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Does Self-Compassion Mitigate the Association Between Childhood Maltreatment and Later Emotion Regulation Difficulties? A Preliminary Investigation

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Abstract Child maltreatment-related outcomes range from no symptom expression to suicide. Increasingly, the diverse presentations have been conceptualized as core system dysregulation, including emotion dysregulation. Self-compassion has been advanced as a self-regulation strategy for countering negative self-directed emotions. This study explored whether individual differences in self-compassion would play a role in loosening the associations among childhood maltreatment severity and later emotion regulation difficulties. The sample consisted of transition-age youth (N=81) seeking treatment for problem substance use. Self-compassion was negatively associated with emotion regulation difficulties and childhood maltreatment, and predicted emotion dysregulation above and beyond maltreatment history, current severity of psychological distress, and problem substance use. In addition, self-compassion mediated the relationship between childhood maltreatment severity and later emotion dysregulation. These findings provide an impetus for further research into the relevance of self-compassion for maltreatment-related impairment.

Keywords Childhood maltreatment · Emotion regulation · Problem substance use · Self-compassion · Transition-age youth

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Childhood maltreatment takes many forms, including emotional abuse, emotional neglect, physical abuse, physical neglect, and sexual abuse (Bernstein et al. 2003). Increasingly, the diverse symptom presentations associated with childhood maltreatment have been understood as stemming from underlying emotion regulation difficulties, either in response to overwhelming stress and coping demands, or the burden of a high negative emotional load (Gross and Munoz 1995; Hayes et al. 1996; Linehan 1993; Mennin et al. 2002; Nisenbaum et al. 2010). Emotion regulation difficulties are characterized by impairments in primary aspects of emotional functioning, including the awareness and understanding of emotions, the acceptance of emotions, the ability to control escape and avoidance behaviours in response to strong emotions, and the appropriate use of strategies to control emotionally motivated impulsive behaviour (Gratz and Roemer 2004). In the context of childhood maltreatment, emotion regulation difficulties are well documented. Emotion-based consequences of childhood maltreatment include maladaptive views of and relationships to self and others (e.g., Kendall-Tackett 2002), shame, self-criticism, self-dislike, dissociation, feelings of isolation from others (e.g., Gilbert and Procter 2006), and inflexibility in responding to the demands of the environment (e.g., Thompson 2004; Thompson et al. 2006). Childhood maltreatment has also been linked to the development of psychopathology (Ravndal et al. 2001) and problem substance use (Dembo et al. 1987; Dunn et al. 2002).

Self-compassion has been advanced as a relevant construct to enhance a contextualized view of attacks towards the self (as frequently occurs with maltreatment) and, thereby, counter a helpless, hopeless view of one's victimization (Gilbert and Procter 2006). Neff (2003a) has defined self-compassion as consisting of three bipolar qualities: *self-kindness versus self-judgment*, where self-kindness is characterized by warmth, understanding, and gentleness toward one's own experiences; *mindfulness versus over-identification*, where mindfulness is a decentred, non-overly self-identified view of experience; and *common humanity versus isolation*, in which common humanity involves the recognition that suffering and inadequacies are part of the universal human experience rather than afflictions against oneself alone. Research by Neff (2003b) has shown the intercorrelated components of self-compassion to form a single factor, which is negatively related to such outcomes as emotion regulation difficulties, rumination, dissociation, negative affect, neuroticism, and indicators of psychopathology.

