



## RESEARCH ARTICLE

WILEY

# Self-compassion and emotion regulation difficulties in obsessive–compulsive disorder

Angelika Eichholz<sup>1</sup> | Caroline Schwartz<sup>1</sup> | Adrian Meule<sup>1,2</sup> | Julia Heese<sup>2</sup> | Jakob Neumüller<sup>1</sup> | Ulrich Voderholzer<sup>1,2,3</sup>

<sup>1</sup>Department of Psychiatry and Psychotherapy, University Hospital, LMU Munich, Munich, Germany

<sup>2</sup>Schoen Clinic Roseneck, Prien am Chiemsee, Germany

<sup>3</sup>Department of Psychiatry and Psychotherapy, University Hospital of Freiburg, Freiburg, Germany

**Correspondence**

Angelika Eichholz, Department of Psychiatry and Psychotherapy, University Hospital, LMU Munich, Nußbaumstr. 7, 80336 Munich, Germany.

Email: angelika.eichholz@uk-erlangen.de

Present address: Angelika Eichholz, Interdisciplinary Pain Center, University Hospital Erlangen, Krankenhausstraße 12, 91054 Erlangen, Germany.

**Abstract**

Lack of self-compassion and deficits in emotion regulation are associated with various psychopathological symptoms and may play a role in the development and maintenance of obsessive–compulsive disorder (OCD). However, further empirical research is still needed to better understand these constructs in the context of this disorder. The present study investigated the relation between self-compassion, emotion regulation difficulties, obsessive beliefs, and obsessive–compulsive symptom severity in 90 patients with OCD using self-report questionnaires. Symptom severity and obsessive beliefs were negatively correlated to self-compassion and positively associated with emotion regulation difficulties. Additionally, self-compassion showed a negative relation to emotion regulation difficulties. Emotion regulation difficulties—but not self-compassion—predicted symptom severity when controlling for obsessive beliefs and depression in a hierarchical regression analysis. Further analyses showed that emotion regulation deficits mediated the relationship between self-compassion and OCD symptom severity. Our results provide preliminary evidence that targeting self-compassion and putting more emphasis on emotion regulation deficits might be promising treatment approaches for patients with OCD. Future studies could investigate which specific interventions that directly address these variables improve treatment outcome.

**KEYWORDS**

difficulties in emotion regulation, inpatient, obsessive beliefs, obsessive–compulsive disorder, self-compassion

## 1 | INTRODUCTION

The cognitive behavioural approach is one of the most empirically supported psychological models for obsessive–compulsive disorder (OCD). It posits that symptoms stem from dysfunctional beliefs, which lead to a vicious cycle involving discomfort, neutralizing and

compulsive behaviour, and avoidance (Abramowitz, Taylor, & McKay, 2009; Salkovskis, 1985). Cognitive behaviour therapy (CBT) with exposure and response prevention (ERP) is the treatment option that is closely linked to this concept, and many studies (e.g., McKay et al., 2015; Olatunji, Davis, Powers, & Smits, 2013; Öst, Havnen, Hansen, & Kvale, 2015; Skapinakis et al., 2016) have shown it to be

Present address: Angelika Eichholz, Interdisciplinary Pain Center, University Hospital Erlangen, Krankenhausstraße 12, 91054 Erlangen, Germany.

This is an open access article under the terms of the Creative Commons Attribution-NonCommercial-NoDerivs License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

© 2020 The Authors. *Clinical Psychology & Psychotherapy* published by John Wiley & Sons Ltd

effective. It is now considered as a first line treatment for OCD (Abramowitz, Blakey, Reuman, & Buchholz, 2018; Hirschtritt, Bloch, & Mathews, 2017; National Collaborating Centre for Mental Health, 2006). ERP entails a systematic confrontation with feared stimuli and refraining from symptomatic behaviour (Abramowitz, Taylor, & McKay, 2009), whereas cognitive interventions address dysfunctional thoughts and beliefs considered predisposing factors of obsessive-compulsive symptoms (Abramowitz, 2006). The Obsessive-Compulsive Cognitions Working Group (OCCWG) identified the following different beliefs and appraisals as characteristic of OCD: inflated sense of responsibility, over-importance of thoughts, the need to control thoughts, perfectionism, overestimation of threat, and intolerance of uncertainty (OCCWG, 1997). Studies suggest that OCD symptom dimensions are predicted by obsessive beliefs (Wheaton, Abramowitz, Berman, Riemann, & Hale, 2010) and that decreasing such beliefs is linked to symptom change (Diedrich et al., 2016; Kyrios, Hordern, & Fassnacht, 2015; Wilhelm, Berman, Keshaviah, Schwartz, & Steketee, 2015).

Research also shows that a considerable number of patients do not benefit sufficiently from this type of therapy or drops out prematurely (Fisher & Wells, 2005; Mancebo, Eisen, Sibrava, Dyck, & Rasmussen, 2011; Öst et al., 2015). Regarding these shortcomings, it is crucial to further investigate the factors that explain the development of the disorder and the mechanisms of change of a successful treatment.

Fostering self-compassion and improving emotion regulation skills might help patients with OCD to cope better with difficult inner experiences and to develop a more open and accepting stance towards intrusions and distressing emotions, which might in turn decrease the reliance on symptomatic behaviour (Berman, Shaw, & Wilhelm, 2018; Didonna et al., 2019; Key, Rowa, Bieling, McCabe, & Pawluk, 2017; Leeuwerik, Cavanagh, & Strauss, 2019). Therefore, these two constructs might be important in the maintenance of OCD as well as influencing factors during the treatment process and deserve further attention.

## 1.1 | The role of self-compassion in OCD

Rooted in Buddhist tradition, self-compassion describes a friendly and caring attitude towards oneself in the face of failures or distress, with the desire to alleviate one's suffering (Neff, 2003b). Neff (2003a) distinguishes three distinct but closely interacting components of self-compassion: (a) self-kindness rather than harsh self-judgement, (b) seeing one's experience as a sign of shared humanity rather than as something setting apart from others, and (c) mindfulness rather than over-identification with painful thoughts and feelings. Self-compassion has been found to be negatively associated with psychopathology (MacBeth & Gumley, 2012) and positively linked to well-being (Zessin, Dickhäuser, & Garbade, 2015).

A lack of self-compassion may be relevant for OCD, as patients with this disorder are very self-critical and punish themselves for

### Key Practitioner Message

- Obsessive-compulsive symptoms negatively related to self-compassion.
- Obsessive-compulsive symptoms positively related to difficulties in emotion regulation.
- Emotion dysregulation mediated the self-compassion-symptom severity relationship.
- Targeting self-compassion and emotion regulation in therapy might be beneficial.

having negative intrusive thoughts (Abramowitz, Whiteside, Kalsy, & Tolin, 2003; Belloch, Morillo, & Garcia-Soriano, 2009). In addition, consistent negative associations have been reported for self-compassion and anxiety (Barnard & Curry, 2011; Marshall & Brockman, 2016; Neff, Hsieh, & Dejjitrat, 2005)—a prominent emotion in OCD (Calkins, Berman, & Wilhelm, 2013) and perfectionism (Ferrari, Yap, Scott, Einstein, & Ciarrochi, 2018; Neff, 2003a)—a characteristic belief in OCD. Moreover, self-compassion has been found to be associated with more positive and less negative or irrational thoughts (Arimitsu & Hofmann, 2015; Leary, Tate, Adams, Batts Allen, & Hancock, 2007; Podina, Jucan, & David, 2015). Furthermore, self-compassionate people tend to ruminate or worry less (Johnson & O'Brien, 2013; Krieger, Altenstein, Baettig, Doerig, & Holtforth, 2013; Neff, Kirkpatrick, & Rude, 2007; Raes, 2010; Smeets, Neff, Alberts, & Peters, 2014).

