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## THE INFLUENCE OF PRIMING ATTACHMENT STYLES ON EXCESSIVE REASSURANCE SEEKING AND NEGATIVE FEEDBACK SEEKING IN DEPRESSION

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Two studies examined the associations among attachment styles, excessive reassurance seeking (ERS) and negative feedback seeking (NFS) in depression. In Study 1 ( $n = 303$ ), undergraduate students completed measures assessing attachment style, depressive symptoms, and ERS following either an imaginary interpersonal (friend and partner) or achievement prime. In Study 2 ( $n = 202$ ), undergraduates completed the same measures in addition to completing an index of NFS following an imaginary interpersonal (partner) and achievement prime. Controlling for symptoms of depression, anxious attachment was positively related to ERS, and avoidant attachment was negatively related to ERS and positively associated with NFS. These results suggest that ERS and NFS may be a function of non-secure attachment rather than symptoms of depression per se. More specifically, anxiously attached individuals may attempt to reduce fears of abandonment by seeking reassurance from close others, whereas avoidantly attached individuals may strive to confirm negative perceptions of the self and relationships by seeking out unfavorable feedback from close others.

Depression is a common and enervating mood disorder with a lifetime prevalence of 5–12% for men and 10–25% for women (American Psychiatric Association [APA], 2000). Research has also es-

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tablished a robust association between depression and distressed intimate relationships and has specifically linked depression to rejection, dissatisfaction, and low intimacy (Gotlib & Lee, 1989). Furthermore, interpersonal factors are among the strongest predictors of the course and duration of a depressive episode (Dozois & Beck, 2008). Maladaptive solicitation of feedback through excessive reassurance seeking (ERS) and negative feedback seeking (NFS) is characteristic of individuals with depression and may place them at risk for interpersonal rejection and increases in symptomology (Timmons & Joiner, 2008).

### FEEDBACK SEEKING PATTERNS IN DEPRESSION

On occasion, individuals may seek overly positive feedback to view themselves favorably, self-enhance, and bolster affect (Coyne, 1976; Neff & Karney, 2002). Individuals also tend to self-verify and seek feedback consistent with current self-views (even if negative) to secure a sense of coherence and predictability in their self-perceptions (Swann, 1983). Seeking feedback for self-enhancement and self-verification purposes is common in all individuals (Neff & Karney, 2002) and is adaptive insofar as it results in favorable affect (Coyne, 1976) and a sense of accuracy in self-perceptions (Swann, 1983). However, individuals with depression engage in ERS and persistent NFS, which can promote interpersonal distress and a subsequent increase in depressive symptomology (Timmons & Joiner, 2008).

ERS is defined as “the relatively stable tendency to excessively and persistently seek assurances from others that one is lovable and worthy, regardless of whether such assurance has already been provided” (Joiner, Metalsky, Katz, & Beach, 1999, p. 270). Coyne’s (1976) interpersonal theory of depression posits that, in reaction to symptoms of guilt and low self-worth, individuals with depression seek reassurance from close others to test the security of their relationships. Although close others may initially provide reassurance, individuals with depression often question the authenticity of the feedback, by attributing it to others’ sense of pity or obligation, and continue to seek reassurance. Because this pattern is repetitive and resistant to change, ERS may come to annoy close others who subsequently reject the individual seeking reassurance. Such deterioration of close relationships may then exacerbate depressive symptoms, promote social isolation, and prevent the individual with de-

pression from obtaining the social support necessary to overcome his or her disorder (Joiner & Metalsky, 2001). Potthoff, Holahan, and Joiner (1995), for instance, found that reassurance-seeking behavior in college students was related to an increase in depressive symptomology indirectly through minor social stressors with family members, friends, or partners. Thus, reassurance seeking may generate the very stress in an individual's social environment that exacerbates depression (Eberhart & Hammen, 2009; Joiner & Metalsky, 1995; Joiner & Schmidt, 1998; Potthoff et al., 1995).

In contrast to ERS, NFS is the tendency to elicit self-confirmatory, negative feedback from others. Swann's (1983) self-verification theory maintains that individuals attempt to confirm self-perceptions, even if negative, to obtain confidence in the accuracy of their self-conceptions and a strong sense of control over their own environments. Consistent with these theoretical assertions, individuals with negative self-concepts often chose to interact with partners who have evaluated them unfavorably in order to confirm negative self-views (Swann, Wenzlaff, & Tafarodi, 1992). However, despite their motivation to verify negative self-views, individuals with depression experience increased negative affect upon receiving adverse feedback (Swann, Griffin, Predmore, & Gaines, 1987). NFS is also associated with increases in depressive symptomology in the context of stressful events (Pettit & Joiner, 2001a) such as a rejection by a college roommate (Joiner, 1995) and poor exam performance (Pettit & Joiner, 2001b). The associations found between ERS and NFS, and subsequent increases in depressive symptomology, highlight the importance of targeting the origins of these behaviors to help prevent individuals with depression from contributing to their own symptomology.

## COGNITIVE ORIGINS OF ERS AND NFS

Researchers have suggested that maladaptive feedback-seeking behaviors and depression may be linked through negative social experiences that occur early in life. Bowlby's (1969/1982) attachment theory posits that an infant develops an internal working model (IWM) of self, other, and relationships, based on the quality of early interactions with a primary caregiver. IWMs guide thought, memory, attributions, and behavior throughout the lifespan, and serve as a framework through which new information is processed

and interpreted (Bretherton & Munholland, 2008). Infants in secure attachment relationships, who received sensitive and responsive caregiving, are thought to model others as trustworthy and the self as worthy of love and affection (Bowlby, 1969, 1980). Conversely, infants in non-secure attachment relationships, who received insensitive caregiving, are thought to model others as untrustworthy and the self as unworthy of love and affection (Bowlby, 1969, 1980). In adulthood, non-secure attachment is described along two dimensions: anxiety, the extent to which an individual worries about the availability of others, and avoidance, the extent to which an individual feels discomfort in close relationships.

