



Mastery matters most: How mastery and positive relations link attachment avoidance and anxiety to negative emotions

Juliane Paech, Ines Schindler & Christopher P. Fagundes

To cite this article: Juliane Paech, Ines Schindler & Christopher P. Fagundes (2016) Mastery matters most: How mastery and positive relations link attachment avoidance and anxiety to negative emotions, *Cognition and Emotion*, 30:5, 1027-1036, DOI: 10.1080/02699931.2015.1039933

To link to this article: <https://doi.org/10.1080/02699931.2015.1039933>



Published online: 16 Jun 2015.



Submit your article to this journal [↗](#)



Article views: 282



View related articles [↗](#)



View Crossmark data [↗](#)



Citing articles: 1 View citing articles [↗](#)

BRIEF REPORT

Mastery matters most: How mastery and positive relations link attachment avoidance and anxiety to negative emotions

Juliane Paech¹, Ines Schindler¹, and Christopher P. Fagundes²

¹Cluster of Excellence, Freie Universität Berlin, Berlin, Germany

²Department of Health Disparities Research, University of Texas MD Anderson Cancer Center, Houston, TX, USA

(Received 29 May 2013; accepted 6 April 2015)

Attachment avoidance and anxiety are associated with negative emotions. However, the mechanisms underlying these associations are not fully understood. We investigated environmental mastery and positive relations with others as two mechanisms behind the attachment–emotion link in a sample of 343 adults. As predicted, attachment avoidance and anxiety were related to greater fear, hostility, envy and depression through lower mastery. Contrary to our hypothesis, positive relations mediated only the attachment–depression link. In addition, by adopting a moderated mediation approach, we were able to show that mastery mattered most for individuals high on avoidance: The indirect effect of avoidance through lack of mastery on fear, hostility and depression (but not on envy) increased with higher avoidance scores. Contrary to our predictions, poor relationships did not matter more as sources of negative emotions as anxiety increased. These findings underscore that the emotional life of avoidantly attached individuals is especially jeopardised by poor mastery.

Keywords: Attachment; Environmental mastery; Fear; Hostility; Envy; Depression.

When one's life is not what one wants it to be, frequent experiences of negative emotion is a natural consequence. However, individuals differ as to why they appraise their life as not going according to plan and in the extent to which they

are negatively affected by such appraisals. In this paper, we employ an attachment-theoretical framework for studying individual differences in experience of negative emotions as related to perceived failure to achieve competence in mastery and the

Correspondence should be addressed to: Juliane Paech, Health Psychology, Jacobs University Bremen, Research V, Campus Ring 1, 28759 Bremen, Germany. E-mail: j.paech@jacobs-university.de

Present address: Juliane Paech is now at Health Psychology, Jacobs University Bremen, Research V, Campus Ring 1, 28759 Bremen, Germany.

interpersonal aspects of life. Specifically, we investigated perceived environmental mastery and positive relations with others as mediators of the associations of attachment avoidance and anxiety with four negative affects (fear, hostility, envy and depression). Although insecure attachment is known as a correlate of global negative affect (cf. Mikulincer & Shaver, 2007), prior research has not fully addressed how attachment avoidance and anxiety may differentially relate to specific negative emotions (but see Consedine & Magai, 2003; Mikulincer & Shaver, 2005).

Furthermore, it has not been tested whether differences in attachment orientation are associated with a greater or lesser importance of poor mastery or unsatisfying relationships as sources of negative emotions. As we will detail below, mastery and positive relationships are on different levels of relative importance to people high on avoidance and people high on anxiety. As a result, it is well possible that these people's emotional problems stem from different sources and manifest as different negative emotions. Unravelling such specific patterns might open up new vistas for learning and development in social, therapeutic or achievement contexts. If individual differences in attachment orientation influence which kind of negative emotional reaction is particularly strong in a given context, it may be helpful to target counselling and interventions at these specific circumstances and emotions.

Individual differences in adult attachment orientation are most appropriately conceptualised along the dimensions of avoidance and anxiety. Our following brief description of these dimensions is mainly based on the book by Mikulincer and Shaver (2007).

Attachment avoidance reflects "the extent to which a person distrusts relationship partners' goodwill and strives to maintain behavioral independence and emotional distance from partners" (Mikulincer & Shaver, 2005, p. 150). As a result, people high on avoidance tend to view relationship goals as secondary to mastery goals. Avoidance further is associated with the use of deactivating strategies in response to threatening events or thoughts, such as the diversion of attention away

from threats, which prevents the attachment system from getting activated. These deactivating strategies can also be applied to down-regulate some of the negative emotions which typically accompany perceived threats. Specifically, while avoidance is associated with greater hostility (Consedine, Fiori, & Magai, 2012), negative emotions related to inferiority and weakness, such as depression or fear, are incongruent with the goal of avoidantly attached individuals to be in control and independent of others. Thus, the latter emotions are denied, hidden or suppressed. This unwillingness or inability to attend to self-directed negative emotions as signals for problems in goal progress, in turn, can undermine mastery as it makes people give up prematurely or withdraw from challenging activities to avoid negative affect.

