Attachment anxiety and friendship group identification under attachment threat:

The moderating role of priming support network expectations
Abstract

We examined the role of priming participants’ own network expectations on their subsequent identification with their friendship group. We examined this prime alongside attachment anxiety and attachment threat, as predictors of friendship group identification. Previous research has suggested that attachment anxiety is associated with negative network expectations. In this study, we extended this work to show that when a network expectation prime was absent, higher attachment anxiety was associated with lower group identification under attachment threat, compared to a control condition. However, when expectations of support network were primed, attachment threat no longer affected group identification, so that only attachment anxiety predicted group identification. This suggests that priming participants who are high in attachment anxiety with their own network expectancies (which are negative), results in participants dis-identifying with their friendship group, regardless of whether or not they have experienced attachment threat.

*Keywords:* attachment anxiety; friendship group; identification; priming; support network expectations
1. Introduction

Group identification (feeling a sense of belonging to a group), has been linked with a number of positive benefits, such as improved mental health (Bizumic, Reynolds, Turner, Bromhead, & Subasic, 2009). Social support is more likely to be offered, received, and used, if those providing and receiving the support share a social identity (for a review see Haslam, Jetten, Postmes, & Haslam, 2009). However, the strength of identification with a group may depend on individual differences in attachment orientation and perceptions of the usefulness of a support network. Previous work has found that individuals higher in attachment anxiety have a tendency to dis-identify (lower their level of identification) from friendship groups when an interpersonal relationship is threatened; that is, at the very time their friendship group might be most beneficial as a source of support (Crisp, Farrow, Rosenthal, Walsh, Blissett, & Penn, 2009). We propose that this effect may occur because individuals high in attachment anxiety have more negative expectations of their support network. In order to explore this mechanism, we propose that for those high in attachment anxiety, priming support network expectations (i.e., making their negative expectations salient) should result in dis-identification (lowered identification) from their friendship group, regardless of whether or not their primary relationship is threatened.

1.1 Attachment

The attachment system is an evolutionary based control system designed to ensure proximity to, and elicit security and safety from, attachment figures (Bowlby, 1969/1982). Individuals can be situated along two continuous dimensions of attachment: anxiety about abandonment and avoidance of intimacy (Brennan, Clark, & Shaver, 1998; Mikulincer & Shaver, 2003). Individuals who have experienced
sensitive, responsive, and appropriate care from their attachment figures tend to be low in both anxiety and avoidance, which characterizes secure attachment. Individuals high in attachment anxiety often have a history of unpredictable and inconsistently responsive caregivers (Cassidy & Berlin, 1994). They are hyper-vigilant to attachment-related threat and hyperactivate the attachment system, becoming preoccupied by the availability of potential caregivers and the likelihood of rejection (Main, 1990). Individuals high in attachment avoidance often have a history of rejecting or over-intrusive caregivers and deactivate their attachment system under threat by downplaying negative affect, avoiding intimacy, and endorsing independence and self-reliance (Mikulincer & Nachshon, 1991; Shaver & Mikulincer, 2002).

A large body of research has explored the impact that attachment orientation can have on intrapersonal and interpersonal processes. For example, securely attached individuals are comfortable with closeness to attachment figures, seek out these figures in times of need, and find thoughts of them comforting (McGowan, 2002; Shaver & Mikulincer, 2004). By contrast, individuals who are high in attachment anxiety report feeling more general anxiety, negativity, and rejection in interpersonal relationships (Kafetsios & Nezlek, 2002; Tidwell, Reis & Shaver, 1996). Furthermore, those high in attachment avoidance may be less involved, seek less support, and disclose less in interpersonal relationships (Mikulincer & Nachshon, 1991; Mikulincer & Orbach, 1995).

