The relationship of self-compassion and depression: Cross-lagged panel analyses in depressed patients after outpatient therapy

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Article Info

Article history:
Received 22 March 2016
Received in revised form 4 May 2016
Accepted 22 May 2016
Available online 24 May 2016

Keywords:
Self-compassion
Depression
Depressive symptoms
Cross-lagged panel analysis
Longitudinal design

Abstract

Background: Previous cross-sectional studies suggest that self-compassion and depressive symptoms are consistently negatively associated. Although it is often implicitly assumed that (a lack of) self-compassion precedes depressive symptoms, so far no study has tested whether (lack of) self-compassion is a cause or a consequence of depressive symptoms, or both.

Method: To examine such reciprocal effects, we used data of 125 depressed outpatients after a time limited cognitive-behavioral psychotherapy. We assessed self-compassion and depressive symptoms via self-report measures and the presence of a major depressive episode directly after therapy, as well as 6 and 12 months later.

Results: Cross-lagged panel analyses indicated that (lack of) self-compassion significantly predicted subsequent depressive symptoms while controlling for autoregressive effects, whereas depressive symptoms did not predict subsequent levels of self-compassion. This was also the case for the relationship between self-compassion and the presence of a major depressive episode. The same patterns also occurred when we separately tested the reciprocal effects for two composite sub-measures of either positive or negative facets of self-compassion.

Limitations: Causality cannot be inferred from our results. Depressive symptoms and self-compassion could still be causally unrelated, and a third variable could account for their negative association.

Conclusions: These findings support the notions that (a lack of) self-compassion could serve as a vulnerability factor for depression and that cultivating self-compassion may deserve a focus in depression prevention programs or treatments.

1. Introduction

Depression is one of the most common mental disorders (Kessler et al., 2005) and its associated burden represents a major public health problem that affects depressive patients as well as society (Kupfer et al., 2012; Üstün et al., 2004). Depression is often marked by recurrent nature (Bockting et al., 2015), and although many patients can benefit from depression treatments, relapse and recurrence rates even after a successful therapy are considerable (Vittengl et al., 2007). Additionally, residual depressive symptoms have been found to be the most consistent and strongest predictor of depression relapse (e.g., Judd et al., 1998). Self-compassion describes a mindful and benevolent attitude towards oneself when challenged with failure, personal weaknesses or facing physical pain. A recent meta-analysis showed that self-compassion is positively associated with well-being (Zessin et al., 2015). Moreover, a fast growing body of research suggests that self-compassion and its cultivation deserves closer attention also in clinical and non-clinical populations (for an overview see Barnard and Curry, 2011; Galante et al., 2014; Gilbert and Procter, 2006; Hofmann et al., 2011; Neff, 2015).

Many studies have investigated the cross-sectional association of self-compassion and depression. A meta-analysis by MacBeth and Gumley (2012) including about 4000 subjects has shown a mean effect size of $r = -0.51$ between self-compassion and depressive symptoms. Moreover, a study by Krieger and colleagues (Krieger et al., 2013) indicated that people suffering from a major depressive episode reported significantly lower levels of self-compassion than never-depressed people even when controlling for depressive symptoms. Together, these studies suggest a close association between depression and self-compassion. However, most of the studies that investigated the relationship between depression or depressive symptoms with self-compassion used a cross-sectional design. One exception is a study by Raes (2011) that investigated the longitudinal association between self-
compassion and depressive symptoms. A sample of 347 first-year psychology students completed measures of self-compassion and depressive symptoms at two assessments separated by a 5-month period. Results showed that levels of self-compassion at baseline were significantly negatively associated with depressive symptoms. In line with this result, Zeller and colleagues (Zeller et al., 2014) found in an at-risk youth sample that self-compassion prospectively predicted not only reduced levels of depression but also posttraumatic stress, panic, and suicidal ideation, as well as wellbeing outcomes over six months.