## ATTACHMENT STYLES AND ERS

Anxiously attached individuals emphasize extreme commitment and affection in romantic relationships and often idealize their romantic partners because they need other's approval in order to experience a sense of self-worth (Feeney, 2008; Moran, Bailey, & DeOliveira, 2008). Accordingly, robust positive associations have been established between anxious attachment and both daily and overall levels of ERS, even when controlling for depressive symptoms (Abela et al., 2005; Davila, 2001; Evraire & Dozois, 2014; Katz, Petracca, & Rabinowitz, 2009; Shaver, Schachner, & Mikulincer, 2005). Shaver et al. (2005), for example, found that for women high on attachment anxiety, reassurance seeking on a given day was associated with more negative mood the next day; however, for women low on attachment anxiety, reassurance seeking predicted positive mood the following day. Similarly, Evraire and Dozois (2014) found that schemas of abandonment moderated the relationship between ERS and depressive symptoms over 6 weeks, suggesting that fears of abandonment in particular may place individuals at risk for engaging in ERS. Thus, individuals may excessively seek reassurance as a result of IWMs reflecting attachment anxiety and a fear of abandonment, rather than because of depressive symptoms per se.

In contrast, avoidantly attached individuals have been found to create clear limits for closeness, dependence, and affection, and to be less satisfied in romantic relationships than securely attached individuals (Feeney, 2008). Since avoidantly attached individuals minimize the expression of negative emotions, cope with distress

by avoiding interpersonal intimacy (Moran et al., 2008), and defensively exclude relationship-related information from cognitive processing (Bowlby, 1980; Moran et al., 2008), they may be unlikely to seek out reassuring feedback from others about their social status. Congruent with this idea are research findings that avoidant attachment is unrelated (Shaver et al., 2005), or negatively related (Davila, 2001; Evraire & Dozois, 2014), to ERS. Evraire and Dozois (2014) also found that when avoidantly attached individuals did engage in ERS, it did not have a negative impact on their mood 6 weeks later. Thus, it appears that avoidant attachment does not place individuals at risk for engaging in ERS or experiencing ERS-related increases in depressive symptomatology.

## ATTACHMENT STYLES AND NFS

Although the literature has supported the conclusion that ERS may operate as a function of anxious attachment rather than symptoms of depression, research has not yet examined whether non-secure attachment may also promote NFS independently of depressive symptoms. Theoretically, the negative self-perceptions characteristic of insecure IWMs may promote seeking self-confirmatory, negative feedback from others (Swann, 1983). Along these lines, empirical research has associated both anxious and avoidant attachment with NFS. For example, studies have found that relative to those with secure attachment styles, individuals with an anxious/preoccupied attachment style seek out less positive feedback and more negative feedback from romantic partners and friends (Brennan & Bosson, 1998; Hepper & Carnelley, 2010). Individuals who are avoidantly attached expect their co-workers to undervalue them, by providing lower ratings of their job performance, and anticipate negative feedback from romantic partners (Brennan & Bosson, 1998; Hazen & Shaver, 1990). Seeking out and receiving negative feedback from close others can serve to maintain interpersonal distance and confirm an avoidantly attached individual's negative representation of others and distrust of close relationships (Hazen & Shaver, 1990). These findings are consistent with the hypothesis that NFS may also be a function of insecure attachment, rather than depressive symptomatology.

## THE CURRENT STUDY

The literature has suggested that individuals may not engage in ERS and NFS because of symptoms of depression per se, but rather due to non-secure attachment representations reflecting a general mistrust of relationships. Although the literature has started to suggest that ERS may serve more as a function of anxious attachment (Davila, 2001; Evraire & Dozois, 2014; Shaver et al., 2005), research has not yet examined whether non-secure attachment may also promote NFS independently of depressive symptoms. Another important gap in the literature concerns the exploration of these feedback-seeking behaviors in the context of a coping response to an activated IWM. Ainsworth, Blehar, Waters, and Wall (1978) proposed that attachment-related representations are most likely to impact an individual's behavior in the context of attachment-related stress. Study 1 and 2 therefore examined how individual attachment styles and symptoms of depression were associated with ERS and NFS. The extent to which individuals sought reassurance or negative feedback across both relational (romantic and nonromantic) and achievement (academic) stressors was also examined to determine the extent to which these behaviors were domain specific.

The following hypotheses were addressed in both studies. Attachment anxiety was predicted to be positively associated with ERS (Hypothesis 1), since an anxious IWM may promote a fear of abandonment and a reliance on social reassurance in order to maintain positive self-perceptions (Davila, 2001). Attachment avoidance was expected to be negatively associated with ERS (Hypothesis 2), because avoidantly-attached individuals may devalue interpersonal relationships and be averse to seeking positive, reassuring feedback from close others (Brennan & Bosson, 1998). With respect to domain specificity, individuals presented with an interpersonal scenario were predicted to report higher levels of ERS compared to individuals presented with an achievement scenario (Hypothesis 3). More specifically, individuals with an anxious attachment style were expected to experience activation of their IWMs following an interpersonal priming condition and to report increases in ERS as a means of coping with the distress induced by the prime (Hypothesis 4).

Attachment anxiety was also expected to be positively associated with NFS following each prime (Hypothesis 5), since the negative

self-perceptions characteristic of anxious IWMs may also promote seeking self-confirmatory, negative feedback from others (Swann, 1983). Attachment avoidance was also expected to relate positively to NFS after each prime (Hypothesis 6), given that negative feedback from others can ‘confirm’ the negative self-views of avoidantly-attached individuals and is in line with their strategy of maintaining interpersonal distance (Bowlby, 1980).

## STUDY 1—METHOD

### PARTICIPANTS

Participants were first-year psychology undergraduates ( $n = 303$ )<sup>1</sup> recruited through the web-based research participation pool. The age of the participants ranged from 17 to 48 ( $M = 18.73$ ;  $SD = 0.81$ ) years. There were 244 females and 59 males. Reported race was 66.0% Caucasian, 21.5% Asian, 2% African Canadian, 0.7% First Nations or Native Canadian, 0.7% Hispanic, and 9.1% other, consistent with the underlying demographics of the University.

### MEASURES

*Beck Depression Inventory, Second Edition (BDI-II)*. The BDI-II (Beck, Steer, & Brown, 1996) is a 21-item questionnaire that assesses the presence and severity of unipolar depressive symptomatology. Each item is rated on a 4-point scale from 0 (indicating a lack of depressive symptomatology) to 3 (indicating high depressive symptomatology) with summary total scores ranging from 0 to 63. Considerable psychometric evidence supports the concurrent and discriminant validity of this questionnaire as a measure of depression in both clinical and undergraduate samples (Beck et al., 1996; Dozois, Dobson, & Ahnberg, 1998).