While research has tended to focus on the impact of the attachment system on intra- and inter-personal processes, to date there has been relatively less research on the impact that the attachment system can have upon group based behaviors, relationships, and cognitions. Mikulincer and Shaver (2007a) have suggested that
attachment functions can be served by groups (Smith, Murphy, & Coats, 1999) and an individual may transfer their own working models of relationships onto the group. Research has found that individuals high in attachment anxiety relate to groups in a way similar to that expected in a dyadic relationship, by appraising group processes as threatening, and reacting more negatively to out-group members (Mikulincer & Shaver, 2001; Rom & Mikulincer, 2003). Individuals high in attachment avoidance are more surprising in their group relationships, for the most part negatively appraising group members as expected, but under certain circumstances, such as being required to interact with group members, demonstrating behaviors which indicate that their deactivating strategies may collapse under pressure, so that negative emotions can no longer be suppressed (Mikulincer & Shaver, 2007a; Rom & Mikulincer, 2003). Although these strategies have often been seen as less than optimal, developments such as social defense theory suggest that groups may function better precisely because they have members who are heterogeneous (i.e., differ in attachment patterns) serving different functions within the group (Ein-Dor, Mikulincer, Doron, & Shaver, 2010). Despite the valuable insights this work gives us, research on attachment and group processes is scant, and few studies have attempted to look at how intrapersonal attachment orientation may interact with contextual factors to affect how an individual thinks about, identifies with, or acts towards a group (Mikulincer & Shaver, 2007a).

1.2 Attachment and Group Identification

In close relationships, the goals for individuals with higher attachment anxiety are support, comfort, and maintenance of extreme closeness to prevent rejection and uncertainty about reliability (see Hazan & Shaver, 1990). Similar goals can be extrapolated to groups. For example, individuals with higher attachment anxiety are
driven to maintain “an illusion of connectedness” (Shaver & Mikulincer, 2002, p. 143) by exaggerating personal weakness and attempting to elicit compassion from their fellow in-group members. In contrast, when individuals suffer interpersonal distress, those low in attachment anxiety and avoidance (i.e., people with greater attachment security) seek emotional and social support from others (Florian, Mikulincer, & Bucholtz, 1995), while those high in attachment anxiety might fixate on their attachment figure, rather than seek support elsewhere (Crisp et al., 2009).

1.3 Network Expectations

Attachment orientations can be conceptualized as working models, which are cognitive templates of self-views and expectations of interactions with others (e.g., Bowlby, 1973; Bretherton & Munholland, 2008; Collins & Read, 1994; Waters & Waters, 2006). Previous studies have argued that working models of the self and others play an important role in determining expectations (Sarason, Pierce, & Sarason, 1990), and individuals characterized by a secure model (positive models of both self and others) expect positivity from others and can utilize them effectively (e.g., Bartholomew & Horowitz, 1991; Hazan & Shaver, 1987). Negative expectations of network support can be defined as “a set of expectations or beliefs that it is inadvisable, impossible, useless, or potentially dangerous to draw on network resources” (Vaux, Burda, & Stewart, 1986, p. 413). Previous research has found secure individuals to hold more positive network expectations than insecure individuals (Wallace & Vaux, 1993), with both avoidant and ambivalent (also known as anxious) attachment styles associated with negative network expectations (Larose, Bernier, Soucy, & Duchesne, 1999).

1.4 The Current Research
The findings of Wallace and Vaux (1993) and Larose et al. (1999) suggest that expectations of the usefulness of one’s support network may be an important additional aspect to consider when examining the association between attachment anxiety and interpersonal threat as predictors of group identification. Crisp et al. (2009) examined the link between attachment anxiety and group identification under conditions of attachment threat (i.e., separated, ignored, or rejected, see Dewitte, Koster, De Houwer, & Buysse, 2007), and found that under threat (an envisaged argument with partner), individuals higher in attachment anxiety identified less with their friendship group than those lower in attachment anxiety. In the control condition (an envisaged ‘bad day’ with no attachment associations), there was no significant association between attachment anxiety and group identification, and in contrast to the threat condition, there was a non-significant tendency for participants high in attachment anxiety to identify more with their group than participants lower in attachment anxiety. It is possible that the dis-identification effects seen under attachment threat for those higher in attachment anxiety may be because attachment threat reminds individuals of their negative network expectations. In other words, attachment threat may make support network expectations more salient, which in turn affects friendship group identification. Importantly, for those higher in attachment anxiety these network expectations are negative, which should result in lower identification, while for those lower in attachment anxiety, these network expectations are positive, which should result in higher identification.

In order to test this assumption, we first carried out a pilot to further establish the link between attachment anxiety and friendship group identification. The main study examined the effect of network expectation activation prior to receiving an attachment threat / control scenario. It was expected that activating network
expectations would eliminate the previously observed interaction between attachment anxiety and threat in predicting group identification (Crisp et al., 2009). Specifically, previous research has suggested that those higher in attachment anxiety hold more negative expectations about their network than those lower in attachment anxiety. If negative expectations are a mechanism in the link between attachment anxiety under threat and group identification, then activating awareness and salience of those expectations should result in lower friendship group identification for those high in attachment anxiety, regardless of whether or not an attachment threat is present.