There are only a few studies that examined self-compassion in the context of OCD. Landmann, Cludius, Tuschen-Caffier, Moritz, and Külz (2019) found that mindfulness, one component of self-compassion, significantly predicted insight into the unreasonableness of the threat-related belief in patients with OCD. Moreover, an increase in mindfulness skills is associated with OCD symptom reduction (Didonna et al., 2019). Using an online survey with participants who self-reported suffering from OCD, Wetterneck, Lee, Smith, and Hart (2013) found a moderate negative correlation between self-compassion and obsessive-compulsive symptom severity. In a recently published study, participants with clinically significant OCD symptoms reported lower trait mindfulness and self-compassion compared with participants with anxiety or depression and to healthy controls (Leeuwerik et al., 2019). The authors found medium-to-large associations between mindfulness, self-compassion, and obsessive-compulsive symptoms as well as obsessive beliefs. Further regression analyses showed that both mindfulness and self-compassion predicted obsessive-compulsive symptoms.

Thus, self-compassion may allow looking at thoughts without misinterpreting them or becoming fused to them. By entailing mindful and accepting awareness of inner experiences, self-compassion may, therefore, buffer the negative effects from intrusions and dysfunctional beliefs.

## 1.2 | The role of emotion regulation in OCD

In addition to self-compassion, the construct of emotion regulation may be potentially useful for improving therapy outcome in OCD. Emotion regulation can be defined as “mechanisms by which individuals influence which emotions they have, when they have them, and how they experience and express these emotions” (Gross, 1998, p. 275). Although good emotion regulation skills are important to adapt to various situations and to accomplish one's goals, deficits in emotion regulation have been found to be associated with psychopathological symptoms (Aldao, Nolen-Hoeksema, & Schweizer, 2010) and appear to be relevant across a wide range of disorders (Berking & Wupperman, 2012; Gross & Jazaieri, 2014).

The cognitive behavioural model mentioned above and also the criteria according to the current version of the *Diagnostic and Statistical Manual of Mental Disorders* (American Psychiatric Association, 2013) suggest that compulsions, neutralizing, or avoidance behaviour can be viewed as maladaptive strategies to reduce emotional distress. Patients with OCD are assumed to have problems influencing their distressing emotions in a constructive way, therefore applying symptomatic behaviours instead. This may serve to reduce negative emotional responses in the short run but will maintain the symptomatology in the long run (Allen & Barlow, 2009; Calkins et al., 2013).

There is growing empirical evidence that emotion dysregulation may play an important role in OCD. Indeed, studies have shown that emotion regulation difficulties relate to higher obsessive-compulsive symptomatology in non-clinical samples (Fergus & Bardeen; Stern, Nota, Heimberg, Holaway, & Coles, 2014; Yap et al., 2018). Using qualitative content analysis and analysing treatment reports of OCD inpatients, Külz et al. (2010) showed that OCD symptoms served most commonly as an emotion regulation strategy. In a systematic review, Robinson and Freeston (2014) found that alexithymia, anxiety sensitivity, and distress intolerance were elevated in patients with OCD in comparison with non-clinical controls. In two other studies, individuals with OCD showed higher emotion regulation deficits than healthy controls (Fernández de la Cruz et al., 2013; Yap et al., 2018). Moreover, Berman et al. (2018) found positive associations between obsessive beliefs and emotion regulation difficulties.

## 1.3 | The relationship between self-compassion and emotion regulation

With regard to the relationship between self-compassion and emotion regulation difficulties, it has been theorized that self-compassion facilitates an adaptive emotion regulation by holding feelings in balanced awareness and deploying its self-soothing and motivating effect (Berking & Whitley, 2014; Gilbert, 2014; Neff, 2003b). Indeed, this assumption is supported by empirical data. For example, several studies report a strong negative correlation between self-compassion and deficits in emotion regulation (Finlay-Jones, Rees, & Kane, 2015; Scoglio et al., 2018; Vettese, Dyer, Li, & Wekerle, 2011). Using an experimental design, Odou and Brinker (2015) found that a self-

compassionate mind can help to regulate negative emotions and increase positive emotions instead. In another experimental study, Diedrich et al. (2014) asked depressive individuals to apply different emotion regulation strategies and a self-compassionate approach after negative emotions had been induced. The results showed that self-compassion was similarly effective as reappraisal and acceptance and reduced the distressing emotional response more than a waiting condition. In a recent systematic review including five studies, Inwood and Ferrari et al. (2018) concluded that emotion regulation may be a mechanism of change in the relationship between self-compassion and mental health.

Elucidating the assumed links between OCD symptoms, self-compassion, and emotion regulation difficulties could add to a better understanding of OCD and may, therefore, have important treatment implications.

## 1.4 | Hypotheses

The current study investigated the associations between OCD symptom severity, obsessive beliefs, self-compassion, and emotion regulation difficulties in a sample of OCD inpatients. Specifically, we expected that emotion regulation difficulties and OCD symptom severity as well as obsessive beliefs would be positively correlated, whereas emotion regulation difficulties and self-compassion would be inversely related. In addition, we hypothesized a negative correlation between self-compassion and OCD symptom severity as well as obsessive beliefs. To further investigate the relevance of these variables for OCD and its treatment, we hypothesized that emotion regulation difficulties and self-compassion would predict symptom severity when controlling for obsessive beliefs and depression. We accounted for obsessive beliefs as these are found to be an important mechanism of change and are already typically addressed in CBT (Diedrich et al., 2016; McKay et al., 2015). The decision to control for depressive symptoms was based on the high rate of depressive disorder in our sample and on prior research indicating associations between depression and self-compassion (Krieger et al., 2013) as well as emotion regulation difficulties (Aldao et al., 2010). Additionally, we tested a mediational model, in which deficits in emotion regulation mediate the relationship between self-compassion and OCD symptoms.

