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Individual Differences in Self-Compassion: The Role of Attachment and Experiences of Parenting in Childhood

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Much evidence indicates that self-compassion is related to a wide range of positive outcomes, yet remarkably little is known as to the origins of self-compassion. Here we present two studies that investigate the potential origins of individual differences in self-compassion. In Study 1, participants' ($N = 329$) recall of high parental rejection and overprotection, and low parental warmth in childhood predicted low self-compassion, and this was mediated by attachment anxiety. Attachment avoidance did not mediate any association. Study 2 ($N = 32$) extended this cross-sectional study by experimentally enhancing attachment security, which led to an increase in state self-compassion. Results suggest that early childhood experiences and attachment may influence the development of self-compassion.

Keywords: Self-compassion; Attachment; Attachment security priming; Parenting.

Much evidence indicates that self-compassion is related to a wide range of positive outcomes (e.g., Neff, 2003a, 2003b). However, remarkably little is known as to the origins of individual differences in self-compassion. Compassion refers to sensitivity to suffering experienced by others with a quality of kindness, non-judgement, and the desire to reduce their suffering (Goetz, Keltner, & Simon-Thomas, 2010). Self-compassion involves being compassionate toward the self in times of difficulty, with a non-judgemental and kind stance taken toward one's own suffering, and the desire to alleviate one's own suffering gently and with kindness (Neff, 2003a). Further, self-compassion includes viewing suffering as part of the human condition by acknowledging that suffering is experienced by all people, and is worthy of compassion, rather than self-judgement or criticism (Neff, 2003a).

It could be argued that self-compassion might lead to excuses for one's shortcomings. However, Neff (2003a) proposes that self-compassion involves attending to the actions needed to optimize healthy functioning with gentleness and compassion, which provides the emotional safety to rectify one's shortcomings. Neff (2003a) also differentiates self-

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compassion from self-esteem, which involves comparisons of one's own qualities against others or an ideal standard. Self-compassion does not involve judgements of the self as good or bad, but rather relates to a kind and compassionate *stance* toward the self (Neff, 2003a).

Self-compassion is related to lower psychopathology, negative affect, and neuroticism, and greater happiness, positive affect, curiosity, optimism, extraversion, and conscientiousness (e.g., MacBeth & Gumley, 2012; Neff, Kirkpatrick, & Rude, 2007; Pinto-Gouveia, Duarte, Matos, & Fraguas, 2013). Self-compassion is also related to social and relational outcomes. For example, Neff and Pommier (2013) found that individuals higher in self-compassion experienced greater empathic concern, altruism, and compassion for humanity. Further, individuals higher in self-compassion report greater romantic relationship satisfaction (Neff & Beretvas, 2013). In brief, self-compassion is related to a wide range of positive psychosocial outcomes. Yet, remarkably little is known regarding the origins of self-compassion. Several researchers have posited that the origins of self-compassion are likely to have their roots in early relationships with primary caregivers (e.g., Gilbert, 2009; Gilbert & Procter, 2006; Neff, 2011; Neff & McGeehee, 2010).

Neff (2011) and Neff and McGeehee (2010) argue that sensitive and responsive parenting should foster the capacity to relate to oneself with compassion during times of stress, and to self-soothe to relieve the distress. In contrast, those who experience inconsistent, cold, or rejecting caregiving are less likely to be self-compassionate and more likely to respond with greater self-criticism (Gilbert & Procter, 2006; Neff & McGeehee, 2010). Gilbert (2005, 2009) argue that humans are motivated to, amongst other things, form social attachments, and these motives in turn influence attention, cognitions, and behavior. When a social mentality is activated, an individual then seeks an appropriate response from others, and these responses then influence the development of that social mentality (Gilbert, 2009). For example, if an individual seeks care and compassion, and receives appropriate responses from others (i.e., care and compassion), this social mentality is strengthened and continues to develop. However, if an individual seeks care and compassion and receives a negative response from others (e.g., rejection, ignoring, or humiliation) the social mentality becomes blocked. This can also inhibit the development of skills and behaviors related to this particular social mentality (Gilbert, 2009). Therefore, if efforts to receive care and compassion are consistently blocked by others, this person may become less skilled at recognizing their own need for care and compassion (i.e., self-compassion). The first experiences of seeking care and compassion occur during childhood, and it is therefore possible that the development of individual differences in self-compassion has roots in early childhood experiences.

