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How Self-Compassion Helps Reduce Symptoms of Depression and Anxiety in Non-Clinical Slovak Youth: The Mediating Role of Emotion Regulation Strategies

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Self-compassion has received considerable attention for promoting well-being and reducing psychopathology, and preliminary findings generate the hypothesis that self-compassion influences mental health indirectly through adaptive emotion regulation strategies. The cross-sectional study investigates the links between self-compassion, emotion regulation (cognitive reappraisal and expressive suppression), and depression/anxiety symptoms in 420 Slovak adolescents and young adults (M_{age} = 19.4, *SD* = 3.2). We examined the direct and indirect effects of self-compassion on depression/anxiety symptoms through cognitive reappraisal and expressive suppression as mediators. The bivariate correlation analysis confirmed that depression and anxiety were significantly negatively correlated with cognitive reappraisal and self-compassion. As predicted, depression and anxiety symptoms significantly and positively correlated with emotion suppression. Mediation analysis demonstrated an indirect effect of self-compassion on both depression and anxiety through a cognitive reappraisal. However, when controlling for the effect of depression, the mediation effect of cognitive reappraisal on the relationship between self-compassion and anxiety was eliminated. The study confirms that cognitive reappraisal affects the relationship between self-compassion and depression by regulating negative emotions. However, the protective role of self-compassion and cognitive reappraisal in reducing anxiety symptoms is questionable.

Key words: self-compassion, cognitive reappraisal, expressive suppression, depression, anxiety

Introduction

In Eastern philosophy, compassion has been a key feature of humanity since the beginning, whereas in Western psychology this concept became popular only in the second half of the 20th century. Since then, various psychotherapeutic approaches have emerged that explicitly focus on the cultivation of compassion

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as a key factor in the treatment of mental disorders and the promotion of well-being (e.g., compassion-focused therapy, satitherapy). Self-compassion is linked to greater well-being (Zessin et al., 2015) and lower levels of depression, anxiety, and stress (MacBeth & Gumley, 2012). However, there is still little evidence about the psychological mechanism through which self-compassion maintains low distress and well-being. Recent theoretical studies hypothesized that self-compassion impacts psychological health by facilitating an individual´s adaptive emotion regulation (Finlay-Jones, 2017). Therefore, our study aimed to synthesize research findings on associations between self-compassion, emotion regulation strategies, and psychological health and empirically verify the assumption about self-compassion preceding adaptive emotion regulation strategies that maintain psychological health.

Self-Compassion

Self-compassion is part of a broader concept of compassion that also includes compassion received from others and giving compassion to others (Gilbert, 2009). According to Neff (2003), self-compassion comprises three principal components: 1) kindness (being kind and non-judgmental towards the self rather than self-critical), 2) mindfulness (which, like 'distress tolerance', involves holding painful feelings in mindful awareness rather than over-identifying with them), 3) common humanity (seeing one's suffering as part of the human condition rather than isolating). Later, Strauss et al. (2016) consolidated previous definitions of compassion (to others and to self) and defined compassion as a multifactorial construct. According to their conclusions, compassion consists of five dimensions focused on both oneself and other people: 1) recognition of suffering, 2) understanding the universality of suffering in human experience, 3) feeling for the sufferer and being emotionally in touch with their suffering, 4) acceptance of any unpleasant feelings, 5) acting to reduce suffering.

Studies based on earlier models of self-compassion have consistently yielded results supporting self-compassion as a protective factor against psychopathology. The meta-analysis of MacBeth and Gumley (2012) found a significant association between higher self-compassion and lower psychopathology symptoms of depression, anxiety, and stress. Similar results were found in the meta-analysis of Marsh et al. (2018) among the adolescent population (age 10-19 years). In addition to cross-sectional studies, a longitudinal study by Stutts et al. (2018) discovered that self-compassion offers long-term emotional benefits by partially mitigating the connection between stress and symptoms of depression and anxiety. Eventually, Kyrby et al. (2017) investigated a causal effect of self-compassion on psychopathology through 21 randomized controlled trial studies. They found moderate effects of compassion interventions, including reductions in depression, anxiety, and psychological distress, as well as improvements in well-being.

