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Self-compassion and depressive symptoms in a Norwegian student sample

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Abstract

Excessive self-criticism is common to many mental health problems, including depression. Theoretically, positive self-compassion may work to prevent depression by protecting against the proliferation of self-condemning responses. A sample of Norwegian university students (N = 277, mean age = 22.9 years, SD = 3.5 years, 56% women) completed the Self-Compassion Scale (SCS) and the SCL-90 Depression subscale. Items of the three positive SCS-subscales (self-kindness, mindfulness, and common humanity) and items of the three negative SCS subscales (self-judgment, over-identification, and isolation) were combined to provide measures of Positive Self-Compassion and Self-Condemnation respectively. A moderation analysis indicated that the association between Self-Condemnation and Depressive Symptoms was weaker for individuals high in positive self-compassion, as expected. Bootstrap mediation analyses (conducted separately in groups scoring high and low in positive self-compassion) suggested that, in individuals high in positive self-compassion, self-compassion worked to reduce depressive symptoms by inversely affecting self-condemnation. When positive self-compassion was low, however, only Self-Condemnation predicted Depressive Symptoms. These results suggest that when positive self-compassion is above a certain level, it can keep self-condemning responses in check. If positive self-compassion is too weak, however, something else is needed, perhaps understanding input from another person.

Keywords: Self-Compassion Scale, depression, moderation, mediation, validation
Harsh self-criticism is a transdiagnostic characteristic of a wide range of mental health problems, including depression (Gilbert & Irons, 2005). Individuals with excessive self-criticism tend to isolate themselves from others and feel overwhelmed by negative thoughts and feelings during depressive periods. Self-compassion-based interventions, such as, Mindful Self-Compassion (Neff & Germer, 2013) and Compassionate Mind Training (Gilbert & Procter, 2006) are based on the notion that training individuals to respond with self-compassion during moments of distress may improve mental health. A kind and compassionate response to distressing thoughts or feelings might shorten episodes of habitual and overlearned self-condemning reactions. The idea is not to prevent self-critical thoughts from ever occurring; self-judgment may be a healthy response to unacceptable behavior. Instead, the aim is to stop self-judging attitudes from prevailing, proliferating, and escalating out of proportion. Self-compassion may thus “put a brake” on self-judging attitudes that, in depressive-prone individuals, may run wild if unchecked. If self-compassion becomes ingrained in the response-repertoire of the individual, this may reduce depressive symptoms over time.

Neff’s (2003) Self-Compassion Scale (SCS) operationalizes self-compassion through its incorporation of three positive and three negative subscales. Factor-analyses indicated that the positive and negative subscales are not opposites but can co-exist (Neff, 2003). The positive SCS subscales are labeled Self-Kindness, Common Humanity, and Mindfulness. Self-kindness refers to the ability to be kind and supportive when facing one's weaknesses or distress (e.g., “I’m kind to myself when I’m experiencing suffering.”). Common Humanity refers to the tendency or ability to regard the experiences of distress and failure as part of being human rather than as a basic deficit that sets one apart from others (e.g., “When I feel inadequate in some way, I try to remind myself that feelings of inadequacy are shared by most people.”). Mindfulness as measured by the SCS Mindfulness subscale refers to mindfulness toward one’s distressed feelings and failures in particular, and refers to neither ignoring them nor perceiving them as more encompassing than they really are (e.g., “When I fail at something important to me, I try to keep things in perspective.”). Together these positive subscales indicate a healthy, self-supportive attitude.

The negative SCS subscales are Self-Judgment, Over-Identification, and Isolation. Self-Judgment refers to the tendency to judge oneself harshly when experiencing distress or failure (e.g., “I can be a bit cold-hearted toward myself when I am experiencing suffering.”). Isolation refers to the experience of being worse than, and separate from, others (e.g., “When I think about my inadequacies, it tends to make me feel more separate and cut off from the rest of the world.”). Over-identification refers to the tendency to perceive failure and distress as overwhelming and as a reflection of one’s personality (e.g., “When I fail at something important to me I become consumed by feelings of inadequacy.”). These negative subscales indicate levels of self-condemning and self-rejecting attitudes when experiencing failure or distress.