Consistent with the proposition that the quality of parenting received in childhood may lead to the development of individual differences in self-compassion, in a sample of adolescents and young adults, Neff and McGeehee (2010) found that self-reported recollections of maternal support and positive family functioning were associated with higher self-compassion. Further, although not directly tapping the construct of self-compassion, Irons, Gilbert, Baldwin, Baccus, and Palmer (2006) found that individuals who recalled their parents as rejecting and over-protective were higher in self-criticism, whereas individuals who experienced parental warmth tended to be lower in self-criticism. In brief, initial evidence suggests that some aspects of parenting received in childhood are associated with self-compassion in adolescents and young adults (Neff & McGeehee, 2010) and with self-criticism in adults (Irons et al., 2006).

The relationship between parenting received in childhood and self-compassion is likely to be complex and may be indirect. Much evidence indicates that sensitive and responsive

parenting leads to the development of a secure attachment style (Grossman, Grossman, & Waters, 2005; Mikulincer & Shaver, 2007a). Several researchers have argued that attachment theory may be a useful framework for understanding the origins of self-compassion (e.g., Neff, 2011; Neff & McGeehee, 2010). Perhaps sensitive and responsive parenting facilitates the development of a secure attachment style and the associated self-soothing abilities, which may in turn provide an individual with an enhanced capacity for self-compassion.

Attachment refers to the affectional bond formed between an infant and caregiver during the early years of life. Individual differences in attachment-system functioning develop as a result of the sensitivity and responsiveness an infant experiences from caregivers (Mikulincer & Shaver, 2007a). Bowlby proposed that the attachment system is not only relevant to infants, but is active and influential “from the cradle to the grave” (Bowlby, 1979, p. 129). Adult attachment is generally conceptualized along the two dimensions of attachment anxiety and avoidance (Fraley, Waller, & Brennan, 2000; Mikulincer & Shaver, 2007a). Attachment anxiety is characterized by fear of rejection and abandonment, concern about intimate relationships, and negative feelings about the self, such as feelings of unworthiness, whereas attachment avoidance reflects the tendency to feel uncomfortable with, and avoid intimacy and closeness. Individuals high in attachment avoidance are excessively self-reliant, and do not engage in efforts to enhance intimacy (Mikulincer & Shaver, 2007a). Importantly, and of particular relevance to the present research, attachment security is conceptualized as low attachment anxiety and avoidance (Mikulincer & Shaver, 2007a).

Individuals with a secure attachment style (low anxiety and low avoidance) have likely experienced caring and supportive interactions with caregivers, whereby the infant’s bids for proximity and comfort when distressed were met with sensitivity and responsiveness, which fosters the ability to self-soothe and regulate emotion (Mikulincer & Shaver, 2004, 2007a). Individuals high in attachment anxiety are likely to have received inconsistent responsiveness when distressed, and have therefore learnt that expressing distress only sometimes elicits support and care, and therefore heighten the intensity of emotion to gain comfort from others, known as hyperactivation of the attachment system (Shaver & Mikulincer, 2009). Attachment avoidance, on the other hand, refers to the deactivation of the attachment system, and is associated with the tendency to suppress or deny attachment needs (Mikulincer & Shaver, 2007a; Shaver & Mikulincer, 2009). Individuals high in attachment avoidance are likely to have experienced rejection or punishment during childhood when they have expressed distress to caregivers, and have therefore learnt to inhibit the experience and expression of emotional distress (Shaver & Mikulincer, 2009).

Individuals high in attachment anxiety typically display a negative view of self (Mikulincer & Shaver, 2007a), experience difficulties self-soothing and regulating emotion (Shaver & Mikulincer, 2009), and are more self-critical (Cantazaro & Wei, 2010). Consistent with social mentality theory (Gilbert, 2009), it seems likely that individuals who have not received sensitive and responsive parenting would have reduced capacity for self-compassion, or have this capacity blocked. This may be because they are higher in attachment anxiety which reduces the ability to self-soothe with a compassionate stance toward the self. Further, as Wei, Liao, Ku, and Shaffer (2011) note, individuals high in attachment anxiety heighten emotional distress, which may lead to the belief that their suffering happens only to them, rather than to all of humanity. Neff and McGeehee (2010) found that attachment security was related to higher self-compassion, whereas preoccupied and fearful attachments (both high in attachment anxiety) were associated with lower self-compassion. Similarly, Raque-Bogdan, Ericson, Jackson, Martin, and

Bryan (2011) and Wei et al. (2011) found an association between attachment anxiety and lower self-compassion.