Neurological research suggests that self-compassion is associated with increased joy and optimism through the stimulation of pathways within the left prefrontal cortex (Lutz et al. 2004). Individuals with higher levels of self-compassion have been shown to have better mental health, as evidenced by higher levels of happiness and optimism (Neff et al. 2007). Self-compassion has similarly been found to be a predictor of well-being among adolescents (Neff and McGehee 2010). Self-compassion has been associated with greater resilience (Neff and McGehee 2010), including the appropriate use of internal (e.g., personality and skills-based) and external resources (i.e., available and culturally appropriate supports, including relationships, community and service supports) to navigate situations involving significant threat (Masten and Wright 2009). When taught to young adults in a laboratory context, self-compassion has been found to act as a buffer against negative self-feelings following distressing events (Leary et al. 2007). Correspondingly, several therapies have emerged which focus on teaching self-compassion and its component skills (e.g., Dialectical Behaviour Therapy: Linehan 1993; Compassion-focused Therapy: Gilbert 2009). A basic premise of these therapies is that one can learn to deliberately cultivate compassionate mind states and traits, characterized by feelings of warmth, safety, presence, and interconnectedness, and thereby alleviate emotion dysregulation (Gilbert and Procter 2006).

Self-compassion appears to be distinct relative to other, more well-established individual differences variables in the literature, including self-esteem and mindfulness. Self-compassion has been distinguished from self-esteem, which encompasses performance evaluations of self and others, comparisons of oneself to an ideal, potentially maladaptive traits, like ego-defensiveness and narcissism (Finn 1990), and a contingent, unstable feeling of self-worth (Leary et al. 2007; Neff 2003b; Neff and Vonk 2009). Self-compassion has also been differentiated from mindfulness, which although a subcomponent of self-compassion, is a less powerful predictor of quality of life as well as psychological symptom severity in mixed anxiety and depression (Van Dam et al. 2011).

The current study explored whether self-compassion would play a role in mitigating the association between early maltreatment history and later emotion regulation problems in young adulthood. Transition-age youth were evaluated for individual differences in self-compassion at intake to an addictions and mental health centre. It was anticipated that maltreatment and emotion regulation difficulties would be prominent in this sample, as has been found in previous studies of treatment-seeking populations (Bernstein and Fink 1998; Bernstein et al. 2003; Cheetham et al. 2010; Cohen and Densen-Gerber 1982; Simpson and Miller 2002). Moreover, previous research has shown self-constructs to be significant mediators of childhood maltreatment history and maladaptive outcomes among youth with illicit drug use (Dembo et al. 1987). To our knowledge, no research has studied the interplay of maltreatment history and self-compassion in predicting emotion regulation outcomes among transition-age, treatment-seeking youths, an important clinical cohort to study given their level of unmet treatment needs exceeds any age group (Kirby and Keon 2006). This study aimed to establish whether self-compassion would have power in predicting emotion dysregulation outcomes beyond other variables typically studied among individuals seeking substance use treatment, including maltreatment history and current severity of psychological symptoms and problem substance use. Moreover, this study aimed to determine the role of self-compassion in buffering the impacts of early maltreatment.

Method

Participants

There were $N=81$ participants in this study, 65.4% male, and 72.8% Caucasian. All were youth, ages 16–24 (M=19.49; SD=2.32) seen at intake to a substance treatment program in a hospital-based, joint youth addictions and mental health treatment program. Inclusion criteria included substance-related distress and/or impairment over the past 60 days, as determined by clinical screening based on *Diagnostic Statistical Manual-IV* criteria (American Psychiatric Association 2000). Exclusion criteria included evidence of unmanaged psychosis, Bipolar Disorder, and/or a history of serious self-harm or suicidality, as determined by direct screening questions administered at intake, and if necessary, diagnostic verification by the program psychiatrist. Most participants were poly-substance users (87.7%), with the mean number of substances used being three. The most commonly used substances were cannabis (77.8%), cocaine/crack (23.5%), and alcohol (51.9%). On average, the days of substance use in a month was 20.64 days (SD=10.25), and combined alcohol and drug days were 5.53 (SD=7.54). Fifty-two percent (52.5%) of participants were unemployed, almost 30 percent (29.6%) were involved with the criminal justice system in some form, 17.3% were awaiting trial or sentencing, and 12.3% were on parole.