The dimension of attachment anxiety indicates "the degree to which a person worries that a partner will not be available in times of need" (Mikulincer & Shaver, 2005, p. 150). Anxiety is associated with the use of hyperactivating strategies. That is, anxiously attached individuals are vigilant with respect to possible threats and exaggerate the severity of stressors to keep the attachment system activated. Anxiety is linked to the prioritisation of relationship over mastery goals. In contrast to avoidance, several negative emotions are congruent with the goal of anxiously attached individuals to gain attachment figures' attention and support. Therefore, it seems worth to sustain or even up-regulate negative emotions that signal helplessness or despair and to exaggerate their display.

Although attachment develops in the context of specific relationships, relationship-specific experiences become integrated into an overarching model of what to expect of others in general (Fraleigh, Heffernan, Vicary, & Brumbaugh, 2011). This internal working model influences affective reactions in all areas of life. Extant research also points to some processes that account for this link between attachment dimensions and emotions. In general, insecure attachment (i.e., high avoidance and/or anxiety) has been linked to the adoption of less adaptive coping strategies (e.g., Holmberg, Lomore, Takacs, & Price, 2010; Wei, Heppner, Russell, & Young, 2006), reduced appetitive engagement

and help seeking in achievement settings (e.g., Elliot & Reis, 2003; Larose, Bernier, & Tarabulsky, 2005), and less satisfaction of basic psychological needs (including need for competence and relatedness; Wei, Shaffer, Young, & Zakalik, 2005). The ineffective coping and lack of needs satisfaction in these individuals further function as mediators of the associations of avoidance and anxiety with depression (Wei et al., 2005, 2006).

However, in line with the different goal priorities and emotion-regulatory strategies of avoidantly and anxiously attached individuals, it is likely that somewhat different processes account for linkages of these attachment dimensions with negative emotions (for depression, see Wei, Mallinckrodt, Larson, & Zakalik, 2005). Building on and extending work on different sources of self-esteem as a function of attachment orientation (Brennan & Bosson, 1998; Hepper & Carnelley, 2012; Park, Crocker, & Mickelson, 2004), we assumed that mastery of competence or interpersonal aspects of life are of different relevance to the emotional life of people high on avoidance or high on anxiety. We included two dimensions of psychological well-being (e.g., Ryff & Keyes, 1995) in this study, environmental mastery and positive relations with others, which have also been employed by Brennan and Bosson (1998) to operationalise successful action and social acceptance.

To be sure, poor mastery and lack of positive relations generally are linked to negative affect (Ryff & Keyes, 1995). However, people high on avoidance tend to derive self-worth primarily from competence and self-reliance, whereas high anxiety is associated with relying primarily on interpersonal sources of self-worth (Brennan & Bosson, 1998; Hepper & Carnelley, 2012; Park et al., 2004). Accordingly, we hypothesised that mastery becomes increasingly relevant to low negative emotions with higher attachment avoidance (Hypothesis 1). In contrast, positive relations with others should become more relevant to low negative emotions as attachment anxiety increases (Hypothesis 2). These ideas also tie in with a developmental-functional view of emotions and attachment (Consedine & Magai, 2003) highlighting that emotions serve different functions depending on an

individual's attachment organisation. For instance, avoidantly attached individuals may experience fear in response to cues of incompetence, whereas anxiously attached individuals experience fear as they perceive cues of rejection. In both cases, fear would arise because achievement of an important goal is threatened, but the goal is rather different and so is the path that mediates between attachment and fear.

Extending prior research, we adopted a moderated mediation approach (cf., Preacher, Rucker, & Hayes, 2007) to test our hypotheses. Moderated mediation is optimally suited to test the idea that environmental mastery (or positive relations) becomes more important as a mediator of the attachment–emotion link with higher levels of avoidance (or anxiety). For instance, people high on avoidance are more invested in mastery strivings and, thus, their environmental mastery is typically higher than that of highly anxious individuals (see Brennan & Bosson, 1998). In a mediator model, this stronger link between anxiety and poor mastery would, by necessity, lead to a greater indirect effect of anxiety (rather than avoidance) via mastery on negative emotions. In contrast, moderated mediation allows addressing the possibility that although mastery is not more negatively affected by avoidance than by anxiety, poor mastery matters more for the experience of negative emotions when avoidance is high.