However, a limitation of both studies is that they did not preclude a possible reciprocal effect, i.e., that change in (depressive) symptoms may lead to a change of self-compassion. As a consequence, the cross-sectional negative correlation between self-compassion and depressive symptoms may be the result of different mechanisms. It may be that (1) (a lack of) self-compassion causes depressive symptoms, (2) depressive symptoms cause (a lack) of self-compassion, (3) depressive symptoms and (a lack of) self-compassion cause each other, or (4) depressive symptoms and self-compassion are causally unrelated and a third variable accounts for their negative association. Multi-wave longitudinal data are needed to test reciprocal relations. Our study uses a 12-month, three-wave longitudinal design that tests the interplay between self-compassion and depressive symptoms over time. Thus, the main aim of the present study was to test the possible mechanisms outlined above. Consequently, the present study combines a multi-wave longitudinal design with a cross-lagged analysis (Fin- kel, 1995), that allows for disentangling the cause-effect relationships.

To arrive at a better understanding of the association between depression and self-compassion, we may also need to look more closely into the assessment of the self-compassion construct. Self-compassion is typically measured by the Self-Compassion Scale (Neff, 2003a). Conceptually, Neff (2003b) defined self-compassion in terms of three bipolar components: (a) self-kindness (vs. self-judgment), (b) common humanity (vs. isolation), and (c) mindfulness (vs. overidentiﬁcation). Self-kindness refers to the ability of treating oneself with care and understanding as opposed to harsh self-judgment. Common humanity refers to the recognition that imperfection is a shared aspect of the human experience, as opposed to feeling isolated and alone by one's failures and imperfections. Mindfulness involves holding and accepting one's present-moment experience as opposed to getting involved with the emotion. The SCS includes one scale for each component and their negative opposites. Although this 6-factor-factor structure finds empirical support in different samples, there has been a controversial discussion about the assessment of self-compassion (Neff, 2015). Particularly relevant for the current research is the question whether an empirical association between (lack of) self-compassion and psychopathology may be inﬂated by the above-mentioned negative components of the SCS. As recently argued by Muris (2015) the composite of the negative components of the SCS, i.e., “Self-Coldness” (Gilbert et al., 2011; Körner et al., 2015) or “Uncompassion” (Neff, 2015), not only taps the true, protective nature of self-compassion but also non-compassionate mechanisms, such as rumination or self-criticism, that do not ﬁt with the original deﬁnition of self-compassion. To investigate such possible differential contributions of the positive and negative components of the SCS to the association with depressive symptoms, we perform separate analyses for the positive and negative subscales and compare the results with those obtained with the SCS total score.

The present study aimed to investigate the longitudinal relationship of self-compassion with depressive symptoms and depressive episodes. Based on previous research, our hypothesis was that there will be a negative time-lagged relationship of self-compassion with both depressive symptoms and depressive episodes. For the reversed time-lagged relationship of depressive symptoms and depressive episodes with self-compassion we had no specific hypothesis, since this time-lagged relationship has never been investigated before. Similarly, we had no specific hypothesis for the time-lagged associations between the self-compassion subscales and depressive symptoms/depressive episodes.

2. Methods

2.1. Participants

The sample consisted of 125 participants (54% female) who had completed treatment in a depression treatment efficacy study. The study protocol for the treatment study and the follow-up assessments used in the present study were approved by the local ethics committee, and all participants signed informed-consent forms before the initial inclusion in the study. At intake all participants completed a diagnostic interview, the Structured Clinical Interview for the DSM–IV Axis I (SCID; First et al., 1995; Wittchen et al., 1997), and fulﬁlled the diagnosis of a major depressive episode. Mean duration between the initial assessment and the ﬁrst wave in this study (treatment termination) was about seven months. Participants were followed for 12 months after the end of therapy. Mean age of the participants at intake was 41.8 years (SD = 11.6, range = 19–66). Before the treatment, 38% identiﬁed themselves as single, 40% in a relationship or married, and 16% as separated/divorced or widowed. Two percent had less than nine years of school education, 36% had finished a professional training, 17% had ﬁnished high school, and 40% had a university degree.

Self-report data were available for 125 individuals at T1 (immediately after treatment), for 115 individuals at T2 (6 months after the end of treatment), and for 103 individuals at T3 (12 months after the end of treatment). To investigate the potential impact of attrition, differences on study variables were tested between participants who completed the last follow-up assessment (T3) and participants who dropped out of the study before this last assessment. Participants who dropped out did not differ signiﬁcantly from participants who completed the full study in any of the self-report variables.