There is a robust association between scores on the full SCS and indicators of mental health, including depression. A recent meta-analysis reported a large effect for the association between self-compassion as measured by the SCS and psychopathology in general ($r = -0.54$, MacBeth & Gumley, 2012). Studies show that self-compassion as measured by the full SCS may be a mediator of the effects of Mindfulness Based Cognitive Therapy on depressive symptoms (Kuyken et al., 2010) and may protect against the worsening of depressive symptoms over time (Raes, 2011).

At face value, the negative SCS subscales seem particularly related to depression, as they describe reactions typical of individuals with depressive symptoms [aggression toward self...
(Self-judgment), feeling overwhelmed (Over-identification) and perceiving oneself as isolated from and inferior to others (Isolation). Conceivably, associations between the full SCS scale and depressive symptoms could be due to an association between depression and the negative SCS subscales only, with the positive subscales playing little, if any, role. However, we hypothesize that the positive subscales are associated with the development of depressive symptoms. In fact, a positive self-compassionate response may be even more important than the negative responses in understanding why some people do not become, or do not remain, depressed. While moments of uncompassionate, self-disparaging and isolating responses are common and sometimes even unavoidable, positive self-compassionate responses may influence whether such unhelpful uncompassionate responses proliferate and prevail. Depression might be maintained by the proliferation of such responses, rather than their passing presence (Segal, Williams, Mark, & Teasdale, 2002).

Based on the above literature, three hypotheses can be proposed about the role of self-compassion in explaining depressive symptoms. These hypotheses are (a) moderation, (b) mediation, and (c) moderated mediation. In general, a moderation hypothesis claims that one variable, the moderator, changes or modifies the association between two other variables. In this study, we hypothesize that as a moderator Positive Self-Compassion would influence the association between Self-Condemnation and Depressive Symptoms so that this association would be less strong for individuals scoring high in positive self-compassion.

A mediation hypothesis is also plausible. In general, a mediation hypothesis has another purpose than a moderation hypothesis. The purpose of a mediation hypothesis is to make a first step toward understanding possible causal pathways. We included a mediation hypothesis since we were interested in how the habit of responding with positive self-compassion might reduce depressive symptoms. It is likely that the tendency to respond with a self-compassionate attitude to self-condemning thoughts and feelings may reduce self-condemning responses over time. In other words, this second hypothesis claims that positive self-compassion reduces depressive symptoms not directly but via the pathway of reducing self-condemnation. In statistical terms, Self-Condemnation acts as a statistical mediator of the association between Positive Self-Compassion and Depressive Symptoms.

A third possibility is that there exists not only a moderation or mediation effect but also a combination of these two: a moderated mediation effect. If the first (moderation) hypothesis receives support in our data, this suggests we should test mediation at different levels of the moderator, rather than in the sample as a whole. The moderated mediation hypothesis in the present study claims that positive self-compassion reduces depressive symptoms by reducing self-condemnation, but only for individuals scoring high in positive self-compassion.

Method

Procedure

Packages of questionnaires were distributed to university students when they attended lectures. To increase generalizability across gender and interests, students from three fields were approached (psychology, engineering, and medical studies). The packages included the SCS (Neff, 2003), the Symptom Checklist-90 Revised (SCL-90-R) Depression subscale (Derogatis, 2000), and two other scales used in a preliminary study which tested the psychometric properties of the
Norwegian translation of the SCS. (The results of this analysis are presented as a Supplement to this article). Also included were questions on age, gender, and familiarity with mindfulness.

Participants
The sample consisted of 277 undergraduate students from the fields of psychology (53%), engineering (25%), and medicine (22%). The mean age was 22.9 years (SD = 3.5 years). Age was positively skewed [skewness = 2.69 (0.15)] with most students scoring in the range from 20 to 25 years; the oldest student was 45 years old. The gender distribution was even in the total sample (56% were women), but there was a preponderance of men in the subsample of engineering students in comparison with the subsample of psychology and medical students ($F(2,268) = 26.5, p < 0.001$). The majority of the total sample (80%) had no familiarity with mindfulness, as measured with a single item (see Supplement).