Procedure

Youth were invited to complete a screen and questionnaires for the current study, along with the standard intake forms and interview. Consenting youth were evaluated for their levels of self-compassion, severity of childhood maltreatment history, current emotion regulation difficulties, substance use severity, and psychological symptom severity. Participants were informed that access to standard treatment would in no way be dependent upon their decision to participate in the research. A ten-dollar gift certificate was offered as payment for participants' time to complete measures at intake, which took approximately 1 hour. Nearly all participants consented, with one participant declining due to concerns about collecting additional data while involved in a legal matter.

Measures

Emotion dysregulation was measured using the *Difficulties with Emotion Regulation Scale* (DERS; Gratz and Roemer 2004). The DERS consists of six intercorrelated scales of emotion dysregulation: (a) Non-acceptance of emotional reactions; (b) Difficulty engaging in goal-directed behaviour; (c) Difficulty controlling impulses; (d) Lack of emotional awareness; (e) Limited access to emotion-regulation strategies; and (f) Lack of emotional clarity. The DERS begins each item with the phrase, "When I'm upset". Participants rate each item on a five-point Likert scale from "almost never" (1) to "almost always" (5). A high score represents a high degree of emotion dysregulation. The original authors report high test-retest reliability in a 4-week period, at a level of .84 (Gratz and Roemer 2004). The DERS has shown high internal consistency and good construct and predictive validity within clinical populations (Fox et al. 2007; Nisenbaum et al. 2010). In the present study, the internal consistency of the DERS was high, at a level of .90.

Participants disclosed their degree of experience with childhood maltreatment using the *Childhood Trauma Questionnaire Short Form* (CTQSF), a 28-item retrospective report questionnaire, which encompasses a validity scale evaluating minimization/denial, and history of five major abusive domains: (a) Physical abuse, (b) Physical neglect, (c) Emotional abuse, (d) Emotional neglect, and (e) Sexual abuse (Bernstein et al. 2003; Bernstein and Fink 1998). Only three items use the word "abuse" on this scale. Items typically describe behaviourally defined events. Participants rate each item on a five-point Likert scale from "never true" (1) and to "very often true" (5). Scores in each domain are categorised into four types of severity: none to minimal, minimal to moderate, moderate to severe, and severe to extreme. The CTQSF has been shown to have good internal consistency for each of the domains (Bernstein et al. 2003). Multiple studies have confirmed the convergent and divergent validity and stability over time of the CTQSF when histories of maltreatment are ascertained using clinical records and clinical interviews (Bernstein et al. 1997; Bernstein et al. 1994; Fink et al. 1995; Lipschitz et al. 1999). In the present study, researchers found the CTQSF had an acceptable internal consistency of .82.

Self-compassion was determined using the 26-item *Self-Compassion Scale* (SCS; Neff 2003b), which consists of six intercorrelated subscales: (a) Self-kindness; (b) Self-judgment; (c) Common humanity; (d) Isolation; (e) Mindfulness; and (f) Over-identification. Respondents self-report their behaviours on a five-point Likert scale from "almost never" (1) to "almost always" (5). Researchers reverse code the self-judgement, isolation and over-identification subscales and then sum the mean scores of each of the six subscales to create one overarching self-compassion score (Neff 2003b). In this way each of the six factors are equally important. The author found the six factor model fit the data (NNFI=.92; CFI=.93).

The higher-order factor of self-compassion explained the intercorrelations between the six factors (NNFI=.90; CFI=.92). Internal consistency for the SCS was excellent(.92) and the author indicated good test-retest reliability for the SCS (r=.93).

The screening tool for determining psychological symptom severity was the *Brief Symptom Inventory* (BSI; Derogatis and Melisaratos 1983). The BSI is a 53-item self-report measure used widely in clinical settings, based upon Derogatis' (1977) Symptom Checklist-90-R (SCL-90-R). This measure asks participants to rate the degree to which they have experienced a specific psychopathological symptom during the past week. Ratings are measured on a four-point scale from "not at all" to "extremely". Clinicians generate a number of unique global distress indices from the BSI, including the Global Severity Index (GSI), as used in the current study. Derogatis and Melisaratos (1983) have reported good convergent, discriminant, predictive, and construct validity for the measure. In the current study, high internal consistency was found, at a level of .97.

