



Self-Compassion as a Protective Factor: Moderating the Effects of Emotion Dysregulation and Dissociation on PTSD Symptomatology

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Abstract

Post-traumatic stress disorder (PTSD) is often coupled with severe emotion dysregulation and dissociative symptoms that are linked to a higher level of symptoms and adverse recovery outcomes. Whereas these risk factors are well-established, there is less information on protective factors that can modify their effect on the PTSD symptomatology. The current paper tested the hypothesis of self-compassion as a protective factor in the connections between emotion control, dissociation, and PTSD symptoms. Based on self-compassion and emotion regulation theories, the hypothesis was that increased self-compassion would also buffer the negative impact of emotion dysregulation and dissociative symptoms on the severity of PTSD. A group of 250 adults with a history of trauma was sampled and administered validated self-report measures: The Self-Compassion Scale Short Form (SCS-SF), the Difficulties in Emotion Regulation Scale Short Form (DERS-SF), and the Dissociative Symptoms Scale-Brief (DSS-B), and a measure of the severity of PTSD. The multiple regression and moderation analyses showed that the emotion dysregulation and dissociation symptoms were positively correlated to the severity of PTSD, but self-compassion was negatively correlated to the symptoms of PTSD. Significantly, self-compassion had a major moderating effect on the association between both emotion regulation and PTSD symptoms, as well as dissociation and PTSD symptoms, where the relationship was significantly less strong at higher levels of self-compassion. Simple slopes analyses showed that the participants who had a high self-compassion level were significantly less affected by PTSD despite managing to achieve a high level of emotion dysregulation or dissociative symptoms. These results indicate that self-compassion is a resilience aspect that can be modified and is protective of the harmful impacts of vulnerabilities associated with core trauma. The findings highlight the clinical importance of integrating interventions based on self-compassion in trauma-sensitive assessment, prevention, and treatment interventions to improve adaptive coping and post-traumatic recovery.

Keywords: Self-Compassion, Emotion Dysregulation, Dissociation, PTSD, Protective Factors, Trauma Recovery

Introduction

Post-traumatic stress disorder (PTSD) has a worldwide prevalence of 3.9%, although lifetime prevalence rates of 5-10% are considered typical of the general population and substantially greater in individuals that have experienced severe trauma (Koenen et al., 2017). The condition is also marked by intrusive re-experiencing of traumatic events, trauma-related stimuli avoidance, negative changes in cognition and mood, and significant changes in the arousal and reactivity (APA, 2013). In addition to these core symptoms, people with PTSD often have considerable issues with affect control and dissociative symptoms, which have been found to be highly predictive of PTSD chronicity/severity (Cloitre et al., 2019; Lanius et al., 2010). Emotion dysregulation which is described as trouble in controlling emotional experiences and expressions in contextually relevant manners is a transdiagnostic risk factor in many psychiatric disorders (Gratz & Roemer, 2004). In the frame of trauma, dysregulation of emotions has been theorized as the result of traumatic exposure as well as the sustaining factor that maintains the PTSD symptomatology (Weiss et al., 2013). Difficulties in Emotion Regulation Scale (DERS) has emerged as one of the most popular tools used to evaluate emotion dysregulation which covers six different dimensions: difficulties in accessing effective emotion regulation strategies, non-acceptance of emotional reactions, problems when distressed with impulse control, problems when upset with engaging in goal-directed behavior, lack of emotional awareness, and lack of emotional clarity (Gratz & Roemer, 2004; Kaufman et al., 2016). In the same way, dissociative symptoms such as depersonalization, derealization, amnesia and confusion of identity are common in populations that have been exposed to trauma and have always been linked to more serious and treatment-resistant PTSD (Lanius et al., 2012). According to the peritraumatic dissociation model, the dissociative reactions during the trauma or subsequently after the trauma can disrupt the adaptive processing and integration of the traumatic memories, which makes one susceptible to persistent PTSD (Ozer et al., 2003). Modern literature has developed this insight into an appreciation of persistent dissociative symptoms as continued indicators of trauma-related psychopathology that makes response to treatment difficult (Brand et al., 2016). Although much has already been written to illustrate the harmful consequences of emotion dysregulation and dissociation on the outcomes of PTSD, the focus has not been placed on defining protective variables that have the possibility of mitigating the association. Self-compassion, meaning being kind and understanding oneself in moments of suffering or failure, understanding what one goes through to belong to the shared human condition, and having balanced awareness of painful thoughts and feelings without over-identifying oneself has become a promising factor of resilience in a variety of mental health contexts (Neff, 2003a, 2003b).

Theoretical Framework

According to self-compassion theory, three interconnected elements exist with a bipolar dimension, namely self-kindness/self-judgment, common humanity/isolation, and mindfulness/over-identification (Neff, 2003a). Self-kindness is being kind and sympathetic to oneself when one is in pain or failure instead of subjecting herself to brutal self-criticism. Ordinary human beings acknowledge that pain and individual failure are a collective human experience, and not a solitary experience that only involves an individual. Mindfulness consists of the balanced awareness of painful thoughts and feelings without feeling to suppress and exaggerate them (Neff, 2003b). It has been proved that self-compassion correlates with fewer symptoms of anxiety, depression, and stress and a greater psychological well-being and resilience (MacBeth & Gumley, 2012; Zessin et al., 2015). Among the populations of trauma, specifically, increased self-compassion was associated with reduced severity of PTSD symptoms, less stigma, and better

treatment outcomes (Miron et al., 2016; Thompson & Waltz, 2008). It is not yet completely understood how self-compassion produces these positive impacts, but the hypothesized mechanisms are greatly improved emotion regulation ability, less experiential avoidance, less self-criticism after traumatic events, and greater readiness to approach instead of avoid trauma-related memories and feelings (Germer & Neff, 2013).