It is also possible that poor parenting may lead to impaired capacity for self-compassion via heightened attachment avoidance, though the relationship between attachment avoidance and self-compassion is complex. Individuals high in attachment avoidance can display both positive and negative views of self (Pietromonaco & Feldman Barrett, 2000) and are likely to defensively enhance views of self and suppress vulnerability (Mikulincer & Shaver, 2007a). Interestingly, self-compassion is negatively associated with avoidant coping (Allen & Leary, 2010; Neff, Hsieh, & Dejjterat, 2005) and experiential avoidance (Thompson & Waltz, 2008), both of which are key features of attachment avoidance (Mikulincer & Shaver, 2007a). Self-compassion involves a kind and gentle acceptance of one's own shortcomings and failures, rather than engaging in efforts to avoid or escape from difficult emotion (Allen & Leary, 2010; Neff et al., 2005), again, a feature of attachment avoidance. Thus, theoretically, it is plausible that attachment avoidance may be related to lower self-compassion, as individuals high in attachment avoidance have less capacity to accept personal shortcomings with compassion, and instead engage in efforts to deny shortcomings. Several studies have not found an association between attachment avoidance and self-compassion (Neff & McGeehee, 2010; Wei et al., 2011), though Raque-Bogdan et al. (2011) did find one. Given the considerations mentioned earlier in the text regarding avoidant coping and self-compassion, and that substantial research has demonstrated an association between high attachment avoidance and poor psychosocial adjustment (Mikulincer & Shaver, 2007a), it seems possible that attachment avoidance may also be associated with low self-compassion.

Study 1

In Study 1 we examined whether retrospective reports of parenting received in childhood would predict individual differences in self-compassion, and whether these associations would be mediated by attachment (anxiety and avoidance). Specifically, it was predicted that poor parenting received in childhood (operationalized by three factors: low warmth, high overprotection, and high rejection) would predict low self-compassion, and this would be mediated by attachment (anxiety and avoidance).

Methods

Participants

Participants were 329 first year undergraduate psychology students from Griffith University (241 females and 88 males, ranging in age from 16 to 55, $M = 21.53$ years, $SD = 6.59$) who participated for experimental credit.

Measures

Self-compassion. The Self-Compassion Scale is a 26-item self-report measure of self-compassion (Neff, 2003a; e.g., "I try to be loving towards myself when I'm feeling emotional pain" and "When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people"). The measure consists of six subscales that can be summed to yield a more parsimonious total score that reflects a single higher-order factor (Neff, 2003a). The Self-Compassion Scale is a widely used, valid and reliable measure (Neff, 2003a), and displayed high internal consistency in the present sample ($\alpha = .93$).

Recollections of parenting. The 23-item short-Egna Minnen Beträffande Uppfostran (s-EMBU) “My Memories of Upbringing” measures adults’ perceptions of their parents’ child-rearing behavior on three subscales: parental rejection (e.g., “My parents criticized me and told me how lazy and useless I was in front of others”), emotional warmth (e.g., “I felt that warmth and tenderness existed between me and my parents”), and parental overprotection (e.g., “I think that my parents’ anxiety that something might happen to me was exaggerated”; Arrindell et al., 1999). Although the s-EMBU can be scored separately for mothers and fathers, in order to incorporate the wide range of possible carer arrangements, a measure of perceptions of parental care-giving behavior in general was obtained. The s-EMBU demonstrated high internal consistency in the present sample for parental rejection ($\alpha = .88$), emotional warmth ($\alpha = .90$), and overprotection ($\alpha = .87$).

Attachment. The 36-item Experiences in Close Relationships Scale-Revised (ECR-R) is a reliable and valid measure of attachment anxiety (e.g., “My desire to be very close sometimes scares people away” and “I worry a lot about relationships”) and avoidance (e.g., “I prefer not to show a partner how I feel deep down” and “I find it difficult to allow myself to depend on romantic partners”; Fraley et al., 2000). Cronbach’s alpha in the present sample was high for both attachment anxiety ($\alpha = .94$) and attachment avoidance ($\alpha = .95$).

Procedure

Full ethical approval was provided by the Griffith University Human Research Ethics Committee. First year undergraduate students were invited to participate in the research for experimental credit, and participants signed up to the study on a Subject Pool website. Participants were informed that the research was an online questionnaire designed to investigate personality and individual differences, and provided informed consent on the survey website, and then completed the questionnaire that included the above measures.