## 2 | METHOD

### 2.1 | Participants

The sample consisted of  $N = 90$  adult patients who were consecutively recruited from an inpatient clinic with a specialized unit for the treatment of OCD and completed self-report questionnaires on admission. Patients were diagnosed with OCD according to the International Statistical Classification of Diseases and Related Health Problems 10th Revision (Dilling, Mombour, & Schmidt, 2015) by behaviourally oriented psychologists or psychiatrists, experienced

in the diagnosis and treatment of OCD. Besides the diagnosis of OCD, the inclusion criteria involved a minimum age of 18 years and German language fluency. Only fully completed questionnaires were considered for analysis. Exclusion criteria were meeting the criteria for psychotic, bipolar or substance dependence disorder, and current suicidal intent. There were almost equal numbers of women ( $n = 46$ ) and men ( $n = 44$ ) in the sample, with a mean age of 33.93 years ( $SD = 12.65$ , range: 18–68). Most participants had both obsessions and compulsions (80.0%), 16.7% suffered predominantly from compulsive acts, and 3.3% mainly from obsessional thoughts or ruminations. The majority of patients (93.3%) had at least one mental comorbidity, most frequently depressive disorders (87.8%). The responsible ethical committee had approved the study, and all participants gave written informed consent.

## 2.2 | Measures

The *Yale-Brown Obsessive Compulsive Scale - Self report* (Baer, 1993) is a scale designed to assess the severity of OCD. It is the self-report version of the clinician-administered interview format (Goodman et al., 1989), which is considered as a “gold standard” for the assessment of OCD (Grabill et al., 2008). The scale consists of 10 items concerning obsessions and compulsions that can be scored from 0 (*equivalent to no symptoms*) to 4 (*equivalent to severe symptoms*). The German version shows good consistency with the interview format (Schaible, Armbrust, & Nutzinger, 2001), and good psychometric properties are reported (Jacobsen, Kloss, Fricke, Hand, & Moritz, 2003). McDonald's  $\omega$  for the full scale in the present sample was found to be 0.80.

The *Obsessive-Beliefs Questionnaire* (OCCWG, 2005) is an instrument designed to measure cognitive biases identified as typical for obsessive thinking on a 7-point scale from 1 = *strongly disagree* to 7 = *strongly agree*. It contains three subscales: responsibility/overestimation of threat, perfectionism/intolerance of uncertainty, and importance/control of thoughts. In the present study, we used the abbreviated 24-item German adaptation, for which acceptable to good reliability and validity are reported (Ertle et al., 2008). Consistent with these results, McDonald's  $\omega$  was 0.90 for the total scale in the current study.

Self-compassion was measured using the 12-item *Self-Compassion Scale - Short Form* (Hupfeld & Ruffieux, 2011; Raes, Pommier, Neff, & Van Gucht, 2011). Each statement about how people relate towards themselves in difficult times is rated along a 5-point scale with 1 = *almost never* and 5 = *almost always*. The scale measures six facets of self-compassion: self-kindness versus self-judgement, common humanity versus isolation, mindfulness versus over-identification. The shortened scale shows good psychometric properties and exhibits a high correlation with the 26-item Self-Compassion Scale (Hupfeld & Ruffieux, 2011; Raes et al., 2011). In this study, McDonald's  $\omega$  was 0.84 for the total scale.

To assess emotion regulation difficulties, the *Difficulties in Emotion Regulation Scale* (DERS; Gratz & Roemer, 2004) was used. Participants are asked to rate 36 items on a scale from 1 = *almost never* to 5 = *almost always*. The scale contains six different facets: non-acceptance of emotions, difficulties engaging in goal-directed

behaviour, impulse control difficulties, lack of emotional awareness, limited access to emotion regulation strategies, and lack of emotional clarity. Good psychometric properties are reported for the original English (Gratz & Roemer, 2004) and translated German version (Ehring, Fischer, Schnülle, Böstlering, & Tuschen-Caffier, 2008). One exception seems to be the awareness subscale (Bardeen, Fergus, & Orcutt, 2012; Hallion, Steinman, Tolin, & Diefenbach, 2018; Yap et al., 2018). As there is a growing consensus that the DERS total score is psychometrically stronger without the awareness items, we excluded this subscale from our analyses. McDonald's  $\omega$  of the DERS total scale without the awareness scale was 0.94.

The revised version of the *Beck Depression Inventory II* (Beck, Steer, & Brown, 1996) was used to measure depressive symptoms within the last 2 weeks. This self-report questionnaire consists of 21 items. Each answer is scored on a scale value of 0 to 3. The German version (Hautzinger, Keller, & Kühner, 2006) demonstrates good reliability and validity (Kühner, Bürger, Keller, & Hautzinger, 2007). McDonald's  $\omega$  was found to be 0.90 for the total scale.

## 2.3 | Statistical analysis

Data were analysed using IBM SPSS 25.0 software. Pearson correlation coefficients between symptom severity, obsessive beliefs, self-compassion, emotion regulation difficulties, and depression were computed to examine the relations between these variables. To evaluate whether self-compassion and emotion regulation difficulties predict symptom severity after accounting for obsessive beliefs and depression, a hierarchical linear regression analysis was calculated. Furthermore, a simple mediation model was tested with PROCESS version 3.4 (Hayes, 2018). Specifically, self-compassion was used as independent variable, emotion regulation difficulties were used as mediating variable, and obsessive-compulsive symptoms were used as dependent variable. The presence of an indirect effect of self-compassion on obsessive compulsive symptoms through emotion regulation difficulties was evaluated with bias-corrected confidence intervals based on 10,000 bootstrap samples. We considered the indirect effect as statistically different from zero in case zero was not included in the bootstrap confidence interval. To control for potential confounding effects, we also tested a mediation model that included depressive symptomatology as a covariate. For all other statistical tests, an alpha level of  $p < .05$  was chosen.

## 3 | RESULTS

### 3.1 | Relationship between symptom severity, obsessive beliefs, self-compassion, and emotion regulation difficulties

All study variables were positively associated with each other except self-compassion, which was negatively correlated with the other study variables (Table 1).

### 3.2 | Hierarchical regression analysis predicting obsessive symptom severity

The results of the hierarchical regression analysis are presented in Table 2. After controlling for obsessive beliefs and depression, entering emotion regulation difficulties and self-compassion in the second step significantly augmented the prediction of symptom severity measured by the Yale–Brown Obsessive Compulsive Scale – Self report. In this prediction model, depression and emotion regulation difficulties were found to be significant predictors. All variables together accounted for 28.9% of the variance in symptom severity.

### 3.3 | Emotion regulation difficulties as a mediator of the relation between self-compassion and symptom severity

As presented in Figure 1, the results of the mediation analysis show that self-compassion indirectly influences obsessive–compulsive symptom severity through its effect on emotion regulation difficulties. This indirect effect is statistically different from zero, as the confidence interval does not include zero ( $ab = -1.95$ ,  $SE = 0.75$ , 95% CI  $[-3.65, -0.74]$ ). The direct effect was not significant. The indirect

effect of self-compassion on obsessive–compulsive symptoms through emotion regulation difficulties was also significant when depression scores were included as covariate in the mediation model ( $ab = -1.20$ ,  $SE = 0.54$ , 95% CI  $[-2.47, -0.32]$ ).