*Depressive Interpersonal Relationships Inventory—Reassurance Seeking Subscale (DIRI-RS)*. The DIRI-RS (Joiner, Alfano, & Metalsky, 1992) is a 4-item self-report questionnaire designed to measure an individual’s tendency to engage in reassurance seeking (e.g., Do you find yourself often asking the people you feel close to how they truly feel about you?), and his or her partner’s reactions to such

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1. This sample of participants was the same as that reported on in Evraire and Dozois, 2014.



reassurance seeking (e.g., Do the people you feel close to sometimes get fed up with you seeking reassurance from them about whether they really care about you?). Participants answer the questions based on their current relationships on a 7-point scale from 1 (not at all) to 7 (very much); for the purpose of the current study an average score was calculated with scores ranging from 1 to 7. Joiner and Metalsky (2001) supported the construct and criterion validity of the DIRI-RS along with its use as a cohesive and replicable measure of reassurance-seeking distinct from general dependency, doubt in others' sincerity, and dependence on close others. The DIRI-RS demonstrates high internal consistency (Joiner et al., 1992).

*Experiences in Close Relationships—Revised (ECR-R).* The ECR-R (Fraley, Waller, & Brennan, 2000) is a revised version of Brennan, Clark, and Shaver's (1998) Experiences in Close Relationships (ECR) questionnaire. This 36-item questionnaire is designed to assess individual differences with respect to attachment-anxiety (the extent to which people are insecure about their partner's availability and responsiveness) and attachment-related avoidance (the extent to which individuals are uncomfortable being close to others). Participants rate each item on a 7-point scale from 1 (disagree strongly) to 7 (agree strongly) based on how they generally experience their close relationships (friends, parents, partner), not just on what is happening in their current relationships; for the current study an average score was calculated for both anxious and avoidant attachment. The internal consistency reliability of the ECR-R is excellent (e.g.,  $\alpha \geq .90$ ).

*Positive Affect and Negative Affect Schedule (PANAS).* The PANAS (Watson, Clark, & Tellegen, 1998) is a 20-item questionnaire that assesses 10 negative and 10 positive emotions; respondents rate the degree to which their emotional experience is consistent with a given adjective on a 5-point scale from 1 (very slightly or not at all) to 5 (extremely). Initial studies in the development of the PANAS have shown that the mood scales are stable over a 2-month time period, internally consistent, and largely uncorrelated (Crawford & Henry, 2004; Watson et al., 1998).

*Imagery Scripts (Allen, Horne, & Trinder, 1996).* Participants were presented with one of three primes: interpersonal friend, interpersonal partner, or academic achievement. Allen et al. (1996) examined

the affective responses elicited by these scripts and found that both the achievement and interpersonal stressors induced a significant degree of dysphoria in participants compared to neutral scripts. These researchers also found no differences in affective responses across the various stressful scripts. Participants who were presented with a stressful script rated themselves as sadder, more aroused, and less in control, indicating a distressed response to the scripts.

## PROCEDURE

Participants were self-selected for the study through a university web-based research participation pool and were run in groups of up to ten students. Participants completed a demographics form along with a package of questionnaires. Each package included the aforementioned questionnaires, along with questionnaires not reported on in this article, and one of 3 primes (Allen et al., 1996): an interpersonal partner prime, interpersonal friend prime, or an achievement academic prime. In each package, the questionnaires preceded the prime in randomized order (with the exception of the PANAS which always directly preceded and followed the prime). After completing the first set of questionnaires, participants were instructed to read the prime carefully and to spend 30 seconds imagining that they were experiencing the situation they had just read about. Directly following the prime, participants again completed the PANAS followed by the DIRI-RS. Participants were compensated with course credit for their participation in the study.

## RESULTS

### DESCRIPTIVE STATISTICS

Descriptive statistics for the variables of interest are summarized in Table 1 and correlations among variables in Table 2. Participants assigned to the interpersonal partner, interpersonal friend, and academic achievement primes did not differ from one another on demographics or variables of interest.

TABLE 1. Mean and Standard Deviations for Key Variables in Study 1 by Gender

Variable	<i>M</i>		<i>SD</i>		<i>t</i>
	Male	Female	Male	Female	
ERS Pre-Prime	2.68	2.51	1.38	1.21	.98
ERS Post-Prime	3.20	3.14	1.58	1.44	.28
Depression	8.91	10.17	8.57	7.07	-1.17
Anxious Attachment	3.25	3.18	1.08	1.05	.48
Avoidant Attachment	3.32	3.34	1.04	1.05	-.10

Note. ERS = Excessive reassurance seeking

## MOOD MANIPULATION CHECK

Two  $3 \times 2$  mixed model ANOVAs, along with the appropriate follow-up tests, were conducted to examine how positive and negative mood fluctuated as a function of mood prime. Following each prime, individuals reported a decrease in positive mood and an increase in negative mood ( $ps < .001$ ). However, individuals who read the interpersonal friend prime reported significantly greater positive mood following the prime than did individuals in the interpersonal partner or academic achievement primes ( $ps < .05$ ). Individuals who read the academic achievement prime reported significantly greater negative mood following the prime than did individuals in the interpersonal partner or friend primes ( $ps < .05$ ). Given these differences in post-prime mood, correlation coefficients between change in positive mood (from pre to post prime) and ERS post-prime, and change in negative mood and ERS post-prime were assessed. Neither correlation was significant; as such, change in mood was not controlled for in subsequent analyses.