2.2. Measures

Participants ﬁlled out a paper-pencil version of the self-report questionnaires at home and returned them via mail. Additionally, participants were interviewed via telephone regarding the presence or absence of a MDE. For the present study, we used the following measures at the end of treatment (T1), and at six (T2) and 12 months (T3) after treatment.

2.2.1. Self-Compassion Scale

Self-compassion was assessed with the Self-Compassion Scale (SCS; Neff, 2003a). The SCS is a 26-item self-report inventory that consists of six subscales: self-kindness, self-judgment, common humanity, isolation, mindfulness, and overidentiﬁcation. Each item was rated on a 5-point scale (1 = strongly disagree to 5 = strongly agree). In the present study, we used the German version of the SCS, that has shown adequate factorial validity of the six-factor structure and good construct validity of the total score with respect to a wealth of measures (e.g., self-esteem, narcissism, emotional intelligence, the big ﬁve factors of personality, etc.), high internal consistency (Cronbach’s α = .91) and retest reliability (rTT = .92) for the total score in a community sample (Hufﬁeld and Ruffieux, 2011). As mentioned in the introduction, a fact worthy of mention is that there is an ongoing debate on the factor structure of the SCS, since in some studies a higher order
factor for self-compassion was found while this was not the case in other studies (for an overview see Neff (2015)). The total SCS score was obtained by computing the mean across all 26 items after reverse scoring the negative items. Additionally, two subscales were built: A subscale (SCS-POS) including the 13 items of the positive facets (self-kindness, common humanity, and mindfulness) and a subscale (SCS-NEG) consisting of the 13 items of the negative facets (self-judgment, isolation, and over-identification). Higher scores in SCS-POS and lower scores in SCS-NEG represent a more self-compassionate attitude. Cronbach’s alphas for these scores in the present study are reported in Table 1.

2.2.2. Beck Depression Inventory-II

The Beck Depression Inventory-II (BDI-II, Beck et al., 1996) is a self-report measure consisting of 21 items describing symptoms of depression. Answers are given on a scale from 0 to 3 representing different manifestations in severity of a given symptom. Total scale scores range from 0 to 63, with a higher score indicating more depressive symptoms. The German version (Kühner et al., 2007) of the BDI-II has shown similar psychometric properties as the original version. Cronbach’s alphas for the present study are reported in Table 1.

2.2.3. Structured Clinical Interview for DSM-IV Axis I Disorders – Depression Section

The depression diagnoses were assessed with the German Structured Clinical Interview for DSM-IV Axis I Disorders (SCID-I; German version: Wittchen et al., 1997). Trained interviewers (research assistants or graduate students) conducted the Depression Section of the SCID via telephone at all three time points. It has previously been shown that SCID interviews can reliably be conducted via telephone (Rohde et al., 1997). Fourteen per cent of the sample (still) had a depression diagnosis at the end of treatment (T1), 12% had a depression diagnosis six months after the end of treatment (T2), and 10% had a depression diagnosis 12 months after treatment. There were missing data for the diagnosis for three participants at T1, for six participants at T2, and for eight participants at T3.

2.3. Statistical analyses

Confirmatory factor analyses and structural equation modeling analyses were conducted using the Mplus 7 software (Muthén and Muthén, 2012). To deal with missing values and non-normality of the measures, we employed robust maximum likelihood estimation (MLR; Muthén and Muthén, 2012). Model fit was assessed by the comparative fit index (CFI), the Tucker-Lewis index (TLI), and the root-mean-square error of approximation (RMSEA) and its respective 90% confidence interval. Based on recommendations by Hu and Bentler (1999), good fit is assumed for values greater than or equal to .95 for CFI and TLI and less than or equal to .05 for RMSEA. Acceptable fit is assumed by values greater than or equal to .90 for CFI and TLI and less than or equal to .08 for RMSEA (Little, 2013). To compare nested models, we calculated differences in fit according to recommendations by Satorra and Bentler (2010) for models with only continuous variables or using the Bayesian Information Criterion (BIC) for models with binary and continuous variables.