Results

The normality of the distribution for each of the variables was examined, and checks for outliers were performed. Transformation and removal of outliers did not change the pattern of results, and the untransformed data were therefore used for the analyses in Study 1. Table 1 contains descriptive statistics and a correlation matrix for the variables of interest. All variables were correlated in the expected directions. Specifically, parental rejection and overprotection were positively related to attachment insecurity (anxiety and avoidance), and parental warmth negatively related, though the magnitude of these

TABLE 1 Means, Standard Deviations, and Correlations for Variables of Interest (Study 1)

	Mean	SD	1	2	3	4	5	6
1. Attachment anxiety	61.15	21.36	1.00					
2. Attachment avoidance	56.36	20.63	.41***	1.00				
3. Parental warmth	17.53	4.71	-.12*	-.22***	1.00			
4. Parental rejection	11.91	4.93	.25***	.21**	-.62***	1.00		
5. Parental overprotection	20.53	6.21	.26***	.17**	-.22***	.50***	1.00	
6. Self-compassion	74.68	17.29	-.35***	-.19***	.14*	-.24***	-.20**	1.00

Notes: $N = 329$ (parental warmth, $N = 298$; parental rejection, $N = 277$; parental overprotection, $N = 292$); * $p < .05$; ** $p < .01$; *** $p < .001$.

correlations was small. Similarly, small but significant correlations were found between the three parenting subscales and self-compassion in expected directions. Attachment anxiety and avoidance were both associated with lower self-compassion, though this association was stronger for attachment anxiety.

The indirect effect of parenting received in childhood on self-compassion via attachment was examined using bootstrapping methods with 5000 bootstrap samples as recommended by Preacher and Hayes (2004) to test the significance of the indirect effect of the independent variable (parenting received in childhood) on the dependant variable (self-compassion) through the proposed mediator (attachment; Preacher & Hayes, 2004). Three multiple mediation models were tested. A diagram of the theoretical model is presented in Figure 1. The total effect of parental warmth on self-compassion was significant ($b = .51, p < .05$). The associations between parental warmth and the proposed mediators (attachment) were significant for attachment anxiety ($b = -.55, p < .05$) and attachment avoidance ($b = -.97, p < .001$). Attachment anxiety ($b = -.28, p < .001$) but not avoidance ($b = -.05, p = .294$) predicted self-compassion. Finally, attachment anxiety mediated the association between parental warmth and self-compassion. Specifically, there was a significant indirect effect of parental warmth on self-compassion via attachment anxiety ($b = .15, CI_{95\%} = .004$ to $.362$), and a non-significant direct effect ($b = .31, p = .127$) of parental warmth on self-compassion when controlling for the mediator. No significant indirect effects were found for attachment avoidance ($CI_{95\%} = -.042$ to $.186$). Overall, the model predicted 15.3% of the variance in self-compassion ($R^2 = .153$).

The total effect of parental rejection on self-compassion was significant ($b = -.85, p < .001$). The associations between parental rejection and the proposed mediators (attachment) were significant for attachment anxiety ($b = 1.09, p < .001$) and attachment avoidance ($b = .89, p < .001$). Attachment anxiety ($b = -.26, p < .001$) but not avoidance ($b = -.04, p = .425$) predicted self-compassion. Finally, attachment anxiety mediated the association between parental rejection and self-compassion. Specifically, there was a significant indirect effect of parental rejection on self-compassion via attachment anxiety ($b = -.28, CI_{95\%} = -.510$ to $-.116$), though the direct effect of parental rejection on self-compassion remained significant ($b = -.53, p < .05$) when controlling for the mediator. No significant indirect effects were found for attachment

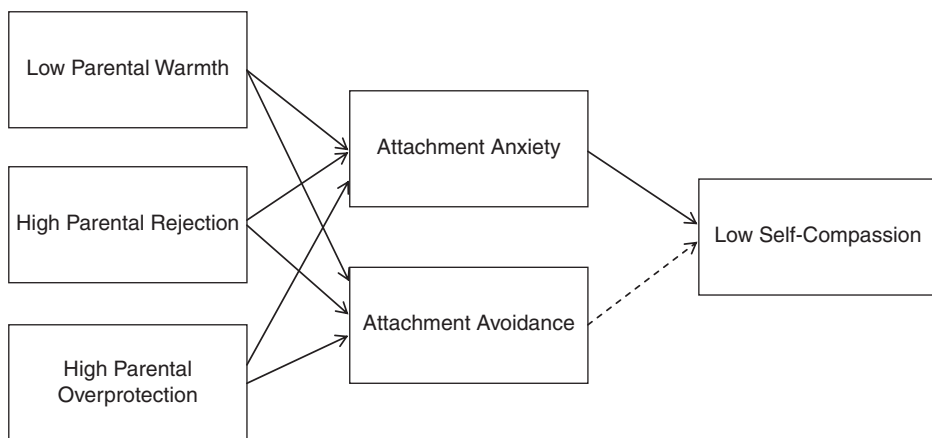


FIGURE 1 Diagram of multiple mediation model. *Note:* Dotted line represents non-significant path.