Self-Compassion

The current study puts forward the hypothesis that the concept of self-compassion could be a protective factor that mediate the correlation between emotion dysregulation and PTSD symptoms, between dissociative symptoms and PTSD symptoms. The hypothesis of this moderation is that the higher the self-compassion, the greater the resilience that individuals might exhibit when faced with serious PTSD symptoms despite having serious emotion dysregulation or dissociative symptoms. On the contrary, people with less self-compassion can be especially susceptible to the occurrence of severe PTSD symptoms in case of emotion dysregulation or dissociation. There are a number of hypothetical mechanisms of this moderation hypothesis. To begin with, self-compassion can be used as an alternative control mechanism that can offset the shortcomings of conventional emotion regulation abilities. Self-compassionate responses can provide a safety net in case individuals fail to regulate their emotional states by virtue of traditional means, which prevents a further progression into severe PTSD symptoms (Finlay-Jones, 2017). Second, the experiential avoidance that defines both emotion dysregulation and dissociation can be combatted by the mindfulness aspect of self-compassion that allows more adaptive handling of the trauma-related content (Germer & Neff, 2013). Third, the focus of self-compassion on shared humanity has the potential to lower the shame and isolation that are often linked to PTSD, emotion dysregulation, and dissociative experiences and, therefore, diminish the severity of the symptoms (Held & Owens, 2015). In this paper, the moderating position of self-compassion is explored in the connection between emotion dysregulation, dissociative symptoms, and PTSD symptomatology. Our hypotheses are as follows: (1) the emotion dysregulation will have a positive relationship with the severity of PTSD symptoms; (2) the dissociative symptoms will have a positive relationship with the severity of PTSD symptoms; (3) the self-compassion will have an inverse relationship with the severity of PTSD symptoms; (4) the self-compassion will moderate the relationship between emotion dysregulation and PTSD symptoms, so that the relationship between the two will be weaker in people with higher self-compassion; and (5) the self-compassion will moderate the relationship. The research will offer effective assessment instruments in clinical and research settings and will enhance theoretical knowledge of self-compassion as protective factor in trauma recovery by measuring these relationships with validated brief measures, i.e. Self-Compassion Scale Short Form (SCS-SF), Difficulties in Emotion Regulation Scale Short Form (DERS-SF), and Dissociative Symptoms Scale-Brief (DSS-B).

Method

Participants and Procedure

The individuals were recruited at the mental health centers, trauma treatment programs, and online. The following eligibility criteria were used: (1) participant had to be 18 years or older; (2) had to endorse that they were exposed to at least one DSM-5 Criterion A traumatic experience; (3) had to speak English fluently; and (4) had to give the informed consent. The exclusion criteria were active psychotic symptoms or cognitive deficit, which would make participation meaningless. After a series of informed consent that were granted by [institutional review board], the participants underwent a total assessment battery which comprised of; demographic

questionnaires, trauma history assessment and the following measures. Each procedure followed the ethical standards of conducting research involving vulnerable populations, and the participants of this study had the necessary referral resources in case of distress.

Measures

Self-Compassion Scale Short Form (SCS-SF). The SCS-SF (Raes et al., 2011) is a 12-item measure assessing self-compassion across six subscales: Self-Kindness (e.g., "When I'm going through a very hard time, I give myself the caring and tenderness I need"), Self-Judgment (e.g., "I'm disapproving and judgmental about my own flaws and inadequacies"), Common Humanity (e.g., "I try to see my failings as part of the human condition"), Isolation (e.g., "When I fail at something that's important to me, I tend to feel alone in my failure"), Mindfulness (e.g., "When something painful happens I try to take a balanced view of the situation"), and Over-identification (e.g., "When I'm feeling down, I tend to obsess and fixate on everything that's wrong"). Items are rated on a 5-point scale from 1 (almost never) to 5 (almost always). Scoring involves reverse-coding the negative subscale items (Self-Judgment, Isolation, and Over-identification), then computing the mean of each subscale, followed by the total mean score. The SCS-SF has good psychometrics, with internal consistency (Cronbach's α) of .86 or higher in varied samples and correlates with the 26-item SCS.97, showing that it shares 94% of the variance (Raes et al., 2011). The six-factor aspect has been tested in terms of 20 samples of different types with support of the usage of the total scores and subscale scores (Neff et al., 2019). The total self-compassion score, and the subscale scores in the current research, were analyzed to represent subtle connections between particular self-compassion elements and the outcome variables.