## 4 | DISCUSSION

The present study extends the existing literature by investigating the relationship between self-compassion, emotion regulation deficits, and obsessive–compulsive symptoms in a clinical sample of inpatients suffering from OCD. The hypotheses were largely supported by the data. As anticipated and in accordance with prior research (Berman et al., 2018; Fergus & Bardeen, 2014; Fernández de la Cruz et al., 2013; Leeuwrik et al., 2019; Wetterneck et al., 2013; Yap et al., 2018), symptom severity and obsessive beliefs were negatively correlated with self-compassion and positively associated with emotion regulation difficulties. In line with our expectation and previous studies (Finlay-Jones et al., 2015; Scoglio et al., 2018; Vettese et al., 2011), a strong and negative correlation between self-compassion and difficulties in emotion regulation existed.

Additionally, difficulties in emotion regulation were found to positively predict symptom severity in a hierarchical regression analysis after accounting for depression and obsessive beliefs. This finding

**TABLE 1** Correlations between symptom severity, obsessive beliefs, emotion regulation difficulties, self-compassion, and depression

Variable	M (SD)	Range	1	2	3	4	5
1. Y-BOCS-SR	25.20 (5.42)	15–37	–				
2. OBQ	4.57 (1.07)	1.71–6.50	.36	–			
3. SCS-SF	2.32 (0.66)	1.25–4.25	–.40	–.42	–		
4. DERS	86.68 (22.43)	35–138	.49	.45	–.61	–	
5. BDI-II	26.99 (10.27)	1–47	.48	.39	–.60	.52	–

Note. All correlation coefficients were significant at  $p < .001$ .

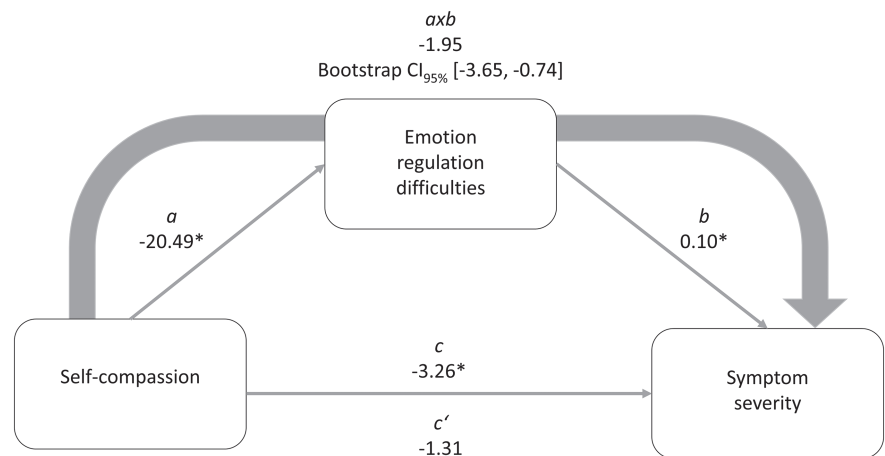
Abbreviations: BDI-II, Beck Depression Inventory II; DERS, Difficulties in Emotion Regulation Scale; OBQ, Obsessive Beliefs Questionnaire; SCS-SF, Self-Compassion Scale – Short Form; Y-BOCS-SR, Yale–Brown Obsessive Compulsive Scale – Self report.

**TABLE 2** Hierarchical regression analysis predicting OCD symptom severity from obsessive beliefs, depression, self-compassion, and emotion regulation difficulties

Variable	$\Delta R^2$	$\Delta F$	$p$	$b$	$SE$	$\beta$	$t$	$p$
Step 1	0.27	15.67	<.001					
OBQ				1.06	0.50	.21	2.10	.04
BDI-II				0.21	0.05	.40	3.98	<.001
Step 2	0.06	3.49	.04					
OBQ				0.63	0.52	.12	1.20	.23
BDI-II				0.14	0.06	.27	2.36	.02
SCS-SF				–0.08	1.02	–.01	–0.08	.94
DERS				0.07	0.03	.29	2.41	.02

Abbreviations: BDI-II, Beck Depression Inventory II; DERS, Difficulties in Emotion Regulation Scale; OBQ, Obsessive-Beliefs Questionnaire; SCS-SF, Self-compassion Scale – Short Form.

**FIGURE 1** Unstandardized regression coefficients for the mediation model with emotion regulation difficulties as a mediator of the relationship between self-compassion and obsessive-compulsive symptom severity. Asterisks indicate  $p < .05$



supports the idea that emotion regulation deficits may play a relevant role for patients with OCD. Unlike the recently published study by Leeuwerik et al. (2019), self-compassion did not emerge as a significant predictor. The mediation analysis provides one explanation for this result as the self-compassion–symptom severity relationship was found to be mediated by emotion regulation difficulties. Depression did not account for this effect, as the relationships observed persisted after controlling for depressive symptoms. This suggests that clinicians can apply these findings to patients with OCD regardless of their depression symptom severity. In sum, these results support previous research (Inwood & Ferrari, 2018), and theoretical considerations that self-compassion may foster adaptive emotion regulation by approaching painful feelings with kindness, mindfulness, and a sense of shared humanity (Neff, 2003b).

#### 4.1 | Treatment implications

It should be noted that the magnitudes of the effects found in our study were modest, which limits conclusions concerning clinical relevance. However, if the results of the present study receive further empirical support, they could have important clinical implications. Improving emotion regulation skills and developing a self-compassionate mind independent of traditional interventions could prove useful in facilitating and improving treatment gains and in lowering dropout rates.

One possibility would be to implement interventions prior to undertaking ERP. This might help individuals with OCD to gain self-efficacy and approach rather than avoid their emotions. By improving regulation skills and a self-compassionate mind, the threatening effect of distressing emotional responses might be lowered and an accepting stance fostered, which could reduce aversiveness of exposure (Fernández de la Cruz et al., 2013), allow for a differentiated perception and deeper awareness of one's emotions (Koole, 2009), and improve acceptability of psychological interventions (Levitt, Brown, Orsillo, & Barlow, 2004). Self-compassion may also buffer feelings of failure and frustration during ERP. Initial support for the benefit of targeting emotion regulation difficulties was found by Allen and

Barlow (2009). By using a multiple baseline across subjects design with seven patients with OCD, the authors found that the acquisition of an emotion regulation skill (in this study, the prevention of emotional avoidance) was related to a reduction in OCD symptoms.

Another possibility to improve therapy outcome could be an additional treatment following CBT. There are interventions designed to specifically foster a self-compassionate mind (Ferrari et al., 2019; Germer & Neff, 2013; Gilbert, 2014) or emotion regulation skills (Berking & Whitley, 2014). Another promising approach might be mindfulness-based interventions, which can target both (Robins, Keng, Ekblad, & Brantley, 2012). There are some studies examining mindfulness-based interventions that yielded promising results (Didonna et al., 2019; Key et al., 2017; Külz et al., 2019). However, it seems still unclear if mindfulness-based interventions provide an added benefit compared with existing approaches (Külz et al., 2019; Strauss et al., 2018).

Future studies will have to assess to what extent traditional psychological interventions already target self-compassion and emotion regulation. Component analyses could reveal which specific aspects should be emphasized more to further improve OCD treatment.