Emotion Regulation

Emotion regulation is driven by multiple, complex processes that allow managing emotions, "especially their intensive and temporal features to accomplish one's goal" (Thompson, 1994, pp. 27–28). The current approaches in emotion regulation focus on 1) abilities (difficulties) to regulate emotions (Gratz & Roemer, 2004) and specific 2) processes by which emotions are regulated – the Process Model of emotion regulation (Gross, 1998). The two most common strategies in emotion regulation reflected in the Process Model are cognitive reappraisal and expressive suppression

(Gross, 2015). While cognitive reappraisal is an antecedent-focused strategy that involves reinterpreting the emotional salience of emotion-eliciting situations, expressive suppression is a response-focused strategy that involves the conscious inhibition of emotional expression of emotion-eliciting situations.

Despite differences in both approaches, existing research shows that emotion regulation and self-compassion are related. First, lower difficulties in emotion regulation were associated with higher self-compassion in healthy adolescents (Sünbül & Güneri, 2019), obese adolescents (Gouveia, 2019), or OCD patients (Eichholz et al., 2020). In the second approach, researchers observed a strong positive association of self-compassion with cognitive reappraisal and a weak negative association with expressive suppression (Bakker et al., 2019; Bates et al., 2021; McBride et al., 2022). Yet, the research aimed at the specific strategies in emotion regulation is rather limited.

Except for associations between self-compassion and emotion regulation, recent research increasingly supports strong links between emotion regulation and psychopathology. Various longitudinal studies (Kranzler et al., 2015; Flynn & Rudolph, 2014) and meta-analyses (e.g., Aldao et al., 2010; Schäfer et al., 2016) showed that all facets of emotion dysregulation (e.g., non-acceptance) are related to depression symptoms. Moreover, emotion regulation strategies are related to depression and anxiety. Several meta-analyses indicate that adaptive emotion regulation strategies are negatively linked to symptoms of psychopathology such as depression or anxiety, while maladaptive emotion regulation strategies share positive relationships with these symptoms among adults and adolescents (Aldao et al., 2010; Schäfer et al., 2016; Compas et al., 2017).

Importantly, emotion regulation seems to play an important role in psychopathology treatment. A systematic review by Sloan et al. (2017) showed that emotion regulation difficulties are mitigated as the psychological symptoms improve. Specifically, emotion dysregulation and symptoms of depression, anxiety, borderline personality disorder, eating-related pathology, and substance use were found to decrease after treatment in all of the included studies. Thus, this evidence suggests that difficulties in emotion regulation are an integral part of multiple forms of psychopathology and can be reduced by an adequate psychopathology treatment.

Self-Compassion, Emotion Regulation, and Psychopathology

Despite advances in the research of emotion regulation, its role in the relationship between self-compassion and psychopathology is still understudied. Findings from experimental and longitudinal studies provide evidence that both self-compassion and emotion regulation are causal factors in psychopathology (Stutts et al., 2018; Kyrby et al., 2017; Sloan et al., 2017). Self-compassion involves a warm and accepting attitude toward disliked aspects of the self that cause psychological distress (Neff, 2003). Given that effective emotion regulation requires awareness, understanding, and tolerance of emotions (Gratz & Roemer, 2004), it can be posited that self-compassion is an antecedent of emotion regulation. Existing studies reported that difficulties in emotion regulation mediated the relationships between self-compassion and depression (Diedrich et al., 2016), OCD symptoms (Eichholz et al., 2020), emotional eating (Gouveia et al., 2019), and stress symptoms (Finlay-Jones et al., 2015). On the other hand, only a few studies tested specific emotion regulation strategies as a mediator between self-compassion and psychopathology. While Bates et al. (2021) and McBride et al. (2022)

found that self-compassion has a strong effect on reducing social anxiety symptoms directly and indirectly, through cognitive reappraisal and expressive suppression, a study by Bakker et al. (2019) showed that only rumination mediated the relationship between self-compassion and depression.

Present Study

Previous research has focused mainly on emotion regulation difficulties (Diedrich et al., 2016), while only a few studies focused on specific emotion regulation strategies and came with mixed results (Bakker et al., 2019; McBride et al., 2022). The present study aims to investigate the connections between self-compassion, depression, and anxiety symptoms, and to explore the mediating roles of cognitive reappraisal and expressive suppression in adolescents and young adults. Building on recent conceptualizations of self-compassion (Strauss et al., 2016), we hypothesize positive relationships between self-compassion and cognitive reappraisal, and negative relationships with expressive suppression, depression, and anxiety symptoms. Additionally, we hypothesize that cognitive reappraisal will correlate positively while expressive suppression negatively with depression and anxiety symptoms. Furthermore, we hypothesize that both emotion regulation strategies will mediate the relationships between self-compassion and depression/anxiety symptoms.