avoidance ($CI_{95\%} = -.168$ to $.048$). Overall, the model predicted 15.8% of the variance in self-compassion ($R^2 = .158$).

The total effect of parental overprotection on self-compassion was significant ($b = -.55, p < .001$). The associations between parental overprotection and the proposed mediators (attachment) were significant for attachment anxiety ($b = .88, p < .001$) and attachment avoidance ($b = .58, p < .01$). Attachment anxiety ($b = -.28, p < .001$) but not avoidance ($b = -.05, p = .299$) predicted self-compassion. Finally, attachment anxiety mediated the association between parental overprotection and self-compassion. Specifically, there was a significant indirect effect of parental overprotection on self-compassion via attachment anxiety ($b = -.25, CI_{95\%} = -.414$ to $-.120$), and a non-significant direct effect of parental overprotection on self-compassion ($b = -.28, p = .086$) when controlling for the mediator. No significant indirect effects were found for attachment avoidance ($CI_{95\%} = -.115$ to $.024$). Overall, the model predicted 16.2% of the variance in self-compassion ($R^2 = .162$).

In summary, poor parenting received in childhood (low warmth, high over-protection, and high rejection) was associated with lower self-compassion. Attachment anxiety mediated the association between parental warmth, rejection, and overprotection on self-compassion. Attachment avoidance did not mediate any association.

Discussion

The aim of Study 1 was to investigate the possible origins of individual differences in self-compassion. We proposed that retrospective reports of poor parenting received in childhood (low warmth, high over-protection, and high rejection) would predict low self-compassion, and that these associations would be mediated by attachment. As hypothesized, parental warmth predicted high self-compassion, and parental rejection and overprotection predicted low self-compassion. Interestingly, these associations were mediated by attachment anxiety but not avoidance. These findings suggest that experiences of parenting received in childhood that are characterized by rejection, criticism, and a lack of warmth and care, are associated with lower self-compassion via heightened attachment anxiety.

The cross-sectional nature of the present study does, however, preclude conclusions regarding causation from being made. Only longitudinal research can definitively examine whether early parenting practices lead to the development of individual differences in self-compassion. However, the proposed mechanism underlying the association between parenting in childhood and self-compassion, namely attachment, can be manipulated experimentally (Mikulincer & Shaver, 2007b) to provide preliminary causal evidence. In Study 2, we investigated the attachment–self-compassion association experimentally.

Study 2

Study 2 examined whether experimentally enhancing attachment security through established attachment security priming methods would lead to an increase in state self-compassion. Much evidence indicates that experimentally priming attachment security leads to a range of theoretically relevant outcomes (Mikulincer & Shaver, 2007b). Thus, in Study 2, we examined the effects of experimentally enhancing attachment security to examine the effects on self-compassion. Attachment security priming refers to the process of temporarily activating individuals' mental representations of secure attachment figures, which enhances feelings of felt security (Mikulincer & Shaver, 2007b). Felt security is "a sense that the world is generally safe, that attachment figures are helpful when called upon,

and that it is possible to explore the environment curiously and confidently and to engage rewardingly with other people” (Mikulincer & Shaver, 2007a, p. 21). Security priming leads individuals (regardless of their attachment style) to behave more like those who are *dispositionally* secure (Mikulincer & Shaver, 2007b). If attachment is causally related to self-compassion, then priming attachment security should increase state self-compassion. It was predicted that participants in the experimental security priming condition would increase in state self-compassion. No such changes were expected in the control condition.

Methods

Participants

Participants were 32 first year undergraduate psychology students from Griffith University (24 females and 8 males, ranging in age from 17 to 56, $M = 21.31$ years, $SD = 8.02$) participating for experimental credit. Participants were randomly assigned to either the experimental condition ($N = 16$; 11 females and 5 males) or to the control condition ($N = 16$; 13 females and 3 males).

