiety

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We hypothesized that people with lower self-esteem (SE) may perceive feedback from romantic partners in threatening ways and display maladaptive reactions during these events. Although prior research suggests that SE is mostly unrelated to emotional reactions to partner feedback, we predicted that differences in anxious emotion exist, but emerge before the feedback is delivered, at anticipation. We evaluated these predictions through a series of studies in which participants received feedback from ongoing and ostensible dating partners. As in prior research, SE was unrelated to anxiety at feedback delivery. In contrast, and consistent with predictions, participants with lower SE anticipated feeling more anxious when receiving positive and negative feedback. These results are discussed in the context of broader relationship dynamics.

KEYWORDS

anticipation, anxiety, feedback, romantic relationships, self-esteem

1 | INTRODUCTION

Receiving feedback from dating or longer-term partners can be an important opportunity to strengthen romantic relationships. In the current work, however, we explore the idea that what for some is a chance for growth may feel threatening to others. For example, a criticism may portend imminent rejection, or it could be seen as a useful reminder of your partner's needs. A compliment may signal a partner's love, or it may feel like a new standard that one has to live up to. In other words, there may be important differences in how individuals respond to partner feedback. Given that self-esteem (SE) is a powerful predictor of reactions and outcomes in relationships more broadly (see Erol & Orth, 2016, for review), the present studies focus on it as the key individual differences factor. More specifically, we assess the relationship between SE and *anxious emotion* in response to partner feedback. Our approach marks a departure from prior work in that we measure reactions across the timeline of emotion, with the hypothesis that SE may be particularly relevant during the *anticipation* of partner feedback.

1.1 | Feedback as an opportunity and a threat in romantic relationships

A wealth of empirical evidence suggests that partner feedback (regardless of valence) may serve an adaptive function in romantic relationships. Positive feedback has the potential to benefit the self (e.g., satisfying self-enhancement needs) as well as the relationship (e.g., indicating relationship viability or partner positive regard and commitment; e.g., Ackerman, Griskevicius, & Li, 2011; Kwang & Swann, 2010; Leary, 2007; Stinson et al., 2010). As such, receiving positive feedback is often associated with good feelings (e.g., Ackerman et al., 2011; Kwang & Swann, 2010; Stinson et al., 2010) as well as felt security and relationship satisfaction (Murray, Holmes, & Collins, 2006). It may be surprising, however, that under certain circumstances, negative feedback also has adaptive functions in romantic relationships. When negative feedback centers on problematic behaviors (as opposed to character flaws; Renshaw, Blais, & Caska, 2010), especially in the context of conflicts between romantic partners, it can serve as a catalyst for behavioral change, enhancing intimacy and satisfaction in the long-run (e.g., Gottman & Krokoff, 1989; Heavey, Christensen, & Malamuth, 1995; Pietromonaco, Greenwood, & Barrett, 2004).

Despite the functional benefits of partner feedback, people may still differ in the degree to which they construe these events in positive versus threatening ways, and, correspondingly, the reactions they experience and the benefits they are able to derive. More threatening responses to partner feedback may involve worrying that compliments indicate that a partner will be disappointed when they get to know you better or that criticisms signal that a partner is not that into you. In the current research, we propose that SE, the positivity of one's self-views, is an individual difference that relates to these reactions.

This prediction derives from the rich literature showing that SE is a relevant factor in romantic contexts, with people lower in SE often experiencing vulnerability and adverse long-term outcomes. For example, recent meta-analyses not only find that people with lower SE tend to have lower levels of relationship satisfaction, but also that their partners tend to be less satisfied and committed to them (Cameron & Granger, 2018; Erol & Orth, 2016). Given this global level of relationship vulnerability, it seems likely that people with lower SE also experience vulnerability during the more everyday aspects of their romantic relationships. More specifically, we propose that those with lower SE are one group of people who experience feedback from romantic partners in more threatening ways.

1.2 | Emotional reactions to partner feedback and the timeline of emotion

If SE is indeed associated with threat responses to partner feedback, what specific responses should be assessed? In the current research, we chose to focus on emotion as it is a key component of both personal and interpersonal well-being (e.g., Fredrickson & Joiner, 2002; Gottman, 1994), and moreover, research finds that emotion tracks fluctuations in both intimacy and conflict in romantic relationships (Laurenceau, Troy, & Carver, 2005). In conceptualizing and measuring emotional responses to feedback, however, we relied on a framework important in other research traditions which distinguishes between the emotions one experiences at various points on the timeline of an event (e.g., Gard, Gard, Kring, & John, 2006; Wilson & Gilbert, 2005).

Anticipatory emotion, which occurs first, is how an individual expects to feel during an experience, before the experience has occurred (e.g., Gard et al., 2006). Here, participants might first learn that their partner is going to give them a compliment during an upcoming conversation and then be asked to anticipate how they will feel during this interaction. By contrast, consummatory emotion, which occurs later, is an assessment of how an individual feels during an event and it is measured simultaneously or very shortly after the event occurs. For example, participants might be asked how they felt receiving a compliment from their partner immediately after the interaction took place. As further outlined below, the central premise of our research is that although SE is unrelated to emotional responses when feedback is received at consumption, there are indeed meaningful differences in how people with lower versus higher SE anticipate feeling during these interactions.

Traditionally, psychologists have focused their emotion assessments on the consummatory phase, and this research suggests that SE is unrelated to consummatory emotional responses to partner feedback. These studies have demonstrated that people seem to feel positive emotion when receiving positive feedback and negative emotion when receiving negative feedback, regardless of their level of SE (e.g., Swann, Griffin, Predmore, & Gaines, 1987). These emotional responses are thought to be the output of an "acceptance signaling system" (Stinson et al., 2010) which is tied to the nearly universal belonging need of humans (e.g., Baumeister & Leary, 1995). This system monitors and alerts the individual to their relational value (Stinson et al., 2010). Positive feedback, and thus improved value, is signaled with positive emotion, while negative feedback, and thus diminished value, is signaled with negative emotion. Although a handful of studies find a more nuanced relationship between SE and consummatory reactions to feedback (see Wood, Heimpel, & Michela, 2003; Wood, Heimpel, Newby-Clark, & Ross, 2005), review and meta-analysis of the broader literature reveal that this is a statistically reliable effect (e.g., Kwang & Swann, 2010; Shrauger, 1975).

Anticipatory emotion, by contrast, is quite understudied in the close relationships domain, though we think it could be relevant for a few reasons. First, anticipatory emotion is often distinct from consummatory emotion—people can be poorly calibrated, underestimating or overestimating how good or bad an experience will make them feel (e.g., Kring & Caponigro, 2010). The large affective forecasting literature documents such "prediction errors" in a host of domains (e.g., Wilson & Gilbert, 2005) including romantic relationships (e.g., Eastwick, Finkel, Krishnamurti, & Loewenstein, 2008). This suggests that even if there are generally few differences in consummatory emotion when feedback is delivered (Kwang & Swann, 2010; Shrauger, 1975), people with lower SE may still differ at anticipation and their anticipated emotion may bear little relation to how they actually feel during the event.