Methods

Participants

The study sample comprised 420 participants, 275 (65.5%) women. Age ranged from 14 to 27 with a mean of 19.4 years (*SD* = 3.2). According to the National Health Service (2023) criteria, 132 (31.4%) of the participants had clinically significant higher scores in anxiety (cut-off for The Generalized Anxiety Disorder Questionnaire ≥ 8) and 158 (37.6%) in depression (cut-off for The Patient Health Questionnaire ≥ 10). All the participants were Slovak. Most participants were university students (71%), and the rest were students of two Slovak High schools.

University students were approached for the research through student contacts (snowball method) and completed the measurement instruments in the online version. High school students were approached through their schools and, after obtaining informed consent from their legal guardians (parents), completed the measurement instruments at school using the pencil-and-paper method in an anonymized form. In the High schools, data collection was managed by teachers. Data was collected in February and March 2021, during the COVID-19 pandemic.

Measures

The Sussex-Oxford Compassion for the Self Scale (SOCS-S, Gu et al., 2020) is a 20-item self-report measure of self-compassion consisting of five subscales (recognizing suffering, understanding the universality of suffering, feeling for the person suffering, tolerating unpleasant feelings, acting or being motivated to act to alleviate suffering). The items are rated on a 5-point Likert scale, where 1 = "Not at all true" and 5 = "Always true." Higher scores reflect greater self-compassion. The Slovak translation of the SOCS-S (Pilárik et al., 2023) had good internal consistency. In our study, the internal consistency of the SOCS-S was good with Cronbach's alpha: 0.87, 95% CI [0.85-0.89] and McDonald's omega: 0.87, 95% CI [0.85-0.89].

The Emotion Regulation Questionnaire (ERQ, Gross & John, 2003) is a 10-item self-report measure of two emotion regulation

strategies. Six items are used to measure the cognitive reappraisal strategy, and four to measure the emotional expression suppression strategy. The items are rated on a 7-point Likert scale, where 1 = "Strongly disagree" and 7 = "Strongly agree." Higher scores reflect greater habitual use of the emotion regulation strategy. We used the Slovak version of the ERQ published by the authors on the website (https://spl.stanford.edu/resources). In our study, the internal consistency of the ERQ-reappraisal was good with Cronbach's alpha: 0.85, 95% CI [0.83-0.87] and McDonald's omega: 0.86, 95% CI [0.84-0.88]. The internal consistency of the ERQ-suppression was also good with Cronbach's alpha: 0.78, 95% CI [0.75-0.81] and McDonald's omega: 0.80, 95% CI [0.77-0.83].

The Patient Health Questionnaire (PHQ-9, Kroenke et al., 2001) is a brief measure assessing the severity of depression. Its nine items reflect the nine DSM-IV depression diagnostic criteria, thus asking about the frequency of various symptoms (e.g., dropped mood, sleeping difficulties, changes in appetite) and the presence and duration of suicide ideation. The items are rated on a 4-point Likert scale (0 = "Not at all" and 3 = "Nearly every day"). Higher scores indicate higher severity of depression. The Slovak version of the PHQ-9 is published on the official website of the questionnaire (Patient Health Questionnaire screeners). In our study, the internal consistency of the PHQ-9 was good with Cronbach's alpha: 0.89, 95% CI [0.87-0.90] and McDonald's omega: 0.90, 95% CI [0.87-0.91].

The Generalized Anxiety Disorder Questionnaire (GAD-7, Spitzer et al., 2006) is a 7-item measure assessing the symptoms of generalized anxiety disorder, as defined by DSM-IV. The items examine the frequency of feeling nervous or anxious, the inability to control thoughts, difficulties with relaxing, and perceived restlessness. They are answered using a 4-point Likert scale (0 = "Not at all" and 3 = "Nearly every day"). Higher scores indicate greater severity of generalized anxiety disorder. The Slovak version of the GAD-7 is published on the official website of the questionnaire (Patient Health Questionnaire screeners). In our study, the internal consistency of the GAD-7 was excellent with Cronbach's alpha: 0.94, 95% CI [0.93-0.94] and McDonald's omega: 0.94, 95% CI [0.93-0.95].