Addictive severity was measured using the 6-item Substance Misuse Scale (SMS) of the *Behaviour and Symptom Identification Scale* (BASIS; Eisen et al. 1994). Participants answered questions such as: "Did you try to hide your drinking or drug use?" using a scale where zero represents "never" and four represents "always." The SMS is used to assess the extent of difficulty in controlling substance behaviours over the past week. Internal consistency for the Substance Misuse Scale in a clinical population has been reported to be .85 (Cameron et al. 2007). In the present study, both internal consistency of the SMS and test-retest reliability was found to be at acceptable levels (r=.77 in both cases).

Number of days of substance and alcohol use was determined using the *Timeline Follow-back* (TLFB; Sobell and Sobell 1992). This widely used measure asks participants to recall their daily type of substance use in the past month. Research with adolescents shows adequate reliability and validity on the TLFB (Lewis-Esquerre et al. 2005).

Results

Descriptive Statistics

Descriptive statistics were first examined to establish the overall severity of, and intercorrelations among, the primary study variables. Using the norms set out in the CTQSF manual (Bernstein and Fink 1998), overall scores on the CTQSF fell into the low to moderate range of the measure (M=45.41; SD=15.95). However, 14.6 percent of participants reported experiencing severe to extreme childhood trauma and 12.7 percent reported moderate to severe trauma. Using threshold values extending from low to extreme, the most commonly reported form of abuse was emotional neglect (56.7%; M=10.8), followed by emotional abuse (53.4%; M=11.3), physical abuse (26.7%; M=8.1), physical neglect (36.7%; M=7.8), and sexual abuse (23.3%; M=7.1). The scores reported here are lower than what other studies found (Ravndal et al. 2001; Singer et al. 2004). Table 1 indicates that those who experienced greater childhood maltreatment also experienced greater emotion dysregulation, and lower levels of self-compassion. In addition, greater childhood maltreatment was associated with higher levels of psychopathology, and greater severity of substance use. A gender difference on the CTQ was found, which showed females reported higher levels of childhood maltreatment than males (t=−2.96, p<.01).

Mean self-compassion on the SCS (M=16.71; SD=3.72) fell within a range found in previous studies (Neff 2003b). In the current study, those reporting greater self-compassion reported less emotion dysregulation, and a lower severity of addictive problems and

Table 1 Correlations between emotion dysregulation, addiction severity, psychological symptom severity, childhood maltreatment, and self-compassion (N=81)

	Maltreatment	Emotion dysregulation	Addiction severity	Psychological symptom severity
Emotion Dysregulation	.33**			
Addiction Severity	.39***	.50***		
Psychological Symptom Severity	.51***	.71***	.64***	
Self-compassion	−.34**	−.69***	−.33**	−.56***

***p<.001, **p<.01 (2-tailed).

psychopathology (See Table 1). There was no gender difference in the total self-compassion score.

Finally, the mean score on the DERS was 96.78 out of 300 (SD=20.98). This score is lower than what has been found in other samples of a similar age range (Gratz and Roemer 2004; Weinberg and Klonsky 2009) suggesting a greater degree of emotion dysregulation in this sample. As would be anticipated from our current model, and shown in Table 1, those with greater emotion dysregulation reported greater psychopathology and addictive severity. No gender difference was found in emotion dysregulation.

Given the lack of specific hypotheses in this study pertaining to gender differences in emotion regulation outcomes, and given that no gender difference was found on the main outcome variable, emotion dysregulation, subsequent analyses did not control for gender.