Why might SE differences emerge at anticipation when they largely do not appear at consumption? Hard and fast evidence about an event is only achieved during consumption and here the dominance of the acceptance signaling system might leave little room for individual differences to manifest (Stinson et al., 2010). However, given that these aspects of emotion are separable, at anticipation there may be greater potential for existing beliefs or schemas to drive an individual's expectations about how an event will unfold and feel. With respect to partner feedback, the meaning and immediate consequences are still uncertain at anticipation, and thus this might be the time-point at which a lower SE person's self-doubt and relationship insecurities have their most pronounced effect.

While there is minimal research on anticipatory emotion in close relationships, a few studies do lend support to this prediction. Anthony, Wood, and Holmes (2007) found that in situations in which acceptance from a social group is somewhat ambiguous, people with lower SE anticipate less positive social and affective outcomes. In another study, Wood and colleagues found that participants with lower SE anticipated feeling anxious during an imagined future success, at levels similar to their

anticipated anxiety when imagining a future failure (Wood et al., 2005). While these studies establish an association between SE and anticipatory emotion, the anticipated events were not actually experienced and therefore little is known about how participants' emotions may have shifted at consumption.

Existing studies also leave open the question of whether anticipatory emotion plays a role in dating contexts. In fact, there is reason to believe that anticipatory emotion might be important here. Prior work finds that anticipatory emotion is associated with behavioral intentions (e.g., Gray & McNaughton, 2000; Kring & Caponigro, 2010). People are motivated to seek out experiences that they anticipate will make them feel good and to avoid experiences that they anticipate will feel bad, even if their expectations are unrelated to how they would actually feel if the event occurred (Anthony et al., 2007). This suggests that those who anticipate feeling discomfort in response to feedback may be motivated to avoid these interactions and thus miss out on opportunities to be validated, have their relationship affirmed, or even hear and respond to their partners' concerns.

1.3 | A focus on anxious emotion

In examining emotional responses to partner feedback, we specifically focused on the emotion of *anxiety* for the following reasons. First and foremost, it is well known that an appraisal of threat is a core component of anxiety (Lazarus, 1991; also see Beck, 1976). Moreover, anxiety tends to appear in response to implicit, ambiguous, or impending (but not yet encountered) cues (e.g., Bishop, 2007; Blanchard, Blanchard, Griebel, & Nutt, 2008), and has been referred to by some as a "future-oriented emotional state" (Grupe & Nitschke, 2013, p. 488). If people with lower SE indeed view partner feedback in threatening ways, they might experience anxiety specifically during anticipation when the meaning and immediate consequences of the feedback are still uncertain.

This prediction extends prior work that has largely focused on global measures of emotion (positive vs. negative) rather than assessing how discrete and theoretically relevant emotions emerge and shift over time. The value of focusing on discrete emotions is underscored by one of the few relevant studies taking this approach. Here, Wood et al. (2005) showed distinctive changes in anxiety (not in other discrete emotions such as sadness, anger, or excitement) among lower SE individuals when anticipating future successes and failures.¹

1.4 | Emotional responses and feedback valence

To reiterate, the central premise of this research is that SE is associated with anxious emotion in response to partner feedback at anticipation but not at consumption. That is, although the acceptance signaling system seems to override individual differences in emotion when feedback is received, SE may still play a significant role at anticipation. As of yet, however, we have not considered the nature or valence of partner feedback and how that might interact with SE to predict anticipatory anxiety. For example, do people with lower SE anticipate feeling anxious in response to a partner's compliment as much as to a partner's criticism? A secondary goal of this research is therefore to evaluate whether people with lower SE experience anticipatory anxiety in response to positive and negative

¹In this study, Wood et al. (2005) also found that participants with lower SE experienced consummatory anxiety in response to feedback that they had performed well on a series of laboratory-based cognitive tasks. It is unclear whether this same consummatory pattern will emerge during interpersonal experiences in which feedback conveys social acceptance (vs. rejection) from dating partners the focus of the current research. Our prediction is that the acceptance signaling system is dominant in interpersonal contexts and thus overrides these individual differences.

partner feedback similarly or whether differences in anticipatory emotion emerge across feedback valence.

Existing research and theory suggest that feedback valence may interact with SE in a few ways. One possibility is that people with lower SE anticipate both positive and negative partner feedback in anxiety-provoking ways. This hypothesis aligns with the risk-regulation model (e.g., Murray et al., 2006), which argues that people with lower SE, who doubt their self-worth, worry a great deal about the possibility and pain of rejection. These concerns are exacerbated by events that have the potential to expose or heighten feelings of dependence on a partner. Partner feedback is likely one such category of events. When anticipating negative feedback, people with lower SE may worry about learning where they fall short, or feel concerned that rejection is coming (e.g., Murray et al., 2006). When anticipating positive feedback, these individuals may feel anxious that there are going to be new standards that they have to live up to, or that the stage will be set for embarrassment or disappointment if it turns out that they interpreted the feedback in overly positive ways (e.g., Cameron, Stinson, Gaetz, & Balchen, 2010; Collins & Feeney, 2004; Collins, Ford, Guichard, & Allard, 2006; Murray, Holmes, Griffin, Bellavia, & Rose, 2001). According to this risk-regulation perspective, people with lower SE may anticipate both positive and negative partner feedback in anxiety-provoking ways.

A second possibility is more consistent with self-verification theory, which argues that we want others to see us in ways consistent with how we see ourselves (e.g., Kwang & Swann, 2010; Swann, 1997). Because people use their SE, an index of perceived value, to prepare for future social encounters, anticipating a feedback-self-view discrepancy may feel anxiety-provoking. For example, the anticipated discrepancy may portend a confusing interaction and, moreover, may threaten to undermine one's epistemic need to predict and control their lives (e.g., Stinson et al., 2010). That is, partner feedback may signal threat to the degree that the feedback is expected to be at odds with the individual's self-views. According to this self-verification perspective, people with lower SE may only anticipate positive (not negative) partner feedback in anxiety-provoking ways, as it is positive feedback that clashes with their relatively negative self-views.

Here we present two possible ways that feedback valence may interact with SE to predict changes in anticipatory anxiety, one more consistent with the risk-regulation model (Murray et al., 2006) and the other with self-verification theory (e.g., Swann, 1997). To be clear, however, our focus is to demonstrate under which circumstances (positive vs. negative feedback) the hypothesized pattern of anxiety emerges, rather than staking a claim on one of these theoretical perspectives. Therefore, we evaluate both of these possibilities in the current research, but refrain from making a concrete prediction as to the outcome.

1.5 | The present research

The goal of this research is therefore to assess whether individual differences in SE relate to anxious reactions to partner feedback at different points on the timeline of emotion. Our primary hypothesis is that people with lower SE will experience more anxious emotion in response to partner feedback, but that this relationship will appear at anticipation rather than consumption. Because it is more counterintuitive to expect people to respond in adverse ways to *positive feedback* from romantic partners, in Study 1 we first sought to examine our primary hypothesis in this context. Subsequently, in Studies 2a and 2b we manipulated the valence of the feedback to determine whether people with lower SE experience heightened anticipatory anxiety solely in response to positive feedback or in response to positive and negative feedback similarly, a secondary goal of this research.