Measures
Self-Compassion Scale
The 26-item SCS consists of three positive subscales: Self-Kindness (5 items), Common Humanity (4 items), and Mindfulness (4 items), and three negative subscales: Self-Judgment (5 items), Isolation (4 items), and Over-Identification (4 items). Respondents rate their agreement with items on a 5-point Likert-type scale from *almost always* (5) to *almost never* (1). The original scale has good psychometric properties (Neff, 2003). The total self-compassion score is computed by reverse-coding items on the negative scales, calculating means for each subscale (adding the respective subscale items and dividing by number of items on the subscale), and finally adding the subscale means and dividing by number of subscales.

In the present study, the items of the three positive subscales were added to calculate an indicator of self-compassion with the negative self-compassion subscales removed (i.e., *positive self-compassion*). The items of the three negative subscales were added together to calculate an indicator of the negative self-compassion items (i.e., *self-condemnation*). Both indicators had high internal reliability (Cronbach’s $\alpha$ was 0.89 for each indicator).

Depression subscale of the SCL-90-R
The 90-item SCL-90-R (Derogatis, 2000) is a self-report inventory of psychological problems. The respondent is asked to indicate to what degree each problem (for example, “crying easily”) has bothered him or her during the previous 7 days from *not at all* (0) to *very much* (4). We used the 13-item Depression subscale, which covers low mood, hopelessness, helplessness, and lack of interest, vitality, and positive motivation. This scale has shown good psychometric properties in a Norwegian translation (Vassend, Lian, & Andersen, 1992). In the present study, the SCL-90 Depression subscale had an mean item score of 0.89 (SD = 0.76), Cronbach’s $\alpha$ of 0.91, a skewness of 1.3 (0.15), and kurtosis of 1.32. The skewness reflected the preponderance of low depression scores in this non-clinical sample.

Ethical considerations
Participants received oral and written information about the project, including its aims, and were told that participation was anonymous and voluntary. No compensation was given for participation. No information that could identify the individual students was collected.
Statistical analysis
Analyses were conducted with CSS/Statistica (version 12), and SPSS (version 22). A preliminary confirmatory factor analysis (CFA) was conducted with the SPSS software AMOS. The hypothesis that positive self-compassion was a moderator of the association between the self-condemnation and depressive symptoms was examined by performing a series of regression analyses as Warner (2013), for example, described. These analyses consisted of three main steps. First, a regression analysis was conducted in which the independent variable (Self-Condemnation); moderator (Positive Self-Compassion) and the interaction between these variables were entered as predictors of Depressive Symptoms. Before calculating the interaction effect, the variables were centered by subtracting the sample mean from the scores on each predictor. Since the interaction predicted significant variance in Depressive Symptoms over and above the two other predictors, we took the next step in the moderation analysis. In this second step, the interaction was graphed to visually display the nature of the interaction. On the $x$-axis, a value one standard deviation above and below the self-condemnation mean was selected. Two levels of the moderator (high and low positive self-compassion) were represented by the lines. The $y$-axis represented the predicted level of depression symptoms for these values. The third step of the moderation analysis was to assess whether the regression slopes for Self-Condemnation (on Depressive Symptoms) at each level of the moderator were statistical significant. This was done by performing regressions to predict Depressive Symptoms for the groups scoring high and low on positive self-compassion separately. Positive Self-Compassion and Self-Condemnation were entered as independent variables to predict depressive symptoms. Finally, a Johnson–Neyman (J-N) analysis (Johnson & Fey, 1950; Johnson & Neyman, 1936) was performed to examine at which level of the moderator the association between the independent variable and outcome variable became non-significant [See also Hayes (2013) for a description of the application of the J-N procedure to moderation analyses]. This step completed the moderation analysis.

Mediation analyses were conducted with standardized variables and bootstrap procedures, using Preacher and Hayes’ (2008) “indirect” script. Since the moderation analysis described above had shown that positive self-compassion may moderate the association between self-condemnation and depressive symptoms, the mediation hypothesis was examined twice, once for groups above and once for groups below the mean on positive self-compassion, thereby testing for moderated mediation.