Inferential Statistics

To determine whether self-compassion would uniquely account for the variance in emotion dysregulation, a stepwise multiple regression analysis (Draper and Smith 1981) was performed, entering the following independent variables in sequence as separate steps predicting emotion dysregulation: childhood maltreatment, addictive severity, psychological symptom severity, and self-compassion. The first three variables were tested as separate steps to establish that each significantly predicted the variance in emotion dysregulation, as would be expected theoretically. In addition, self-compassion was added as a fourth step to evaluate whether self-compassion was a unique predictor of emotion dysregulation, above and beyond childhood maltreatment history and current psychological distress or addictive severity. Results indicated that each variable uniquely and significantly contributed to the variance in emotion dysregulation: childhood maltreatment (ΔR^2=.11; β=.33; t=3.12, p<.01), addictive severity (ΔR^2=.16; β=4.35; t=4.11, p<.001), psychological symptom severity (ΔR^2=.23; β=.66; t=5.78, p<.001). Moreover, in the final step of the analysis, when all other variables had been controlled, self-compassion proved to significantly predict emotion dysregulation over and above the other variables (ΔR^2=.14; β=−.44; t=5.25, p<.001). The full complement of results is shown in Table 2.

The next set of analyses explored whether individual differences in self-compassion would mediate the statistical association between childhood maltreatment history and later emotion regulation difficulties. According to Baron and Kenny (1986), a variable is considered a mediator when its presence lessens the significant relationship between two other variables. In the current model, childhood maltreatment history significantly predicted both emotion dysregulation (R^2=.11; F=9.75, p<.01; β=.33, p<.01) and self-compassion (R^2=.11; F=10.40, p<.01; β=−.34, p<.01). Furthermore, self-compassion significantly

Table 2 Predictors of emotion dysregulation in regression analyses

Step	R^2	ΔR^2	F	ΔF	Childhood maltreatment β (t-value)	Addictive severity β (t-value)	Psych. symptom β (t-value)	Self compassion β (t-value)
1	.11	.11	9.75**	9.75**	.33 (3.12**)			
2	.27	.16	14.29***	16.85***	.16 (1.53 ns)	4.35 (4.11***)		
3	.49	.23	24.65***	33.36***	−.04 (−.45 ns)	.04 (.88 ns)	.66 (5.78***)	
4	.63	.14	31.82***	27.52***	−.08 (−1.03 ns)	.11 (1.24 ns)	.43 (4.03***)	−.44 (−5.25***)

***p<.001, **p<.01 (2-tailed). Childhood maltreatment (Step I), Addiction severity (Step II), Psychological symptom severity (Step III), Self-Compassion (Step IV).

predicted emotion dysregulation (R^2=.48; F=71.37, p<.001; β=−.69, p<.001). As shown in Fig. 1, when self-compassion was controlled, the effect of childhood maltreatment history on emotion dysregulation was reduced to a non-significant level (R^2=.47, F=34.53, p<.001; β=.11, p=.20). Sobel's test revealed that self-compassion significantly reduced the association between childhood maltreatment history and emotion regulation difficulties (z=2.97, p<.01). Thus, self-compassion significantly mediated the relationship between history of childhood maltreatment and emotion regulation difficulties.

Discussion

The overarching goal of this study was to explore self-compassion and its contribution to predicting emotion regulation outcomes among treatment-seeking, transition-age youth with a history of childhood maltreatment. Results supported the main study hypotheses in demonstrating that self-compassion significantly and uniquely contributed to fourteen percent of the emotion dysregulation variance, above and beyond childhood maltreatment history and current psychological distress and addiction severity. This finding is significant as other research points to childhood maltreatment (Shipman et al. 2000), psychological distress (Gratz et al. 2008), and addiction severity (Fox et al. 2007) as predictors of emotion dysregulation, whereas no study has examined the predictive nature of self-compassion on emotion dysregulation, over and above these other predictors. The current results also showed self-compassion to mediate the relationship between childhood maltreatment history and emotion regulation difficulties. These findings align with previous research demonstrating a significant role played by self-compassion in predicting mental health among adolescents and young adults (Neff and McGehee 2010). Taken together, the results

