Self-Compassion Mediates the Relationship between Parental Criticism and Social Anxiety

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Abstract

Psychological theories of social anxiety suggest that social anxiety is associated with parental criticism. The current study aimed to test this hypothesis and examine the possibility that different aspects of self-compassion (self-warmth and self-coldness) mediate the relationship between parental criticism and social anxiety. Participants from the general population (N = 211) completed an online survey that measured levels of parental criticism, self-compassion, and social anxiety. The results showed that parental criticism was positively correlated with social anxiety and self-coldness, while negatively correlated with self-warmth. Social anxiety was also positively correlated with self-coldness and negatively correlated with self-warmth. Finally, self-warmth and self-coldness completely mediated the relationship between parental criticism and social anxiety. The results provide evidence to suggest that parental criticism has an impact on social anxiety through its association with low self-compassion.

Key words: Self-compassion; parental criticism; social anxiety.

Individuals who experience social anxiety are overly concerned about possible critical evaluation of themselves by others. This results in much fear and avoidance of social situations, which can lead to impairments in everyday functioning (Henderson & Zimbardo, 2010). In severe instances of social anxiety, an everyday social interaction can be a terrifying and exceptionally difficult task in which distorted negative self-cognitions and strong negative emotions such as embarrassment, shame, and self-hatred are evoked (Herbert, Rheingold, & Brandsma, 2010). While cognitive-behavioural theories of social...

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anxiety highlight the role of cognitions and behaviours in maintaining the social anxiety (Rapee & Heimberg, 1997), developmental and social learning theories emphasise the importance of developmental experiences that might contribute to the disorder, namely parenting styles (Detweiler, Comer, & Albano, 2010). These theories have found much empirical support, but few studies have explored the influence of both parenting styles and cognitions on social anxiety. The current study examined the association between parental criticism, self-compassion, and social anxiety. In addition, this study examined if self-compassion, an adaptive way of relating to oneself that involves self-kindness and mindfulness, mediates the relationship between parental criticism and social anxiety.

The social learning perspective of social anxiety states that parents who display anxious, fearful, or avoidant behaviours are modelled by their children, and that this modelling might lead to the development of social anxiety in such children (de Rosnay, Cooper, Tsigaras, & Murray, 2006; Turner, Beidel, Roberson-Nay, & Tervo, 2003). Furthermore, parental characteristics such as low affective warmth and strict discipline are predictive of social anxiety (Duchesne, Larose, Vitaro, & Tremblay, 2010; Festa & Ginsburg, 2011). However, while these studies offer explanations as to why socially anxious individuals display certain behaviours, the development of distorted negative self-cognitions in social anxiety is not explained. Parental criticism offers a source of explanation for this aspect of social anxiety.

Criticism or punishment of children based on poor performance, setting overly high standards, and not understanding or accepting mistakes constitute parental criticism (Frost, Marten, Lahart, & Rosenblate, 1990). Being insulted, sworn at, threatened with physical harm, or being told that one is worthless and useless are examples of parental criticism (Sachs-Ericsson, Verona, Joiner, & Preacher, 2006). Parental criticism can negatively impact a child, and has been linked specifically to self-criticism (Koestner, Zuroff, & Powers, 1991). Self-criticism is a harmful form of self-evaluation that involves feelings of worthlessness and guilt, a sense of failure, and perceiving disapproval and criticism from others in reaction to performance in everyday activities (Cox, Fleet, & Stein, 2004). Koestner, Zuroff, and Powers (1991) demonstrated that experiences of parental criticism at age five predicted the development of self-criticism by age twelve and the maintenance of self-criticism into adulthood, whilst controlling for child temperament. Additional research has supported Koestner et al.’s evidence of a predictive relationship between parental criticism and self-criticism (Brewin, Andrews, &Furnham, 1996; Sachs-Ericsson et al., 2006).

Consistent with the observed associations between parental criticism and self-criticism (Koestner et al., 1991), associations between social anxiety and parental criticism have been reported. Juster, Heimberg, Frost, Holt, Mattia, and Faccenda(1996) found that their sample of patients with social phobia reported significantly higher perceived parental criticism than community volunteers. Likewise, Antony, Purdon, Huta, &Swinson (1998) in their study of perfectionism across a range of anxiety disorders found that individuals with social phobia reported significantly higher parental criticism than individuals with other anxiety disorders. Recently, Knappe, Beesdo-Baum, Lieb, & Wittchen (2012) found that paternal rejection and low emotional warmth was associated with social anxiety in a large sample of 1053 adolescents. In spite of these consistent
findings, no studies to date have examined potential mediators of the relationship between parental criticism and social anxiety. A possible mediator to this relationship is self-compassion. The intervening period between early childhood and adulthood is a time when parental criticism might be internalised such that it affects the development of an individual’s self-identity. It is therefore possible that high levels of parental criticism might lead to lower levels of self-compassion, which in turn results in high levels of social anxiety.