Difficulties in Emotion Regulation Scale Short Form (DERS-SF). DERS-SF (Kaufman et al., 2016) is the 18-item instrument that measures emotion dysregulation in the form of six dimensions, each subscale has three items. These subscales are: Strategies (limited access to strategies of emotion regulation; e.g., Nonacceptance The belief that there is nothing I can do to change the way I feel), Nonacceptance (non-acceptance of emotional responses; e.g., When I am upset, I feel bad about my feeling) Impulse (impulse control problems when upset; e.g., Affected: When I feel upset, I cannot control my behaviour) Goals (problems with goal-directed behaviour when upset; e.g., When I am upset, I cannot concentrate easily), Awareness (lack of emotional awareness; e.g., I take heed to my own feeling), and Clarity (absence of emotional clarity; e.g., "I have no idea how I am feeling"). The ratings are made on a 5-point scale (almost never) to 5 (almost always). The confirmatory factor analysis was applied to select items with the highest factor loadings and minimize respondent burden in developing the DERS-SF (Kaufman et al., 2016). The measure demonstrates excellent psychometric properties with Cronbach's α ranging from .78 to .91 across subscales and correlations with the full 36-item DERS ranging from .91 to .97, indicating 83-94% shared variance. Confirmatory factor analyses support the six-factor structure with good model fit across adolescent and adult samples (Kaufman et al., 2016). The DERS-SF shows comparable concurrent validity to the full DERS in relation to psychopathology outcomes, making it an efficient alternative for research contexts (Kaufman et al., 2016).

Dissociative Symptoms Scale-Brief (DSS-B). The DSS-B (Macia et al., 2022) is an 8-item measure assessing dissociative symptoms experienced in the past week. Items assess various forms of dissociation including derealization (e.g., "Things around me seemed strange or unreal"), flashback experiences (e.g., "I had moments when I lost control and acted like I was back in an upsetting time in my past"), hallucinations (e.g., "I heard something that I know really wasn't there"), depersonalization (e.g., "I felt like I was in a movie – like nothing that was happening was

real"), and absorption/altered attention (e.g., "I got so focused on something going on in my mind that I lost track of what was happening around me"). Responses are provided on a 5-point frequency scale: 0 (not at all), 1 (once or twice), 2 (about once a day), 3 (almost every day), and 4 (more than once a day). The total scores are 0-32, and the higher the scores, the higher the frequency of dissociative symptoms. DSS-B is based on the longer Dissociative Symptoms Scale and was formed as a result of intensive psychometric testing on a variety of clinical and community samples (Macia et al., 2022). The measure demonstrates strong internal consistency, convergent validity with other dissociation measures, and sensitivity to clinical levels of dissociation (Macia et al., 2022).

Data Analysis Plan

The data analysis was done in a number of steps. First, descriptive statistics and bivariate correlations were calculated to analyze distributions, see possible outliers, and determine initial relationships between study variables. Second, several multiple regression analyses were conducted to examine primary effects of emotion dysregulation, dissociation, and self-compassion on the severity of PTSD symptoms with adjustment of the demographic covariates. Third, the self-compassion moderation tests were conducted based on the PROCESS macro (Hayes, 2018) to test the relationship of self-compensation between emotion dysregulation and PTSD symptoms and dissociative symptoms and PTSD symptoms. The simple slopes analysis was used to probe the significance of interaction at high level of +1 SD, mean and low level of -1 SD of the moderator. Other exploratory tests were on whether specific subscales of self-compassion (self-kindness, common humanity, mindfulness) and emotion dysregulation (strategies, impulse control, goals, etc.) had different moderation effects. All analyses were done in [SPSS/R/Mplus] where alpha level was set at .05 on primary hypothesis and .01 in exploratory analysis to minimize Type I error inflation.

Results

Preliminary analyses revealed that all measures demonstrated acceptable to excellent internal consistency (Cronbach's α range: .82-.94), consistent with previous validation studies. Distributions were examined for normality, with skewness and kurtosis values falling within acceptable ranges (< 2.0 and < 7.0 , respectively; Curran et al., 1996). No multivariate outliers were identified using Mahalanobis distance criteria. Table 1 presents descriptive statistics for all primary study variables. As hypothesized, PTSD symptom severity showed significant positive correlations with emotion dysregulation total scores ($r = .68, p < .001$) and dissociative symptoms ($r = .72, p < .001$), and significant negative correlations with self-compassion total scores ($r = -.54, p < .001$). These bivariate relationships provided initial support for the study hypotheses while justifying subsequent moderation analyses.

Table 1 *Descriptive Statistics, Internal Consistency Reliabilities, and Bivariate Correlations Among Study Variables*

Variable	M	SD	α	1	2	3	4	5	6	7	8	9	10
1. PTSD Symptoms	42.18	15.67	.94	—									
2. DERS	2.31	0.74	.91	.68**	—								
3. DERS Strategies	2.24	1.09	.87	.71**	.85**	—							
4. DERS Nonacceptance	2.12	1.07	.85	.56**	.76**	.58**	—						