3. Results

Table 1 shows the means, standard deviations, internal consistencies, and correlations of the measures used at all time points of assessment. Self-compassion as well as SCS-POS and depressive symptoms were negatively associated, both within and across measurement occasions. SCS-NEG and depressive symptoms were positively associated, both within and across measurement occasions.

3.1. Associations between Self-Compassion and Depressive Symptoms (BDI)

For the structural equation models with self-report measures, we used all six facets as indicators for self-compassion. For depressive symptoms, we used three-item parcels as indicators. Items were randomly assigned to these three parcels, since they serve as more stable indicators of a latent construct than single items (Little et al., 2002). For models including the positive subscale of self-compassion (SCS-POS), we used the three positive facets as indicators, and for the negative subscale of self-compassion (SCS-NEG), we used the three negative facets as indicators. For each factor of a given latent variable, the unstandardized value of the first loading was set to 1. Table 2 shows the standardized factor loadings of the measurement model with freely estimated factor loadings including self-compassion, using the six facets as

### Table 1

<table>
<thead>
<tr>
<th>Variables</th>
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<th>15</th>
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</thead>
</table>
| 1. SCS-T1 | 2.94 | .58  | 108.44  | (.93)
| 2. SCS-T2 | 3.03 | .63  | 132.44  | (.94)
| 3. SCS-T3 | 3.03 | .64  | 133.45  | (.94)
| 4. SCS-POS-T1 | 3.01 | .64  | 139.43  | (.91)
| 5. SCS-POS-T2 | 3.07 | .68  | 131.49  | (.92)
| 6. SCS-POS-T3 | 3.06 | .66  | 140.45  | (.92)
| 7. SCS-NEG-T1 | 3.14 | .63  | 162.48  | (.91)
| 8. SCS-NEG-T2 | 3.02 | .72  | 123.47  | (.91)
| 9. SCS-NEG-T3 | 3.00 | .75  | 123.47  | (.91)
| 10. BDI-II-T1 | 9.71 | 8.80 | 0-46   | (.88)
| 11. BDI-II-T2 | 8.73 | 8.30 | 0-50   | (.88)
| 12. BDI-II-T3 | 10.06 | 10.42 | 0-56   | (.88)
| 13. MDE-T1 | -   | -   | -       | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   |
| 14. MDE-T2 | -   | -   | -       | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   |
| 15. MDE-T3 | -   | -   | -       | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   | -   |

Notes. Cronbach’s alphas are provided in parentheses on the diagonal. SCS = Self-Compassion scale total; SCS-POS = Self-Compassion Positive Facets; SCS-NEG = Self-Compassion Negative Facets; BDI-II = Beck Depression Inventory II; MDE = Depressive Episode (0 = absent, 1 = present).

\* p < .10
\* p < .05
\* p < .01
indicators, and depressive symptoms, using three randomly aggregated parcels as indicators.

Model fit for the measurement models are depicted in Table 3. Indices for all models indicated that they were appropriate for the model including all facets as indicators for self-compassion, and good for the models in which self-compassion was indicated by three positive or three negative facets alone, respectively.

In a next step, we tested whether measurement invariance across time existed for the latent variables (Finkel, 1995). For all three associations (SCS – depressive symptoms, SCS-POS – depressive symptoms, SCS-NEG – depressive symptoms), we compared the fit of the measurement model with freely estimated factor loadings with a second model that was identical to the first except that we constrained the factor loadings of each indicator to be equal across time. If the constrained model does not fit worse than the unconstrained model, then the constraints are empirically justified and ensure that the latent constructs have the same meaning across time (i.e., metric invariance). As shown in Table 3, model fit was at least appropriate for all constrained measurement models. Because chi-square differences between all unconstrained and constrained measurement models were not significant, we favored the more parsimonious models and retained the longitudinal constraints on factor loadings in all subsequent analyses.

In a second step, the structural relations between factors were specified as cross-lagged effects, which indicate the effect of one variable on the other, after controlling for their stabilities over time. This method allows the investigation of time-lagged reciprocal effects of two variables while controlling for autoregressive effects (Cole and Maxwell, 2003). Moreover, this method allows controlling for random measurement error by analyzing the constructs as latent variables and control for non-random measurement error by accounting for variance related to specific indicators and occasions.