Self-compassion is a new construct to western psychology, adapted from Buddhist philosophy, and is associated with psychological well-being (Neff, 2009). Conceptualised as compassion turned inward, self-compassion involves being touched by, and open to one’s own suffering, desiring to alleviate one’s own suffering, and healing oneself with kindness. It also involves accepting and understanding non-judgementally one’s pain, inadequacies, and failures (Neff, 2003). Self-compassion entails three components: (1) self-kindness-self-judgement: extending kindness and understanding to oneself rather than harsh judgment and self-criticism; (2) common humanity-isolation: seeing one’s experiences as part of the larger human experience rather than seeing them as separating and isolating; and (3) mindfulness-over-identification: holding thoughts and feelings that are painful in balanced awareness rather than over-identifying with and ruminating about them, thus being negatively influenced by them (Neff, 2003). Recent research into self-compassion separated the positive (self-kindness, common humanity, mindfulness) and negative (self-judgement, isolation, over-identification) aspects of self-compassion into two dimensions: self-warmth and self-coldness (Gilbert, McEwan, Matos, & Rivis, 2011).

Recently, Werner, Jazaieri, Goldin, Ziv, Heimberg, and Gross (2012) demonstrated that individuals with social anxiety had significantly lower self-compassion scores than healthy controls. They also found that self-compassion was associated with greater fears of evaluation. These findings are consistent with recent research suggesting that self-compassion plays an important secondary role in the development and maintenance of psychological disorders (Neff, 2009). Furthermore, as the self-coldness component of self-compassion corresponds to the construct of self-criticism, it is unsurprising that low self-compassion is related to social anxiety. We can therefore expect that self-coldness would be associated with social anxiety and might possibly act as a significant mediator to the relationship between parental criticism and social anxiety. However, the independent effect of self-warmth and extent to which it might be mediate the relationship between parental criticism and social anxiety is as yet unknown.

The first aim of the current study was to replicate previous findings that showed that social anxiety is associated with parental criticism and self-compassion. Secondly, we hoped to investigate the mediating role of self-compassion and its components in the relationship between parental criticism and social anxiety. We hypothesized that parental criticism would be positively correlated with social anxiety, negatively correlated with the self-warmth, and positively correlated with self-coldness. Furthermore, self-coldness would be positively correlated with social anxiety, while self-warmth would be negatively correlated with social anxiety, independent of self-coldness. Finally, we expected to find that the two sub-components of self-compassion would mediate the relationship between parental criticism and social anxiety. We chose to examine the effects of self-coldness
and self-warmth components of self-compassion rather than Neff’s three component model because the subscales used in her model are highly correlated. For example, Neff (2003) reported that the self-kindness subscale and mindfulness subscale were correlated at \( r = .87 \). The problems with multicollinearity would lead to unreliable path estimates and make results difficult to interpret.

**Method**

**Participants**

Participants were recruited from the general population who were offered an entry into a lucky draw prize as incentive for participating. The sample consisted of 140 females and 71 males ranging from 18 to 63 years of age (\( M= 30.23, SD= 12.79 \)). Approximately 77% of the sample identified as Australian, 13% as European, 6% as Asian, and 4% as another nationality.

**Measures**

Participants were administered the four item parental criticism subscale of the Frost Multidimensional Perfectionism Scale (FMPS; Frost et al., 1990). The parental criticism subscale reflects critical evaluation by parents. Participants were required to rate a statement such as ‘My parents never tried to understand my mistakes’, on a 5-point scale ranging from ‘strongly agree’ to ‘strongly disagree’. Frost, Marten, Lahart and Rosenblate (1990) reported the parental criticism subscale’s internal consistency was excellent (\( \alpha = .84 \)), and demonstrated that the parental criticism subscale displayed convergent validity by positively correlating with the other subscales of the FMPS.