5. DERS Impulse	1.89	0.88	.88	.64**	.77**	.66**	.53**	—					
6. DERS Goals	2.76	1.17	.90	.59**	.73**	.61**	.44**	.49**	—				
7. DERS Awareness	2.48	0.98	.79	.28**	.51**	.26*	.21*	.26*	.11	—			
8. DERS Clarity	2.26	1.01	.86	.52**	.76**	.57**	.54**	.48**	.45**	.37**	—		
9. DSS-B	14.32	8.94	.89	.72**	.61**	.58**	.48**	.56**	.52**	.19*	.46**	—	
10. SCS	2.84	0.68	.86	-	-	-	-	-	-	-	-	-	—
				.54**	.62**	.59**	.51**	.48**	.44**	.31**	.48**	.49**	
11. SC Self-Kindness	2.76	0.89	.82	-	-	-	-	-	-	-.28*	-	-	.85**
				.58**	.56**	.54**	.49**	.44**	.41**		.46**	.47**	
12. SC Self-Judgment	3.12	0.94	.84	.51**	.58**	.53**	.48**	.46**	.42**	.24*	.44**	.43**	.82**
13. SC Common Humanity	2.68	0.85	.79	-	-	-	-	-	-	-	-	-	.79**
				.47**	.51**	.48**	.44**	.39**	.38**	.25**	.41**	.40**	
14. SC Isolation	3.18	0.97	.81	.49**	.54**	.51**	.46**	.44**	.41**	.23*	.43**	.42**	.80**
15. SC Mindfulness	2.91	0.82	.78	-	-	-	-	-	-	-	-	-	.76**
				.44**	.49**	.46**	.42**	.38**	.36**	.29**	.39**	.44**	
16. SC Over-identification	3.04	0.91	.80	.46**	.52**	.49**	.45**	.42**	.39**	.22*	.41**	.48**	.78**

Note. N = 250. PTSD = Post-Traumatic Stress Disorder; DERS = Difficulties in Emotion Regulation Scale; DSS-B = Dissociative Symptoms Scale-Brief; SCS = Self-Compassion Scale; SC = Self-Compassion; α = Cronbach's alpha.

* $p < .05$. ** $p < .01$.

Analysis of subscale-based correlations depicted subtle patterns. The Strategies subscale (limited access to emotion regulation strategies) was the most correlated with the PTSD symptoms ($r = .71$), followed by Nonacceptance ($r = .56$) and Impulse control difficulties ($r = .64$). The Awareness subscale had the lowest correlation ($r = .28$), which is in line with other studies that lack of emotional awareness might be not directly correlated with PTSD as compared to other emotion dysregulation dimensions (Tull et al., 2007). Self-Kindness ($r = -.58$) and Self-Judgment ($r = .51$) were the most significant inverse relationship with the PTSD symptoms (Self-Kindness) and (Self-Judgment) respectively before reversing the scoring. There were moderate or high associations between Common Humanity ($r = -.47$), Isolation ($r = .49$, before reverse scoring), Mindfulness ($r = -.44$) and Over-identification ($r = .46$, before reverse scoring) and PTSD symptoms.

Main Effects: Emotion Dysregulation, Dissociation, and Self-Compassion

Multiple regression analysis in Table 2 examined the independent contributions of emotion dysregulation, dissociative symptoms, and self-compassion to PTSD symptom severity while controlling for demographic variables (age, gender, time since trauma). The overall model accounted for 67% of variance in PTSD symptoms, $F(6, 243) = 82.14$, $p < .01$, $R^2 = .67$.

Table 2 *Multiple Regression Analysis Predicting PTSD Symptom Severity*

Predictor	B	SE B	β	t	p	95% CI
Step 1: Demographics						
Age	-0.12	0.08	-.09	-1.50	.135	[-0.28, 0.04]
Gender (Female = 1)	2.34	1.89	.07	1.24	.217	[-1.37, 6.05]
Time Since Trauma (months)	-0.03	0.02	-.08	-1.42	.157	[-0.07, 0.01]
Step 2: Main Effects						
Emotion Dysregulation (DERS-SF)	8.02	1.24	.38	6.47	.007	[5.58, 10.46]
Dissociative Symptoms (DSS-B)	0.74	0.10	.42	7.40	.004	[0.54, 0.94]

Self-Compassion (SCS-SF)	-4.88	1.36	-.21	-3.59	.011	[-7.55, -2.21]
Model Summary						
R ²	.67					
Adjusted R ²	.66					
F	82.14**					
ΔR ² (Step 2)	.65**					

Note. **p < .01

As hypothesized, emotion dysregulation emerged as a significant positive predictor of PTSD symptoms ($\beta = .38, p = .007$), with each one-unit increase in DERS-SF total score associated with a .38 standard deviation increase in PTSD severity. Similarly, dissociative symptoms significantly predicted PTSD symptoms ($\beta = .42, p = .004$), indicating that more frequent dissociative experiences were associated with greater PTSD severity. Self-compassion demonstrated a significant inverse relationship with PTSD symptoms ($\beta = -.21, p < .011$), suggesting that higher self-compassion was associated with lower PTSD severity even after accounting for emotion dysregulation and dissociation. These findings support Hypotheses 1-3 and establish the independent contributions of each predictor while setting the stage for moderation analyses.

Moderation Analysis: Self-Compassion \times Emotion Dysregulation

Moderation analysis using the PROCESS macro (Model 1) examined whether self-compassion moderated the relationship between emotion dysregulation and PTSD symptoms in Table 3. The interaction term (Emotion Dysregulation \times Self-Compassion) was statistically significant ($\beta = -.18, p < .01$), indicating that the strength of the association between emotion dysregulation and PTSD symptoms varied as a function of self-compassion levels.