Across studies, we additionally evaluated three ways these dynamics unfold in, and relate to, broader processes in dating contexts. First, we assessed the generalizability of the findings by

measuring reactions to feedback from both ongoing relationship partners (Study 1) and potential dating partners (Studies 2a and 2b). Second, we measured whether anticipatory (vs. consummatory) emotional responses to positive partner feedback are associated with changes in relationship functioning over time (Study 1). Third, we evaluated whether anticipatory anxiety is associated with behavioral intentions and whether it mediates the relationship between SE and these intentions (Studies 2a and 2b). All study measures are posted on the Open Science Framework and can be found here: https://osf.io/9vyp7/?view_only=a099bd530bc74aa2983d44adbccb474a.

2 | STUDY 1

In Study 1, we evaluated the relationship between SE and anticipatory and consummatory anxiety in response to *positive* partner feedback. Participants were in ongoing romantic relationships and they received positive feedback from their own partner during a laboratory interaction. More specifically, one partner delivered a compliment to the other, our operationalization of positive feedback. We measured anxiety both prior to (i.e., anticipation) and directly following (i.e., consumption) the conversation. We additionally assessed relationship functioning during the year following the laboratory session and evaluated whether anxious responses to partner feedback are associated with future relationship functioning.

2.1 | Method

2.1.1 | Participants

Fifty-nine nonmarried, monogamous, male–female couples were enrolled in the study. This sample size was based on prior work from our laboratory (Ayduk & Kross, 2010) which similarly assessed the role of an individual difference factor (spontaneous self-distancing) during a dyadic interaction (also see Gordon, Impett, Kogan, Oveis, & Keltner, 2012). At the start of the laboratory session, each individual was randomly assigned to the role of either compliment receiver (referred to as the "participant," 31 women and 28 men) or compliment giver (referred to as the "partner"). Here we focus on the compliment receiver as the key subject of interest (age: M = 21.87, SD = 3.56). Couples had to be dating for a minimum of 3 months (months: M = 22.36, SD = 19.12). Ethnicity of the sample was 1.72% American Indian/Alaskan Native, 31.03% Asian, 5.17% Black/African American, 44.83% Caucasian, 17.24% other, with 15.52% identifying as Hispanic or Latino/a.

2.1.2 | Procedure

All study procedures were approved by the university Institutional Review Board. Although Study 1 was specifically designed to test the connection between SE and anxious responses to partner feedback, we included additional measures that are described in the Supporting Information (also see Luerssen, Jhita, & Ayduk, 2017). Both members of each couple first completed a background questionnaire from home which included the measure of SE. At the start of the laboratory session, the couples went through consent procedures and were then separated and completed a measure of baseline emotion. Subsequently, partners were told that they had been assigned to lead the conversation, during which they would describe three qualities about the participant that they liked or appreciated. The partner was given 5 min to think about and write down the qualities they planned to discuss.

While the partner prepared, the participant learned that the partner had been assigned to lead the conversation, had been given a choice of topics, and had *freely chosen* to give the participant a compliment. In reality, the partner had been assigned to the topic but we elected to maintain this

deception so that the participant would not easily discount the meaning or significance of the received compliment. Participants then completed the measure of anticipatory emotion—how they expected to feel receiving the compliment from their partner.

Subsequently, the members of the couple were brought back together and the partner delivered the compliment during the 5-min conversation. The participant was instructed to simply listen and remain silent while the partner talked. This approach was chosen so that participants indeed received the positive feedback and did not have the opportunity to steer the conversation in another direction. The members of the couple were then separated and completed the measure of consummatory emotion.

Participants were emailed a follow-up questionnaire 6-months after, and again 1-year after, the laboratory session. Forty-seven compliment receivers completed the 6-month follow-up, with 39 of them still involved in the same relationship. At 1-year, 44 compliment receivers responded, with 37 in the same relationship. Attrition was unrelated to SE, age, baseline relationship functioning, and relationship length, t's < 1.08, p's > 0.28. However, more women than men completed a follow-up assessment, $\chi^2 = 5.95$, p = 0.01.

2.1.3 | Measures

Rosenberg SE scale

The Rosenberg SE scale is a highly validated 10-item measure of SE (Rosenberg, 1989). Ratings were made on a scale from 1 (*does not describe me at all*) to 6 (*describes me very well*). The appropriate items were reverse-scored and averaged (M = 4.76, SD = 0.93, $\alpha = 0.91$).

Emotion

At baseline, anticipation, and consumption, participants completed a modified positive affect negative affect schedule (PANAS) with ratings on a 1 (very slightly or not at all) to 5 (extremely) scale (Watson, Clark, & Tellegen, 1988). Note that at anticipation participants indicated how they anticipated feeling during the conversation while at consumption they reported how they actually felt during the conversation. Ratings on "Distressed," "Nervous," "Jittery," "Afraid," "Uncomfortable," and "Embarrassed" were averaged to index anxious emotion (baseline: M = 1.59, SD = 0.52; anticipation: M = 1.94, SD = 0.76; consumption: M = 1.71, SD = 0.72; α 's = 0.80–0.83). This composite was created based on a factor analysis of all PANAS items completed at baseline. While we focused on anxious emotion for a priori reasons, we report more information on the factor analysis as well as key results for additional negative and positive emotion composites in the Supporting Information (including the factor loadings) and briefly in the Discussion section.

Relationship functioning

At baseline, 6-months, and 1-year, participants rated their relationship on happiness, satisfaction, commitment, warmth, and comfort, and how rewarding the relationship was $(0 = not \ at \ all \ to 5 = completely)$. These items were loosely based on the Couples Satisfaction Index (Funk & Rogge, 2007) and were averaged to index relationship functioning (baseline: M = 5.21, SD = 0.81; 6-month: M = 4.92, SD = 0.80; 1 year: M = 4.96, SD = 0.94; α 's = 0.90–0.94). Note that happiness was measured on a 7-point scale in the follow-up assessments and was therefore rescaled to a 6-point scale before averaging.

Degree of expressed affection

To evaluate whether participant SE was related to the degree of affection their partner provided, two coders viewed video recordings of the conversations and rated expressed love and affection a scale from 0 (not at all) to 3 (very much so). These ratings were averaged (M = 1.85, SD = 0.74, $\alpha = 0.69$).

2.2 | Results

2.2.1 | Anxiety during the laboratory session

We conducted general linear models analysis on anxious emotion, with participant SE (mean-centered) as the between-subjects predictor and time as the within-subjects predictor (2: anticipation, consumption). Baseline anxiety was included as a covariate to control for preexisting differences in emotion tendencies. We had no predictions regarding how these processes differ by sex or partner SE and were underpowered in detecting three-way interactions. Even so, there were no substantive changes in the main results when sex or partner SE was included as covariates. See Table 1 for zero-order correlations.

There was a main effect of time in predicting anxious emotion, F(1, 56) = 8.61, p < 0.01, $\hat{\omega}_P^2 = 0.11$, but no main effect of SE, F(1, 56) = 2.32, p = 0.13, $\hat{\omega}_P^2 = 0.02$. These results were qualified by a significant SE × time interaction, F(1, 56) = 6.05, p = 0.02, $\hat{\omega}_P^2 = 0.08$. SE was negatively associated with anxious emotion at anticipation, F(1, 56) = 6.66, p = 0.01, b = -0.25, 95% confidence interval (CI) [-0.44, -0.05], $\hat{\omega}_P^2 = 0.09$, but was unrelated to anxious emotion at consumption, F(1, 56) = 0.06, p = 0.80, b = -0.03, 95% CI [-0.23, 0.18], $\hat{\omega}_P^2 = -0.02$ (see Figure 1).