While attachment is generally perceived to consist of anxiety and avoidance dimensions, following the example of Crisp et al. (2009), the research we present here focuses on attachment anxiety.

**Pilot**

Although network expectations measured by the Network Orientation Scale (NOS) have previously been examined with regard to attachment anxiety, attachment orientation in these earlier studies was assessed by the three-factor model of attachment (Wallace & Vaux, 1993) and the Attachment Style Questionnaire (Larose et al., 1999). In order to align with previous research on attachment anxiety and group identification (Crisp et al., 2009) and the recent conceptualization of attachment as dimensional (Mikulincer & Shaver, 2003; Fraley & Waller, 1998), the pilot examined the link between attachment anxiety, as measured by the Experiences in Close Relationships Scale (ECR: Brennan et al., 1998) and expectations of network support (as measured by the NOS) to establish whether scores on attachment anxiety would be negatively associated with network expectations consistent with previous findings (Larose et al., 1999; Wallace & Vaux, 1993).

**2.1 Method**
2.1.1 Participants & Design

One hundred and twenty university students (107 female; 13 male) took part in exchange for course credit ($\text{Mean age} = 19.58, \text{SD} = 2.07$). The study was administered online with network expectations and attachment measures counterbalanced between participants.

2.1.2 Measures

2.1.2.1 Attachment. The Experiences in Close Relationships Scale (ECR; Brennan et al., 1998) comprises 36 items. Eighteen items refer to attachment anxiety (e.g., “I worry about being abandoned”; “I worry a lot about my relationships”). Items are rated on a 7-point scale from 1 (disagree strongly) to 4 (neutral / mixed) to 7 (agree strongly). The measure is widely used, and has high reliability, usually with coefficients above .90 (Mikulincer & Shaver, 2007a), which was also the case here ($\alpha = .93$).

2.1.2.2. Network expectations. The Network Orientation Scale (NOS: Vaux et al., 1986) comprises 20 questions that assess beliefs regarding expectations of the usefulness of network support in times of need (e.g., “Some things are too personal to talk to anyone about”; “If you confide in other people, they will take advantage of you”). Participants rated each statement on a four-point scale: 1 (strongly agree); 2 (agree); 3 (disagree); 4 (strongly disagree). The scale is conceptualized in terms of positive-negative expectations (see Vaux et al., 1986). We calculated the scale in accordance with Larose et al. (1999) so that a higher mean score indicates positive network expectations, while a lower mean score indicates negative network expectations ($\alpha = .78$).

2.2 Results & Discussion
Counterbalanced order had no significant effect and was excluded from the subsequent analysis. A significant negative association was found between attachment anxiety ($M = 4.00, SD = 1.09$), and network expectations ($M = 2.92, SD = 0.28,$) $r = -.24, p = .010,$ such that higher attachment anxiety was associated with negative network expectations, supporting previous research by Larose et al. (1999).

3. Main Study

Our pilot established that attachment anxiety was negatively associated with support network expectations. The main study examined the effect of network expectation activation prior to receiving an attachment threat / control scenario. It was expected that activating network expectations would eliminate the previously observed interaction between attachment anxiety and threat in predicting group identification (Crisp et al., 2009). Specifically, increasing the salience of negative expectations should result in lower friendship group identification for those high in attachment anxiety, regardless of whether or not an attachment threat is present. Therefore, in this main study, we utilized the NOS as a network expectations prime.

3.1 Method

3.1.1 Participants & Design

Eighty university students (70 female; 10 male) took part, in exchange for course credit ($Mean \text{ age} = 19.55, SD = 2.19$). The study was administered online with participants receiving one of two threat conditions (control; attachment threat), and one of two network expectations prime conditions (no-prime; prime).

3.1.2 Measures

3.1.2.1 Group identification. The friendship group identification measure (Tarrant, North, & Hargreaves, 2004) comprises 13 items (e.g., “I am glad to belong to this group; I think this group is important”). Participants recorded on an 11-point
Likert-type scale, 0 (completely disagree) to 10 (completely agree), the extent to which they agreed with each statement, in relation to their closest group of friends ($\alpha = .88$).