Results
Age and gender
Age was unrelated to the total SCS score ($r = 0.02$). No significant gender differences on the SCS or for the positive subscales were evident, but women scored higher on the Isolation and Over-Identification subscales. Women also scored higher on the Depression subscale of SCL-90 (see Supplement).

Preliminary analyses: Psychometric properties of the Norwegian SCS
All SCS subscales correlated significantly with each other and with depression (Table 1) and strongly with our two other criteria of external validity (rumination as measured by the Rumination Reflection Questionnaire (RRQ)-rumination subscale and mindfulness as measured...
Table 1: Correlations between total SCS scores, SCS subscales, and SCL-90 Depression (95% CIs in square brackets).

<table>
<thead>
<tr>
<th></th>
<th>Positive self-compassion (positive SCS subscales)</th>
<th>Self-condemnation (negative SCS subscales)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Depression (SCL-90)</td>
<td>Self-kindness *</td>
</tr>
<tr>
<td>Positive self-compassion</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-kindness *</td>
<td>-0.35** [-0.46, -0.23]</td>
<td></td>
</tr>
<tr>
<td>Common humanity *</td>
<td>-0.28** [-0.40, -0.17]</td>
<td>0.55** [0.45, 0.65]</td>
</tr>
<tr>
<td>Mindfulness *</td>
<td>-0.35** [-0.46, -0.24]</td>
<td>0.57** [0.47, 0.67]</td>
</tr>
<tr>
<td>Self-condemnation</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-judgment *</td>
<td>-0.46** [-0.57, -0.36]</td>
<td>0.52** [0.42, 0.63]</td>
</tr>
<tr>
<td>Isolation *</td>
<td>-0.59** [-0.69, -0.49]</td>
<td>0.40** [0.29, -0.51]</td>
</tr>
<tr>
<td>Over-identification *</td>
<td>-0.56** [-0.66, -0.46]</td>
<td>0.32** [0.21, 0.44]</td>
</tr>
<tr>
<td>Total SCS</td>
<td>-0.59** [-0.68, -0.51]</td>
<td>0.76** [0.68, 0.84]</td>
</tr>
</tbody>
</table>

Notes: Correlations between subscales that were originally assumed to be opposites are in bold font. Total SCS, total score on the Self-Compassion Scale; SCL-90, Depression subscale of the Symptom Checklist-90 Revised. **p < 0.01.

*SCS subscales with negative subscales reversed.
by the sum score of the Five Facet Mindfulness Questionnaire (FFMQ); see Supplement). A CFA of the SCS was consistent with Neff’s (2003) finding that a 6-factor structure with an overall Self-Compassion factor fits the data better than a 3-factor structure with an overall Self-Compassion factor (see Supplement). Also, the strength of the bivariate correlation between the presumed opposites of the three dimensions were only moderate, according to Cohen’s (1988) criteria for four of the SCS subscales: Mindfulness vs. Over-Identification ($r = 0.33$) and Common Humanity versus Isolation ($r = 0.40$). The correlation between Self-Kindness and Self-Judgment was higher but not very high ($r = 0.52$). The factor analysis and correlations indicate that the negative and positive SCS subscales are not mutually exclusive.

This is in line with the theoretical notion that being low in self-condemnation does not automatically make a person treat him or herself with compassion (Neff, 2003). Also, some people might be frequently self-condemning but at the same time be able to meet their self-condemnation with understanding and positive self-compassion.

Summarizing, the preliminary analysis showed that although the factor structure may need further study, the Norwegian SCS had acceptable psychometric characteristics (see Supplement for details). Furthermore, it was possible to score high (or low) on both Positive Self-Compassion and on Self-Condensation simultaneously.

Moderation analyses

A series of analyses were performed to test the hypothesis that positive self-compassion was a moderator of the association between the self-condemnation and depressive symptoms. Preliminary data screening showed that the variables reflecting Positive Self-Compassion and Self-Condensation were linear and normally distributed but that the variable of Depressive Symptoms was skewed toward a greater frequency of lower scores. This is to be expected in a normal sample and no transformations were made. Positive Self-Compassion, Self-Condensation, and the interaction between these two variables were entered as predictors of Depressive Symptoms in a multiple regression analysis. Before computing interaction terms, scores on both Positive Self-Compassion and Self-Condensation were centered by subtracting sample means.