Subsequently, we tested for structural invariance over time. In the first set of cross-lagged models, all structural coefficients were freely estimated. In the second set of cross-lagged models, we constrained the structural parameters, i.e., stability coefficients and cross-lagged coefficients, to be equal across all measurement time points. For all analyses, the model with the freely estimated structural coefficients and the constrained model did not differ significantly in fit. As a consequence, we used the more parsimonious models with longitudinal constraints on all structural coefficients.

Table 4 shows the standardized cross-lagged effects for the final models with the longitudinal constraints on structural coefficients, the cross-sectional correlations at T1, and the stability coefficients. Stability coefficients for self-compassion and depressive symptoms were significant, suggesting these variables are temporally stable. Results indicate that levels of self-compassion predicted depressive symptoms. Regarding the reverse effects of depressive symptoms on self-compassion, the results in all three tested associations indicated that depressive symptoms do not significantly predict subsequent levels of self-compassion. In sum, depressive symptoms seem to be a consequence rather than a cause of (a lack of) self-compassion. Since the patterns of results were equal across the three associations, this is the case for all three associations tested.

3.2. Associations between Self-Compassion and Major Depressive Episode

We created models to investigate the relationship between self-compassion and the absence or presence of a Major Depressive Episode (MDE). For the models with the total SCS scale, we used again all six facets as indicators for the latent variable ‘self-compassion’ for each measurement time point. Additionally, we added observed variables for the presence of an MDE (0 = absent, 1 = MDE) for each assessment time point. For models investigating the association of SCS-POS and SCS-NEG with MDE, we again used the respective facets as indicators. The first indicator of each latent variable was fixed at 1 in all models. In each model we specified autoregressive paths and cross-lagged paths. Based on the results above, we did not test measurement models again but constraint loadings of the latent variables over time. For computing the models, we used Monte Carlo integration, since models with continuous latent variables and categorical outcomes using maximum likelihood estimation and missing data for dependent variables require numerical integration (Muthén and Muthén, 2012). In a first step, we tested all models for structural invariance over time. In the first set of cross-lagged models, all structural coefficients were freely estimated. In the second set of cross-lagged models, we constrained the structural parameters, i.e., stability coefficients and cross-lagged coefficients, to be equal across all measurement points. Model comparison of these nested models was based on the BIC, with lower values indicating a better-fitting model. For all associations, the models with longitudinal constraints on structural coefficients showed a better fit than the one with free structural coefficients (SCS: 3322.60 vs. 3341.01; SCS-POS: 1733.90 vs. 1752.63; SCS-NEG: 1815.03 vs. 1832.69). Therefore, we went with the more parsimonious model. Results for the models assuming structural invariance are depicted in Table 5. The pattern of results for MDE, were again similar irrespective of using SCS, SCS-POS or SCS-NEG. The autoregressive path was significant for variables measuring self-compassion, and significant for MDE (except for the model with SCS were there was a trend, p = .057). Regarding the cross-lagged paths, self-compassion consistently significantly predicted MDE, while MDE was not predictive for levels of self-compassion. Odds ratio (OR) for the prediction of MDE by self-compassion was OR = 0.260 (95% CI: 0.111–0.610), for MDE on SCS-POS it was OR = 0.362 (95% CI: 0.168–0.781), and for

<table>
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<th>Factor</th>
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Notes: SCS – Self-compassion; D – Depressive symptoms; DEP – Parcels from depressive symptom items. All loadings are statistically significant at p < .001.
MDE on SCS-NEG it was OR = 5.342 (95% CI: 2.020–14.131). For ease of comparability, we reversed the OR for SCS-NEG, so that more SCS-NEG is better, which led to an OR of 0.187 (95% CI: 0.071–0.495). The OR confidence intervals of all three associations do overlap indicating that they are not significantly different from each other.

4. Discussion

The present study investigated the reciprocal effects of self-compassion and depression in a sample of former psychotherapy patients who had originally been diagnosed with major depression after the end of treatment in a prospective study with three waves.

Table 4
Overview of the cross-sectional correlation, cross-lagged effects, and stability effects for depressive symptoms.