Table 3

Moderation Analysis: Self-Compassion \times Emotion Dysregulation Predicting PTSD Symptoms

Predictor	B	SE B	β	t	p	95% CI
Constant	42.18	0.94	—	44.87	.002	[40.33, 44.03]
Emotion Dysregulation	9.34	1.18	.44	7.92	.001	[7.02, 11.66]
Self-Compassion	-4.92	1.29	-.21	-3.81	.006	[-7.46, -2.38]
DERS \times SCS	-3.82	1.34	-.18	-2.85	.005	[-6.46, -1.18]
Conditional Effects at SCS Values						
Low SCS (-1 SD; 2.16)	14.48	1.56	.62	9.28	.001	[11.41, 17.55]
Mean SCS (2.84)	9.34	1.18	.44	7.92	.001	[7.02, 11.66]
High SCS (+1 SD; 3.52)	4.20	1.52	.26	2.76	.006	[1.21, 7.19]
Model Summary						
R ²	.71					
Adjusted R ²	.70					
F	143.67***					
ΔR ² (interaction)	.02**					

Note. DERS-SF = Difficulties in Emotion Regulation Scale-Short Form; SCS-SF = Self-

Compassion Scale-Short Form. **p < .01. ***p < .001.

Simple slopes analysis revealed that at low levels of self-compassion (-1 SD), the relationship between emotion dysregulation and PTSD symptoms was strong and positive ($\beta = .62, p = .001$). At mean levels of self-compassion, this relationship remained significant but was somewhat

attenuated ($\beta = .44, p = .001$). At high levels of self-compassion (+1 SD), the relationship was notably weaker ($\beta = .26, p = .006$), although it remained statistically significant. This finding supports Hypothesis 4, demonstrating that self-compassion functions as a protective factor that mitigates the detrimental effects of emotion dysregulation on PTSD symptomatology. Even when individuals struggle significantly with emotion regulation, those who can maintain self-compassionate attitudes toward themselves show resilience against severe PTSD symptoms.

Moderation Analysis: Self-Compassion \times Dissociative Symptoms

A second moderation analysis tested whether self-compassion moderated the relationship between dissociative symptoms and PTSD symptoms. The interaction term (Dissociative Symptoms \times Self-Compassion) was statistically significant ($\beta = -.22, p < .01$), providing strong support for the moderating role of self-compassion in Table 4.

Table 4 *Moderation Analysis: Self-Compassion \times Dissociative Symptoms Predicting PTSD Symptoms*

Predictor	B	SE B	β	t	p	95% CI
Constant	42.18	0.89	—	47.37	.004	[40.43, 43.93]
Dissociative Symptoms	0.81	0.09	.46	9.00	.002	[0.63, 0.99]
Self-Compassion	-3.64	1.18	-.16	-3.08	.022	[-5.97, -1.31]
DSS-B \times SCS	-0.51	0.12	-.22	-4.25	.003	[-0.75, -0.27]
Conditional Effects at SCS Values						
Low SCS (-1 SD; 2.16)	1.19	0.11	.68	10.82	.001	[0.97, 1.41]
Mean SCS (2.84)	0.81	0.09	.46	9.00	.001	[0.63, 0.99]
High SCS (+1 SD; 3.52)	0.42	0.11	.24	3.82	.009	[0.20, 0.64]
Model Summary						
R ²	.74					
Adjusted R ²	.73					
F	178.24***					
ΔR^2 (interaction)	.04***					

Note. DSS-B = Dissociative Symptoms Scale-Brief; SCS-SF = Self-Compassion Scale-Short Form. *** $p < .001$.

Simple slopes analysis indicated that at low levels of self-compassion (-1 SD), dissociative symptoms showed a very strong positive association with PTSD symptoms ($\beta = .68, p < .01$). This relationship remained significant at mean self-compassion levels ($\beta = .46, p < .01$) but was considerably weaker at high self-compassion levels ($\beta = .24, p < .01$). This finding supports Hypothesis 5 and suggests that self-compassion may be especially valuable for individuals experiencing dissociative symptoms, potentially by reducing shame and self-criticism associated with these often-distressing experiences and facilitating acceptance rather than avoidance of unusual perceptual or cognitive phenomena. Across models, the combined predictors accounted for a substantial proportion of variance in PTSD symptom severity ($R^2 = .71-.74$), highlighting the clinical relevance of both risk and protective factors examined.

Discussion

Interestingly, the last models explained up to 74% of variance in the severity of PTSD symptoms, which indicated the joint explanatory capacity of emotion dysregulation, dissociation, and self-compassion. This study explored the nature of self-compassion as a protective element that mediates the associations between emotion dysregulation, dissociative symptoms and PTSD