In addition to addressing the role of environmental mastery and positive relations as mediators, we were interested in the unique contributions of avoidance and anxiety to the prediction of specific negative emotions. Following Carver and Scheier (1998), we selected depression and fear as central affective responses to poor mastery. Depression results when failing to make progress towards valued outcomes, fear results when failure to avoid negative outcomes is imminent. In addition, we considered hostility and envy as emotions with a social focus relevant to attachment theory (Mikulincer & Shaver, 2005). These emotions are targeted at another person and indicative of jeopardised relationships, as both emotions include the tendency to oppose the other and/or bear him or her ill-will. As stated above, it is possible that findings

for avoidance differ for hostility and envy (signals of angry self-assertion) in comparison with depression and fear (signals of helplessness) (see Consedine et al., 2012).

In sum, some emotions are less or more functional with high avoidance or high anxiety (cf. Consedine & Magai, 2003; Mikulincer & Shaver, 2005). Accordingly, mastery and positive relations may not function as mediators of all attachment–emotion links but may rather be limited to emotions that are functional within an individual’s attachment organisation. We therefore addressed the question of whether the greater importance of mastery/positive relations with higher levels of avoidance/anxiety can be demonstrated for fear, hostility, envy and depression.

METHOD

Participants and procedure

We now report how we determined our sample size, all data exclusions (if any), all manipulations (if any), and give an overview of all measures in the study. The present data come from a large-scale questionnaire study (for more details, see Schindler, 2014) including a measurement battery on emotions, subjective and psychological well-being, personal goals, values, and other personality measures (e.g., Big Five, self-esteem). The 343 participants registered through our homepage in response to advertisements (on the Berlin underground, postings in online discussion forums, distribution of flyers and invitations to acquaintances) and filled out a mailed questionnaire which could be completed in about 60–90 minutes. The sample consisted of 212 women (61.8%) and 131 men (38.2%) aged between 18 and 73 years, $M = 34.0$ years, who were fluent in German (94.5% native speakers). Level of education was above average, with 87.7% having received qualification for college entrance and 43.1% holding a bachelor, masters or doctoral degree. At the time of study, 44.0% of the participants reported that their primary occupation was the pursuit of their (further) education/vocational training, 20.1% of the participants were working full time and 10.5%

part time, 12.5% were not in paid employment (including people who were unemployed, on leave, retired or full-time homemakers), and 12.8% indicated another occupation (including self-employment, military/civil service and non-response).

Measures

We employed previously established German translations of all measures used in this study, with the exception of envy. As we did not find a German translation of the respective measure, we created the German item set through translation and back-translation. If not reported differently, items were answered on 5-point scales ranging from 1 = *not at all* to 5 = *very much*.

Attachment avoidance and anxiety

We employed a short and modified version of the Experiences in Close Relationships Questionnaire by Lo et al. (2009; German items were taken from Neumann, Rohmann, & Bierhoff, 2007) targeting attachment orientation with regard to close others in general rather than only romantic partners. Scores for avoidance, $M = 2.28$, $SD = 0.59$, $\alpha = 0.76$, and anxiety, $M = 2.80$, $SD = 0.71$, $\alpha = 0.83$, were computed by averaging across the eight items of each scale. Avoidance and anxiety were uncorrelated in our sample, $r = -.03$, $p = .601$.

Environmental mastery and positive relations with others

We used a short version of Ryff’s Scales of Psychological Well-Being (van Dierendonck, 2005; German items were taken from Staudinger, 1990). The environmental mastery scale, $M = 3.51$, $SD = 0.66$, included six items, $\alpha = 0.80$. The positive relations with others scale, $M = 3.81$, $SD = 0.77$, included six items, $\alpha = 0.80$.

Fear and hostility

We employed selected negative affect subscales of the Positive and Negative Affect Schedule – Expanded Form (Watson & Clark, 1994; German

translation by R ocke & Gr uhn, 2003). Participants rated how much each emotion adjective describes how they feel in general. Both fear (e.g., afraid), $M = 2.07$, $SD = 0.64$, $\alpha = 0.84$, and hostility (e.g., angry), $M = 1.70$, $SD = 0.54$, $\alpha = 0.81$, scores were computed by averaging across the respective six items.

Envy

Participants completed the Dispositional Envy Scale (Smith, Parrott, Diener, Hoyle, & Kim, 1999). This measure consists of eight items, $\alpha = 0.84$, which were averaged into an overall envy score, $M = 1.93$, $SD = 0.58$.