Data Analysis

The collected data was exported to MS Excel, where it was cleaned and prepared for statistical analyses conducted in the statistical package JASP.17. After the descriptive analysis, we examined the relationships between variables using bivariate Pearson correlations. In the next step, separate mediation analysis models were conducted to examine the mediating effects of cognitive reappraisal (ERQ-r) and emotion suppression (ERQ-s) on the relationship between self-compassion (SOCS) and depression (PHQ-9) or anxiety (GAD-7). Then, we computed two models considering SOCS as an independent variable: cognitive reappraisal (ERQ-r) or emotion suppression (ERQ-s) as a mediator and depression (PHQ-9) or anxiety (GAD-7) as an outcome. Afterward, we calculated path coefficients of bias-corrected bootstrapped indirect effects based on 5000 bootstrap samples, their standard errors, and 95% confidence intervals (CI). Mediation models were also tested with the addition of gender and age as potential background confounders. Additional mediation analysis models were performed for PHQ-9 (or GAD-7), with SOCS as a predictor and ERQ-r as a mediator, while GAD-7 (or PHQ-9) was controlled as a background confounding variable. These models also used 5000 bootstrapped samples and 95% confidence intervals.

Results

Preliminary Analyses

All measures were checked for outliers, kurtosis, and skewness. No meaningful outliers were noted (Cook's distance was used for diagnostics). The skewness and kurtosis coefficients do not indicate a fundamental violation of normality distribution for any of the investigated variables.

Table 1 provides an overview of descriptive statistics and correlations for investigated variables. All investigated variables significantly correlated with each other in the expected directions. PHQ-9 or GAD-7 were significantly negatively correlated with ERQ-reappraisal and SOCS. Significant positive correlations were found between the PHQ-9 or GAD-7 and ERQ-suppression. PHQ-9 and GAD-7 were the most correlated variables, even when controlling for both emotion regulation strategies (r = 0.74).

The correlations between SOCS and PHQ-9 or GAD-7 decreased and lost significance when controlling for ERQ-reappraisal (r = -0.08 for both) but stayed almost equally strong and significant when controlling for ERQ-suppression (r = -0.20 or -0.19).

Mediation Analysis for PHQ-9 and GAD-7

While the mediator was the ERQ-reappraisal (Table 2 in the Appendix), the mediation model showed an insignificant direct effect of SOCS on PHQ-9, but a significant effect of ERQ-reappraisal on PHQ-9. Also, a significant indirect effect of SOCS on the PHQ-9 was found with the mediating role of ERQ-reappraisal. The result remained significant even when controlling for gender and age as background confounding factors. Furthermore, the path analysis model showed an insignificant direct effect of SOCS on GAD-7 but a significant effect of ERQ-reappraisal on GAD-7. Also, a significant indirect effect of SOCS on GAD-7 was found with the mediating role of ERQ-reappraisal.

While the mediator was ERQ-suppression (Table 3 in the Appendix), the path analysis model showed a significant direct effect of SOCS on PHQ-9 and also a significant effect of ERQ-suppression on PHQ-9. However, an insignificant indirect effect of SOCS on PHQ-9 was found with the mediating role of ERQ-suppression. The results remained analogical even when controlling for gender and age as background confounding factors.

Table 1 *Descriptive statistics and Pearson correlations for all considered variables (N = 420)*

Variables	*M*	*SD*	ERQ-r	ERQ-s	PHQ-9	GAD-7
SOCS	72.51	10.8	.37***	-.09	-.21***	-.20***
ERQ-r	28.88	6.25		.06	-.37***	-.35***
ERQ-s	15.96	5.17			.17***	.20***
PHQ-9	8.06	6.05				.78***
GAD-7	6.47	5.69				

Note. GAD-7: The Generalized Anxiety Disorder Questionnaire; PHQ-9: Patient Health Questionnaire – Depression; SOCS: Self-Compassion Scale; ERQ-r: Cognitive reappraisal from Emotion Regulation Scale; ERQ-s: Emotion suppression from Emotion Regulation Scale.
*** p-value < .001

Furthermore, the path analysis model showed a significant direct effect of SOCS on GAD-7. Also, ERQ-suppression had a significant effect on the GAD-7, but an insignificant indirect effect of SOCS on GAD-7 was found with the mediating role of ERQ-suppression.