Follow-up analyses showed that the pattern of results was the same when baseline anxiety was removed as a covariate. Additionally, there was no correlation between participants' SE and the degree of love and affection provided by their partner during the compliment conversation, r(57) = 0.10, p = 0.46, and the results did not differ if expressed affection was added as an additional covariate. This suggests that the partners of people with lower SE were not presenting qualitatively different feedback from other partners.

	SE	PSE	SEX	BA	AA	CA	EA	RFB	RF6	RF12
SE	-	0.29**	0.04	-0.22*	-0.38***	-0.07	-0.10	0.32**	0.14	0.29*
PSE	-	-	-0.18	-0.10	-0.21	-0.05	0.26**	0.47***	-0.02	0.08
SEX	_	-	-	0.01	0.05	-0.04	-0.03	0.13	0.30*	0.48***
BA	-	-	-	-	0.44***	0.19	-0.14	-0.11	-0.18	-0.49***
AA	-	-	-	-	-	0.60***	-0.10	-0.13	-0.48***	-0.30*
CA	-	-	-	-	-	-	0.04	0.15	-0.31*	-0.05
EA	_	-	-	-	-	-	-	0.16	0.21	0.22
RFB	_	-	-	-	-	-	-	-	0.35**	0.46***
RF6	_	-	-	-	-	-	-	-	-	0.60***
RF12	-	-	-	-	-	-	-	=	-	-

Notes. Intercorrelations are for the whole sample of compliment receivers (n = 59), with the exception of the 6-month (n = 39) and 1-year (n = 37) relationship functioning measures, which included participants who completed the assessment and were still involved in the same relationship. AA: anticipatory anxious emotion; BA: baseline anxious emotion; CA: consummatory anxious emotion; EA: partner expressed love and affection during the conversation; PSE: partner self-esteem; RFB: baseline relationship functioning; RF6: 6-month follow-up relationship functioning; RF12: 1-year follow-up relationship functioning; SE: self-esteem; SEX: sex (female = -0.5), male = 0.5).

p < 0.10; p < 0.05; p < 0.05; p < 0.01.

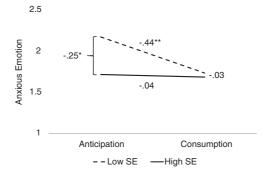


FIGURE 1 Study 1—Self-esteem × time interaction. In Study 1, participants with lower and higher self-esteem (SE) differed in anxious emotion at anticipation, but not at consumption. Predicted values are at 1 SD above and below the mean of SE

2.2.2 | Relationship functioning over time

In this sample, SE was not significantly related to future relationship functioning (see Table 1). Nevertheless, in order to understand the connection between emotion and relationship well-being, we predicted 6-month and 1-year relationship functioning with anticipatory and consummatory anxious emotion as simultaneous predictors.² Baseline relationship functioning was included as a covariate to tap into change in functioning.

At 6-months, relationship functioning was predicted by baseline relationship functioning, F (1, 35) = 4.68, p = 0.04, b = 0.35, 95% CI [0.02, 0.68], $\hat{\omega}_p^2$ = 0.09, and by anticipatory anxious emotion, F(1, 35) = 4.17, p < 0.05, b = -0.38, 95% CI [-0.76, -0.002], $\hat{\omega}_p^2$ = 0.08. There was no effect of consummatory anxious emotion, F(1, 35) = 0.33, p = 0.57, b = -0.10, 95% CI [-0.47, 0.27], $\hat{\omega}_p^2$ = -0.02. The effect of anticipatory anxiety persisted when controlling for participant SE, F (1, 34) = 4.22, p < 0.05, b = -0.40, 95% CI [-0.80, -0.004], $\hat{\omega}_p^2$ = 0.08, and was slightly attenuated when controlling for baseline anxiety (to isolate reactivity to the compliment rather than general emotion tendencies), F(1, 34) = 3.65, p = 0.06, b = -0.39, 95% CI [-0.80, 0.02], $\hat{\omega}_p^2$ = 0.06. Note that baseline anxiety was unrelated to functioning here, F(1, 34) = 0.01, p = 0.93, b = 0.02, 95% CI [-0.42, 0.46], $\hat{\omega}_p^2$ = -0.03. At 1-year, functioning was predicted only by baseline functioning, F(1, 33) = 6.96, p = 0.01, p = 0.54, 95% CI [0.12, 0.95], $\hat{\omega}_p^2$ = 0.14. The effect of anticipatory anxiety was no longer significant, although it was in the expected direction, F(1, 33) = 1.85, p = 0.18, p = -0.30, 95% CI [-0.74, 0.15], $\hat{\omega}_p^2$ = 0.02, with the effect of consummatory anxiety F(1, 35) = 0.10, p = 0.75, p = 0.07, 95% CI [-0.39, 0.53], $\hat{\omega}_p^2$ = -0.02.

2.3 | Study 1 summary

The results from Study 1 support the primary hypothesis that SE is associated with anticipatory emotional responses to partner feedback. Prior to the conversation, people with lower SE anticipated feeling anxious when receiving a compliment from their own romantic partner. However, their anxiety declined once the conversation took place. In fact, their emotion was comparable to the emotion of those with higher SE at this consummatory stage. These findings support the perspective that for

²We were also interested in whether anticipatory emotion mediates the relationship between SE and future relationship functioning. There was no evidence of mediation, however (Hayes, 2009). This might be because SE was not significantly related to relationship functioning longitudinally in this sample or because we were underpowered in conducting mediational analyses given attrition in our follow-up assessments.

people with lower SE, positive partner feedback may feel threatening particularly before the meaning and significance of the feedback is known. In addition, the results from Study 1 tentatively suggest that anticipatory anxiety may play a role in ongoing relationship dynamics as it was associated with relationship functioning 6-months following the laboratory session (though, again, this effect was marginal when controlling for baseline anxiety).

3 | STUDIES 2A AND 2B

In Studies 2a and 2b, we again evaluated the primary hypothesis that SE is associated with anxious responses to partner feedback at anticipation but not at consumption. To assess the generalizability of the findings, here single participants received feedback from potential dating partners (rather than their partner in an ongoing relationship). Additionally, we compared anticipatory and consummatory responses to *positive* versus *negative* partner feedback (the strengths versus weaknesses of an online dating profile). Finally, to capture broader relationship processes, we also assessed whether anxious reactions mediate the relationship between SE and behavioral intentions—to receive the feedback and get to know the partner. As described below, each study addressed the limitations of the other by differing in minor methodological details. Note that the pattern of results was the same across substudies (2a and 2b), so we first present the results with the studies combined and then illustrate the results for each substudy separately.