The Self-Compassion Scale (Neff, 2003) consists of 26-items and participants endorse each item on a 5-point scale ranging from ‘almost never’ to ‘almost always’ as it relates to their own behaviour. The 5-item self-kindness, 4-item common humanity and 4-item mindfulness subscale scores were summed to form the self-warmth factor. The 5-item self-judgement, 4-item isolation and 4-item over-identification subscale scores were summed to form the self-coldness factor. Neff reported excellent internal consistency, test-retest reliability and validity scores for the scale.

The Liebowitz Social Anxiety Scale (LSAS; Liebowitz, 1987) is a 24-item measure of social anxiety. Participants reported the extent to which they feared or avoided a range of social interaction and performance situations. Fear was rated on a 4-point scale from ‘none’ to ‘severe’. Avoidance was rated on a 4-point scale from ‘never’ to ‘usually’. Excellent internal consistency, convergent validity and divergent validity for the LSAS have been reported (Fresco et al., 2001).

**Design**

This study employed a correlational cross-sectional design. Pearson product-moment correlations were used to test for relationships between the independent variable
(IV) parental criticism and the two components of self-compassion, and between these components and the dependent variable (DV) social anxiety. Bootstrap analysis was used to test the significance of the mediating effects of self-warmth and self-coldness on the relationship between parental criticism and social anxiety. Preacher and Hayes (2008) suggested that bootstrapping does not impose the assumption of normality on the sampling distribution of indirect effects and is a superior alternative to the Sobel assessment of mediation. The bootstrap method was used to estimate the indirect, direct and total effect sizes of parental criticism through the mediating variables (self-warmth and self-coldness) on social anxiety; bias-controlled and accelerated confidence intervals from 5,000 bootstrap samples were used to infer significance of indirect effects (Preacher & Hayes, 2008). An SPSS bootstrap macro was used to analyse the data (http://www.afhayes.com).

RESULTS

Visual inspection of the histogram plots showed that all variables except parental criticism had sufficiently normal distributions for further analysis. A Log10 transformation improved the normality of the parental criticism variable.

Descriptive results for all outcome variables are shown in Table 1. Table 1 also includes the results of correlation analyses between variables that are relevant to the hypotheses. Furthermore, as composite variables were generated in this study, reliability analyses were conducted; the internal consistencies of variables were highly satisfactory. Although irrelevant to the hypotheses of this study, the variables age and total self-compassion were included in the correlation analyses for exploratory purposes.

All of the hypothesised correlations in this study were significant. Parental criticism was positively correlated with social anxiety and negatively correlated with self-warmth, parental criticism was positively correlated with self-coldness, and self-coldness was positively correlated with social anxiety. Although four of the five hypothesised correlations

<table>
<thead>
<tr>
<th>Measure</th>
<th>Gender</th>
<th>Age</th>
<th>FMPS-PC</th>
<th>LSAS</th>
<th>Self-coldness</th>
<th>Self-warmth</th>
<th>SCS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-.11</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FMPS-PC</td>
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<td>.09</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>LSAS</td>
<td>.11</td>
<td>-.18*</td>
<td>.24*</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-coldness</td>
<td>.19*</td>
<td>-.29*</td>
<td>.28*</td>
<td>.51*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-warmth</td>
<td>-.11</td>
<td>.10</td>
<td>-.25*</td>
<td>-.28*</td>
<td>-.28*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>SCS</td>
<td>-.19*</td>
<td>.25*</td>
<td>-.33*</td>
<td>-.50*</td>
<td>-.82*</td>
<td>.78*</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>-</td>
<td>30.23</td>
<td>.89</td>
<td>40.50</td>
<td>2.48</td>
<td>2.57</td>
<td>3.05</td>
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<tr>
<td>SD</td>
<td>-</td>
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<td>.18</td>
<td>18.81</td>
<td>.81</td>
<td>.72</td>
<td>.61</td>
</tr>
<tr>
<td>Cronbach’s α</td>
<td>-</td>
<td>-</td>
<td>80</td>
<td>94</td>
<td>92</td>
<td>90</td>
<td>.91</td>
</tr>
</tbody>
</table>

Notes: FMPS-PC= parental-criticism subscale of the Frost Multidimensional Perfectionism Scale; LSAS= Liebowitz Social Anxiety Scale; SCS= Self-Compassion Scale; The mean and standard deviation of FMPS-PC were from log10 transformed data; *=p < .01.
had small effect sizes (<.30), the positive correlation between self-coldness and social anxiety had a large effect size (> .50). Results also showed that self-warmth and social anxiety were significantly correlated even after controlling for self-coldness, \( r (208) = -.16, p = .019 \). Both age and gender were significantly correlated with various outcome variables and their effects were thus controlled for in subsequent mediation analyses.