Depression

Participants completed the Center for Epidemiological Studies Depression Scale (Radloff, 1977; German version by Hautzinger, 1988). They indicated on a 4-point scale ranging from 1 = *rarely or none of the time (less than 1 day)* to 4 = *most or all of the time (5–7 days)* whether they had suffered from specific depressive symptoms. The 20 items were averaged into an overall depression score, $M = 1.66$, $SD = 0.44$, $\alpha = 0.90$.

RESULTS

We employed Mplus Version 6.1 to test a moderated mediation model (cf. Model 1 in Preacher et al., 2007) estimating the indirect (via environmental mastery and positive relations) and direct effects of attachment avoidance and anxiety on fear, hostility, envy and depression (all independent variables and mediators were centred at their means). The attachment dimensions functioned as both independent variables and moderators of the indirect effects. We initially included all possible interactions of avoidance and anxiety with environmental mastery and positive relations. As this analysis revealed that the interaction of anxiety with mastery and the interaction of avoidance with positive relations were not significantly related to any of the four emotions (B s between -0.12 and

0.03 , p s between .068 and .915), we included only the predicted interactions of avoidance with mastery and of anxiety with positive relations in our final model (Figure 1). We also tested whether the interaction between avoidance and anxiety and the triple interactions between avoidance, anxiety and mastery/positive relations predicted the four emotions, but found this not to be the case (B s between -0.09 and 0.11 , p s between .056 and .870). We obtained estimates of indirect and conditional indirect effects to evaluate our hypotheses. As recommended (e.g., Preacher et al., 2007), these estimates were based on bias-corrected bootstrap confidence intervals (CIs) of the indirect effects based on 5000 bootstrap samples.

Figure 1 shows the path coefficients for our model along with the explained variance in each variable (note that the model is saturated and, therefore, has perfect fit). In line with Hypothesis 1, we found significant interactions between avoidance and environmental mastery in predicting fear, hostility and depression (i.e., moderated mediation). The estimated conditional indirect effects (solid lines) of avoidance via mastery on fear, hostility and depression along with their 95% confidence bands (dashed lines) are shown in Figure 2. The overall pattern of findings is similar across the three emotions. As avoidance scores increased, the indirect effects became bigger, which means that mastery mattered more for those who are highly avoidant. Indirect effects of avoidance on fear (Panel A, Figure 2) and hostility (Panel B, Figure 2) were not significantly different from zero at avoidance scores of 1, but became significant as avoidance scores approached 2. Indirect effects of avoidance on depression (Panel C, Figure 2) were significant for any avoidance score. In contrast and with relevance to our research question, we did not find evidence of moderated mediation in the association between avoidance and envy. Avoidance had an unconditional indirect effect of $B = 0.08$, BC 95% CI [0.04, 0.12] via environmental mastery on envy (i.e., mediation only).

Environmental mastery also mediated the associations between anxiety and the four emotions. Anxiety had indirect effects through mastery on fear, $B = 0.14$, BC 95% CI [0.09, 0.21], hostility,