## ERS FOLLOWING INTERPERSONAL VERSUS ACHIEVEMENT PRIMES

An ANOVA evaluating the extent to which levels of ERS differed across the three primes (interpersonal partner, interpersonal friend, and academic achievement) was significant,  $F(2, 299) = 14.81, p < .001$ . Follow-up tests, using the Bonferroni method, were conducted to evaluate pairwise differences among means. Individuals who read the interpersonal partner prime ( $M = 3.38, SD = 1.44$ ) reported significantly higher levels of ERS than did individuals presented

**TABLE 2. Study 1 Correlation Coefficients Among ERS, Depression, and Attachment Styles**

	1	2	3	4	5
1. ERS Pre-Prime	—				
2. ERS Post-Prime	.47**	—			
3. Depression	.30**	.22**	—		
4. Anxious Attachment	.46**	.39**	.52**	—	
5. Anxious Attachment	-.07	-.02	.32**	.28**	—

Note. \* Correlation is significant at the .05 level (2-tailed); \*\* Correlation is significant at the .01 level (2-tailed); ERS = Excessive reassurance seeking

with the academic achievement prime ( $M = 2.54$ ,  $SD = 1.36$ ;  $p < .001$ ). Similarly, individuals who read the friend prime ( $M = 3.53$ ,  $SD = 1.41$ ), reported significantly greater levels of ERS than those who read the academic achievement prime ( $M = 2.54$ ,  $SD = 1.36$ ;  $p < .001$ ).

#### THE CONTRIBUTION OF ATTACHMENT STYLES AND DEPRESSION TO ERS POST-PRIME

A set of hierarchical multiple regression analyses was conducted to assess whether attachment styles predicted ERS following each of the three primes, beyond the effects of depression. The first hierarchical multiple regression analysis was for the interpersonal partner prime. In the first step individuals who had higher levels of depressive symptoms reported engaging in higher levels of ERS ( $\beta = .33$ ,  $p < .01$ ),  $R^2 = .11$ ,  $F(1, 97) = 11.79$ ,  $p < .01$ . In the second step attachment anxiety ( $\beta = .61$ ,  $p < .001$ ) and attachment avoidance ( $\beta = -.18$ ,  $p < .05$ ) added significantly to the prediction of ERS over and above the effects of time 1 depression,  $R^2$  change = .26  $F(3, 95) = 18.29$ ,  $p < .001$ . Individuals who endorsed an anxious attachment style reported higher levels of ERS following the interpersonal partner prime whereas individuals who endorsed an avoidant attachment style were less likely to seek ERS. Depression no longer predicted ERS following the interpersonal partner prime after controlling for the other predictors in the regression model ( $\beta = .05$ , *ns*).

The second hierarchical multiple regression analysis was for the interpersonal friend prime. Time 1 depression did not account for a significant amount of ERS variability ( $\beta = .14$ , *ns*),  $R^2 = .02$ ,  $F(1, 100) = 1.89$ , *ns*. Furthermore, attachment anxiety ( $\beta = .11$ , *ns*) and attach-

ment avoidance ( $\beta = -.18, ns$ ) did not predict ERS over and above the effects of time 1 depression,  $R^2$  change = .04,  $F(3, 98) = 1.94, ns$ .

The third hierarchical multiple regression analysis was for the academic achievement prime. Time 1 depression did not account for a significant amount of ERS variability ( $\beta = .10, ns$ ),  $R^2 = .01, F(1, 97) = 1.04, ns$ . In the second step attachment anxiety ( $\beta = .32, p < .01$ ) but not attachment avoidance ( $\beta = -.09, ns$ ) predicted ERS over and above the effects of time 1 depression,  $R^2$  change = .09,  $F(3, 95) = 3.55, p < .05$ . Individuals who endorsed an anxious attachment style reported higher levels of ERS following the academic achievement prime.

## STUDY 2—METHOD

### PARTICIPANTS

Participants were first-year psychology undergraduates ( $n = 201$ ). Participants' ages ranged from 16 to 44 years ( $M = 18.62; SD = 2.98$ ). There were 163 females and 38 males. Reported race was 48.8% Caucasian, 32.8% Asian, 3.5% African Canadian, 0.5% First Nations or Native Canadian, 1.0% Hispanic, 0.5% Native Hawaiian or other Pacific Islander, and 12.9% other.

### MEASURES

Participants completed the self-report questionnaires and primes described in Study 1<sup>2</sup> (ECR-R, DIRI-RS, BDI-II and interpersonal partner and academic achievement imagery scripts) along with a measure to assess NFS.

*Feedback-Seeking Questionnaire (FSQ)*. The FSQ (Swann, Wenzlaff, Krull, & Pelham, 1992) is a list of 30 feedback questions [e.g., what is some evidence you have seen that (name) has good social skills?]. Participants are asked to imagine that a close other is going to answer the questions about them and must choose the five questions

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2. The interpersonal friend prime was not utilized in Study 2 because in Study 1 this prime did not result in a decrease in negative mood to the same extent as the interpersonal partner and academic achievement primes.

that they want answered. In the original FSQ, there are six questions for each of five domains: social, intellectual, artistic/musical, physical appearance, and sports. For each domain, three of the six questions are worded positively [e.g., "what is some evidence you have seen that (name) has good social skills?"] and three are worded negatively [e.g., "what academic subjects would you expect to prove difficult for (name)?"]. To compliment the stressful written primes, a modified version of the FSQ was given in the current study which used only the social and intellectual domains and resulted in a total of 12 questions per stressful written prime. The social domain of FSQ questions was adapted for the current study to suit romantic relationships in order to compliment the content of the relationship break-up prime. For example, the item "In terms of social competence, what is the best asset of [name]" was revised to "In terms of competence within romantic relationships, what is the best asset of [name]." Each choice of a negatively worded question was coded as 1, and each positively worded question was coded as 0. Responses were then summed so that high scores indicated a stronger preference for negative feedback and possible summary scores ranged from 0 (Low NFS) to 5 (High NFS).

## PROCEDURE

Participants were run in groups of up to ten and completed a demographics form and a package of questionnaires administered in random order. Each participant was given both the interpersonal partner prime and the achievement academic prime in counterbalanced order. Participants completed the FSQ immediately following each prime. Stressful primes were utilized in the current study prior to the FSQ because the need to engage in NFS may be particularly strong under conditions of stress (Joiner, 1995; Pettit & Joiner, 2001a, 2001b), and NFS has not yet been examined in the context of stressful written primes. Participants were compensated with course credit for their participation.