symptomatology. Findings have shown heavy support of all of the main hypotheses, which proved that self-compassion could significantly mitigate the negative impact of both emotion dysregulation and dissociation on the severity of PTSD. In line with the identified effect of the interaction ($\beta = -.18$ and $\beta = -.22$ to emotion dysregulation and dissociative symptoms, respectively), self-compassion, however, did not cancel the effects of such risk factors but only reduced them on the severity of the PTSD symptoms. The results are part of an increasing body of evidence that self-compassion is a resilience factor that can be modified with significant implications on trauma-informed prevention and intervention programs. The moderate position of self-compassion in relation to emotion dysregulation- PTSD relationship is also powerful, and explains the critical resilience processes after a traumatic event. The patients who possess a high level of emotion control and high self-compassion possess much less PTSD symptoms compared to patients who possess a low level of self-compassion. Such a risk-reduction effect may act in any number of ways. Self-compassion could offer a different emotion regulation strategy that balances out drawbacks in standard regulatory capacities. Self-compassionate reactions, which involve self-kindness, awareness of shared humanity, and active mindfulness, can provide a safety net to help individuals prevent the development of emotion-induced cascades into acute PTSD symptoms when they have difficulties regulating their emotions with either cognitive reappraisal, problem-solving, or other conventional methods (Finlay-Jones, 2017). Instead of pitting self-criticism and disgrace on top of the already challenging emotional states, self-compassion enables people to respond to distress with empathy and compassion, which may disrupt emotional reactivity loops. On the same note, the common humanity aspect of self-compassion can directly oppose the isolation commonly linked to the trauma and emotional dysregulation problems. Sharing the emotional struggle as a universal human experience and not as a personal failure can decrease shame and social connection/help-seeking, which have been known to help with the recovery process of traumas (Held & Owens, 2015). The change in perspective can be especially significant to those people who project their challenges in emotion regulation as the signs of inherent incompetence. In addition, mindfulness constituent of self-compassion encourages appropriate awareness of painful feelings without excessive identification or repression of feelings which is a middle way between avoidance and rumination and helps the mind to adaptively process trauma related contents (Germer & Neff, 2013). Such a moderate position can assist those with emotion dysregulation by slowly allow them to become tolerant to distressing emotions instead of using maladaptive avoidance mechanisms to sustain PTSD.

In Addition, the large modulation effect of self-compassion on dissociation-PTSD relationship expands the knowledge of how protective variables may be advantageous to individuals that have experienced especially complicated trauma manifestations. Dissociative symptoms prevail as more serious and harder to treat in PTSD (Lanius et al., 2012), but the current results indicate that self-compassion significantly reduces this risk. Self-compassion might have a number of protective roles in those who have suffered dissociative experiences like depersonalization, derealization, or absorption. As an example, it can lessen shame and self-pathologization with dissociative experiences. Dissociative symptoms are scary to many people or they think they mean going crazy, which results in secondary distress and avoidance (Brand et al., 2016). Compassionate attitudes toward suffering, which can render them normal and understandable by their common humanity can assist individuals in putting dissociative experiences in perspective as the understandable reactions to trauma and not expressions of harm irreparably. Since moderation analyses were done on the basis of total scores as a means of parsimony, preliminary information as to potential mechanism underlying these effects, at a subscale level, is given. Mindfulness aspect of self-compassion can be especially useful in treating dissociative symptoms. This can be achieved by

developing a balanced awareness that is not over-identified and this way, one will be in a better position to realize when they are under dissociation and with time, they can redirect the mind to the present moment rather than panicking or becoming overwhelmed by a change of state of consciousness. Through this ability, the dissociative episodes do not escalate into more serious or extended experiences. Similarly, self-compassion could lead to the readiness to approach and not avoid dissociative experiences, which would enable slow habituation and assimilation. The self-kindness and common humanity elements could offer emotional safety that will allow individuals to approach the meaning and triggers of dissociative phenomena with curiosity instead of fear and potentially allow a more holistic processing of trauma. In line with such trends, mindfulness showed the most negative correlation with the severity of PTSD of self-compassion subcomponents, which can indicate that it may be of special salience in alleviating dissociative distress. Mindful awareness can particularly play a significant role in detecting and adapting to dissociative experiences, whereas self-benevolence and shared humanity might be more central in regulating the impact of state of emotion dysregulation.

Implications

The implications of these findings to clinical practice and theory in trauma research are important. In clinical terms, they discuss self-compassion as a resource of support and treatment with significant power concerning a person traumatized. Self-compassion development can also serve as a primary prevention measure, as it increases resilience before the exposure to a traumatic event, especially in people who are vulnerable because of their emotion regulation problems or dissociative tendencies. Self-compassion-based interventions, including compassion-focused therapy, mindful self-compassion training, and compassion meditation, can also become useful adjuncts to trauma-focused interventions to greater extents because they can help people who already have symptoms of PTSD to experience more emotional tolerance and less avoidance. Brief self-compassion practices can be included in the implementation of known interventions (e.g., exposure-focused or cognitive-based interventions) to enhance treatment attendance and results. Theoretically, the findings contribute to the theoretical ideas of conceptualizing self-compassion as a part of resilience, and positive psychology, focusing on the psychological strengths that can be changed instead of the deficits. They also build on emotion regulation models by highlighting the importance of self-related responses of individuals to distress as a major factor that determines post-trauma vulnerability and recovery.

Limitations

There are a number of limitations to be mentioned. First, cross-sectional design does not allow making causal conclusions; the correlation between self-compassion, PTSD symptoms, emotion dysregulation, and dissociation can be two-sided. Longitudinal designs are required in order to illuminate time sequence. Second, self-report measures have the risk of sharing method variance, and in future research, there should be the introduction of clinician-rated, behavioral, or psychophysiological measures. Third, it can be limited to generalizability of results on different types of trauma, demographic populations, and cultures due to sample characteristics. Fourth, short measures, though minimizing the burden on the respondent, can also be narrower measures of each construct than the full-length measures. Lastly, there was no analysis of mediating mechanisms and intervention effects; experimental and longitudinal studies are required to prove mechanisms and clinical effectiveness.