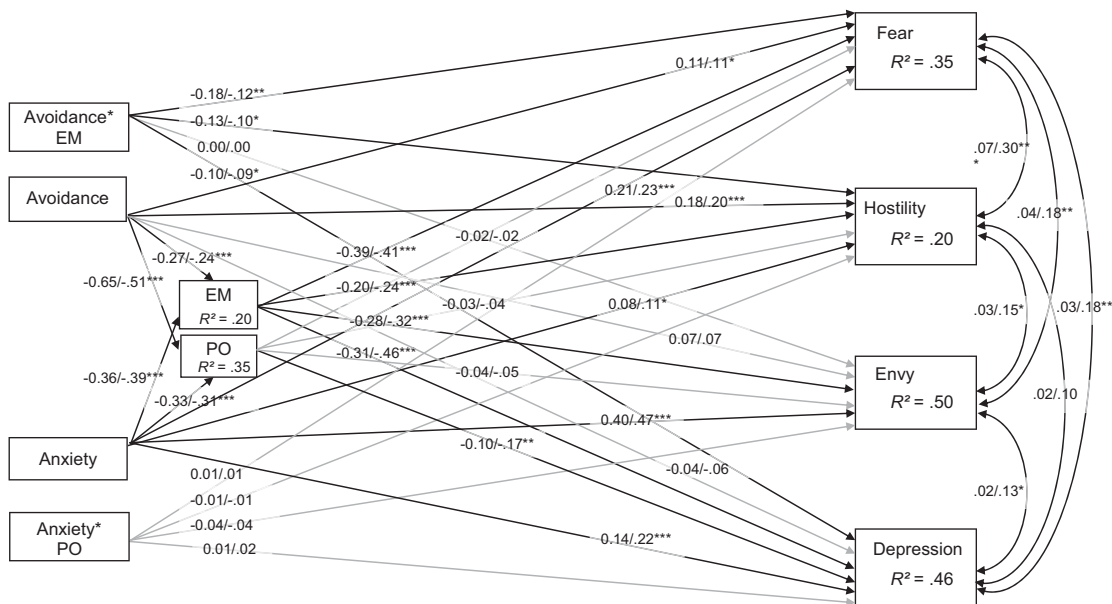


Figure 1. Moderated mediator model linking avoidance and anxiety to multiple emotional outcomes. Unstandardised and standardised path coefficients are reported (B/ β). Note. EM = environmental mastery. PO = positive relations with others. *** $p < .001$. ** $p < .01$. * $p < .05$.

$B = 0.07$, BC 95% CI [0.04, 0.11], envy, $B = 0.10$, BC 95% CI [0.06, 0.15] and depression, $B = 0.11$, BC 95% CI [0.07, 0.15].

In contrast to mastery, positive relations with others only mediated the associations of both avoidance, indirect effect of $B = 0.06$, BC 95% CI [0.02, 0.11], and anxiety, indirect effect of $B = 0.03$, BC 95% CI [0.01, 0.06], with depression. After considering mastery, positive relations were unrelated to fear, hostility and envy. Contrary to Hypothesis 2, the interaction term between anxiety and positive relations was not significantly related to any of the four emotions (Figure 1).

DISCUSSION

This study sought to add to our understanding of linkages between attachment avoidance and anxiety with different negative emotions in two ways. First, we examined environmental mastery and positive relations with others as potential mediators of attachment–emotion linkages and examined

if these mediators became more important with higher levels of avoidance or anxiety (i.e., moderated mediation). Second, we included fear, hostility, envy and depression as distinct negative emotions that may show differential associations with avoidance and anxiety.

Based on the literature on attachment differences in primary sources of self-esteem (Brennan & Bosson, 1998; Hepper & Carnelley, 2012; Park et al., 2004), we assumed that environmental mastery would become more important to keeping negative affect down when avoidance is high. In contrast, positive relations with others should become more important to keeping negative affect down when anxiety is high. As expected (Hypothesis 1), mastery became more important as a mediator of the links of avoidance with fear, hostility and depression. This indicates that individuals high on avoidance not only reported lower mastery but also were hit especially hard by a lack of mastery as, for them, it was strongly linked to a range of negative emotions. The need to be self-reliant that characterises attachment avoidance

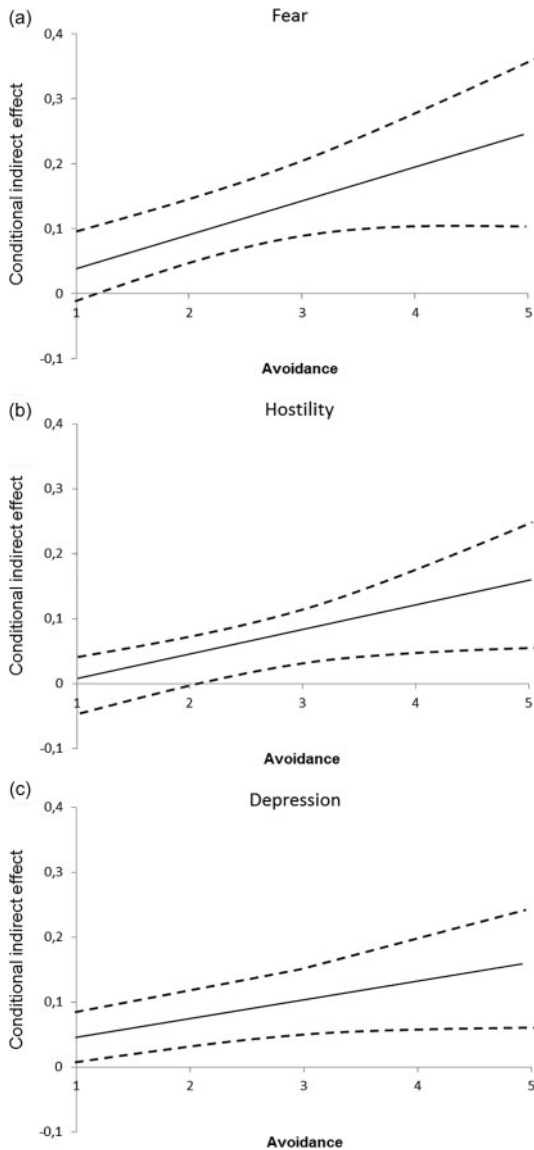


Figure 2. Conditional indirect effects of attachment avoidance via environmental mastery on fear (Panel A), hostility (Panel B) and depression (Panel C) (with 95% confidence bands). The x-axis denotes an indirect effect of zero.