As per Baron and Kenny’s (1986) recommendation, all required pre-requisites for mediation were met. Results of the bootstrap analysis of the mediating effects of self-warmth and self-coldness on the relationship between parental criticism and social anxiety are shown in Table 2. When the effects of self-warmth and self-coldness were controlled for (\( c' \) path), the relationship between parental criticism and social anxiety was rendered non-significant; thus, a complete mediation effect was present (see Figure 1). Self-warmth and self-coldness were both significant mediators of the relationship between parental criticism and social anxiety (see model one in Table 2). Notably, the indirect effect of parental criticism through self-coldness was over four times larger than through self-warmth. Furthermore, total self-compassion was entered into a supplementary mediation analysis for exploratory purposes. It also significantly mediated the relationship between parental criticism and social anxiety, as shown in model two of Table 2.

**Table 2.** Indirect effects of parental criticism on social anxiety through mediator variables.

<table>
<thead>
<tr>
<th>Model</th>
<th>Mediator</th>
<th>Parameter Estimate</th>
<th>Standard Error</th>
<th>Lower</th>
<th>Upper</th>
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<tr>
<td>one</td>
<td>Total</td>
<td>0.88*</td>
<td>0.19</td>
<td>0.53</td>
<td>1.28</td>
</tr>
<tr>
<td></td>
<td>Self-warmth</td>
<td>0.17*</td>
<td>0.09</td>
<td>0.03</td>
<td>0.38</td>
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<tr>
<td></td>
<td>Self-coldness</td>
<td>0.71*</td>
<td>0.19</td>
<td>0.38</td>
<td>1.12</td>
</tr>
<tr>
<td>two</td>
<td>Self-compassion</td>
<td>16.34*</td>
<td>3.34</td>
<td>10.74</td>
<td>25.26</td>
</tr>
</tbody>
</table>

Notes: BCA CI = bias-controlled and accelerated confidence intervals; * \( p < .05 \), with 5000 bootstrap samples.

**Figure 1.** Path model of the relationships between parental-criticism, self-warmth, self-coldness and social anxiety. Values represented are unstandardized coefficients and standard errors (in parentheses) after controlling for the effect of gender. (*) \( p < .05 \); (**) \( p < .01 \).
The results of the current study indicated that social anxiety is related to parental criticism as well as the construct of self-compassion. Furthermore, self-compassion was found to be a significant mediator for the relationship between parental criticism and social anxiety.

Our findings showed a positive relationship between parental criticism and social anxiety. That is, individuals who reported being punished or criticised by their parents for not meeting expectations or standards also endorsed more social anxiety symptoms. This finding reflects other research that has demonstrated relationships between experiences of strict, cold, and harsh parenting and the development of social anxiety (Duchesne et al., 2010; Festa & Ginsburg, 2011).

Parental criticism was also shown to be negatively related to self-warmth, and positively related to self-coldness. Individuals who retrospectively reported experiences of critical parenting were less likely to be self-kind, mindful, or to see their experiences as part of a common human condition. Furthermore, they were more likely to be self-judgemental, over-identify with their problems, and feel isolated and separated from others. Although not included in the hypotheses of the current study, parental criticism was also negatively correlated with the overall construct of self-compassion, which consists of the self-warmth and self-coldness factors, consistent with Neff and McGhee’s (2010) study showing that certain developmental experiences such as warm maternal care, stable family functioning, and high parental support were associated with high levels of self-compassion. The current study is the first to demonstrate a relationship between maladaptive developmental experiences and low levels of self-compassion, as well as the two separate dimensions of self-compassion. The finding that parental criticism was associated with both of the separate dimensions is noteworthy; instead of parental criticism solely being predictive of self-criticism (Sachs-Ericsson et al., 2006), perhaps experiencing critical parenting also renders individuals less able to be self-kind, or self-compassionate. This implication is supported by Gilbert et al.’s (2011) finding that a fear of self-compassion was associated with self-criticism and insecure attachment. It can be speculated that negative developmental experiences not only increase the likelihood of psychological harm, but also decrease the ability of individuals to experience positive, adaptive emotions.