Measures

Self-compassion. To assess state self-compassion, we administered the 12-item Short Form Self-Compassion Scale (Raes, Pommier, Neff, & Van Gucht, 2011) and asked participants to respond to the items based on how they were feeling in the present moment. Example items include “I’m intolerant and impatient towards those aspects of my personality I don’t like” and “I try to be understanding and patient towards those aspects of my personality I don’t like.” The Short Form Self-Compassion Scale has good psychometric properties, and can be summed to yield a total score (Raes et al., 2011). The measure had high internal consistency in the present sample at pre ($\alpha = .87$) and post ($\alpha = .91$).

Attachment. The 21-item State Adult Attachment Measure (SAAM) was used to assess change in state attachment as a manipulation check. The SAAM consists of three subscales: anxiety (e.g., “I feel a strong need to be unconditionally loved right now”), avoidance (e.g., “I would be uncomfortable having a good friend or a relationship partner close to me”), and security (e.g., “I feel secure and close to other people”; Gillath, Hart, Nofhle, & Stockdale, 2009). The measure has good convergent and discriminant validity (Gillath et al., 2009). Internal consistency was high in the present sample at pre ($\alpha = .84$, .84, and .96) and post ($\alpha = .85$, .84, and .95) for anxiety, avoidance, and security, respectively.

Procedure

Full ethical approval was provided by the Griffith University Human Research Ethics Committee. Individuals were invited to participate to gain course credit on a Subject Pool website. Participants were informed that the present research was designed to investigate their thoughts and feelings relating to particular experiences. Participants signed a consent form in the experimental session, and were randomly assigned to either the security priming experimental condition or to the control condition. In both conditions, participants first completed the pre-manipulation questionnaires, and then completed the manipulation and the post-manipulation questionnaires.

To ensure that any observed effect of security priming was not specific to any one prime, one of four 10-minute security primes were randomized. The four primes were based on primes described by Mikulincer et al. (2001) and Mikulincer and Shaver (2001).

Participants were asked to visualize a particular person with whom they feel comfortable, safe, and can turn to when they are upset; someone who is sensitive and responsive to their needs, and who would help them if needed. Participants were asked to think about how this person might help them, and how they would feel afterward. Participants in the control condition completed one of four 10-minute interpersonal skills modules that were randomized. The interpersonal skills sessions focussed on participants' use of questions, "I-statements", and assertiveness. Participants were provided basic education about each of these skills, and were asked to reflect on their own use of interpersonal skills relevant to each topic in their daily life. This control condition was chosen as it was an active control condition, but did not focus on feelings of security or compassion. Details of the experimental manipulations used are available from the first author upon request.

Results

A mixed between-within subjects ANOVA was conducted to assess changes in state attachment as a manipulation check. For state attachment security, there was a significant main effect for time, $F(1, 30) = 5.68, p = .024$, partial $\eta^2 = .16$ and a significant interaction between condition and time $F(1, 30) = 11.13, p = .002$, partial $\eta^2 = .27$. For the experimental condition, there was a significant increase between pre ($M = 38.31, SD = 10.45$) and post ($M = 43.94, SD = 5.45$) state attachment security ($t(15) = -3.17, p = .006$), $d = .68$, whereas for the control condition, there was no significant difference between pre- ($M = 36.13, SD = 10.25$) and post- ($M = 35.19, SD = 10.79$) scores ($t(15) = 1.11, p = 2.84$), $d = .09$. No significant effects were observed for attachment anxiety or avoidance.

With regards to the outcome measure (state self-compassion), there was no significant main effect for time, $F(1, 29) = 1.79, p = .191$, partial $\eta^2 = .06$, but there was a significant interaction between condition and time, $F(1, 29) = 5.18, p = .03$, partial $\eta^2 = .15$. State self-compassion increased in the experimental condition between pre- ($M = 39.56, SD = 8.92$) and post- ($M = 43.94, SD = 7.04$) scores ($t(15) = -2.29, p = .037$), $d = .55$, but not in the control condition between pre- ($M = 30.47, SD = 6.42$) and post- ($M = 29.33, SD = 6.84$) scores ($t(14) = .783, p = .447$), $d = .15$.¹

Discussion

Study 2 examined whether experimentally enhancing attachment security through security priming methods would lead to an increase in state self-compassion. State attachment security significantly increased in the experimental condition and not in the control condition, indicating that the manipulation was successful. State self-compassion also increased in the experimental condition and not in the control condition, which demonstrates that enhancing state attachment security leads to increases in state self-compassion.