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<tr>
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</tr>
<tr>
<td>Self-Compassion - Negative</td>
<td>−.53**</td>
<td>.09</td>
<td>.16*</td>
<td>.63**</td>
<td>.77**</td>
</tr>
</tbody>
</table>

Note. D = Depression; S = Self-compassion. r = correlation between the latent variables of self-compassion and depressive symptoms at T1. Although the coefficients were constrained to be equal across time, the constraints were imposed on unstandardized coefficients, which led to slight variations in the resulting standardized coefficients. To reduce complexity, we report the mean of the two standardized coefficients and the corresponding p-values.

+ p < .10.
* p < .05.
** p < .01.

Table 5
Overview of the cross-sectional correlation, cross-lagged effects, and stability effects for major depressive episode.

<table>
<thead>
<tr>
<th></th>
<th>r</th>
<th>MDE → SS</th>
<th>S → MDE</th>
<th>MDE → MDE</th>
<th>S → S</th>
</tr>
</thead>
<tbody>
<tr>
<td>Major Depression Episode</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Compassion</td>
<td>−.40**</td>
<td>−0.089</td>
<td>−1.347**</td>
<td>1.039*</td>
<td>0.885**</td>
</tr>
<tr>
<td>Self-Compassion - Positive</td>
<td>−.38**</td>
<td>−0.132</td>
<td>−1.017**</td>
<td>1.200*</td>
<td>0.820**</td>
</tr>
<tr>
<td>Self-Compassion - Negative</td>
<td>.35**</td>
<td>.087</td>
<td>1.676**</td>
<td>1.217*</td>
<td>0.883**</td>
</tr>
</tbody>
</table>

Note. MDE = Depressive Episode; S = Self-compassion; r = Point-biserial correlation between respective sum score and MDE (0 = absent, 1 = present) at T1. Values for cross-lagged effects, and stability effects represent unstandardized coefficients.

+ p < .10.
* p < .05.
** p < .01.
over 12 months. Results indicate that (lack of) self-compassion predicts depressive symptoms, while depressive symptoms do not predict levels of self-compassion. This pattern of results was corroborated when depression was measured by the presence or the absence of a major depression episode diagnosis. Importantly, the results based on self-report measures replicate and extend the finding of a previous study with students to a clinical sample (Raes, 2011). Additionally, we show that the effect is robust over a longer time period, since we used a longer time interval. Depressive symptoms and MDE did not significantly predict levels of self-compassion. This finding does not support a scar model, i.e., that low self-compassion is a result of depression (e.g., Coyne et al., 1998). However, one has to keep in mind that the participants in the present study are completers of a depression treatment trial and all of them had met the diagnostic criteria for a major depressive episode at pretreatment (on average seven months before the first assessment in this study). As a consequence, it might be possible that the “scar” had already developed before this study and “healed” in some patients over the course of the treatment. However, means and standard deviations in the present study indicate that we were able to observe the predictive effect in a rather broad range of depressive symptoms and levels of self-compassion.

The effect of self-compassion on depressive symptoms is small to medium over an interval of six months. However, it has to be taken into account that this effect is controlled for stability effects, which reduces the magnitude of the effect in comparison to the effects in cross-sectional studies (Adachi and Willoughby, 2015). Interestingly, the magnitude of the cross-lagged associations is very similar to the effects found in a recent meta-analysis of the associations between self-esteem and depressive symptoms (Sowislo and Orth, 2013). Sowislo and Orth found a mean cross-lagged effect of self-esteem on depression of −.16 (p < .05), and this effect was larger than the mean cross-lagged effect of depression on self-esteem, i.e., −.08 (p < .05). This similarity is not surprising, considering that how you treat yourself in hard times may closely correspond with how you feel about yourself in general and is also consistent with the findings that self-esteem and self-compassion are consistently correlated with about .60 (Neff, 2011).

Despite this similarity, it is important to keep in mind that there are some studies suggesting that self-compassion can explain how people feel or how they react to adversities above and beyond self-esteem (Krieger et al., 2015; Neff and Vonk, 2009). Moreover, Marshall et al. (2015) recently showed in a longitudinal study in a large sample of adolescents that self-compassion moderated the association of low self-esteem on mental health.