#### 4.2 | Limitations

It is necessary to acknowledge some limitations of the current study. First, the cross-sectional design does not allow to reliably derive causal relationships between the studied variables. Longitudinal or experimental research will extend the current findings and help to improve the understanding of the relationship between emotion regulation difficulties, self-compassion, and OCD.

This study extends existing research by assessing a relatively large sample with elevated obsessive-compulsive symptom severity. However, the interpretation of the current findings is limited to patients with OCD with various co-morbidities. Thus, the current sample may not be representative of the entire population of persons with OCD, and therefore, the results may be different in other samples. Moreover, inter-rater reliability for ensuring accuracy of diagnostic profiles was not conducted. Therefore, the results should be interpreted with

caution, and further research is needed to replicate these findings. Future studies should examine the relationship between the variables in varied samples (e.g., outpatient or adolescent OCD samples) and also focus on possible impacts of co-morbid psychiatric disorders (Whitehead & Suveg, 2015).

In addition, it also needs to be acknowledged that the data presented were exclusively based upon retrospective self-report measures. This could be problematic, as answers may be influenced by social desirability, response, or recall biases. Furthermore, individuals may have been unable to report their experiences properly due to a lack of insight or because some processes involved in self-compassion and emotion regulation are not deliberate but automatic. In addition, the instruments used did not focus on special emotions or situations. The aim of this study was to use comprehensive measures of emotion regulation and self-compassion. As a next step, a promising research approach may be to focus more on specific (also positive; Stern et al., 2014) emotional responses and the context. Future studies should also use measures that consider different subtypes of obsessive-compulsive symptoms to gain further insight into unique associations and dimension-specific effects (Berman et al., 2018). To replicate and expand the results of this study, further studies would therefore benefit from employing other instruments and methods such as clinician-administered interviews or measuring physiological parameters and from focusing more on potential moderating factors.

## 5 | CONCLUSION

The cognitive behavioural model points out the importance of obsessive beliefs in the maintenance of OCD symptomatology, but it also stresses the short-term functionality of symptomatic behaviour in regulating emotional discomfort. Self-compassion might be a valuable resource to deal with painful emotional states and stressful thoughts and beliefs using acceptance and kindness, which enables patients to behave in accordance with desired goals. An additional emphasis on emotion regulation strategies might also be a promising treatment approach to cope with emotional distress, which in turn could lower the need to fall back on symptomatic behaviour such as rituals or thought suppression. Our findings allow gaining first insights in the relationship between OCD symptoms, self-compassion, and emotion dysregulation. To further clarify the interplay between the constructs and to be able to derive specific therapy recommendations, additional studies on this topic are warranted.

## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## ORCID

Angelika Eichholz  <https://orcid.org/0000-0002-1643-6015>

Adrian Meule  <https://orcid.org/0000-0002-6639-8977>

Ulrich Voderholzer  <https://orcid.org/0000-0003-0261-3145>

## REFERENCES

- Abramowitz, J. S. (2006). The psychological treatment of obsessive-compulsive disorder. *Canadian Journal of Psychiatry*, 51(7), 407–416. <https://doi.org/10.1177/070674370605100702>
- Abramowitz, J. S., Blakey, S. M., Reuman, L., & Buchholz, J. L. (2018). New directions in the cognitive-behavioral treatment of OCD: Theory, research, and practice. *Behavior Therapy*, 49(3), 311–322. <https://doi.org/10.1016/j.beth.2017.09.002>
- Abramowitz, J. S., Taylor, S., & McKay, D. (2009). Obsessive-compulsive disorder. *The Lancet*, 374(9688), 491–499. [https://doi.org/10.1016/S0140-6736\(09\)60240-3](https://doi.org/10.1016/S0140-6736(09)60240-3)
- Abramowitz, J. S., Whiteside, S., Kalsy, S. A., & Tolin, D. F. (2003). Thought control strategies in obsessive-compulsive disorder: A replication and extension. *Behaviour Research and Therapy*, 41(5), 529–540. [https://doi.org/10.1016/S0005-7967\(02\)00026-8](https://doi.org/10.1016/S0005-7967(02)00026-8)
- Aldao, A., Nolen-Hoeksema, S., & Schweizer, S. (2010). Emotion-regulation strategies across psychopathology: A meta-analytic review. *Clinical Psychology Review*, 30(2), 217–237. <https://doi.org/10.1016/j.cpr.2009.11.004>
- Allen, L. B., & Barlow, D. H. (2009). Relationship of exposure to clinically irrelevant emotion cues and obsessive-compulsive symptoms. *Behavior Modification*, 33(6), 743–762. <https://doi.org/10.1177/0145445509344180>
- American Psychiatric Association (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Arimitsu, K., & Hofmann, S. G. (2015). Cognitions as mediators in the relationship between self-compassion and affect. *Personality and Individual Differences*, 74, 41–48. <https://doi.org/10.1016/j.paid.2014.10.008>
- Baer, L. (1993). *Alles unter Kontrolle - Zwangsgedanken und Zwangshandlungen überwinden*. Bern: Huber.
- Bardeen, J., Fergus, T., & Orcutt, H. (2012). An examination of the latent structure of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment*, 34(3), 382–392. <https://doi.org/10.1007/s10862-012-9280-y>
- Barnard, L. K., & Curry, J. F. (2011). Self-compassion: Conceptualizations, correlates, & interventions. *Review of General Psychology*, 15(4), 289–303. <https://doi.org/10.1037/a0025754>
- Beck, A. T., Steer, R. A., & Brown, G. K. (1996). *Manual for the Beck Depression Inventory-II*. San Antonio: The Psychological Corporation.
- Belloch, A., Morillo, C., & Garcia-Soriano, G. (2009). Strategies to control unwanted intrusive thoughts: Which are relevant and specific in obsessive-compulsive disorder? *Cognitive Therapy and Research*, 33(1), 75–89. <https://doi.org/10.1007/s10608-007-9141-2>
- Berking, M., & Whitley, B. (2014). *Affect regulation training: A practitioner's manual*. New York: Springer.
- Berking, M., & Wupperman, P. (2012). Emotion regulation and mental health: Recent finding, current challenges, and future directions. *Current Opinion in Psychiatry*, 25(2), 128–134. <https://doi.org/10.1097/YCO.0b013e3283503669>
- Berman, N. C., Shaw, A. M., & Wilhelm, S. (2018). Emotion regulation in patients with obsessive compulsive disorder: Unique effects for those with “taboo thoughts”. *Cognitive Therapy and Research*, 42(5), 674–685. <https://doi.org/10.1007/s10608-018-9911-z>
- Calkins, A., Berman, N., & Wilhelm, S. (2013). Recent advances in research on cognition and emotion in OCD: A review. *Current Psychiatry Reports*, 15(5), 1–7. <https://doi.org/10.1007/s11920-013-0357-4>
- Diedrich, A., Grant, M., Hofmann, S. G., Hiller, W., & Berking, M. (2014). Self-compassion as an emotion regulation strategy in major depressive disorder. *Behaviour Research and Therapy*, 58, 43–51. <https://doi.org/10.1016/j.brat.2014.05.006>
- Diedrich, A., Sckopke, P., Schwartz, C., Schlegl, S., Osen, B., Stierle, C., & Voderholzer, U. (2016). Change in obsessive beliefs as predictor and mediator of symptom change during treatment of obsessive-compulsive disorder – a process-outcome study. *BMC Psychiatry*, 16(1), 220. <https://doi.org/10.1186/s12888-016-0914-6>