3.1.2.2 Network expectations (NOS), & attachment orientation (ECR).

Measures were as described in the pilot (attachment anxiety $\alpha = .93$). The NOS was utilized as a network expectations activation prime and was dummy coded $0 =$ no prime (absence of NOS), $1 =$ prime (presence of NOS).

3.1.3 Procedure

First, participants completed the ECR. Second, those in the network expectations activation (prime) condition completed the NOS. The NOS was utilized as a network expectations prime, in order to make salient participants’ own specific network expectations. Participants in the no-activation (no prime) condition did not receive the NOS. Participants then received either the control or attachment threat scenario. Those in the control condition read and imagined a ‘bad day’ scenario, which consisted of a Monday morning where negative (non-relationship) events happened, including losing their wallet, phone and keys, being late for an assessed presentation, and receiving a mark of zero. Those in the threat condition were asked to read and imagine a scenario which described an argument with a boyfriend / girlfriend, and subsequent inability to contact them (both adapted from Crisp et al., 2009). After reading their assigned scenario, participants were asked to write 10 words / phrases describing what they would think and feel in this situation. Finally, they completed the group identification measure. Participants in the control condition received the NOS at the end of the study, following the identification measure. Condition (control = 0; threat = 1) and network expectation activation (no-prime = 0; prime = 1) were dummy coded in the following analyses.
3.2 Results & Discussion

3.2.1 Identification

Attachment anxiety \((M = 3.82, SD = 1.03)\), condition (control; threat), and network expectation activation (no-prime; prime) were entered into a regression as predictors of friendship group identification \((M = 8.50, SD = 1.14)\). Attachment anxiety and group identification were mean centered prior to analysis. Means reported below are prior to centering. A significant partial effect of attachment anxiety was revealed, \(t(76) = -4.23, \beta = -.43, p < .001\), with high attachment anxiety associated with lower identification. Condition, \(t(76) = -1.66, \beta = -.17, p = .102\), and prime, \(t(76) = -0.74, \beta = -.08, p = .463\), were non-significant. The condition x prime interaction variable at step 2 was the only significant two-way interaction, \(t(73) = 2.05, \beta = .36, p = .044, \Delta R^2 = .05\). Further analysis for this interaction revealed that, when no prime was present, participants in the control condition \((M = 9.12, SD = 0.68)\) had a higher level of identification than those in the threat condition \((M = 8.13, SD = 1.11)\), \(t(38) = 3.42, p = .002\). When a prime was present, there was no significant difference between the control \((M = 8.27, SD = 1.61)\) and threat \((M = 8.50, SD = 0.71)\) conditions, \(t(38) = -0.59, p = .561\). At step 3 of the regression, the condition x prime x anxiety interaction variable was significant, \(t(72) = 2.38, \beta = .41, p = .020, \Delta R^2 = .05\). This interaction was decomposed by examining condition and anxiety as predictors of identification within each network prime condition.

3.2.1.1 No-prime. A regression with interaction terms assessed the role of attachment anxiety \((M = 3.74, SD = 2.81)\) and condition in predicting identification \((M = 8.63, SD = 1.04)\). At step 1, a significant partial effect of anxiety was revealed, \(t(37) = -4.11, \beta = -.50, p < .001\), with attachment anxiety negatively correlated with identification. A significant partial effect of condition was also established, \(t(37) = -
3.35, $\beta = -.41, p = .002$; those in the control condition ($M = 9.12, SD = 0.68$) reported greater identification with their group than participants in the threat condition ($M = 8.13, SD = 1.11$). With the interaction variable entered at step 2, there was a significant condition x anxiety interaction, $t(36) = -2.62, \beta = -.40, p = .013, \Delta R^2 = .08$. See Figure 1.

To further explore this finding, anxiety was assessed as a predictor for identification within each condition. In the control condition no effect of attachment anxiety was found, $t(18) = -1.50, \beta = -.33, p = .150$. In the threat condition, attachment anxiety significantly predicted identification, $t(18) = -4.60, \beta = -.74, p < .001$: those higher in attachment anxiety identified less with their friendship group than those lower in attachment anxiety. In addition, the condition x anxiety interaction was explored by examining the effect of condition on identification for those low in attachment anxiety (-1SD) and high in attachment anxiety (+1SD). For those low in attachment anxiety there was no significant effect of condition, $t(37) = -0.91, \beta = -.14, p = .361$, while there was a significant effect of condition on identification for those high in attachment anxiety, $t(37) = -4.39, \beta = -.71, p < .001$. Participants high in attachment anxiety identified less with their friendship group in the threat condition, compared to those in the control condition. This is consistent with the findings of Crisp et al. (2009) who also observed dis-identification with friendship group for participants higher in attachment anxiety following an attachment threat.