Another interesting finding of the present study is that results regarding reciprocal effects did not change irrespective of whether we only used the positive or the negative subscales of the SCS. Although the direction of the effects was inversely due to the polarity of the scales, significance and size of the effect was similar in all models. This implies that our study data do not per se support the notion of Muris (2015) that the total self-compassion score is “contaminated” by a negative component that is mainly responsible for the association of self-compassion with psychopathological symptoms. If this were the case, results for the two subscales in the present study would have differed from each other. As a consequence, our findings could support Neff’s notion that “self-compassion represents the relative balance of compassionate and uncompassionate responses to suffering, and [that] the lack of self-compassion is as important to the definition of the trait as the presence of it.” (Neff, 2015). Nevertheless, it might be possible that this result is only true for depressive symptoms and not for other symptoms of psychopathology. Future research is needed to clarify this question.

The present study did not investigate potential mediators of the effect of self-compassion on depression. In previous studies, a compassionate attitude towards the self has shown to buffer the effect of stressful situations on negative affect or psychopathological symptoms and to promote well-being. For example, empirical studies have suggested that self-compassion has a buffering effect on negative affect and depressive or other psychopathological symptoms, when coping with homesickness (Terry et al., 2013), with divorce (Sbarra et al., 2012), or with other negative or stressful events (Krieger et al., 2015; Leary et al., 2007). A proposed mechanism behind this association is that people who treat themselves in stressful situations with more self-compassion show more proactive and less avoiding coping strategies (Allen and Leary, 2010). In support of this notion, some studies showed that higher levels of self-compassion are associated with lower levels of pathological mental processes, such as rumination, worrying or avoidance behavior, which in turn predict weaker psychopathological symptoms (Krieger et al., 2013; Raes, 2010).

Possibly, people with higher levels of self-compassion also have a better awareness of their personal needs. For example, it has been shown that higher levels of self-compassion are related to a lesser likelihood to subordinate one’s personal needs in interpersonal conflicts (Yarnell and Neff, 2013). However, acknowledging one’s needs also under stressful circumstances may increase the probability of satisfying one’s needs and may prevent depressive or other psychological symptoms accordingly (Brockmeyer et al., 2014). However, the present study does not allow for drawing any conclusions on this issue.

4.1. Limitations

There are some important limitations in the present study that we want to acknowledge. First, since the present study did not involve an experimental design, causality cannot be inferred from our results. Depressive symptoms and self-compassion could still be causally unrelated, and a third variable could account for their negative association. Second, our findings suggest that a lack of self-compassion predicts higher levels of depressive symptoms. However as described above, the present research did not examine the underlying mechanism (mediators) that may link self-compassion with depression. Third, the sample size may be considered too small for conducting structural equation modeling. However, Little (2013) shows that with the sample size of the present study small to medium effect sizes can be reliably detected. Considering this, our sample size was too small to detect small effect sizes. Finally, we did not include other measures than self-compassion to control for the prediction of depression. However, it is important to note that in all our analyses we controlled for at least precedent depressive symptoms or diagnosable depressive episodes, defined as the worst two weeks within the last four weeks by including autoregressive paths. In previous studies, residual depressive symptoms have been found to be the most consistent and strongest predictor of depression relapse (e.g., Judd et al., 1998). Self-compassion therefore, predicted depressive symptoms and episodes over and above depressive symptoms. Besides these limitations, there are some noteworthy strengths of this study: To our knowledge this is the first study that investigated reciprocal effects between self-compassion and depression, as well as the stability of effects of self-compassion in a clinical sample over one year using self-report as well as observer-based measures of depression.

5. Conclusion

The present study showed that self-compassion predicts depression, whereas depression does not predict self-compassion.
Although the results of the present study indicate that self-compassion is a rather stable trait with stability coefficients of about .80, an increasing number of intervention studies in clinical and subclinical populations (Albertson et al., 2014; Held and Owens, 2015; Jazaieri et al., 2014; Neff and Germer, 2012; Shahar et al., 2012; Shapiro and Mongrain, 2010) show that fostering a self-compassionate attitude is possible. However, there is still a lack of research regarding the long-term stability of such changes. Taken together, the present findings suggest that self-compassion may deserve special attention in future depression research, since an emphasized focus on treating oneself in a supportive way despite aggravating circumstances could be a valuable candidate for the improvement of depression treatment and relapse prevention.

References