- Didonna, F., Lanfredi, M., Xodo, E., Ferrari, C., Rossi, R., & Pedrini, L. (2019). Mindfulness-based cognitive therapy for obsessive-compulsive disorder: A pilot study. *Journal of Psychiatric Practice*, 25(2), 156–170. <https://doi.org/10.1097/prs.0000000000000377>
- Dilling, H., Mombour, W., & Schmidt, M. H. (Eds.) (2015). *Weltgesundheitsorganisation. Internationale Klassifikation psychischer Störungen. ICD-10 Kapitel V (F). Klinisch-diagnostische Leitlinien* (Oth ed.). Bern: Hogrefe.
- Ehring, T., Fischer, S., Schnülle, J., Böstlering, A., & Tuschen-Caffier, B. (2008). Characteristics of emotion regulation in recovered depressed versus never depressed individuals. *Personality and Individual Differences*, 44(7), 1574–1584. <https://doi.org/10.1016/j.paid.2008.01.013>
- Ertle, A., Wahl, K., Bohne, A., Moritz, S., Kordon, A., & Schulte, D. (2008). Dimensionen zwangsspezifischer Einstellungen: Der Obsessive-eliefs Questionnaire (OBQ) für den deutschen Sprachraum analysiert. *Zeitschrift für Klinische Psychologie und Psychotherapie*, 37, 263–271.
- Fergus, T. A., & Bardeen, J. R. (2014). Emotion regulation and obsessive-compulsive symptoms: A further examination of associations. *Journal of Obsessive-Compulsive and Related Disorders*, 3(3), 243–248. <https://doi.org/10.1016/j.jocrd.2014.06.001>
- Fernández de la Cruz, L., Landau, D., Iervolino, A. C., Santo, S., Pertusa, A., Singh, S., & Mataix-Cols, D. (2013). Experiential avoidance and emotion regulation difficulties in hoarding disorder. *Journal of Anxiety Disorders*, 27(2), 204–209. <https://doi.org/10.1016/j.janxdis.2013.01.004>
- Ferrari, M., Hunt, C., Harrysunker, A., Abbott, M. J., Beath, A. P., & Einstein, D. A. (2019). Self-compassion interventions and psychosocial outcomes: A meta-analysis of RCTs. *Mindfulness*, 10(8), 1455–1473. <https://doi.org/10.1007/s12671-019-01134-6>
- Ferrari, M., Yap, K., Scott, N., Einstein, D. A., & Ciarrochi, J. (2018). Self-compassion moderates the perfectionism and depression link in both adolescence and adulthood. *PLoS ONE*, 13(2), e0192022–e0192022. <https://doi.org/10.1371/journal.pone.0192022>
- Finlay-Jones, A. L., Rees, C. S., & Kane, R. T. (2015). Self-compassion, emotion regulation and stress among Australian psychologists: Testing an emotion regulation model of self-compassion using structural equation modeling. *PLoS ONE*, 10(7), 1–19. <https://doi.org/10.1371/journal.pone.0133481>
- Fisher, P. L., & Wells, A. (2005). How effective are cognitive and behavioral treatments for obsessive-compulsive disorder? A clinical significance analysis. *Behaviour Research and Therapy*, 43, 1543–1558. <https://doi.org/10.1016/j.brat.2004.11.007>
- Germer, C. K., & Neff, K. D. (2013). Self-compassion in clinical practice. *Journal of Clinical Psychology*, 69(8), 856–867. <https://doi.org/10.1002/jclp.22021>
- Gilbert, P. (2014). The origins and nature of compassion focused therapy. *British Journal of Clinical Psychology*, 53(1), 6–41. <https://doi.org/10.1111/bjc.12043>
- Goodman, W. K., Price, L. H., Rasmussen, S. A., Mazure, C., Fleischmann, R. L., Hill, C. L., ... Charney, D. S. (1989). The Yale-Brown Obsessive Compulsive Scale: I. Development, use, and reliability. *Archives of General Psychiatry*, 46(11), 1006–1011. <https://doi.org/10.1001/archpsyc.1989.01810110048007>
- Grabill, K., Merlo, L., Duke, D., Harford, K.-L., Keeley, M. L., Geffken, G. R., & Storch, E. A. (2008). Assessment of obsessive-compulsive disorder: A review. *Journal of Anxiety Disorders*, 22(1), 1–17. <https://doi.org/10.1016/j.janxdis.2007.01.012>
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the difficulties in emotion regulation scale. *Journal of Psychopathology and Behavioral Assessment*, 26(1), 41–54. <https://doi.org/10.1023/B:JOBA.0000007455.08539.94>
- Gross, J. J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology*, 2(3), 271–299. <https://doi.org/10.1037/1089-2680.2.3.271>
- Gross, J. J., & Jazaieri, H. (2014). Emotion, emotion regulation, and psychopathology: An affective science perspective. *Clinical Psychological Science*, 2(4), 387–401. <https://doi.org/10.1177/2167702614536164>
- Hallion, L. S., Steinman, S. A., Tolin, D. F., & Diefenbach, G. J. (2018). Psychometric properties of the Difficulties in Emotion Regulation Scale (DERS) and its short forms in adults with emotional disorders. *Frontiers in Psychology*, 9, 539–539. <https://doi.org/10.3389/fpsyg.2018.00539>
- Hautzinger, M., Keller, F., & Kühner, C. (2006). *BDI-II. Beck Depressions-Inventar*. Frankfurt/Main: Harcourt Test Services.
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach*. New York: Guilford Press.
- Hirschtritt, M. E., Bloch, M. H., & Mathews, C. A. (2017). Obsessive-compulsive disorder: Advances in diagnosis and treatment. *JAMA*, 317(13), 1358–1367. <https://doi.org/10.1001/jama.2017.2200>
- Hupfeld, J., & Ruffieux, N. (2011). Validierung einer deutschen Version der Self-Compassion Scale (SCS-D). *Zeitschrift für Klinische Psychologie Und Psychotherapie*, 40(2), 115–123. <https://doi.org/10.1026/1616-3443/a000088>
- Inwood, E., & Ferrari, M. (2018). Mechanisms of change in the relationship between self-compassion, emotion regulation, and mental health: A systematic review. *Applied Psychology: Health and Well-Being*, 10(2), 215–235. <https://doi.org/10.1111/aphw.12127>
- Jacobsen, D., Kloss, M., Fricke, S., Hand, I., & Moritz, S. (2003). Reliabilität der deutschen Version der Yale-Brown Obsessive Compulsive Scale. *Verhaltenstherapie*, 13(2), 111–113. <https://doi.org/10.1159/000072184>
- Johnson, E. A., & O'Brien, K. A. (2013). Self-compassion soothes the savage ego-threat system: Effects on negative affect, shame, rumination, and depressive symptoms. *Journal of Social and Clinical Psychology*, 32(9), 939–963. <https://doi.org/10.1521/jscp.2013.32.9.939>
- Key, B. L., Rowa, K., Bieling, P., McCabe, R., & Pawluk, E. J. (2017). Mindfulness-based cognitive therapy as an augmentation treatment for obsessive-compulsive disorder. *Clinical Psychology & Psychotherapy*, 1–12. <https://doi.org/10.1002/cpp.2076>
- Koole, S. L. (2009). The psychology of emotion regulation: An integrative review. *Cognition and Emotion*, 23(1), 4–41. <https://doi.org/10.1080/02699930802619031>
- Krieger, T., Altenstein, D., Baettig, I., Doerig, N., & Holtforth, M. G. (2013). Self-compassion in depression: Associations with depressive symptoms, rumination, and avoidance in depressed outpatients. *Behavior Therapy*, 44(3), 501–513. <https://doi.org/10.1016/j.beth.2013.04.004>
- Kühner, C., Bürger, C., Keller, F., & Hautzinger, M. (2007). Reliabilität und Validität des revidierten Beck-Depressionsinventars (BDI-II). *Der Nervenarzt*, 78(6), 651–656. <https://doi.org/10.1007/s00115-006-2098-7>
- Külz, A. K., Landmann, S., Cludius, B., Rose, N., Heidenreich, T., Jelinek, L., ... Moritz, S. (2019). Mindfulness-based cognitive therapy (MBCT) in patients with obsessive-compulsive disorder (OCD) and residual symptoms after cognitive behavioral therapy (CBT): A randomized controlled trial. *European Archives of Psychiatry and Clinical Neuroscience*, 269(2), 223–233. <https://doi.org/10.1007/s00406-018-0957-4>
- Külz, A. K., Lumpp, A., Herbst, N., Stelzer, N., Förstner, U., & Voderholzer, U. (2010). Welche Funktionen erfüllen Zwangssymptome? – Ergebnisse einer Analyse im stationären Setting. *Verhaltenstherapie*, 20(2), 101–108. <https://doi.org/10.1159/000295428>
- Kyrios, M., Hordern, C., & Fassnacht, D. B. (2015). Predictors of response to cognitive behaviour therapy for obsessive-compulsive disorder. *International Journal of Clinical Health & Psychology*, 15(3), 181–190. <https://doi.org/10.1016/j.ijchp.2015.07.003>
- Landmann, S., Cludius, B., Tuschen-Caffier, B., Moritz, S., & Külz, A. K. (2019). Mindfulness predicts insight in obsessive-compulsive disorder over and above OC symptoms: An experience-sampling study.