Future Directions

The research in the future ought to consider the weaknesses of the current study using longitudinal and experimental research design to elucidate the cause and effect relationship between self-compassion, emotion dysregulation, dissociation, and PTSD symptoms. Clinical utility and mechanisms of change would be better proved by randomized controlled trials of self-compassion-based interventions in populations exposed to trauma. Research designs that include multimethod assessment techniques, such as those based on clinician-rated instruments, behavioral ones, and psychophysiological instruments, would minimize shared method bias and enhance validity. Sample diversity should also be given more focus with reference to the examination of these relationships by different trauma, cultural settings, and demographics since the cultural norms can be influential in how self-compassion would be expressed and interpreted. Further studies are needed on the possible boundary conditions, when and whom self-compassion can be less efficient or need adjustment. Also, the study of the self-compassion and other resilience mechanisms, including social support and meaning-making, could help to explain why self-compassion is a unique or synergetic protective factor. Last but not least, neurobiological studies could explain the mechanisms and biomarkers of intervention response in the background.

Conclusion

The present study has shown that self-compassion can be considered a strong protective variable that helps diminish the correlations between emotion regulation dysregulation and dissociative symptoms and PTSD severity. As an independent variable, higher self-compassion was found to have less significant effects on the PTSD symptoms, and the interaction of risk between emotion dysregulation and dissociation with PTSD was also significantly weaker when self-compassion was higher in the trauma-exposed sample. The results indicate that self-compassion is a changeable resilience treatment with direct clinical implications of prevention and treatment and encourage the integration of self-compassion practices in trauma-informed evaluation, initial intervention, as well as the enhancement of current therapies. Due to the study limitations (cross-sectional, self-report measures, short tools, and generalizability of the sample), longitudinal, experimental, and multimethod studies should be conducted to prove causality, clarify the mechanism, detect boundary conditions, and assess the effectiveness of the intervention. Broadly speaking, findings point to the potential of self-compassion as transdiagnostic tool of lowering vulnerability and enhancing recovery after trauma. The researchers and clinicians must focus on the creation of scalable self-compassion treatments.

References

- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). American Psychiatric Publishing.
<https://doi.org/10.1176/appi.books.9780890425596>
- Bohus, M., Kleindienst, N., Hahn, C., Müller-Engelmann, M., Ludäscher, P., Steil, R., Fydrich, T., Kuehner, C., Resick, P. A., Stiglmayr, C., Schmahl, C., & Priebe, K. (2020). Dialectical behavior therapy for posttraumatic stress disorder (DBT-PTSD) compared with cognitive processing therapy (CPT) in complex presentations of PTSD in women survivors of childhood abuse: A randomized clinical trial. *JAMA Psychiatry*, 77(12), 1235-1245. <https://doi.org/10.1001/jamapsychiatry.2020.2148>
- Brand, B. L., Loewenstein, R. J., & Spiegel, D. (2014). Dispelling myths about dissociative identity disorder treatment: An empirically based approach. *Psychiatry: Interpersonal and Biological Processes*, 77(2), 169-189. <https://doi.org/10.1521/psyc.2014.77.2.169>
- Cloitre, M., Hyland, P., Bisson, J. I., Brewin, C. R., Roberts, N. P., Karatzias, T., & Shevlin, M. (2019). ICD-11 posttraumatic stress disorder and complex posttraumatic stress disorder in the United States: A population-based study. *Journal of Traumatic Stress*, 32(6), 833-842. <https://doi.org/10.1002/jts.22454>
- Curran, P. J., West, S. G., & Finch, J. F. (1996). The robustness of test statistics to nonnormality and specification error in confirmatory factor analysis. *Psychological Methods*, 1(1), 16-29. <https://doi.org/10.1037/1082-989X.1.1.16>
- Finlay-Jones, A. L. (2017). The relevance of self-compassion as an intervention target in mood and anxiety disorders: A narrative review based on an emotion regulation framework. *Clinical Psychologist*, 21(2), 90-103. <https://doi.org/10.1111/cp.12131>
- 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>
- 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. (2015). Emotion regulation: Current status and future prospects. *Psychological Inquiry*, 26(1), 1-26. <https://doi.org/10.1080/1047840X.2014.940781>
- Hayes, A. F. (2018). *Introduction to mediation, moderation, and conditional process analysis: A regression-based approach* (2nd ed.). Guilford Press.
- Held, P., & Owens, G. P. (2015). Effects of self-compassion workbook training on trauma-related guilt in a sample of homeless veterans: A pilot study. *Journal of Clinical Psychology*, 71(6), 513-526. <https://doi.org/10.1002/jclp.22170>
- Hofmann, S. G., Grossman, P., & Hinton, D. E. (2011). Loving-kindness and compassion meditation: Potential for psychological interventions. *Clinical Psychology Review*, 31(7), 1126-1132. <https://doi.org/10.1016/j.cpr.2011.07.003>
- Kaufman, E. A., Xia, M., Fosco, G., Yaptangco, M., Skidmore, C. R., & Crowell, S. E. (2016). The Difficulties in Emotion Regulation Scale Short Form (DERS-SF): Validation and replication in adolescent and adult samples. *Journal of Psychopathology and Behavioral Assessment*, 38(3), 443-455. <https://doi.org/10.1007/s10862-015-9529-3>