3.1 | Method

3.1.1 | Participants

Participants were recruited through the Amazon Mechanical Turk web-site. To be eligible for enrollment, participants had to live in the United States, speak fluent English, be 18-35 years of age, and not be in a romantic relationship. To support the cover story that participants were to be easily and immediately paired with a fellow single dating partner, we also restricted enrollment to heterosexual individuals and limited enrollment to normal business hours between 9 a.m. and 5 p.m. To determine our sample size, we used a rule of thumb metric—60 participants per condition (per study). Given that we were enrolling an online sample, however, we knew that some participants would be excluded (see below). As such, we increased the projected sample size by approximately 15% and stopped enrolling participants once that quota was reached (initial sample: n=276).

To confirm that our online sample was indeed engaged and paying attention, we included two overt attention checks, one at the beginning of the procedures and one at the end. Each check directed participants to click on a particular anchor on a Likert scale. Participants who failed to do so were excluded from the analyses (n = 4). As our main dependent measures were ratings on the modified PANAS (Watson et al., 1988), we also excluded participants who selected the same anchor for all of the items assessed at a given time-point (baseline, anticipation, or consumption), which, again, suggests that they were not paying attention (n = 7). Note that these exclusion criteria were determined and executed prior to analysis.

Finally, two questions from the funnel debriefing were used to assess participants' suspicion of the study procedures (i.e., that the partner and feedback were not real): "Do you have any thoughts about the study?" and, "Did you notice anything peculiar about the study?" Two trained coders blind to condition rated participants' responses using a 0 (no mention of disbelief) to 3 (overtly stated that s/he did not think the partner was real) scale ($\alpha = 0.97$). Participants who were scored a three on suspicion by either one of the coders, demonstrating clear doubt about the study procedures, were

TABLE 2 Studies 2a and 2b—Demographics

	Overall	Study 2a	Study 2b
Initial sample size	276	136	140
Excluded	52	27	25
Final sample size	224	109	115
Female participants	106	48	58
Age (years)	28.48 (4.99)	27.55 (4.31)	29.38 (5.43)
American Indian/Alaskan native	1.34%	0.92%	1.74%
Asian	5.80%	8.26%	3.48%
Black/African American	12.50%	13.76%	11.30%
Native Hawaiian/other Pacific islander	0.45%	0%	0.87%
Caucasian	75.89%	70.64%	80.87%
Other	4.02%	6.42%	1.74%
Hispanic/Latino/a	9.42%	10.19%	8.70%

dropped from the analyses (n = 40). Note that the pattern of results reported below was the same when including the latter participants and instead using coders' averaged rating as a covariate (M = 0.66, SD = 1.09). There were 224 participants in the final combined sample. See Table 2 for demographic information across Studies 2a and 2b and in the combined sample.

3.1.2 | Procedure

All study procedures were approved by the university Institutional Review Board. Aside from where noted, the procedures in Studies 2a and 2b were identical. Participants were informed in the Mechanical Turk ad description that the focus of the study was on online dating interactions and as part of their participation they were to make an online dating profile and interact with a fellow single participant. After screening and consent, participants completed a background questionnaire which included measures of baseline anxiety, SE, as well as demographics and relationship history. Next, participants were reminded that they were going to exchange profiles with a fellow single Mechanical Turk participant who they had been partnered with. Given that the researchers were ostensibly focused on learning more about online dating interactions, participants were asked to imagine that they were indeed interested in online dating and were responding to profile questions for a real dating web-site (e.g., OkCupid, Match, eHarmony).

Participants were told that they had been randomly assigned to the role of sharing their profile with their partner and receiving feedback from him or her (rather than reading their partner's profile and providing feedback). In fact, there was no partner and the feedback was standardized across participants (and studies). Participants responded to three questions for their online-dating profile: "What are you like?" "What are some of your favorite books, movies, shows, music, and food?", and "What are you doing with your life?" (minutes working on the profile: M = 4.90, SD = 4.12; profile word count: M = 108.17, SD = 71.98). Note that SE was unrelated to how long participants spent working on their profile, r(222) = 0.06, p = 0.36, or the word count of the profile that they generated, r(221) = 0.04, p = 0.53, suggesting that participants with lower SE were as engaged with the assignment as those with higher SE. Once complete, participants were told that the researchers had shared the profile with their partner.

At this point, procedures diverged across Studies 2a and 2b. As further described below, the differences across studies were intended to balance two dueling concerns. First, to collect a "pure" measure of anticipatory anxiety across conditions, participants needed to know the valence of their

partner's feedback *before* the feedback was received. This meant that participants needed to know that their partner was going to provide positive versus negative feedback (focus on the strengths vs. weaknesses of their profile) ahead of time. However, doing so made it possible that participants would discount the feedback since the partner was *assigned* to provide feedback of that valence. This is problematic given our second concern—that participants believe the feedback reflected their partner's actual impression of them. To prioritize authenticity, it would be more effective to tell participants that their partner was not assigned to focus on their strengths or weaknesses but simply to generate an overall impression of them. With this approach, however, it is difficult to obtain a "pure" measure of anticipatory anxiety across conditions since they need to know something about the feedback they are to receive in order to anticipate it (e.g., giving minor feedback before the full feedback). To balance these concerns, we conducted two studies and believe that in combination they address both issues and thus provide a better evaluation of our research question.

Participants in Study 2a were told that their partner was assigned to provide feedback on *both* the strengths and the weaknesses of their profile and that they had been randomly assigned (between-subjects) to read about either their strengths first (i.e., the positive feedback condition) or their weaknesses first (i.e., the negative feedback condition). After these instructions, participants completed a prefeedback questionnaire which assessed how they anticipated feeling reading the partner's feedback as well as their behavioral intentions. A benefit of this approach was that participants very clearly knew the feedback they were about to read was either positive or negative, thereby allowing them to generate a "pure" anticipatory response before the feedback was delivered. A limitation of this approach was that the feedback might have seemed less real given that the partner was assigned to provide feedback on both their strengths and their weaknesses rather than simply generating an impression of the participant.

By contrast, in Study 2b participants were told that their partner was assigned to assess the overall strength of their profile, thereby intimating that the feedback was a genuine reflection of their partner's overall impression of them. However, participants still needed to anticipate that this feedback was either positive or negative before it was delivered. To do this, we first provided participants with the ostensible partner's rating of them on a single question, "After reading your partner's profile, how strong (versus weak) do you think your partner's profile is?" Ratings were made on a Likert scale ranging from 1 (*very weak*) to 7 (*very strong*). In the positive feedback condition, participants learned that their partner gave them an overall score of 6 and in the negative feedback condition participants learned that their partner gave them a score of 3. After reading this single item, participants learned that their partner was going to provide more specific ratings and comments on their profile. Here, they completed the same prefeedback questionnaire as in Study 2a but now generating an anticipatory response for the comprehensive feedback they were about to read. Again, a benefit of this approach was that the partner's feedback appeared unprompted by the researchers, while a limitation was that participants received the single Likert rating before they anticipated the full feedback.

Procedures across Studies 2a and 2b converged again here. Once participants finished the prefeedback questionnaire, they received their partner's feedback on three dimensions: how authentic, interesting, and fun the partner found the participant after reading his or her profile. For each question, the participant was shown the partner's rating on a Likert scale ranging from 1 (not at all) to 7 (very much so). In the positive feedback condition, ratings were as follows: authentic = 6, interesting = 7, fun = 7. In the negative feedback condition, the ratings were: authentic = 3, interesting = 3, fun = 4.