probably accounts for this finding. This need makes individuals high on avoidance try to master demands on their own, which may contribute to poorer mastery (cf. Elliot & Reis, 2003; Larose et al., 2005). The findings suggest that lack of

mastery can lead to fear and depression in avoidantly attached individuals not only because they failed to reach their goals, but also because it challenges their self-view of being able to deal with problems on their own. Blaming others for causing this undesirable situation leads to hostile feelings, which might reflect an attempt to regain power and control (Consedine et al., 2012; Mikulincer & Shaver, 2005, 2007). Thus, greater valuation of mastery combined with lower actual mastery might explain why mastery was more important to fear, hostility and depression among those high on attachment avoidance.

It should be noted that this greater importance of mastery to the emotional life of individuals high on avoidance was not evident for envy. We thus conclude that interactions of avoidance and mastery are not obtained with every negative emotion. Considered from a developmental-functionalist perspective on emotions and attachment (Consedine & Magai, 2003), this suggests that this finding may be limited to emotions that are functional when avoidance is high. Envy can help individuals to self-improve through recognising something of value in another person and spurring emulation of this person (van de Ven, Zeelenberg, & Pieters, 2011). However, the associated feeling of inferiority should be especially unpleasant for those high on avoidance and can quickly be reduced by perceiving the other's superiority as undeserved. Thereby, one's envy is turned into resentment and hostility in response to this seeming injustice. This would explain how hostility, an emotion that is functional within the avoidant attachment organisation (Consedine et al., 2012), becomes more tied to mastery with higher avoidance while envy does not.

Mastery also accounted for the links between anxiety and negative emotions, but did not become more important as anxiety increased. Highly anxiously attached individuals are prone to low perceived mastery (Brennan & Bosson, 1998; Mikulincer & Shaver, 2007) and, therefore, are more likely to suffer from depression, fear, envy and hostility. As highly anxious individuals heavily rely on their attachment figures for support, they may underestimate their own coping capacities

(Mikulincer & Shaver, 2007). Individuals high on anxiety react with negative emotions such as fear and depression when they sense cues of rejection and abandonment when they want help with managing life. When this help is denied, they may also experience other-directed negative emotions, such as envy and hostility.

Contrary to Hypothesis 2, we did not find moderated mediation in the linkages of anxiety via positive relations with any of the four emotions. Positive relations only mediated the link between attachment anxiety (and avoidance) and depression but was unrelated to the other emotions once mastery was controlled for. Individuals high on anxiety thus were not especially hard hit by a lack of positive relations with others. Moreover, mastery, as compared with positive relations, turned out to be a better mediator of attachment–emotion links for both avoidance and anxiety. The lesser predictive power of positive relations may be explained by the fact that the employed short scale focuses on relationships with friends. Poor relations with friends may be much less important to the emotional lives of those high on anxiety than poor relations with romantic partners or family members.

Our findings also need to be considered in light of prior studies (e.g., Brennan & Bosson, 1998; Hepper & Carnelley, 2012; Park et al., 2004) which have found more support for the notion that relational sources of self-esteem matter more with greater anxiety than for the notion that competence sources of self-esteem matter more with greater avoidance. While the overall pattern of past findings, taken with the current findings, lends support to the general idea that competence and relationships are of different relevance to those with high avoidance or anxiety, individual findings are somewhat inconsistent. To the best of our knowledge, we are the first to have tested for such effects with negative emotions rather than self-esteem¹ and to have employed a moderated mediation framework. Future theorising and research is needed to

determine under which circumstances and with which measures and analysis tools the greater or lesser importance of competence and interpersonal aspects of life with greater or lesser avoidance and anxiety can be demonstrated.

Some limitations of this study should also be mentioned. First, as these are cross-sectional data, the direction of causality between the employed measures remains unclear. We selected a model that matches the cited prior research and our theorising, but it is likely that the studied relationships are reciprocal. The experience of negative emotions can further undermine mastery. Indeed, the tendency of avoidantly attached individuals to deny and turn away from problems and challenges to avoid self-directed negative affect (see Mikulincer & Shaver, 2007) may, in part, be accounted for by their more intense negative emotional reactions to failure. Moreover, emotions can function to maintain insecure attachment (see Consedine & Magai, 2003).