**3.2.1.2 Prime.** A regression with interaction terms assessed the role of attachment anxiety ($M = 3.90, SD = 0.98$) and condition in predicting identification ($M = 8.38, SD = 1.23$). There was a marginally significant partial effect of attachment anxiety, $\beta = -.31, p = .058$; participants higher in attachment anxiety identified less
with their group compared to participants lower in attachment anxiety. There was no significant effect of condition, $\beta = .04, p = .791$, and entering the interaction variable at step 2 revealed no significant attachment anxiety x condition interaction, $\beta = .25, p = .232, \Delta R^2 = .04$. See Figure 1. Therefore, consistent with predictions, priming network expectations resulted in lower identification for those higher in attachment anxiety regardless of condition.

### 4. General Discussion

We expected that activating network expectations should result in lower friendship group identification for those high in attachment anxiety, regardless of whether or not attachment threat is present. We therefore established first, that those high in attachment anxiety hold more negative expectations about their network than those lower in attachment anxiety (pilot) and second, that activating awareness of these negative expectations resulted in lower friendship group identification for those higher in attachment anxiety, regardless of whether or not attachment threat was present (main study).

The pilot corroborated previous findings (Wallace & Vaux, 1993; Larose et al., 1999) that attachment anxiety was associated with more negative expectations of network support. Crisp et al. (2009) established that following an attachment threat, participants higher in attachment anxiety identified less with their friendship group, compared to those lower in attachment anxiety. This effect was replicated here when no support network prime was given; attachment anxiety was negatively associated with group identification in the threat condition, but not in the control condition.

In contrast, when participants’ own network expectations were primed before they received the threat / control manipulations, there was no moderating effect of attachment anxiety and condition on identification; condition did not predict
identification, attachment anxiety was the only predictor of identification. Therefore, priming network expectations appears to eliminate the moderating effect of anxiety and condition on identification (which is otherwise seen in the no-prime condition). It is possible that making negative support network expectations salient for those high in attachment anxiety acts as a type of ‘threat’ in both conditions, increasing an individual’s attachment activation and reducing their group identification. This finding emphasizes the role of network expectations in group identification. In addition, this finding is line with Campbell and Marshall (2011) who suggest that contexts that activate the attachment system will result in heightened attachment behaviors for anxiously attached individuals, compared to more neutral contexts.

Our findings could be extended by examining the consequences of priming positive network expectations, rather than the individual’s own network expectations. Specifically, priming positive network expectations could affect the role of attachment anxiety on group identification by counteracting the tendency for those high in attachment anxiety to identify less with their friendship group following an attachment threat. In addition, this research could be extended to investigate the impact of attachment style priming on group identification. Work investigating the priming of different attachment orientations has shown that priming with security can lead to an increase in felt security and other positive outcomes, regardless of dispositional attachment orientation (Carnelley & Rowe, 2010). Priming with security has been found to enhance views of the self and relationships (Carnelley & Rowe, 2007), and also to attenuate negative reactions to out-groups and enhance intergroup tolerance (Mikulincer & Shaver, 2001; 2007b). Therefore, priming attachment security may also counteract the effect of attachment anxiety on reduced group identification. In addition, future research would need to examine whether
changes in group identification actually lead to differences in behavioral help-seeking when it is most needed, whilst also considering the possible contribution of other personality factors, such as neuroticism.

To conclude, attachment anxiety and condition predict friendship group identification, with individuals higher on attachment anxiety dis-identifying with their friendship group in the threat condition, compared to the control condition. However, when an individual’s own network expectations are primed, awareness of negative expectations is heightened for those high in attachment anxiety, so that they identify less with their friendship group than those low in attachment anxiety, regardless of the presence or absence of attachment threat. These studies build on the previous literature by highlighting the importance of the salience of network expectations in predicting group identification.
References


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Figure Caption

*Figure 1.* Identification as a function of attachment threat and attachment anxiety for participants receiving (Panel - a) no network prime and (Panel - b) a network prime.
Ingroup identification

- **Control**
- **Attachment-threat**

(b) Lower attachment-anxiety (-1 SD) vs. higher attachment-anxiety (+1 SD)