In addition, for each question the partner also included a short comment explaining their rating. These comments were created by the researchers and were designed to be applicable to a wide range of participant profiles. As an example, for the authentic question the positive feedback comment

stated, "Based on the responses, I feel like my partner is the kind of person that is honest about who they are. Openness suggests a person has a good head on their shoulders. I see that here." In the negative feedback condition, the comment stated, "I'm not sure my partner is the kind of person that is relatively honest about who they are. Openness suggests a person has a good head on their shoulders. I'm not sure about that here." See the Supporting Information for the remaining comments.

After reading their partner's feedback, participants completed a post-feedback questionnaire that measured how they actually felt reading the feedback. To mitigate negative feelings upon completion of the main study procedures, all participants in the negative feedback condition also received positive feedback. Their responses to this feedback were not measured. Finally, participants completed a funnel debriefing which probed for suspicion about the study procedures.

3.1.3 | Measures

Overall descriptive statistics are reported below. See Table 3 for means and standard deviations across Studies 2a and 2b.

Rosenberg SE scale

The same measure of SE was used in Studies 2a and 2b as was used in Study 1 (Rosenberg, 1989; M = 4.72, SD = 1.11, $\alpha = 0.94$).

Emotion

At baseline, anticipation, and consumption, participants again completed an altered version of the PANAS (Watson et al., 1988) on a 1 (*very slightly or not at all*) to 5 (*extremely*) scale. Participants indicated how they *anticipated feeling receiving the feedback* at anticipation and how they *actually felt receiving the feedback* at consumption. To preserve consistency across studies, the same composite was used in Studies 2a and 2b as in Study 1. Scores on "Distressed," "Nervous," "Jittery," "Afraid," and "Embarrassed," and "Anxious," were included in anxious emotion composite (baseline: M = 1.35, SD = 0.54; anticipation: M = 1.79, SD = 0.82; consumption: M = 1.54, SD = 0.73; α 's = 0.87–0.90). Note that "Anxious" replaced "Uncomfortable" which was included in Study 1.

Behavioral intentions

Behavioral intentions were assessed in the prefeedback questionnaire, with responses made on a Likert scale ranging from 1 (not at all) to 7 (very much so). Participants' ratings on how much they wanted to receive the feedback (M = 4.41, SD = 1.77) and how much they preferred not to receive the feedback (reverse-scored; M = 3.26, SD = 1.92) were averaged to create a composite measure of their desire for feedback (M = 4.57, SD = 1.71, $\alpha = 0.84$). This composite was based on a factor analysis on these two items as well as two additional items assessing participants' interest in getting to know their partner

TABLE 3 Studies 2a and 2b—Descriptive statistics

	Overall	Study 2a	Study 2b
Self-esteem*	4.72 (1.11)	4.59 (1.15)	4.84 (1.06)
Anxious emotion baseline**	1.35 (0.54)	1.44 (0.63)	1.27 (0.43)
Anxious emotion anticipation*	1.79 (0.82)	1.89 (0.86)	1.70 (0.77)
Anxious emotion consumption**	1.54 (0.73)	1.64 (0.80)	1.44 (0.63)
Desire for feedback	4.57 (1.71)	4.48 (1.72)	4.67 (1.70)

Note. For t tests of differences across Studies 2a and 2b.

^{*}p < 0.10; **p < 0.05.

TABLE 4 Studies 2a and 2b—Zero-order correla	ations	
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	SE	SEX	BA	AA	CA	DFB
SE	-	-0.01	-0.32*	-0.43*	-0.19*	0.38*
SEX	-	-	-0.01	-0.05	0.08	0.04
BA	-	-	-	0.51*	0.55*	-0.07
AA	-	-	-	-	0.59*	-0.27*
CA	-	-	-	-	-	-0.04
DFB	-	-	-	-	-	-

Notes. AA: anticipatory anxious emotion; BA: baseline anxious emotion; CA: consummatory anxious emotion; DFB: desire for feedback; SE: self-esteem; SEX: sex (female = -0.5, male = 0.5). *p < 0.01.

further. Given that interest in getting to know partners was stymied by the nature of the study, in which participants were completing procedures all over the country with little possibility of actually meeting their partner, we elected to focus on the desire for feedback items here. See the Supporting Information for further information on the factor analysis as well as the other two items.

3.2 | Results

3.2.1 | Emotion

We conducted general linear models analysis on anxious emotion with condition (2: positive feedback vs. negative feedback), participant SE (mean-centered) and study (2: 2a vs. 2b) as the between-subjects predictors and time as the within-subjects predictor (2: anticipation, consumption). Baseline anxious emotion was included as a covariate to control for preexisting differences in emotion (see Table 4 for zero-order correlations). In these analyses, we focused on the critical interaction between SE and time in predicting emotion and then evaluated whether that interaction appeared similarly across the positive and negative feedback conditions (i.e., the SE \times time \times condition interaction). Subsequently, we also present the focal interaction between SE and time as a function of study, as well as the simple effects at each time point for Studies 2a and 2b separately.

Overall, there were main effects of SE, F(1, 215) = 8.83, p < 0.01, $\hat{\omega}_P^2 = 0.03$, and time, F(1, 215) = 28.82, p < 0.01, $\hat{\omega}_P^2 = 0.11$, as well as the predicted SE × time interaction, F(1, 215) = 23.99, p < 0.01, $\hat{\omega}_P^2 = 0.09$. As can be seen in Figure 2, analysis of the simple effects showed that SE negatively predicted anxious emotion at anticipation, F(1, 215) = 22.58, p < 0.01,

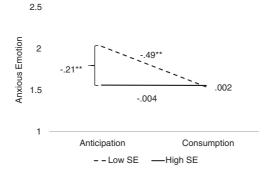


FIGURE 2 Studies 2a and 2b—Self-esteem \times time interaction. In Studies 2a and 2b, participants with lower and higher self-esteem (SE) differed in anxious emotion at anticipation, but not at consumption. Predicted values are at 1 SD above and below the mean of SE

b=-0.21, 95% CI [-0.30, -0.12], $\hat{\omega}_P^2=0.09$, but not at consumption, F(1, 215)=0, p=0.96, b=0.002, 95% CI [-0.07, 0.08], $\hat{\omega}_P^2=-0.005$. There was not a SE × time × condition interaction, F(1, 215)=0.15, p=0.70, $\hat{\omega}_P^2=-0.004$, suggesting that this same pattern emerged regardless of whether the feedback was positive or negative in valence. Note that when baseline anxiety was removed as a covariate from the main analysis, there was again a SE × time interaction, F(1, 216)=22.94, p<0.01, $\hat{\omega}_P^2=0.09$. Here, SE was associated with anxiety at consumption, F(1, 216)=6.45, p=0.01, b=-0.11, 95% CI [-0.19, -0.02], $\hat{\omega}_P^2=0.02$, but the association was weaker than at anticipation, F(1, 216)=43.34, p<0.01, b=-0.31, 95% CI [-0.40, -0.21], $\hat{\omega}_P^2=0.16$.