The overall regression was statistically significant (Adjusted $R^2 = 0.425$, $F(3, 261) = 65.94$, $p < 0.001$). Standardized regression coefficients follow. There was a significant interaction between Positive Self-Compassion and Self-Condensation ($\beta = -0.227$, $t(261) = -4.83$, $p < 0.001$, $sr^2 = 0.05$); in addition to significant effects for Self-Condensation ($\beta = 0.553$, $t(262) = 9.96$, $p < 0.001$, $sr^2 = 0.22$) and Positive Self-Compassion ($\beta = -0.152$, $t(262) = -2.82$, $p = 0.005$, $sr^2 = 0.02$).

The second step of the moderation analysis was to study the nature of the interaction by graphing it. Figure 1 illustrates the interaction between Positive Self-Compassion and Self-Condensation. The sample has been divided at the mean of Positive Self-Compassion. Results for the group high in positive self-compassion are illustrated with a solid line, and results for the group low in positive self-compassion are illustrated with a dotted line. The $x$-axis shows degrees of Self-Condensation (one standard deviation below and above the mean). At low levels of self-condemnation, depressive symptoms were overall low, regardless of degree of Positive Self-Compassion. At high levels of self-condemnation however, Positive Self-Compassion seemed to have a protective effect, reducing depressive symptoms.

The third step of this moderation analysis was to assess whether the regression slopes for the high versus low positive self-compassion groups were significant. To do this, the sample was
divided on the mean into groups high and low on Positive Self-Compassion. A regression analysis was run for each group to predict depressive symptoms from the predictors of self-condemnation and positive self-compassion (Warner, 2013).

This third step showed that higher self-condemnation was related to higher scores on Depressive Symptoms for students scoring high on Positive Self-Compassion as well as students with low positive self-compassion but to different degrees for these two groups. Self-Condemnation seemed to have a weaker relationship to Depressive Symptoms for the group high in positive self-compassion ($\beta = 0.47$, $t(132) = 5.78$, $p < 0.001$), than for the group low in positive self-compassion ($\beta = 0.58$, $t(127) = 8.13$, $p < 0.001$). Although tests of whether the differences between these two slopes are statistically significant do not exist (see p. 280 Cohen et al., 2003), the overall results indicated that positive self-compassion may moderate the effects of self-condemnation on depressive symptoms. Positive Self-Compassion did not predict unique variance in Depressive Symptoms in this analysis.

A J-N analysis was performed in order to find the level of Positive Self-compassion at which the association between Self-Condemnation and Depression became non-significant. This analysis showed that at high levels of Positive Self-compassion (above the 93.96 percentile) the association between Self-Condemnation and Depression went from significant to non-significant. Sixteen students scored above this level. This indicated that, although positive self-compassion weakened the association between self-condemnation and depression, it seldom completely obliterated this association.

Figure 1: Moderation analysis. High and low Self-Condemnation is illustrated on the x-axis. High and low Positive Self-Compassion is illustrated by solid and dotted lines respectively. The y-axis shows mean Depressive Symptoms (range 0–3.62).
Summing up the results of these steps of the moderation analyses, these series of analyses suggested that Positive Self-Compassion could act as a moderator of the association between Self-Condemnation and Depressive Symptoms. When Positive Self-Compassion was high, the association between Self-Condemnation and Depressive symptoms was less strong. When Positive Self-Compassion was low, Self-Condemnation was more strongly related to depression.

Mediation analyses
As planned, the results of the moderation analysis (Hypothesis 1) would decide whether one should look for mediation (Hypothesis 2) in the sample as a whole or at different levels of positive self-compassion. The latter is necessary to reveal any existing moderated mediation effect in the data (Hypothesis 3). The results of the moderation analysis described above suggested that there actually might be different processes involved for high and low positive self-compassion groups. For this reason the mediation hypothesis was analyzed separately for groups of students scoring high versus low on Positive Self-Compassion.