TABLE 3. Means and Standard Deviations for Key Variables in Study 2 by Gender

Variable	M		SD		<i>t</i>
	Male	Female	Male	Female	
ERS	2.89	3.06	1.32	1.47	-.64
Depression	12.13	11.64	7.14	7.44	.37
Anxious Attachment	3.76	3.59	0.98	1.02	.95
Avoidant Attachment	3.76	3.52	0.91	1.01	1.36
NFS Interpersonal Prime	2.22	1.74	1.21	1.36	1.84
NFS Achievement Prime	2.22	1.99	1.01	1.38	.90

Note. ERS = Excessive reassurance seeking; NFS = Negative feedback seeking

## RESULTS

### DESCRIPTIVE STATISTICS

Descriptive statistics for the variables of interest are summarized in Table 3. There were no significant differences between men and women. Correlations among variables are displayed in Table 4.

### ATTACHMENT STYLE AND ERS

A hierarchical multiple regression analysis was conducted to assess whether attachment styles predicted ERS above and beyond the effects of depression.<sup>3</sup>

For the first step, individuals who endorsed greater symptoms of depression reported engaging in higher levels of ERS ( $\beta = .29, p < .001$ ),  $R^2 = .09, F(1, 196) = 18.22, p < .001$ . Attachment anxiety ( $\beta = .41, p < .001$ ) and attachment avoidance ( $\beta = -.15, p < .05$ ) were entered into the second step and added significantly to the prediction of ERS after controlling for the effects of symptoms of depression,  $R^2$  change = .12,  $F(3, 194) = 17.11, p < .001$ . Specifically, individuals higher on anxious attachment reported higher levels of ERS whereas individuals higher on avoidant attachment reported lower levels of ERS. After controlling for the effects of all other predictors in the model, depressive symptoms no longer predicted ERS ( $\beta = .13, ns$ ).

3. These analyses were conducted in order to replicate the findings of Evraire and Dozois (2014).

TABLE 4. Study 2 Correlation Coefficients Among Variables of Interest

	1	2	3	4	5	6
1. Depression	-					
2. Anxious Attachment	.52***	-				
3. Avoidant Attachment	.29***	.31***	-			
4. ERS	.31***	.45***	.04	-		
5. NFS Interpersonal Prime	.16*	.20**	.22**	-.02	-	
6. NFS Achievement Prime	.09	.05	.25**	.03	.23**	-

Note: ERS = Excessive reassurance seeking; NFS = Negative feedback seeking. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

### NFS FOLLOWING INTERPERSONAL VERSUS ACHIEVEMENT PRIMES

The 22 participants who did not follow instructions and did not select exactly five feedback options from the FSQ were excluded from NFS analyses. A paired-samples t-test found no significant difference in overall levels of NFS following the interpersonal ( $M = 1.83$ ,  $SD = 1.34$ ) or achievement ( $M = 2.03$ ,  $SD = 1.32$ ) prime,  $t(178) = -1.63$ , *ns*.

### THE CONTRIBUTION OF ATTACHMENT STYLES AND DEPRESSION TO NFS POST-PRIME

A hierarchical multiple regression analysis was conducted to assess whether attachment styles predicted NFS following the interpersonal partner prime beyond the effects of depression. For the first step, higher scores on symptoms of depression were associated with greater levels of NFS ( $\beta = .16$ ,  $p < .05$ ),  $R^2 = .03$ ,  $F(1, 174) = 4.41$ ,  $p < .05$ . Anxious attachment ( $\beta = .11$ , *ns*) and avoidant attachment ( $\beta = .18$ ,  $p < .05$ ) were entered into the second step and accounted for a significant proportion of variability in NFS after controlling for the effects of symptoms of depression,  $R^2$  change = .04,  $F(3, 172) = 4.22$ ,  $p < .01$ . Specifically, higher avoidant attachment was associated with greater levels of NFS following the interpersonal prime. After controlling for the effects of all other predictors in the model, symptoms of depression no longer predicted NFS ( $\beta = .05$ , *ns*).

The second hierarchical multiple regression analysis was for the achievement prime. For the first step, symptoms of depression did



not account for a significant amount of NFS variance ( $\beta = .09$ , *ns*),  $R^2 = .01$ ,  $F(1, 174) = 1.34$ , *ns*. Anxious attachment ( $\beta = -.05$ , *ns*) and avoidant attachment ( $\beta = .25$ ,  $p < .01$ ) accounted for a significant proportion of variability in NFS after controlling for the effects of depressive symptoms,  $R^2$  change = .06,  $F(3, 172) = 3.93$ ,  $p < .05$ . Specifically, higher avoidant attachment was related to greater levels of NFS following the achievement prime.

## DISCUSSION

The current study sought to gain a comprehensive understanding of the relationships among anxious and avoidant attachment styles, maladaptive feedback-seeking patterns, and symptoms of depression. As discussed below, anxious and avoidant attachment styles were related to ERS above the effects of depression. Furthermore, individuals tended to engage in greater levels of ERS following an interpersonal versus achievement prime. Controlling for symptoms of depression, anxious attachment was also associated with greater levels of ERS following the interpersonal partner and academic achievement prime whereas avoidant attachment was related to lower levels of ERS following the interpersonal partner prime. With regard to NFS, individuals engaged in similar levels of NFS across the interpersonal and achievement primes and only avoidant attachment added to the prediction of NFS above the effects of symptoms of depression. These results support the idea that individuals may engage in ERS and/or NFS as a function of their activated non-secure attachment representations, rather than symptoms of depression per se.

The first hypothesis, that individuals high in attachment anxiety would report higher levels of ERS, was strongly supported. An anxious attachment style is characterized by fears of abandonment, low self-esteem, and extreme dependency (Bowlby, 1969, 1980). The current results support the idea that, as a result of these core beliefs, anxiously-attached individuals rely on feedback from close others to establish a sense of relationship security and self-worth. However, due to early experiences of inconsistently responsive parenting, anxiously-attached individuals learn to distrust others' reassurances and thus continue to engage in ERS (Ainsworth et al., 1978; Bowlby, 1969, 1980). These results also replicate previous findings that anxious attachment is positively related to ERS over and above

the effects of depressive symptoms (Davila, 2001; Evraire & Dozois, 2014; Shaver et al., 2005).