- Behaviour Research and Therapy*, 121, 103449. <https://doi.org/10.1016/j.brat.2019.103449>
- Leary, M. R., Tate, E. B., Adams, C. E., Batts Allen, A., & Hancock, J. (2007). Self-compassion and reactions to unpleasant self-relevant events: The implications of treating oneself kindly. *Journal of Personality and Social Psychology*, 92(5), 887–904. <https://doi.org/10.1037/0022-3514.92.5.887>
- Leeuwerik, T., Cavanagh, K., & Strauss, C. (2019). The association of trait mindfulness and self-compassion with obsessive-compulsive disorder symptoms: Results from a large survey with treatment-seeking adults. *Cognitive Therapy and Research*, 44, 120–135. <https://doi.org/10.1007/s10608-019-10049-4>
- Levitt, J. T., Brown, T. A., Orsillo, S. M., & Barlow, D. H. (2004). The effects of acceptance versus suppression of emotion on subjective and psychophysiological response to carbon dioxide challenge in patients with panic disorder. *Behavior Therapy*, 35(4), 747–766. [https://doi.org/10.1016/S0005-7894\(04\)80018-2](https://doi.org/10.1016/S0005-7894(04)80018-2)
- MacBeth, A., & Gumley, A. (2012). Exploring compassion: A meta-analysis of the association between self-compassion and psychopathology. *Clinical Psychology Review*, 32(6), 545–552. <https://doi.org/10.1016/j.cpr.2012.06.003>
- Mancebo, M. C., Eisen, J. L., Sibrava, N. J., Dyck, I. R., & Rasmussen, S. A. (2011). Patient utilization of cognitive-behavioral therapy for OCD. *Behavior Therapy*, 42(3), 399–412. <https://doi.org/10.1016/j.beth.2010.10.002>
- Marshall, E.-J., & Brockman, R. N. (2016). The relationships between psychological flexibility, self-compassion, and emotional well-being. *Journal of Cognitive Psychotherapy*, 30(1), 60–72. <https://doi.org/10.1891/0889-8391.30.L60>
- McKay, D., Sookman, D., Neziroglu, F., Wilhelm, S., Stein, D. J., Kyrios, M., ... Accreditation Task Force of The Canadian Institute for Obsessive Compulsive Disorders. (2015). Efficacy of cognitive-behavioral therapy for obsessive-compulsive disorder. *Psychiatry Research*, 227(1), 104–113. <https://doi.org/10.1016/j.psychres.2015.02.004>
- National Collaborating Centre for Mental Health. (2006). *Obsessive-compulsive disorder: Core interventions in the treatment of obsessive-compulsive disorder and body dysmorphic disorder*. Leicester (UK): British Psychological Society.
- Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self & Identity*, 2, 223–250. <https://doi.org/10.1080/15298860390209035>
- Neff, K. D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self & Identity*, 2, 85–101. <https://doi.org/10.1080/152988603909032>
- Neff, K. D., Hsieh, Y.-P., & DeJitterat, K. (2005). Self-compassion, achievement goals, and coping with academic failure. *Self and Identity*, 4(3), 263–287. <https://doi.org/10.1080/13576500444000317>
- Neff, K. D., Kirkpatrick, K. L., & Rude, S. S. (2007). Self-compassion and adaptive psychological functioning. *Journal of Research in Personality*, 41(1), 139–154. <https://doi.org/10.1016/j.jrp.2006.03.004>
- Obsessive Compulsive Cognitions Working Group (1997). Cognitive assessment of obsessive-compulsive disorder. *Behaviour Research and Therapy*, 35(7), 667–681. [https://doi.org/10.1016/S0005-7967\(97\)00017-X](https://doi.org/10.1016/S0005-7967(97)00017-X)
- Obsessive Compulsive Cognitions Working Group (2005). Psychometric validation of the obsessive belief questionnaire and interpretation of intrusions inventory—Part 2: Factor analyses and testing of a brief version. *Behaviour Research and Therapy*, 43(11), 1527–1542. <https://doi.org/10.1016/j.brat.2004.07.010>
- Odou, N., & Brinker, J. (2015). Self-compassion, a better alternative to rumination than distraction as a response to negative mood. *The Journal of Positive Psychology*, 10(5), 447–457. <https://doi.org/10.1080/17439760.2014.967800>
- Olatunji, B. O., Davis, M. L., Powers, M. B., & Smits, J. A. J. (2013). Cognitive-behavioral therapy for obsessive-compulsive disorder: A meta-analysis of treatment outcome and moderators. *Journal of Psychiatric Research*, 47(1), 33–41. <https://doi.org/10.1016/j.jpsychires.2012.08.020>
- Öst, L.-G., Havnen, A., Hansen, B., & Kvale, G. (2015). Cognitive behavioral treatments of obsessive-compulsive disorder: A systematic review and meta-analysis of studies published 1993–2014. *Clinical Psychology Review*, 40, 156–169. <https://doi.org/10.1016/j.cpr.2015.06.003>
- Podina, I., Jucan, A., & David, D. (2015). Self-compassion: A buffer in the pathway from maladaptive beliefs to depression. An exploratory study. *Journal of Evidence-Based Psychotherapies*, 15(1), 97–109.
- Raes, F. (2010). Rumination and worry as mediators of the relationship between self-compassion and depression and anxiety. *Personality and Individual Differences*, 48(6), 757–761. <https://doi.org/10.1016/j.paid.2010.01.023>
- Raes, F., Pommier, E., Neff, K. D., & Van Gucht, D. (2011). Construction and factorial validation of a short form of the self-compassion scale. *Clinical Psychology & Psychotherapy*, 18(3), 250–255. <https://doi.org/10.1002/cpp.702>
- Robins, C. J., Keng, S. L., Ekblad, A. G., & Brantley, J. G. (2012). Effects of mindfulness-based stress reduction on emotional experience and expression: A randomized controlled trial. *Journal of Clinical Psychology*, 68(1), 117–131. <https://doi.org/10.1002/jclp.20857>
- Robinson, L. J., & Freeston, M. H. (2014). Emotion and internal experience in obsessive compulsive disorder: Reviewing the role of alexithymia, anxiety sensitivity and distress tolerance. *Clinical Psychology Review*, 34(3), 256–271. <https://doi.org/10.1016/j.cpr.2014.03.003>
- Salkovskis, P. M. (1985). Obsessional-compulsive problems: A cognitive-behavioural analysis. *Behaviour Research and Therapy*, 23(5), 571–583. [https://doi.org/10.1016/0005-7967\(85\)90105-6](https://doi.org/10.1016/0005-7967(85)90105-6)
- Schaible, R., Armbrust, M., & Nutzinger, D. O. (2001). Yale-Brown Obsessive Compulsive Scale: Sind Selbst- und Fremdrating äquivalent? *Verhaltenstherapie*, 11(4), 298–303. <https://doi.org/10.1159/000056673>
- Scoglio, A. A. J., Rudat, D. A., Garvert, D., Jarmolowski, M., Jackson, C., & Herman, J. L. (2018). Self-compassion and responses to trauma: The role of emotion regulation. *Journal of Interpersonal Violence*, 33(13), 2016–2036. <https://doi.org/10.1177/0886260515622296>
- Skapinakis, P., Caldwell, D. M., Hollingworth, W., Bryden, P., Fineberg, N. A., Salkovskis, P., ... Lewis, G. (2016). Pharmacological and psychotherapeutic interventions for management of obsessive-compulsive disorder in adults: A systematic review and network meta-analysis. *The Lancet Psychiatry*, 3(8), 730–739. [https://doi.org/10.1016/S2215-0366\(16\)30069-4](https://doi.org/10.1016/S2215-0366(16)30069-4)
- Smeets, E., Neff, K., Alberts, H., & Peters, M. (2014). Meeting suffering with kindness: Effects of a brief self-compassion intervention for female college students. *Journal of Clinical Psychology*, 70(9), 794–807. <https://doi.org/10.1002/jclp.22076>
- Stern, M. R., Nota, J. A., Heimberg, R. G., Holaway, R. M., & Coles, M. E. (2014). An initial examination of emotion regulation and obsessive compulsive symptoms. *Journal of Obsessive-Compulsive and Related Disorders*, 3(2), 109–114. <https://doi.org/10.1016/j.jocrd.2014.02.005>
- Strauss, C., Lea, L., Hayward, M., Forrester, E., Leeuwerik, T., Jones, A.-M., & Rosten, C. (2018). Mindfulness-based exposure and response prevention for obsessive compulsive disorder: Findings from a pilot randomised controlled trial. *Journal of Anxiety Disorders*, 57, 39–47. <https://doi.org/10.1016/j.janxdis.2018.04.007>
- Vettese, L. C., Dyer, C. E., Li, W. L., & Wekerle, C. (2011). Does self-compassion mitigate the association between childhood maltreatment and later emotion regulation difficulties? A preliminary investigation. *International Journal of Mental Health and Addiction*, 9(5), 480–491. <https://doi.org/10.1007/s11469-011-9340-7>
- Wetterneck, C. T., Lee, E. B., Smith, A. H., & Hart, J. M. (2013). Courage, self-compassion, and values in obsessive-compulsive disorder. *Journal of Contextual Behavioral Science*, 2(3–4), 68–73. <https://doi.org/10.1016/j.jcbs.2013.09.002>