As mentioned, the mediation hypothesis stated that positive self-compassion would be related to depressive symptoms not directly, but indirectly via self-condemnation. This was examined in the group high in positive self-compassion first. Gender was included as a control variable, since Gender was associated with Self-Condemnation ($r = 0.19$, $p = 0.003$) and Depression ($r = 0.24$, $p < 0.001$). A bootstrap procedure showed that, in this high positive self-compassion group, Positive Self-Compassion was negatively related to Depressive Symptoms as expected ($\beta = -0.24$ (0.10), $t = -2.32$, $p = 0.02$, path c in Figure 2). Positive Self-Compassion was also negatively associated with Self-Condemnation, also as expected ($\beta = -0.49$ (0.13), $t = -3.79$, $p < 0.001$, path a in Figure 2). Self-Condemnation was positively associated with Depressive Symptoms ($\beta = 0.36$ (0.06) $t = 5.78$, $p < 0.001$, path b in Figure 2). Finally, the direct

\begin{align*}
(c) & \quad \text{Direct Pathway} \\
\text{Positive Self-compassion (Positive SCS-subscales)} & \quad \rightarrow \quad c = -0.24^* \\
\rightarrow \quad \text{Depressive Symptoms}
\end{align*}

\begin{align*}
(b) & \quad \text{Indirect or Mediated Pathway} \\
\text{Positive Self-compassion (Positive SCS-subscales)} & \quad \rightarrow \quad c' = -0.06 \\
\rightarrow \quad \text{Depressive Symptoms}
\end{align*}

\begin{align*}
\text{Self-condemnation (Negative SCS-subscales)} & \quad \rightarrow \quad a = -0.49^{**} \\
\rightarrow \quad b = 0.36^{**}
\end{align*}

Figure 2: Results of mediation analysis in subsample high in positive self-compassion ($N = 130$).
Table 2: Mediation analysis with positive self-compassion (positive SCS subscales) as the independent variable, self-condemnation (negative SCS subscales) as the presumed mediator and depression as the dependent variable in the group high in positive self-compassion ($N = 130$) and low in positive self-compassion ($N = 129$).

<table>
<thead>
<tr>
<th></th>
<th>Path a (positive self-compassion to self-condemnation)</th>
<th>Path b (self-condemnation to depression)</th>
<th>Path c (total effect of positive self-compassion on depression)</th>
<th>Path c’ (direct effect of positive self-compassion on Depression)</th>
<th>Cross product</th>
<th>CI low</th>
<th>CI high</th>
</tr>
</thead>
<tbody>
<tr>
<td>High positive self-compassion</td>
<td>$-0.49^{**}$</td>
<td>$0.36^{**}$</td>
<td>$-0.24^{*}$</td>
<td>$-0.06$</td>
<td>$-0.18^{**}$</td>
<td>$-0.30$</td>
<td>$-0.09$</td>
</tr>
<tr>
<td>Low positive self-compassion</td>
<td>$-0.25$</td>
<td>$0.64^{**}$</td>
<td>$-0.43^{*}$</td>
<td>$-0.27$</td>
<td>$-0.16$</td>
<td>$-0.36$</td>
<td>$0.02$</td>
</tr>
</tbody>
</table>

Notes: Results are also depicted in Figures 1 and 2. Positive self-compassion, positive SCS subscales; self-condemnation, negative SCS subscales; depression, depressive symptoms as measured by the SCL-90-R Depression subscale; CI, 95% confidence intervals. Number of bootstrap resamples $= 5000$.

*p < 0.05, **p < 0.001.
path between positive self-compassion and depressive symptoms was not significant when Self-Condensation was included in the mediation model (β = −0.06 (0.10), t = −0.62, p = 0.54, path c in Figure 2). The cross-product, which describes the strength of the indirect path via the mediator, was −0.18 (95% CI: [−0.30, −0.09]).

The results from these bootstrap analyses indicate that Positive Self-Compassion acts to decrease depressive symptoms by decreasing Self-Condensation in this group of students, as expected. This mediation model as a whole (Figure 2) predicted 23% of the variance in depressive symptoms in this group (Adjusted R² = 0.23 [F = 13.75 (3,126) p < 0.001]). Thus, the mediation hypothesis received support in the group high in positive self-compassion.