Interestingly, in Study 2, state attachment security increased in the experimental condition, but state attachment anxiety and avoidance did not decrease. Although increasing attachment security should lead to a decrease in state attachment anxiety and avoidance (Gillath et al., 2009), perhaps directly targeting only security was not sufficient to lead to change in anxiety and avoidance with the particular primes used. To date, most studies examining attachment priming manipulations have focussed on priming attachment security rather than insecurity (anxiety and avoidance). However, evidence does indicate that attachment insecurity can be directly primed (e.g., Gillath et al., 2009; Rowe et al., 2012). Future research should examine whether directly priming attachment

anxiety leads to a decrease in state self-compassion in order to more explicitly test this association. In brief, the findings from Study 2 indicate that attachment may be causally related to self-compassion.

General Discussion

The findings of the present research shed light on the potential origins of self-compassion. Study 1 found that retrospective reports of parenting received in childhood predicted self-compassion, and these effects were mediated by attachment anxiety but not avoidance. Specifically, high parental rejection and overprotection, and low parental warmth, predicted low self-compassion, and these associations were mediated by attachment anxiety. To examine the association between attachment and self-compassion experimentally, Study 2 extended this cross-sectional study by experimentally enhancing attachment security which led to an increase in state self-compassion.

Results from Study 1 replicate the established association between parenting received in childhood and attachment (e.g., Grossman et al., 2005), and between attachment anxiety and self-compassion (Raque-Bogdan et al., 2011). In the present research, we found a small but reliable correlation between high attachment avoidance and low self-compassion, which replicates findings reported by Raque-Bogdan et al. (2011) of an association. However, when included with attachment anxiety in the multiple mediation models, attachment avoidance did not predict self-compassion. As mentioned earlier, several studies have not found an association between attachment avoidance and self-compassion (Neff & McGeehee, 2010; Wei et al., 2011). Perhaps the small magnitude of this effect is responsible for the inconsistent findings reported in the literature, but these inconsistencies may also result from the complex association between attachment avoidance and feelings toward the self, discussed earlier.

Findings from Study 1 indicate that parenting received in childhood, at least as recalled retrospectively in adulthood, predicts attachment anxiety which in turn predicts low capacity for self-compassion. Parental warmth was associated with low attachment anxiety, which in turn was associated with higher self-compassion. This finding suggests that the experience of warmth during childhood enables an individual to feel secure in the relationship, without feeling unlovable and fearing abandonment (low attachment anxiety). Over time, this felt security in the relationship may lead to the belief that one is worthy of care, compassion and kindness, and may lead to the development of higher self-compassion. Conversely, experiences of parental rejection were associated with higher attachment anxiety. Perhaps the voice of a rejecting or critical caregiver becomes internalized as self-criticism, and negative views of the self (consistent with attachment anxiety), and ultimately lower capacity for self-compassion. Finally, parental overprotection was associated with higher attachment anxiety, which in turn predicted lower self-compassion. It seems likely that experiences of anxious overprotection may lead an individual to believe that they do not have the ability to cope with difficult life experiences or failure, and may thus not have the opportunity to develop self-compassion.

These findings are consistent with social mentality theory. Specifically, if an individual is met with an appropriate response when seeking compassion, comfort or support, this strengthens the social mentality and the individual is likely to also develop further skills and behaviors related to this social mentality (i.e., self-compassion Gilbert, 2009). When these efforts are met with rejection, criticism, humiliation, hostility, or overprotection, the social mentality is blocked, an individual may become less skilled at recognizing their own need for compassion, which may lead to lower self-compassion (Gilbert, 2009). Overall, results from Study 1 suggest that the quality of parenting received in childhood may be

involved in the development of self-compassion. Longitudinal research is needed to examine whether sensitive and responsive parenting leads to enhanced self-compassion, and whether it is indeed attachment processes that provide greater capacity for self-compassion.

Results from Study 2 are also consistent with prior research showing that attachment security is associated with greater self-compassion (Neff & McGeehee, 2010). Experimentally enhancing state attachment security leads to enhanced self-compassion. Given the substantial literature demonstrating that attachment orientations are influenced by the quality of parenting received in childhood (Grossman et al., 2005; Mikulincer & Shaver, 2007a), the finding from the present research that priming attachment security enhances self-compassion is consistent with previous suggestions that the quality of early caregiver relationships may be responsible for the development of individual differences in self-compassion (Gilbert & Procter, 2006).