The second hypothesis, that avoidant attachment would negatively predict ERS controlling for symptoms of depression, was also supported. Since avoidantly-attached individuals defensively exclude relationship-related information from cognitive processing, (Bowlby, 1980; Moran et al., 2008) and are averse to relationship-related feedback from close others (Brennan & Bosson, 1998), it follows that they would refrain from engaging in ERS. However, it should be noted that the correlation between avoidant attachment and ERS was not significant. This finding is consistent with the fact that the association between avoidant attachment and ERS is mixed in the literature. For example, Shaver et al. (2005) found avoidant attachment to be unrelated to ERS, whereas Davila (2001) found a significant negative correlation between avoidant attachment and ERS. Additional studies are needed to further clarify the nature of the relationships between avoidant attachment, depression, and ERS.

After identifying its relationship with attachment styles, ERS was examined in the context of a coping response to an activated IWM. Ainsworth et al. (1978) proposed that attachment-related representations are particularly salient and influential on behavior in the context of attachment-related stress. Accordingly, the fourth hypothesis predicted that individuals would seek higher levels of ERS following the interpersonal partner and friend primes, compared to the academic achievement prime, since ERS is a behavior that reflects insecurity in relationships. In partial support of the hypothesis, attachment anxiety was associated with higher levels of ERS, and avoidant attachment with lower levels of ERS, following the interpersonal partner prime but not the interpersonal friend prime. One possible explanation for this finding is that attachment styles are more strongly linked with motives, feelings, and behavior in romantic than in platonic relationships (Shaver et al., 2005). As such, the interpersonal partner prime, which centered on the theme of rejection, may have activated an anxious attachment style, which led to higher reports of ERS, since individuals with an anxious attachment style use hyperactivating strategies to deal with their distress (Moran et al., 2008). However activation of an avoidant attachment style was associated with lower reported levels of ERS given that individuals high in avoidance tend to withdraw from relationships when distressed (Moran et al., 2008). Another potential explanation

concerns the fact that individuals who read the interpersonal friend prime experienced less of a decrease in their mood following the prime than those who read the interpersonal partner or academic achievement prime. Thus, it may be that the content of the friend prime was insufficient to activate IWMs of attachment.

In contrast to our hypothesis, anxious attachment was also associated with higher levels of ERS following the academic achievement prime. One potential explanation for this result could be the fact that anxiously-attached individuals may have focused on the social implications of the achievement-related event (Frewen & Dozois, 2006); for example, they may have viewed an exam failure as a disappointment to their partner/parents or as a threat to their social standing. Empirical studies have supported this idea. Hazan and Shaver (1990), for instance, found that anxiously-attached individuals reported focusing on perceptions of a lack of approval and recognition from coworkers at work and that love concerns interfered with work performance. Thus, anxiously-attached individuals may focus on the social implications of achievement-related events which, combined with their need for social approval, may cause them to also seek ERS following negative achievement-related events.

The fifth hypothesis predicted that anxious attachment would be positively associated with NFS, over and above the effects of depressive symptoms. Anxious attachment was not associated with NFS following either the social or the achievement prime. These findings contradict theoretical suggestions that anxiously-attached individuals fail to establish a positive sense of self-worth through early interactions with caregivers (Bowlby, 1969, 1980) and would thus be motivated to seek negative feedback from others to secure a sense of accuracy in their negative self-views (Swann, 1983). These results are also inconsistent with empirical findings that anxiously-attached individuals seek more negative feedback from others than do securely-attached individuals (Brennan & Bosson, 1998; Hepper & Carnelley, 2010). However, these findings are consistent with attachment theory, which highlights the chronic need for anxiously-attached individuals to experience a sense of security in their relationships and to reduce fears of abandonment (Bowlby, 1969, 1980; Moran et al., 2008). Since engaging in NFS and receiving negative feedback from close others may heighten fears of abandonment, the current results suggest that anxiously-attached individuals' need for reassurance (i.e., a sense of security) in relationships may be

strong enough to override their need to confirm negative self-perceptions through NFS. Future research should explore these suggestions empirically and further examine ERS and NFS within the context of anxious attachment.

In support of the sixth hypothesis, avoidant attachment positively predicted NFS over and above the effects of symptoms of depression following both the social and achievement prime. These results are consistent with previous findings that avoidantly-attached individuals select negative over positive hypothetical feedback from friends across interpersonal and achievement domains (Hepper & Carnelley, 2010) and report receiving more negative feedback from romantic partners (Brennan & Bosson, 1998). The current results suggest that avoidantly-attached individuals may engage in NFS to maintain interpersonal distance, confirm negative self-views (Swann, 1983) and sustain unfavorable beliefs of relationships (Moran et al., 2008) following both social- and achievement-related stressful events. Because avoidant attachment predicted NFS beyond the effects of depressive symptoms, the current results also provide the first evidence to support the notion that, in addition to ERS, NFS may also be a function of non-secure attachment (specifically avoidant attachment) rather than depressive symptomatology.

Although the current study contributes to the ERS/NFS literature in important ways, a number of limitations should be considered. One potential limitation pertains to the use of the ECR-R as a measure of attachment. A criticism in the attachment literature is that attachment anxiety and avoidance as assessed by this measure tend to be significantly and positively intercorrelated (Sibley, Fischer, & Liu, 2005). This positive correlation is inconsistent with attachment theory, which depicts attachment anxiety and avoidance as mutually exclusive relationship styles. However, a principal components analysis conducted by Sibley et al. (2005) revealed that the ECR-R's measures of attachment anxiety and attachment avoidance do seem to account for unique variance despite being correlated. Another possible limitation of the current study is that self-report measures of ERS and depression were utilized. Starr and Davila (2008) found that self-report measures inflated the relationship between ERS and depression. These researchers also found that nonclinically depressed samples (like the current samples) yielded a marginally higher association between depression and ERS than studies with clinical patients. This finding suggests that the relationships between ERS and depression may change as individuals become more

depressed and highlights the need to replicate the current study using non-self-report measures in a sample of individuals with clinical depression.

Another possible limitation concerns the use of stressful written primes to trigger attachment styles and subsequent feedback seeking patterns. Reported feedback seeking patterns may differ depending on whether or not they were reported following imaginary situations or actual experiences. For example, Hepper and Carnelley (2010) found that individuals higher on avoidant attachment sought more positive feedback about autonomy when asked to imagine receiving feedback from a friend, but not following actual participation in dyadic tasks. Future studies should consider utilizing daily diary methodology wherein participants can report feedback seeking immediately after experiencing an actual life event. The cross-sectional nature of the current study should also be taken into account. Since all variables were measured at a single time point, cause and effect relations could not be corroborated. If attachment was measured when participants were younger, and feedback seeking was measured at the current time point, the idea that non-secure attachment can cause certain maladaptive feedback seeking behaviors may have been supported. As such, future studies should consider replicating the current experiment using a longitudinal design.