The mediation analysis was then repeated for the group with low levels of positive self-compassion. In this group a mediation effect was not found. Results are presented in Table 2 and Figure 3. Only Self-Condensation was significantly related to Depressive Symptoms when both Positive Self-Compassion and Self-Condensation were entered as predictors of Depressive Symptoms [β = 0.64 (0.10), t = 6.54, p < 0.001, path b in Figure 2].

The partial effect of the control-variable Gender on Depressive Symptoms was also significant [β = 0.37 (0.18), t = 2.0, p = 0.048].

These findings suggest that low levels of positive self-compassion will be less likely to influence self-condensation and thereby reduce depressive symptoms. On the contrary, self-condensation seems to be very closely related to depressive symptoms in this group low in positive self-compassion. This model as a whole predicted 37% of the variance in Depressive Symptoms [Adjusted R = 0.37, F (3,125) = 26.47, p < 0.001] in this group.

Summing up, the mediation hypothesis received support from the group high in positive self-compassion but not in the group low in positive self-compassion. This finding supports the moderated mediation hypothesis (Hypothesis 3).

(a) Direct Pathway

(b) No Mediated Pathway

Figure 3: Results of mediation analysis in subsample low in positive self-compassion (N = 129).
Discussion

This study investigated the effect of positive self-compassion and self-condemnation on symptoms of depression in a diverse group of students. A moderation analysis suggested that positive self-compassion may to some degree protect against depressive symptoms. Mediation analysis conducted separately for students high and low in positive self-compassion served as a step toward explaining how positive self-compassion and self-condemnation may be causally related. In the group of students high in positive self-compassion, self-condemnation seemed to explain the relationship between positive self-compassion and depressive symptoms. In the group of students low in positive self-compassion, however, positive self-compassion did not contribute to reduce depression by reducing self-condemnation. In this latter group, depressive symptoms were only predicted by self-condemnation (and female gender).

These findings are in accordance with the moderated mediation assumption (Hypothesis 3), which suggests that positive self-compassion needs to be above a certain level to affect self-condemnation. Individuals low in positive self-compassion may find it difficult to protect themselves against the negative effects of self-condemnation. Thus, self-condemnation in this group may lead to more adverse effects. Adding self-blame to one’s moments of hurt or failure is not uncommon and may result in excessive feelings of guilt and shame. In shame reactions, self-blame is not limited to self-criticism for wrong acts (“I made a terrible mistake.”) but engulfs the whole person (“Something is terribly wrong with me.”). Such shame-driven reactions may become toxic and cause depressive symptoms over time. In the present study, the group of students high on self-condemnation and low on positive self-compassion may have difficulty defending against such self-condemnation in that they showed higher levels of depressive symptoms.

As mentioned, the analyses also showed that gender was related to depression for students with low levels of positive self-compassion. The question of whether Gender may interact with Positive Self-Compassion and Self-Condemnation in predicting depression may be a topic for future study.

Clinical implications

The hypothesis that positive self-compassion reduces depressive symptoms by reducing self-condemnation received support only among the group scoring above average in positive self-compassion. There was no significant relationship between positive self-compassion and self-condemnation in the group of students scoring low on positive self-compassion. It seems likely that some individuals low in positive self-compassion may harbor pervasive feelings of self-hate or shame that prevent them from perceiving positive statements from others and from making positive compassionate inner statements that they perceive as true and deserved. Shame-rage reactions during moments of hurt may disturb the ability to think clearly and understand oneself and others (e.g., Fonagy, Bateman, & Bateman, 2011). Waves of shame after an event may keep feelings of hurt and self-condemnation alive and prevent a self-compassionate processing of the event. Thus, it seems unrealistic to expect individuals who are particularly low in positive self-compassion to have helpful and compassionate self-directed reactions, given their tendency of self-condemnation when distressed. For these individuals, seeking support through various forms of psychotherapy that focus on strengthening positive self-compassion may be of particular importance. This assumption is supported by findings from a recent study of Canadian
university students which found that shame, self-esteem, and rumination were mediators between self-compassion and depression (Johnson & O’Brian, 2013).