- Wheaton, M. G., Abramowitz, J. S., Berman, N. C., Riemann, B. C., & Hale, L. R. (2010). The relationship between obsessive beliefs and symptom dimensions in obsessive-compulsive disorder. *Behaviour Research and Therapy*, 48(10), 949–954. <https://doi.org/10.1016/j.brat.2010.05.027>
- Whitehead, M. R., & Suveg, C. (2015). Difficulties in emotion regulation differentiate depressive and obsessive-compulsive symptoms and their co-occurrence. *Anxiety, Stress, & Coping*, 1–12. <https://doi.org/10.1080/10615806.2015.1088523>
- Wilhelm, S., Berman, N. C., Keshaviah, A., Schwartz, R. A., & Steketee, G. (2015). Mechanisms of change in cognitive therapy for obsessive compulsive disorder: Role of maladaptive beliefs and schemas. *Behaviour Research and Therapy*, 65, 5–10. <https://doi.org/10.1016/j.brat.2014.12.006>
- Yap, K., Mogan, C., Moriarty, A., Dowling, N., Blair-West, S., Gelgec, C., & Moulding, R. (2018). Emotion regulation difficulties in obsessive-compulsive disorder. *Journal of Clinical Psychology*, 74(4), 695–709. <https://doi.org/10.1002/jclp.22553>
- Zessin, U., Dickhäuser, O., & Garbade, S. (2015). *The relationship between self-compassion and well-being: A meta-analysis*. *Applied Psychology: Health and Well-Being*. <https://doi.org/10.1111/aphw.12051>

**How to cite this article:** Eichholz A, Schwartz C, Meule A, Heese J, Neumüller J, Voderholzer U. Self-compassion and emotion regulation difficulties in obsessive-compulsive disorder. *Clin Psychol Psychother*. 2020;27:630–639. <https://doi.org/10.1002/cpp.2451>