The findings of the current study also carry implications for theoretical models that address ERS and NFS. For example, Coyne's (1976) interpersonal theory of depression suggests that individuals with depression engage in ERS as a result of feelings of guilt and low self-worth. The current findings suggest that Coyne's model may need to be refined to incorporate anxious attachment. Other ERS/NFS models address why individuals with depression might engage in both ERS and NFS (Evraire & Dozois, 2011; Joiner, Alfano, & Metalsky, 1993; Neff & Karney, 2002; Swann, 1990; Swann & Schroeder, 1995). Evraire and Dozois (2011) suggest that it is a combination of depression and attachment styles that may lead individuals to engage in both ERS and NFS. These researchers suggest that individuals engage in ERS because of anxious attachment in order to reduce fears of abandonment and because of symptoms of depression in order to relieve negative global self-views. Individuals may engage in NFS to confirm negative specific self-views. The current results are consistent with and contribute to this argument, suggesting that avoidant attachment might also foster a need

to engage in NFS. In the current study, ERS was not significantly correlated with NFS. However, the current sample did not report significantly high levels of symptoms of depression, and ERS and NFS tend to occur concurrently only under such circumstances. This study offers some insight into how ERS and NFS might interact but empirical research using a sample with different levels of depression is necessary in order to examine this idea of how ERS and NFS might occur within the same individuals.

## CONCLUSION

ERS and NFS have been linked to interpersonal rejection and an exacerbation of depressive symptomology (Starr & Davila, 2008). Although traditionally thought to arise from the depressive symptoms of guilt and low self-worth (Coyne, 1976), the current results found that non-secure attachment predicts ERS and NFS beyond symptoms of depression. Specifically, ERS might arise as a function of anxious attachment, whereas NFS might arise as a function of avoidant attachment.

## REFERENCES

- Abela, J.R.Z., Hankin, B. L., Haigh, E.A.P., Adams, P., Vinokuroff, T., & Trayhem, L. (2005). Interpersonal vulnerability to depression in high-risk children: The role of insecure attachment and reassurance seeking. *Journal of Clinical Child & Adolescent Psychology, 34*, 182–192.
- Ainsworth, M.D.S., Blehar, M. C., Waters, E., & Wall, S. (1978). *Patterns of attachment: A psychological study of the strange situation*. Hillsdale, NJ: Erlbaum.
- Allen, N. B., Horne, D. J., & Trinder, J. (1996). Sociotropy, autonomy, and dysphoric emotional responses to specific classes of stress: A psychophysiological evaluation. *Journal of Abnormal Psychology, 105*, 25–33.
- American Psychiatric Association (2000). *Diagnostic and statistic manual of mental disorders* (4th ed.–text rev.). Washington, DC: Author.
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Beck Depression Inventory manual* (2nd ed.). San Antonio, TX: The Psychological Corporation.
- Bowlby, J. (1980). *Attachment and loss: Loss sadness and depression*. New York: Basic Books.
- Bowlby, J. (1982). *Attachment and loss: Vol. 1. Attachment* (2nd ed.). New York: Basic Books. (1st ed., 1969).
- Brennan, K. A., & Bosson, J. K. (1998). Attachment-style differences in attitudes toward and reactions to feedback from romantic partners: An exploration of the relational bases of self-esteem. *Personality and Social Psychology Bulletin, 24*, 699–714.

- Brennan, K. A., Clark, C. L., & Shaver, P. (1998). Self-report measures of adult romantic attachment. In J. A. Simpson & W. S. Rholes (Eds.), *Attachment theory and close relationships* (pp. 46–76). New York: Guilford.
- Bretherton, I., & Munholland, K. A. (2008). Internal working models in attachment relationships: Elaborating a central construct in attachment theory. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research, and clinical applications* (pp. 102–127). New York: Guilford.
- Coyne, J. C. (1976). Toward an interactional description of depression. *Psychiatry*, *39*, 28–40.
- Crawford, J. R., & Henry, J. D. (2004). The Positive and Negative Affect Schedule (PANAS): Construct validity, measurement properties and normative data in a large, non-clinical sample. *British Journal of Clinical Psychology*, *43*, 245–265.
- Davila, J. (2001). Refining the association between excessive reassurance seeking and depressive symptoms: The role of related interpersonal constructs. *Journal of Social and Clinical Psychology*, *20*, 538–559.
- Dozois, D.J.A., & Beck, A. T. (2008). Cognitive schemas, beliefs and assumptions. In K. S. Dobson & D.J.A. Dozois (Eds.), *Risk factors in depression* (pp. 121–143). San Diego, CA: Elsevier/Academic.
- Dozois, D.J.A., Dobson, K. S., & Ahnberg, J. L. (1998). A psychometric evaluation of the Beck Depression Inventory-II. *Psychological Assessment: A Journal of Consulting and Clinical Psychology*, *10*, 83–89.
- Eberhart, N. K., & Hammen, C. L. (2009). Interpersonal predictor of stress generation. *Personality and Social Psychology Bulletin*, *35*, 544–556.
- Evraire, L. E., & Dozois, D.J.A. (2011). An integrative model of excessive reassurance seeking and negative feedback seeking in the development and maintenance of depression. *Clinical Psychology Review*, *31*, 1291–1303.
- Evraire, L. E., & Dozois, D.J.A. (2014). If it be love indeed tell me how much: Early core beliefs associated with excessive reassurance seeking in depression. *Canadian Journal of Behavioural Science*, *46*, 1–8.
- Feeney, J. (2008). Adult attachment: Developments in the study of couple relationships. In J. Cassidy & P. R. Shaver (Eds.), *Handbook of attachment: Theory, research and clinical applications* (pp. 456–481). New York: Guilford.
- Fraley, R. C., Waller, N. G., & Brennan, K. A. (2000). An item-response theory analysis of self-report measures of adult attachment. *Journal of Personality and Social Psychology*, *78*, 350–365.
- Frewen, P. A., & Dozois, D.J.A. (2006). Self-worth appraisal of life events and Beck's congruency model of depression vulnerability. *Journal of Cognitive Psychotherapy*, *20*, 231–240.
- Gotlib, I. H., & Lee, C. M. (1989). The social functioning of depressed patients: A longitudinal assessment. *Journal of Social and Clinical Psychology*, *8*, 223–237.
- Hazan, C., & Shaver, P. R. (1990). Love and work: An attachment-theoretical perspective. *Journal of Personality and Social Psychology*, *59*, 270–280.
- Hepper, E. G., & Carnelley, K. B. (2010). Adult attachment and feedback-seeking patterns in relationships and work. *European Journal of Social Psychology*, *40*, 448–464.
- Joiner, T. E., Jr. (1995). The price of soliciting and receiving negative feedback: Self-verification theory as a vulnerability to depression theory. *Journal of Abnormal Psychology*, *104*, 364–372.