Exploring the Elimination Effect of PHQ-9 or GAD-7 in Mediation Models with ERQ-Reappraisal

Partial correlation showed that ERQ-reappraisal was not significantly related to GAD-7 when PHQ-9 was controlled (r = -0.10) but was significantly related to PHQ-9 when GAD-7 was controlled (r = -0.17). We, therefore, examined whether ERQ-reappraisal mediates the effect of SOCS on PHQ-9 independent of GAD-7 as background confounder and whether ERQ-reappraisal mediates the effect of SOCS on GAD-7 independent of PHQ-9 as background confounder (Table 4 in the Appendix).

As seen in Table 4, the indirect effect of SOCS on PHQ-9 via ERQ-r remained significant (p = 0.005), although control of background confounder GAD-7 did impact these relationships. In contrast, when PHQ-9 was controlled, the mediating effect of ERQ-r on the SOCS – GAD-7 relationship was eliminated (p = 0.078).

Discussion

Depressive and anxiety symptoms occur with a high comorbidity rate (Kessler et al., 2015). Our results supported these findings by indicating a strong positive relationship between the two, which remained after controlling for emotion regulation strategies. Depression and anxiety are considered part of a broader category of internalizing psychiatric disorders whose development is affected by various factors such as genetic predisposition (Hettema, 2008), temperament (Wang et al., 2022), or developmental life adversities like childhood trauma and/or neglect (Brown et al., 1996). These factors are also implicated in emotion regulation abilities (Dochnal et al., 2019). Therefore, emotion regulation is considered "a transdiagnostic construct" for internalized (and externalized) disorders (Sloan et al., 2017, p. 141). Moreover, we observed a specific role of emotion regulation strategies in the occurrence of depression and anxiety symptoms.

Self-Compassion, Emotion Regulation Strategies, and Symptoms of Depression

Consistently with previous studies, our results support an association between self-compassion and lower rates of depression symptoms (e.g., Marsch et al., 2018; Stutts et al., 2018). However, this relationship was relatively weak, and we did not find a direct effect of self-compassion on depressive symptoms as part of the mediation analysis. The effect of self-compassion on depressive symptoms appears to be mediated by cognitive reappraisal – one of the emotion regulation strategies. The adaptive impact of self-compassion using emotion regulation in reducing depression was also found by Diedrich et al. (2016). They suggested that self-compassion influences depression through the ability to tolerate negative emotions. Eventually, these findings seem to fit the Process Model of emotion regulation (Gross, 1998) and the transaction model of stress and coping (Lazarus & Folkman, 1984). Self-compassion may activate a less critical view of one's limitations in coping strategies and support an individual's self-efficacy at times when depressive symptoms have not been activated in full intensity.

Next, our findings show that suppression of emotion expression had a weak positive relationship with depressive symptoms and it did not mediate the effect of self-compassion on

depression. These results support the mixed conclusions of Dryman and Heimberg (2018). It appears that in the emotion activation phase, self-compassion may protect the individual through another emotion regulation strategy (e.g., tolerating negative feelings) but not through emotion expression. Hence, different emotion regulation strategies may be effective in reducing depressive symptoms depending on the phase of negative emotion elicitation (antecedent or response focused according to Gross Process Model). Eventually, our results support the hypothesis that self-compassion can protect an individual from the onset of depressive symptomatology by activating cognitive reappraisal even in the phase when these negative emotions are not at their full intensity.

Self-Compassion, Emotion Regulation Strategies, and Symptoms of Anxiety

Similar to depression symptoms, we also found a weak negative relationship between self-compassion and anxiety symptoms. Likewise, we did not confirm a direct effect of self-compassion on the level of anxiety symptoms, but this relationship was mediated by cognitive reappraisal. Our findings partially accord with Bates et al. (2021) and McBride et al. (2022). Bates et al. (2021) observed that only the Refraining from the Uncompassionate Self-responding component of self-compassion influenced social anxiety directly and indirectly through cognitive reappraisal. Conversely, McBride et al. (2022) found that cognitive reappraisal indirectly and directly mediated the overall effect of self-compassion on social anxiety. However, our study did not confirm the direct effect of self-compassion on anxiety symptoms. The explanation may lie in different theoretical conceptualizations of self-compassion. We used the newer conceptualization of Strauss et al. (2016) while Bates et al. (2021) and McBride et al. (2022) built on the original conceptualization of Neff (2003), which included refraining from negative self-judgment and self-criticism. We assume that refraining from negative self-judgment and self-criticism can directly reduce anxiety symptoms. On the other hand, acting with self-kindness indirectly facilitates the reduction of anxiety symptoms by activating cognitive reappraisal.