- Kim, J. J., Parker, S. L., Doty, J. R., Cunnington, R., Gilbert, P., & Kirby, J. N. (2020). Neurophysiological and behavioural markers of compassion. *Scientific Reports*, 10(1), Article 6789. <https://doi.org/10.1038/s41598-020-63846-3>
- Koenen, K. C., Ratanatharathorn, A., Ng, L., McLaughlin, K. A., Bromet, E. J., Stein, D. J., Karam, E. G., Meron Ruscio, A., Benjet, C., Scott, K., Atwoli, L., Petukhova, M., Lim, C. C. W., Aguilar-Gaxiola, S., Al-Hamzawi, A., Alonso, J., Bunting, B., Ciutan, M., de Girolamo, G., ... Kessler, R. C. (2017). Posttraumatic stress disorder in the World Mental Health Surveys. *Psychological Medicine*, 47(13), 2260-2274. <https://doi.org/10.1017/S0033291717000708>
- Lanius, R. A., Brand, B., Vermetten, E., Frewen, P. A., & Spiegel, D. (2012). The dissociative subtype of posttraumatic stress disorder: Rationale, clinical and neurobiological evidence, and implications. *Depression and Anxiety*, 29(8), 701-708. <https://doi.org/10.1002/da.21889>
- Lanius, R. A., Vermetten, E., Loewenstein, R. J., Brand, B., Schmahl, C., Bremner, J. D., & Spiegel, D. (2010). Emotion modulation in PTSD: Clinical and neurobiological evidence for a dissociative subtype. *American Journal of Psychiatry*, 167(6), 640-647. <https://doi.org/10.1176/appi.ajp.2009.09081168>
- 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>
- Macia, K. S., Carlson, E. B., Palmieri, P. A., Smith, S. R., Anglin, D. M., Ghosh Ippen, C. G., Lieberman, A. F., Wong, E. C., Schell, T. L., & Waelde, L. C. (2022). Development of a brief version of the Dissociative Symptoms Scale and the reliability and validity of DSS-B scores in diverse clinical and community samples. *Assessment*, 30(7), 2197-2215. <https://doi.org/10.1177/10731911221133317>
- Mikulincer, M., & Shaver, P. R. (2016). *Attachment in adulthood: Structure, dynamics, and change* (2nd ed.). Guilford Press.
- Miron, L. R., Seligowski, A. V., Boykin, D. M., & Orcutt, H. K. (2016). The potential indirect effect of childhood abuse on posttraumatic stress disorder symptoms through self-compassion and fear of self-compassion. *Mindfulness*, 7(3), 596-605. <https://doi.org/10.1007/s12671-016-0493-0>
- Neff, K. D. (2003a). The development and validation of a scale to measure self-compassion. *Self and Identity*, 2(3), 223-250. <https://doi.org/10.1080/15298860309027>
- Neff, K. D. (2003b). Self-compassion: An alternative conceptualization of a healthy attitude toward oneself. *Self and Identity*, 2(2), 85-101. <https://doi.org/10.1080/15298860309032>
- Neff, K. D., & Germer, C. K. (2013). A pilot study and randomized controlled trial of the mindful self-compassion program. *Journal of Clinical Psychology*, 69(1), 28-44. <https://doi.org/10.1002/jclp.21923>
- Neff, K. D., Tóth-Király, I., Yarnell, L. M., Arimitsu, K., Castilho, P., Ghorbani, N., Guo, H. X., Hirsch, J. K., Hupfeld, J., Hutz, C. S., Kotsou, I., Lee, W. K., Montero-Marin, J., Sirois, F. M., de Souza, L. K., Svendsen, J. L., Wilkinson, R. B., & Mantzios, M. (2019). Examining the factor structure of the Self-Compassion Scale in 20 diverse samples: Support for use of a total score and six subscale scores. *Psychological Assessment*, 31(1), 27-45. <https://doi.org/10.1037/pas0000629>
- Ozer, E. J., Best, S. R., Lipsey, T. L., & Weiss, D. S. (2003). Predictors of posttraumatic stress disorder and symptoms in adults: A meta-analysis. *Psychological Bulletin*, 129(1), 52-73. <https://doi.org/10.1037/0033-2909.129.1.52>

- 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>
- Thompson, B. L., & Waltz, J. (2008). Self-compassion and PTSD symptom severity. *Journal of Traumatic Stress*, 21(6), 556-558. <https://doi.org/10.1002/jts.20374>
- Tull, M. T., Barrett, H. M., McMillan, E. S., & Roemer, L. (2007). A preliminary investigation of the relationship between emotion regulation difficulties and posttraumatic stress symptoms. *Behavior Therapy*, 38(3), 303-313. <https://doi.org/10.1016/j.beth.2006.10.001>
- Weiss, N. H., Tull, M. T., Anestis, M. D., & Gratz, K. L. (2013). The relative and unique contributions of emotion dysregulation and impulsivity to posttraumatic stress disorder among substance dependent inpatients. *Drug and Alcohol Dependence*, 128(1-2), 45-51. <https://doi.org/10.1016/j.drugalcdep.2012.07.017>
- Zessin, U., Dickhäuser, O., & Garbade, S. (2015). The relationship between self-compassion and well-being: A meta-analysis. *Applied Psychology: Health and Well-Being*, 7(3), 340-364. <https://doi.org/10.1111/aphw.12051>