Gilbert et al. (2011) have worked extensively with individuals diagnosed with mental illness, such as borderline personality disorder, and describe common hindrances to experiencing self-compassion. Especially in depressed states of mind, self-condemning attitudes may seem closer to the truth and more “real” than positive self-compassion. Being hard on oneself when angry and depressed may also represent an unconsciously acquired manner in which one has learned to protect one’s attachments (e.g., “I know I’m flawed, and I sure hate myself for it, so don’t be hard on me or leave me.”). For these reasons, self-condemnation may not only feel more “true” but also more safe (Gilbert et al., 2011).

Results of the current study are in accordance with the assumption that if an individual can learn to be more self-compassionate, he or she may prevent the escalation of negative feelings in moments of self-condemnation. For example, he or she may be able to feel that “this is an event in my mind, it hurts, but I do not have to condemn myself for feeling bad.” This ability to observe a feeling instead of being swept away by it may lessen feelings of inferiority and hopelessness that might otherwise have prevailed and proliferated. A higher level of compassion with own negative thoughts and feelings might result not only in a better momentary tolerance of such thoughts and feelings but also reduce the frequencies of these over time. Attempts to increase clients’ positive self-compassion in a clinical setting can be a worthwhile focus when treating individuals with high levels of self-condemnation.

Traditionally, positive self-compassion has not been addressed directly in clinical work. Self-condemning attitudes on the other hand, have been approached directly through cognitive-behavioral techniques, such as questioning and testing the client’s self-condemning beliefs. Within other therapeutic approaches, for example, psychodynamic and interpersonal therapies, self-condemning attitudes have been approached through exploring developmental sources of the patients’ distress (which may make the distress more understandable and self-compassion more likely) and via modeling the experience of being understood and not being judged in the therapeutic relationship.

Self-compassion-based therapies such as Mindful Self-Compassion (Neff & Germer, 2013) and Compassionate Mind Training (Gilbert & Procter, 2006) differ from traditional approaches in that they train self-compassion not only by targeting excessive self-criticism but also by directly increasing the positive aspects of self-compassion. The aim is to give compassionate responses a “retrieval advantage” over self-condemning reactions in our minds and bodies. Gilbert and Procter (2006) suggest that humans possess a calming body-mind system that involves the release of neuro-hormones such as oxytocin and opiates when met with affectionate care. Evolutionarily, this system has adapted to allow individuals to relax when it is safe to do so. The opposite reaction is a defensive system triggered by threats of aggression from others or ourselves. As adults we can train ourselves to trigger our caretaking system, for example, by practicing forms of meditation that direct attention toward compassionate and safe images (Germer, 2009). An initial difficulty may be that, for many, self-compassion practices trigger discomfort rather than relaxation (Germer, 2009; Gilbert et al., 2011). For this reason, the initial goal may be to help participants explore their reactions to compassion and try out possibilities of responding with care and affection toward themselves. Over time, benign self-directed attitudes may develop. Preliminary clinical studies (Gilbert & Procter, 2006; Neff & Germer, 2013) indicate that the direct training in self-compassion may have beneficial
effects, providing individuals with an alternative to self-aggression in moments of failure or distress.

Strengths and limitations of the present study
The present study has several limitations. Cross-sectional studies do not allow conclusions to be drawn regarding the causal sequences involved; for this reason they represent only a first step toward understanding processes. Furthermore, the sample consisted of students only, preventing generalization of the results to broader samples. Finally, the close association between the negative SCS subscales (Self-Condemnation) and depression might partly reflect the negative wording of the items aiming to capture both these constructs. This is a common problem with self-report instruments.

Strengths of the present study are found in the preliminary steps of carefully translating and validating the SCS and in the separation of the positive and negative SCS subscales in the analyses.

Conclusion
This study is a first step in examining whether positive aspects of self-compassion may protect against depressive responses by attenuating the link between self-condemnation and depression. The study illustrates the usefulness of separating the positive and negative subscales of Neff’s (2003) SCS.

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Supplementary Materials
Supplemental material for this article can be accessed here.
REFERENCES