Exploring the indirect effect of self-compassion on anxiety symptoms through cognitive reappraisal in the control of depression yielded the finding that this effect became non-significant. McBride et al. (2022) came to a similar finding when looking at social anxiety, specifically fear of external evaluation and fear of attracting attention. In contrast, the indirect effect of self-compassion on depressive symptoms via cognitive reappraisal in the control of anxiety remained significant. Findings regarding the specificity of positive cognition concerning depression rather than anxiety have been reached, for example, by Jolly and Wiesner (1996).

We also hypothesized that depression is the result of emotional dysregulation of negative affect, which is related to deficits in positive cognition. Therefore, cognitive reappraisal is a more effective strategy for reducing depression symptoms compared to anxiety symptoms. Moreover, Kalin (2020) suggested that in the case of comorbidity, the onset of anxiety precedes the onset of depressive symptoms. In this case, effective regulation of negative emotions may require a broader repertoire of regulation strategies (Bonanno & Burton, 2013) that are specifically sensitive to the context in which they are used (Chen & Bonanno, 2021).

Self-compassion, as well as suppression of emotional expression, significantly predicted anxiety symptoms. Contrary to previous studies regarding social anxiety (Bates et al., 2021; McBride et al., 2022), in our study,

suppression of emotion expression did not mediate the effect of self-compassion on anxiety symptoms. We, however, realize that in generalized anxiety disorder, the social context is not the only trigger of fears and feelings of anxiety. Thus, the mediated effect of self-compassion through emotion expression may be a more effective strategy in individuals with social anxiety than in individuals with generalized anxiety. Yet, our findings require further verification, as several coefficients were at the border of statistical significance.

Limitations and Further Research

We faced several limitations. The study was conducted in Slovakia during the COVID-19 pandemic, and thus, it limits direct generalizability to other regions, cultures, or periods. Next, the self-reported nature of the measurement tools (ERQ, SOCS-S) restricts the accuracy of participant responses. Additionally, the lack of verification methods increases the risk of distorted responses. The measurement tools (PHQ-9, GAD-7) focus on symptom frequency in the last two weeks, neglecting intensity or impact on functioning. Using alternative instruments (e.g., Overall Depression Severity and Impairment Scale; Overall Anxiety Severity and Impairment Scale) could enhance understanding of depression/anxiety severity and impact. Lastly, the cross-sectional design limits causal findings to theoretical rather than empirical conclusions. Therefore, future research with experimental or longitudinal designs is needed to verify the causal effect of self-compassion on reducing symptoms of depression and anxiety through cognitive reappraisal.

Conclusion

We examined the complex relationships between depressive and anxiety symptoms, self-compassion, and emotion regulation strategies. It underscores the importance of understanding the specific roles of these concepts in different psychological contexts and the potential for self-compassion and cognitive reappraisal to mitigate symptoms of depression and anxiety.

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Appendix

Table 2 *Unstandardized coefficients in the mediation model examining the association between SOCS and PHQ-9, resp. SOCS and GAD-7, via ERQ-r as mediator*

Paths for PHQ-9	Coefficient (SE)	z-value	95% CI		Paths for GAD-7	Coefficient (SE)	z-value	95% CI	
			Lower	Upper				Lower	Upper
SOCS → PHQ-9 (c´)	-.047 (.027)	-1.729	-.101	.010	SOCS → GAD-7 (c´)	-.044 (.026)	-1.722	-.094	.008
SOCS → ERQ-r (a)	.213 (.026)***	8.083	.163	.268	SOCS → ERQ-r (a)	.213 (.026)***	8.083	.161	.265
ERQ-r → PHQ-9 (b)	-.332 (.047)***	-7.068	-.427	-.240	ERQ-r → GAD-7 (b)	-.292 (.044)***	-6.565	-.384	-.195
Indirect effect					**Indirect effect**				
SOCS → ERQ-r → PHQ-9 (a*b)	-.071 (.013)***	-5.321	-.100	-.049	SOCS → ERQ-r → GAD-7 (a*b)	-.062 (.012)***	-5.096	-.090	-.040
Total effect					**Total effect**				
SOCS → PHQ-9 (c)	-.118 (.027)***	-4.393	-.176	-.061	SOCS → GAD-7 (c)	-.106 (.025)***	-4.229	-.156	-.056