While this pattern of results was the same across studies (SE × time × condition × study interaction), F(1, 215) = 1.33, p = 0.25, $\hat{\omega}_P^2 = 0.001$, the focal SE × time interaction emerged across studies but was stronger in Study 2a than in Study 2b: SE × time × study interaction: F(1, 215) = 4.22, p = 0.04, $\hat{\omega}_P^2 = 0.01$; Study 2a: SE × time interaction, F(1, 215) = 27.52, p < 0.01, $\hat{\omega}_P^2 = 0.11$, simple effect of SE at anticipation: F(1, 215) = 22.12, p < 0.01, b = -0.27, 95% CI [-0.39, -0.16], $\hat{\omega}_P^2 = 0.09$, simple effect of SE at consumption: F(1, 215) = 0.26, p = 0.61, b = 0.03, 95% CI [-0.07, 0.12], $\hat{\omega}_P^2 = -0.003$; Study 2b: SE × time interaction, F(1, 215) = 4.12, p = 0.04, $\hat{\omega}_P^2 = 0.01$, simple effect of SE at anticipation: F(1, 215) = 5.37, p = 0.02, b = -0.15, 95% CI [-0.28, -0.02], $\hat{\omega}_P^2 = 0.02$, simple effect of SE at consumption: F(1, 215) = 0.15, p = 0.70, b = -0.02, 95% CI [-0.13, 0.09], $\hat{\omega}_P^2 = -0.004$. Again, there was no three-way interaction with condition in either study: Study 2a: F(1, 215) = 1.33, p = 0.25, $\hat{\omega}_P^2 = 0.001$; Study 2b: F(1, 215) = 0.26, p = 0.61, $\hat{\omega}_P^2 = -0.003$. Separate figures for the significant interactions in Studies 2a and 2b can be found in the Supporting Information.

3.2.2 | Behavioral intentions

We conducted mediation analyses using bootstrapping procedures developed by Hayes (2013) to evaluate (a) whether anticipatory emotion mediates the relationship between SE and desire for the feedback, and (b) whether the mediation differs across (is moderated by) the feedback conditions. To do so, we ran Model 7 of Hayes's process macro for the Statistical Analysis System (SAS) with 10,000 samples and a 95% CI (Hayes, 2013). The indirect effect is considered statistically significant if CIs do not include zero.

The predictor variable (X) was SE, the outcome variable (Y) was behavioral intentions (desire for feedback), the mediator variable was anticipatory anxiety, and the moderator variable (W) was feedback condition (W_0 = positive, W_1 = negative). Variables were mean-centered. Baseline anxious emotion was included as a covariate to account for chronic differences in emotion tendencies. Given that the focal SE x time interaction as well as the simple effect of SE at anticipation were significant in both substudies (above), we collapsed across substudy for these mediation analyses in order to maximize power. Note that follow-up analyses (described in the Supporting Information) suggest that the results are the same when study was added as a covariate and when study replaced condition as the moderating variable. Here we report the results of the overall mediation analyses, with the specific paths presented in Figure 3. There was a significant indirect effect of anticipatory anxiety in both the positive feedback (b = 0.10, SE = 0.06, 95% CI [0.01, 0.24]) and negative feedback conditions (b = 0.08, SE = 0.04, 95% CI [0.02, 0.19]). There was no evidence of moderated mediation (b = 0.02, SE = 0.05, 95% CI [-0.06, 0.14]) suggesting that anticipatory anxiety mediated the relationship in the same way regardless of condition. More specifically, participants with lower SE experienced higher levels of anticipatory anxiety and this emotion was associated with a diminished desire for the feedback. This pattern was the same when baseline anxiety was removed as a covariate (positive feedback condition: b = 0.10, SE = 0.05, 95% CI [0.01, 0.23]; negative feedback

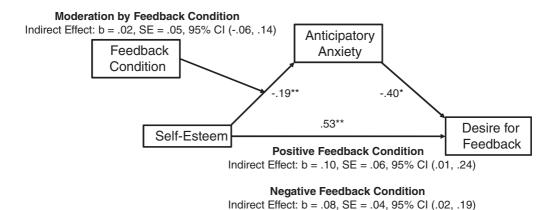


FIGURE 3 Studies 2a and 2b—Mediational analyses desire for feedback. In Studies 2a and 2b, anticipatory anxiety mediated the relationship between self-esteem and desire for feedback, and this pattern was the same in both the positive feedback and negative feedback conditions

condition: b = 0.08, SE = 0.04, 95% CI [0.01, 0.18]; moderated mediation: b = 0.02, SE = 0.04, 95% CI [-0.03, 0.12]).

3.3 | Summary Studies 2a and 2b

The results for combined Studies 2a and 2b support the perspective that SE is associated with anxiety in response to feedback in dating contexts but this effect appears more robust at anticipation than consumption. People with lower SE experienced more anxiety than people with higher SE when anticipating both positive and negative partner feedback, suggesting that they see partner feedback of all kinds as interpersonally threatening (before the feedback is delivered and known). This is consistent with predictions based on the risk-regulation model (Murray et al., 2006). Moreover, anticipatory anxiety mediated the relationship between SE and participants' desire for the feedback and did so regardless of feedback valence.

4 | DISCUSSION

The current research was guided by the perspective that although receiving feedback from partners serves a role in romantic relationships, people differ in their reactions to this feedback. Given the importance of emotion for healthy functioning (e.g., Fredrickson & Joiner, 2002; Gottman, 1994) we evaluated whether anxious reactions to feedback vary and whether these reactions are associated with individual differences in SE.

4.1 | Reactions to partner feedback and the timeline of emotion

The results supported our primary hypothesis that SE was related to anxious emotion in response to partner feedback, but that this relationship was specific to one point on the timeline of emotion—anticipation. Participants with lower SE anticipated feeling more anxious receiving feedback than participants with higher SE. By contrast, and consistent with most prior research, SE was unrelated to consummatory anxiety once the feedback was actually received (e.g., Kwang & Swann, 2010; Shrauger, 1975). This was the same whether the feedback was coming from ongoing dating partners during a laboratory-based conversation (Study 1) or ostensible dating partners during an online interaction (Studies 2a and 2b).

Studies 2a and 2b further showed that people with lower SE anticipated feeling anxious receiving both negative feedback in the weaknesses condition and positive feedback in the strengths condition. This is relatively consistent with the risk-regulation model (rather than self-verification theory) which suggests that both types of feedback may threaten to heighten dependence on a partner and thus feel risky for people who doubt their self-worth, such as those with lower SE (e.g., Cameron et al., 2010; Collins et al., 2006; Collins & Feeney, 2004; Murray et al., 2001; Murray et al., 2006).

Overall, these results suggest that an individual is particularly vulnerable to their schemas and insecurities at the anticipatory stage. Here, people with lower SE seem inclined to worry about what the feedback will look like and mean. Moreover, while participants with higher SE were relatively accurate in their expectations, participants with lower SE were poorly calibrated, anticipating more anxiety than they actually experienced. This finding is consistent with the broader affective forecasting literature which has shown that people often do a poor job predicting future emotional states (e.g., Wilson & Gilbert, 2005).