Second, more specific emotion scales might be needed to assess emotion facets that may show more varied associations with avoidance and anxiety. For instance, it would be interesting to differentiate between malicious and benign envy (e.g., van de Ven et al., 2011). One could assume that the reported strong association between anxiety and envy results from anxiously attached individuals experiencing both benign and malicious envy, while avoidantly attached individuals experience predominantly malicious envy. Finally, we considered only two mediators (mastery and positive relations). Further research is required to examine which other mediators and moderators influence the attachment–emotion relationship.

In spite of these limitations, this research demonstrated the contribution of environmental mastery to explaining how attachment avoidance and anxiety relate to negative emotions. In general, lack of mastery is a potent source of negative affect, but seems of particular importance for

¹As our study also included the Rosenberg Scale as a measure of self-esteem, we conducted an additional regression analysis with self-esteem as outcome. We found a significant interaction between avoidance and environmental mastery in predicting self-esteem, $B = 0.12$, $\beta = 0.07$, $p = .042$ (the association between mastery and self-esteem became stronger with greater avoidance). There was no interaction between anxiety and positive relations, $B = 0.01$, $\beta = 0.01$, $p = .727$.

people high on attachment avoidance. These individuals appear to be especially hard hit by their own failure and may well react with greater fear, hostility and depression (but not envy) than is “normal”. In applied settings, it may be helpful to consider this sensitivity to (potential) losses of control. Improved emotion-regulatory skills may be one way to prevent the typical distancing coping strategies used by avoidantly attached individuals (see Mikulincer & Shaver, 2007) and keep them engaged in difficult tasks, ranging from academic and organisational performance to successful psychotherapy (Richards & Schat, 2011; Wei et al., 2006). Further research is needed to improve understanding of attachment and intermediate mechanisms in applied settings.

Acknowledgements

We want to thank our participants for devoting time and energy to this project and our research assistants Friederike Krusch, Fabian Löwenbrück and Monika Verbalyte, who did a wonderful job running the study.

Disclosure statement

No potential conflict of interest was reported by the authors.

Funding

This research was supported by the Cluster “Languages of Emotion” at Freie Universität Berlin, funded by the German Research Foundation (DFG) as part of the German Excellence Initiative.

REFERENCES

- 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. doi:10.1177/0146167298247003
- Carver, C. S., & Scheier, M. F. (1998). *On the self-regulation of behavior*. New York: Cambridge University Press. doi:10.1017/CBO9781139174794
- Consedine, N. S., Fiori, K. L., & Magai, C. (2012). Regulating emotion expression and regulating emotion experience: Divergent associations with dimensions of attachment among older women. *Attachment and Human Development*, *14*, 477–500. doi:10.1080/14616734.2012.706433
- Consedine, N. S., & Magai, C. (2003). Attachment and emotion experience in later life: The view from emotions theory. *Attachment and Human Development*, *5*, 165–187. doi:10.1080/1461673031000108496
- Elliot, A. J., & Reis, H. T. (2003). Attachment and exploration in adulthood. *Journal of Personality and Social Psychology*, *85*, 317–331. doi:10.1037/0022-3514.85.2.317
- Fraley, R. C., Heffernan, M. E., Vicary, A. M., & Brumbaugh, C. C. (2011). The experiences in close relationships—Relationship Structures Questionnaire: A method for assessing attachment orientations across relationships. *Psychological Assessment*, *23*, 615–625. doi:10.1037/a0022898
- Hautzinger, M. (1988). Die CES-D Skala. Ein Depressionsmessinstrument für Untersuchungen in der Allgemeinbevölkerung [The CES-D scale: A depression-rating scale for research in the general population]. *Diagnostica*, *34*, 167–173.
- Hepper, E. G., & Carnelley, K. B. (2012). The self-esteem roller coaster: Adult attachment moderates the impact of daily feedback. *Personal Relationships*, *19*, 504–520. doi:10.1111/j.1475-6811.2011.01375.x
- Holmberg, D., Lomore, C. D., Takacs, T. A., & Price, E. L. (2010). Adult attachment styles and stressor severity as moderators of the coping sequence. *Personal Relationships*, *18*, 502–517. doi:10.1111/j.1475-6811.2010.01318.x
- Larose, S., Bernier, A., & Tarabulsy, G. M. (2005). Attachment state of mind, learning dispositions, and academic performance during the college transition. *Developmental Psychology*, *41*, 281–289. doi:10.1037/0012-1649.41.1.281
- Lo, C., Walsh, A., Mikulincer, M., Gagliese, L., Zimmermann, C., & Rodin, G. (2009). Measuring attachment security in patients with advanced cancer: Psychometric properties of a modified and brief Experiences in Close Relationships scale. *Psycho-Oncology*, *18*, 490–499. doi:10.1002/pon.1417
- Mikulincer, M., & Shaver, P. R. (2005). Attachment theory and emotions in close relationships: Exploring the attachment-related dynamics of emotional reactions to relational events. *Personal Relationships*, *12*, 149–168. doi:10.1111/j.1350-4126.2005.00108.x