Note. GAD-7: The Generalized Anxiety Disorder Questionnaire; PHQ-9: Patient Health Questionnaire – Depression; SOCS: Self-Compassion Scale; ERQ-r: Cognitive reappraisal from Emotion Regulation Scale; SE: standard error; CI: confidence interval.
***p-value < .001

Table 3 *Unstandardized coefficients in the mediation model examining association between SOCS and PHQ-9, resp. SOCS and GAD-7, via ERQ-s as mediator*

Paths for PHQ-9	Coefficient (SE)	z-value	95% CI		Paths for GAD-7	Coefficient (SE)	z-value	95% CI	
			Lower	Upper				Lower	Upper
SOCS → PHQ-9 (c´)	-.110 (.027)***	-4.136	-.168	-.054	SOCS → GAD-7 (c´)	-.098 (.025)***	-3.942	-.148	-.047
SOCS → ERQ-s (a)	-.043 (.023)	-1.860	-.091	.007	SOCS → ERQ-s (a)	-.043 (.023)	-1.860	-.093	.006
ERQ-s → PHQ-9 (b)	.180 (.055)***	3.251	.063	.310	ERQ-s → GAD-7 (b)	.196 (.052)***	3.771	.089	.308
Indirect effect					**Indirect effect**				
SOCS → ERQ-s → PHQ-9 (a*b)	-.008 (.005)	-1.614	-.021	.000	SOCS → ERQ-s → GAD-7 (a*b)	-.008 (.005)	-1.668	-.023	.000
Total effect					**Total effect**				
SOCS → PHQ-9 (c)	-.118 (.027)***	-4.393	-.176	-.061	SOCS → GAD-7 (c)	-.106 (.025)***	-4.229	-.157	-.053

Note. GAD-7: The Generalized Anxiety Disorder Questionnaire; PHQ-9: Patient Health Questionnaire – Depression; SOCS: Self-Compassion Scale; ERQ-s: Emotion suppression from Emotion Regulation Scale; SE: standard error; CI: confidence interval.
***p-value < .001

Table 4 *Unstandardized coefficients in the mediation model examining the association between SOCS and PHQ-9 (resp. GAD-7) via ERQ-r as mediator and with GAD-7 (resp. PHQ-9) as controlled background confounder*

Paths for PHQ-9 (controlled GAD-7)	Coefficient (SE)	z-value	95% CI		Paths for GAD-7 (controlled PHQ-9)	Coefficient (SE)	z-value	95% CI	
			Lower	Upper				Lower	Upper
SOCS → PHQ-9 (c´)	-.012 (.018)	-0.662	-.047	.023	SOCS → GAD-7 (c´)	-.011 (.017)	-0.644	-.041	.019
SOCS → ERQ-r (a)	.179 (.026)***	6.985	.126	.232	SOCS → ERQ-r (a)	.175 (.025)***	6.879	.122	.231
ERQ-r → PHQ-9 (b)	-.101 (.033)**	-3.096	-.174	-.025	ERQ-r → GAD-7 (b)	-.057 (.031)	-1.823	-.136	-.019
Indirect effect					**Indirect effect**				
SOCS → ERQ-r → PHQ-9 (a*b)	-.018 (.006)**	-2.830	-.034	-.005	SOCS → ERQ-r → GAD-7 (a*b)	-.010 (.006)	-1.762	-.026	.003
Total effect					**Total effect**				
SOCS → PHQ-9 (c)	-.030 (.017)	-1.735	-.067	.006	SOCS → GAD-7 (c)	-.021 (.016)	-1.286	-.053	.010

Note. GAD-7: The Generalized Anxiety Disorder Questionnaire; PHQ-9: Patient Health Questionnaire – Depression; SOCS: Self-Compassion Scale; ERQ-r: Cognitive reappraisal from Emotion Regulation Scale; SE: standard error; CI: confidence interval.

***p-value < .001; **p-value < .01