- Joiner, T. E., Jr., Alfano, M. S., & Metalsky, G. I. (1992). When depression breeds contempt: Reassurance seeking, self-esteem, and rejection of depressed college students by their roommates. *Journal of Abnormal Psychology, 101*, 165–173.
- Joiner, T. E., Jr., Alfano, M. S., & Metalsky, G. I. (1993). Caught in the crossfire: Depression, self-consistency, self-enhancement, and the response of others. *Journal of Social and Clinical Psychology, 12*, 113–134.
- Joiner, T. E. Jr., & Metalsky, G. I. (1995). A prospective test of an integrative interpersonal theory of depression: A naturalistic study of college roommates. *Journal of Personality and Social Psychology, 69*, 778–788.
- Joiner, T. E., Jr., & Metalsky, G. I. (2001). Excessive reassurance seeking: Delineating a risk factor involved in the development of depressive symptoms. *Psychological Science, 12*, 371–378.
- Joiner, T. E., Jr., Metalsky, G. I., Katz, J., & Beach, S.R.H. (1999). Depression and excessive reassurance seeking. *Psychological Inquiry, 10*, 269–278.
- Joiner, T. E., Jr., & Schmidt, N. B. (1998). Excessive reassurance-seeking predicts depression but not anxious reactions to acute stress. *Journal of Abnormal Psychology, 107*, 533–537.
- Katz, J., Petracca, M., & Rabinowitz, J. (2009). A retrospective study of daughters' emotional role reversal with parents, attachment anxiety, excessive reassurance-seeking and depressive symptoms. *The American Journal of Family Therapy, 37*, 185–195.
- Moran, G., Bailey, H. N., & DeOliveira, C. A. (2008). The roots of depression in early attachment experiences. In K. S. Dobson & D.J.A. Dozois (Eds.), *Risk factors in depression* (pp. 289–316). Oxford, England: Elsevier/Academic Press.
- Neff, L. A., & Karney, B. R. (2002). Self-evaluation motives in close relationships: A model of global enhancement and specific verification. In P. Noller & J. A. Feeney (Eds.), *Understanding marriage: Developments in the study of couple interaction* (pp. 32–58). London: Cambridge University Press.
- Pettit, J. W., & Joiner, T. E., Jr. (2001a). Negative life events predict negative feedback seeking as a function of impact on self-esteem. *Cognitive Therapy and Research, 25*, 733–741.
- Pettit, J. W., & Joiner, T. E., Jr. (2001b). Negative feedback-seeking leads to depressive symptom increase under conditions of stress. *Journal of Psychopathology and Behavioral Assessment, 23*, 69–74.
- Potthoff, J. G., Holahan, C. J., & Joiner, T. E. (1995). Reassurance seeking, stress generation, and depressive symptoms: An integrative model. *Journal of Personality and Social Psychology, 68*, 664–670.
- Shaver, P. R., Schachner, D. A., & Mikulincer, M. (2005). Attachment style, excessive reassurance seeking, relationship processes, and depression. *Personality and Social Psychology Bulletin, 31*, 343–359.
- Sibley, C. G., Fischer, R., & Liu, J. H. (2005). Reliability and validity of the revised experiences in close relationships (ECR-R) self-report measure of adult attachment. *Personality and Social Psychology Bulletin, 31*, 1524–1536.
- Starr, L. R., & Davila, J. (2008). Excessive reassurance seeking, depression, and interpersonal rejection: A meta-analytic review. *Journal of Abnormal Psychology, 117*, 762–775.
- Swann, W. B. (1983). Self-verification: Bringing social reality into harmony with the self. In J. Suls & A. G. Greenwald (Eds.), *Social psychological perspectives on the self* (Vol. 2, pp. 33–66). Hillsdale, NJ: Erlbaum.



- Swann, W. B. (1990). To be adored or to be known: The interplay of self-enhancement and self-verification. In R. M. Sorretino & E. T. Higgins (Eds.), *Handbook of motivation and cognition* (Vol. 2, pp. 408–480). New York: Guilford.
- Swann, W. B., Griffin, J. J., Predmore, S. C., & Gaines, B. (1987). The cognitive-affective crossfire: When self-consistency confronts self-enhancement. *Journal of Personality and Social Psychology, 52*, 881–889.
- Swann, W. B., & Schroeder, D. G. (1995). The search for beauty and truth: A framework for understanding reactions to evaluations. *Personality and Social Psychology Bulletin, 21*, 1307–1318.
- Swann, W. B., Jr., Wenzlaff, R. M., Krull, D. S., & Pelham, B. W. (1992). Allure of negative feedback: Self-verification strivings among depressed persons. *Journal of Abnormal Psychology, 101*, 293–306.
- Swann, W. B., Jr., Wenzlaff, R. M., & Tafari, R. W. (1992). Depression and the search for negative evaluation: More evidence of the role of self-verification strivings. *Journal of Abnormal Psychology, 101*, 314–317.
- Timmons, K. A., & Joiner, T. E. (2008). Reassurance seeking and negative feedback seeking. In K. S. Dobson & D.J.A. Dozois (Eds.), *Risk factors in depression* (pp. 289–316). San Diego, CA: Elsevier/Academic.
- Watson D., Clark L. A., & Tellegen A. (1998). Development and validation of brief measures of positive and negative affect: The PANAS scales. *Journal of Personality and Social Psychology, 54*, 1063–1070.

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