The possibility that security priming may overlap conceptually with exercises designed to enhance self-compassion, such as the Letter to a Compassionate Friend Exercise (Neff & Germer, 2013), warrants discussion. Attachment security priming activates the secure base script (Waters & Waters, 2006) which consists of the following if–then propositions:

If I encounter an obstacle and/or become distressed, I can approach a relationship partner for help; he or she is likely to be available and supportive; I will experience relief and comfort as a result of proximity to this person; I can then return to other activities. (Mikulincer, Shaver, Sapir-Lavid, & Avihou-Kanza, 2009, p. 616)

Security priming also provides individuals with a sense of felt security (Mikulincer & Shaver, 2007b). Thus, although attachment figures can offer compassion, attachment figures also function as a *safe haven* when an individual is distressed or in need, and as a *secure base* from which an individual can confidently pursue other (non-attachment related) goals (Ainsworth, 1989; Hazan & Zeifman, 1994; Mikulincer & Shaver, 2007a). These functions of attachment figures, which attachment security priming is designed to activate, extend beyond feelings of compassion.

Only longitudinal research can definitively establish the development of individual differences in self-compassion. However, the present results provide some exciting preliminary evidence regarding the possible origins of individual differences in self-compassion, and have important implications for both theory and research into the development of self-compassion.

Limitations and Future Directions

Limitations of the present research need to be acknowledged. First, the cross-sectional nature of Study 1 precludes definitive conclusions regarding causation being drawn. Future research should track the development of self-compassion in children, in the context of the quality of parenting, and attachment. Second, in Study 2, although state attachment security increased in the experimental condition, attachment anxiety and avoidance did not decrease. Future research should examine primes that directly target attachment anxiety and avoidance to investigate the association between these constructs and self-compassion experimentally. It is also important to note the modest sample size in Study 2. Although the effect sizes obtained were moderate to large, it is important that future research examine these effects in larger samples.

There are limitations of the use of retrospective reports of parenting received in childhood with regards to validity (Brewin, Andrews, & Gotlib, 1993). However, perceptions of parenting received during childhood are often more relevant than actual

parenting behaviors when predicting psychosocial outcomes (e.g., Parker, 1984). Finally, it is important to note that the relationship between early childhood experiences and self-compassion is complex. We do not suggest that attachment is the only mechanism by which parenting in childhood might predict self-compassion. It is very likely that additional factors such as emotion regulation capacity are implicated in this process. We also do not suggest that parenting received in childhood is the only precursor involved in the development of self-compassion. The model accounted for approximately 15% of the variance in self-compassion, and it is therefore important that future research investigates the relative importance of a wide range of processes that might predict individual differences in self-compassion, and additional factors that might explain the relationship between parenting received in childhood and self-compassion.

It is acknowledged that results from Study 2 could be due to demand characteristics due to the repeated nature of the design. However, the inclusion of an active control group where no increase in state attachment security or state self-compassion was observed suggests that the results are unlikely to be due to demand characteristics, and more likely due to the manipulation itself. Finally, it is acknowledged that the present research did not examine the association between retrospective reports of parenting, attachment, and self-compassion across different age groups. There is no compelling theoretical reason as to why the associations between the variables would differ across age ranges, and our samples ranged in age quite substantially, suggesting that the results are not specific to any one age group. Nonetheless, future research should directly test this possibility. Similarly, the present research cannot definitively conclude that the associations between parenting, attachment, and self-compassion would hold equally for males and females. Again, although there is no theoretical reason to suggest that gender would moderate these associations, future research should test whether the associations do hold equally for both males and females.

The present research was the first to investigate whether attachment mediated the association between parenting received in childhood and self-compassion, and the first to examine the effects of experimentally enhancing attachment security on self-compassion. Poor parenting in childhood predicted higher attachment anxiety, which in turn predicted lower self-compassion. Further, priming attachment security led to increases in state self-compassion. In brief, results of the present research suggest that early childhood experiences and attachment may impact on the development of individual differences in self-compassion.

Note

1. Given that pre-test averages of self-compassion were different between the two conditions, to ensure that the results were not obtained due to discrepant levels of self-compassion at baseline, we ran an analysis of covariance comparing post-test self-compassion between the two groups, controlling for pre-test self-compassion. Results revealed that the differences in self-compassion at post-test remained when controlling for initial levels of self-compassion, indicating that the findings were not due to baseline differences in self-compassion. In the interests of brevity, we do not report these additional analyses, but can make them available upon request.

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