The results also showed a positive correlation between self-coldness and social anxiety symptoms and a negative correlation was observed between self-warmth and social anxiety symptoms, even after controlling for self-coldness. The observation that these relationships were in opposite directions is consistent with the notion that self-compassion is comprised of two dimensions (Gilbert et al., 2011; Neff, 2003). Previous research has shown that self-criticism is strongly associated with social anxiety (e.g., Cox et al.) and our current study supports this since the self-coldness factor closely resembles the construct of self-criticism. That self-warmth was negatively associated with social anxiety was important in our argument that self-compassion is a key component in understanding and treating social anxiety, and is consistent with Werner et al.’s study.
which showed an association between low self-compassion and social anxiety symptoms in a clinical sample. That the association between self-warmth and social anxiety remained even after controlling for self-coldness reaffirms the importance of self-compassion. It is therefore not surprising that in our exploratory analysis the overall construct of self-compassion was also significantly related to social anxiety symptoms. Self-compassion potentially constitutes a psychological construct that can greatly enhance the current understanding of social anxiety.

As predicted, self-warmth and self-coldness completely mediated the relationship between parental criticism and social anxiety even after controlling for gender and age. That is, parental criticism did not directly predict social anxiety symptoms. Rather, individuals who retrospectively reported experiencing parental criticism were more likely to report current self-coldness and less likely to report current self-warmth, and subsequently were more likely to endorse current symptoms of social anxiety. A possible explanation for this finding is that although early experiences of critical parenting may be important in creating a vulnerability to social anxiety, self-compassion may impact the likelihood of social anxiety developing in adolescence or early adulthood. This conclusion is congruent with the existing literature, which suggests that while various early life factors predict social anxiety (Kagan, 2010), many other factors are responsible for maintaining social anxiety later in life (Amir & Bomyea, 2010; Heimberg, Brozovich, & Rapee, 2010). Notably, the indirect effect of parental criticism through self-coldness was over four times larger than through self-warmth, implying that self-coldness is a much more likely path through which parental criticism influences social anxiety. This finding is unsurprising since self-coldness was more strongly correlated with social anxiety. Although smaller, the indirect effect of parental criticism through self-warmth still has implications for treatment and suggests that self-compassion interventions might be useful for social anxiety particularly in individuals who have a history of parental criticism. It must be acknowledged that the current study did not employ analyses that allow for causal inferences to be drawn for the relationships between parental criticism, self-compassion, and social anxiety. Further longitudinal research is required to determine the implications of these relationships.

The current study was limited by various factors. Firstly, the sample age range was wide (from 18 to 63 years). The parental criticism scale assessed experiences in childhood, and the actual influence that parental criticism has on individuals may decrease with age; thus, older participants may not exhibit the same effects of experiencing parental criticism as younger participants. However, Boll, Ferring, and Filipp (2003) found that parental interactions were still important to middle adults, thus the older participants’ data in the current study were deemed appropriate for use. Furthermore, age was included in the mediation analysis as a covariate and therefore was unlikely to influence the results. A related limitation was that the parental criticism scale used is only four items long, and its validity has not been derived via comparison with other parental criticism scales, because very few scales of parental criticism exist. The parental criticism scale used was chosen because it is part of the FMPS, which is psychometrically sound and valid. Future research needs to address these issues, perhaps by restricting the age of the sample, and by creating a new, valid scale to measure parental criticism.
Another limitation of the current study is the use of an online survey for data collection; no clinical interviews were conducted and a clinical sample was not examined. However, there is a considerable overlap of social anxiety symptoms between clinical and community samples (McNeil, 2010). Therefore, the findings of the current study may yet apply to clinical social anxiety. Finally, as already mentioned, a major limitation of the current study is its cross-sectional design. As such while we have tested a mediational model, casual inferences could not be drawn as to the relationships between variables. In our mediation model, we suggested that low-self-compassion causes social anxiety. However, it is equally likely that this relationship is bidirectional and that social anxiety also results in lower self-compassion. Future longitudinal research should be conducted for stronger casual inferences to be made. Regardless of the direction of relationships, the current study demonstrates the importance of self-compassion in social anxiety and it is hoped that these findings would spur future research in this area.

The current study showed that parental criticism was related to social anxiety and that this relationship was fully mediated by self-compassion. These findings contribute to the understanding of social anxiety and suggest that self-compassion training, which can elevate self-warmth and reduce self-coldness, may be effective for the prevention and treatment of social anxiety.

**References**


SELFCOMPASSION, PARENTAL CRITICISM AND SOCIAL ANXIETY

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