- Mikulincer, M., & Shaver, P. R. (2007). *Attachment in adulthood: Structure, dynamics, and change*. New York: Guilford Press.
- Neumann, E., Rohmann, E., & Bierhoff, H.-W. (2007). Entwicklung und Validierung von Skalen zur Erfassung von Vermeidung und Angst in Partnerschaften. Der Bochumer Bindungsfragebogen (BoBi) [Development and validation of scales for measuring avoidance and anxiety in romantic relationships – The Bochum Adult Attachment Questionnaire]. *Diagnostica*, 53(1), 33–47. doi:10.1026/0012-1924.53.1.33
- Park, L. E., Crocker, J., & Mickelson, K. D. (2004). Attachment styles and contingencies of self-worth. *Personality and Social Psychology Bulletin*, 30, 1243–1254. doi:10.1177/0146167204264000
- Preacher, K. J., Rucker, D. D., & Hayes, A. F. (2007). Assessing moderated mediation hypotheses: Theory, methods, and prescriptions. *Multivariate Behavioral Research*, 42(1), 185–227. doi:10.1080/00273170701341316
- Radloff, L. S. (1977). The CES-D Scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement*, 1, 385–401. doi:10.1177/014662167700100306
- Richards, D. A., & Schat, A.C.H. (2011). Attachment at (not to) work: Applying attachment theory to explain individual behavior in organizations. *Journal of Applied Psychology*, 96(1), 169–182. doi:10.1037/a0020372
- Röcke, C., & Grühn, D. (2003). *German translation of the PANAS-X* (Unpublished instrument). Retrieved from <http://www4.ncsu.edu/~dgruehn/page7/page10/files/panas-x-german.pdf>
- Ryff, C. D., & Keyes, C. L. M. (1995). The structure of psychological well-being revisited. *Journal of Personality and Social Psychology*, 69, 719–727. doi:10.1037/0022-3514.69.4.719
- Schindler, I. (2014). Relations of admiration and adoration with other emotions and well-being. *Psychology of Well-Being: Theory, Research and Practice*, 4, 14. doi:10.1186/s13612-014-0014-7
- Smith, R. H., Parrott, W. G., Diener, E. F., Hoyle, R. H., & Kim, S. H. (1999). Dispositional envy. *Personality and Social Psychology Bulletin*, 25, 1007–1020. doi:10.1177/01461672992511008
- Staudinger, U. M. (1990). Psychological Well-Being Scales, Ryff, 1989: Deutsche Übersetzung für Forschungszwecke [Psychological Well-Being Scales, Ryff, 1989: German translation for research purposes]. Max Planck Institute for Human Development, Berlin, Germany (Unpublished instrument).
- van de Ven, N., Zeelenberg, M., & Pieters, R. (2011). Why envy outperforms admiration. *Personality and Social Psychology Bulletin*, 37, 784–795. doi:10.1177/0146167211400421
- van Dierendonck, D. (2005). The construct validity of Ryff's Scales of Psychological Well-being and its extension with spiritual well-being. *Personality and Individual Differences*, 36, 629–643. doi:10.1016/S0191-8869(03)00122-3
- Watson, D., & Clark, L. A. (1994). *The PANAS-X: manual for the positive and negative affect schedule - expanded form*. University of Iowa, Iowa City (Unpublished instrument). Retrieved from <http://www.psychology.uiowa.edu/faculty/watson/PANAS-X.pdf>
- Wei, M., Heppner, P. P., Russell, D. W., & Young, S. K. (2006). Maladaptive perfectionism and ineffective coping as mediators between attachment and future depression: A prospective analysis. *Journal of Counseling Psychology*, 53(1), 67–79. doi:10.1037/0022-0167.53.1.67
- Wei, M., Mallinckrodt, B., Larson, L. M., & Zakalik, R. A. (2005). Adult attachment, depressive symptoms, and validation from self versus others. *Journal of Counseling Psychology*, 52, 368–377. doi:10.1037/0022-0167.52.3.368
- Wei, M., Shaffer, P. A., Young, S. K., & Zakalik, R. A. (2005). Adult attachment, shame, depression, and loneliness: The mediation role of basic psychological needs satisfaction. *Journal of Counseling Psychology*, 52, 591–601. doi:10.1037/0022-0167.52.4.591