These findings also fit with prior research on the acceptance signaling system (Stinson et al., 2010). That people with lower SE are vulnerable to their insecurities at anticipation still allows for the acceptance signaling system to be predominant at consumption. Again, the function of the system is to alert the individual to their *current* relational value and signal that value with changes in positive and negative emotion (Stinson et al., 2010). It is at consumption, when feedback is delivered, that a value signal has been received and thus when normative changes in emotion should manifest. The results from Study 1 lend further support to this interpretation in that participants' SE was unrelated to the loving nature of the feedback that their partner provided. This suggests that the partners of people with lower SE did not moderate their feedback in such a way as to minimize participants' anxiety at consumption.

Nevertheless, it is possible that while people experience normative changes in emotion immediately after feedback is delivered, the degree to which the feedback is endorsed or found threatening may be associated with whether that emotion is regulated or with behavioral responses (e.g., attempts to discredit the feedback) that have downstream consequences for how that emotion evolves over time (see Wood et al., 2003, for more information). We should note, however, that auxiliary analyses (see the Supporting Information) showed that whether participants agreed with the feedback was unrelated to their emotion in the immediate at consumption.

4.2 | A focus on anxious emotion

These findings also fit nicely with prior work showing that anxiety is experienced during threat (e.g., Beck, 1976; Lazarus, 1991) particularly when the threat is impending and not yet encountered (Blanchard et al., 2008; Grupe & Nitschke, 2013). Given that the meaning and significance of partner feedback is still uncertain at anticipation, it makes good sense that this is when people with lower SE, who lack confidence and are vulnerable to relationship worries, experience anxiety.

Although we chose to focus on anxiety for a priori reasons, we did measure other emotions. As detailed in the Supporting Information, the pattern of emotion from anticipation to consumption was similar for other negative emotions (frustrated emotion and overall negative emotion) though less robustly and that anticipatory anxiety seemed to better predict broader aspects of relationship functioning. There were nearly no effects for positive emotion. These results suggest that while other emotions may be relevant, anxiety is still core during the anticipation of feedback in dating contexts.

4.3 | Broader relationship dynamics

Overall, this work provides support for the counterintuitive prediction that people with lower SE, who could ostensibly benefit from feedback in dating relationships, still show a profile of

maladaptive emotional responses to such exchanges. Our results further suggest that these responses may be related to broader relationship dynamics. For example, it is possible that anticipatory emotion motivates avoidance of feedback, a prediction tentatively supported by the results of Studies 2a and 2b. Here, anticipatory anxiety mediated the relationship between participant SE and their desire to receive the feedback from their partner, with greater anxiety predicting diminished desire.

If these results generalize to authentic dating contexts, those individuals who intend to avoid feed-back from dating partners may follow through with this motivation behaviorally. For example, it is possible that anticipatory anxiety encourages an individual to stop a conversation, change the topic of discussion, or withhold reassuring facial expressions and behavioral signals when such conversations are initiated by partners, when partners provide subtle cues that feedback is coming, or even when situational factors indicate that feedback is likely. In this way, people with lower SE may be missing out on feedback, which may, in turn, relate to how their relationships evolve over time. For example, if people with lower SE behaviorally discourage their partners from providing feedback, perhaps they come to feel less confident in their partners' positive regard and less secure in their relationships. Perhaps their partners are more distant and less intimate because their attempts to provide constructive criticism are thwarted. Future research is needed to more directly tackle these extensions of the current work.

The results from Study 1 tentatively support the prediction that anticipatory emotion is involved in longer-term dynamics. Here we found that anticipatory anxiety in response to positive feedback from an ongoing dating partner was associated with lower relationship functioning 6-months after the laboratory session. This effect did become marginally significant, however, when adding baseline anxiety as an additional covariate. That said, neither baseline nor consummatory anxiety was related to future relationship functioning in these analyses. This suggests that, at the least, anticipatory anxiety may be a stronger indicator of personality or relationship dynamics than the more typically measured consummatory emotion or general emotion tendencies.

That emotion was not indicative of relationship functioning at the 1-year follow-up is somewhat unsurprising given the larger temporal window (although the results were in the expected direction). This might also be because of attrition and reduction in power—a subset of participants elected not to complete the follow-up assessments while others completed the assessments but had broken up with their partner and therefore did not provide relationship functioning scores. These same issues may partially explain why there was not a strong association between SE and relationship functioning at the follow-up assessments in this sample. As such, future research could benefit from replicating the longitudinal findings and from evaluating whether emotional responses to negative feedback are also indicative of relationship functioning (as we focused solely on positive feedback in Study 1).

4.4 | Remaining caveats and conclusions

In the current research, we elected to focus on the domain of romantic relationships for two reasons—because relationships have a critical impact on psychological and physical health (Kiecolt-Glaser & Newton, 2001; Sedikides, Oliver, & Campbell, 1994) and because people with lower SE are particularly vulnerable in this domain (Fincham & Bradbury, 1993; Robinson & Cameron, 2012). It is possible, however, that these effects are indicative of broader reactivity to evaluation in many domains. For example, people with lower SE might anticipate feeling anxious about an academic success in addition to an interpersonal one. Moreover, prior research from the affective forecasting realm suggests that there are individual differences in forecasting ability (e.g., emotional intelligence; Dunn, Brackett, Ashton-James, Schneiderman, & Salovey, 2007). As such, it might be the case that people

with lower SE do a poor job predicting their emotions more generally, perhaps because of their relatively low self-concept clarity (e.g., Campbell, 1990).

On a separate note, alerting participants that they were about to receive feedback was necessary in order to measure anticipatory emotion and to evaluate whether this emotion differs across feedback valence. This manipulation may feel removed from how feedback is exchanged in relationships in daily life. We would argue, however, that there are often cues that indicate whether a partner is to provide feedback (e.g., during an anniversary, during conflict) and that people pick up on these cues. Additionally, we believe the results of Studies 2a and 2b, finding that there are not differences across feedback valence, suggest that anticipatory anxiety may be reactive to even subtle cues that feedback is coming regardless of whether a person suspects or knows what the feedback is going to be (as was the case in these studies).

Caveats aside, the current findings do contribute to our understanding of the connection between SE and emotion in dating contexts. First, they highlight the importance of measuring emotion in a nuanced way. Besides a handful of studies (e.g., Wood et al., 2003; Wood et al., 2005), prior research evaluating emotional responses to feedback has largely relied on global (positive vs. negative) rather than discrete measures of emotion and has collected these measures solely at the consummatory stage. By focusing on anxiety, and measuring it at both anticipation and consumption, we have shown that people with higher and lower SE exhibit different emotional responses to social feedback and that these differences may influence motivation in dating contexts.

These results also expand the scope of possible interventions designed to improve relationships for people who are lower in SE—a population prone to relationship dissatisfaction (Fincham & Bradbury, 1993; Robinson & Cameron, 2012). It may be possible, for example, to mitigate anticipatory anxiety by revealing to people with lower SE that this emotional response is not predictive of how they actually feel when these events take place, and by highlighting the functional (rather than threatening) role of both positive and negative feedback for romantic relationships (e.g., Renshaw et al., 2010). A healthier exchange of feedback has the potential to improve relationship functioning for these vulnerable individuals.

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