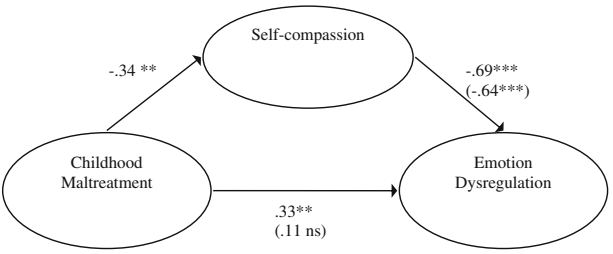

Fig. 1 Mediational model, Self-Compassion as a mediator of childhood maltreatment history and emotion dysregulation

Note: **p < .01; ***p < .001.

provide preliminary evidence that self-compassion may be a fruitful construct to pursue in maltreatment-related research, and may be a target to consider for intervention planning with substance-abusing young adults.

The results and conclusions from this study are considered preliminary for a number of reasons. There was some selection bias, as many participants were involved in the court system and were likely mandated to treatment. In addition, the research was conducted with a single, moderately sized sample. Replication of this research with a larger sample of youth would provide further support for the patterns identified in this study. Given gender differences in maltreatment history in this sample, a larger sample would also increase the power of the analyses, and allow for an exploration of potential interactions among variables, such as gender and maltreatment, in predicting emotion regulation outcomes.

Another limitation was that this study was conducted using a cross-sectional design. Further investigation would be needed to establish whether self-compassion is best understood as a resilience factor, or specific intervention preventing the negative effects of childhood maltreatment. Implementation of an experimental design would allow for the evaluation and clarification of the causal role of self-compassion in predicting emotion regulation outcomes. As shown in previous experimental studies and clinical research, self-compassion is a learned skill that can be cultivated through a compassion-focused therapy, which integrates a cognitive behavioural approach (Gilbert 2009). Even a brief introduction to self-compassion strategies has been shown to impact on emotional response to distressing events (Gilbert and Procter 2006). An experimental design would allow for an assessment of whether the cultivation of this skill among youth with a history of childhood maltreatment and/or addictions leads to improvements in emotion regulation. Repeated exposure to self-compassion teachings or practice could be a variable sensitive to intervention effects. Furthermore, as this study finds some evidence for self-compassion as a mediator between childhood maltreatment and emotion-dysregulation, it would be important to test a self-compassion therapy in the course of a standard addiction treatment.

Examining the impacts of self-compassion experimentally could address further another quandary associated with cross-sectional, self-report, questionnaire based research, specifically, the intercorrelations among study measures. In the current study, there was a strong negative correlation between self-compassion and emotion dysregulation. Given that some items across the self-compassion and emotion dysregulation measures could be understood as capturing similar or inverse processes (e.g., acceptance versus rejection of emotional experience) questions arise as to as to the conceptual distinction between these measures. Experimental research would permit not only self-report measures of self-compassion and emotion dysregulation, but it would also allow the introduction of self-compassion practices whose effects could be measured more clearly through monitoring of behavioural indices of emotional dysregulation. Such intervention-focused research would better evaluate the actual effects of self-compassion practices on emotion regulation outcomes.

Additionally, future research could investigate the mechanisms by which self-compassion is linked to emotion regulation difficulties. Shame has been identified as among the primary outcomes of childhood maltreatment, and a driving force underlying emotional distress and impairment among traumatized individuals (Gilbert and Irons 2005; Gilligan 2003; Tangney and Dearing 2002). Shame is also a key emotional factor underlying problem substance use, including among youth populations (Potter-Efron 2002; Tangney and Dearing 2002). Self-compassion therapies, including Compassion-focused Therapy (Gilbert 2009), have demonstrated that compassionate mind states may be learned,

and may alleviate shame, as well as other distressing outcomes, such as depression, anxiety, self-attacks, feelings of inferiority, and submissive behaviour. Thus, future research could examine the extent to which self-compassion, as an individual differences variable or practice, would be associated with lower shame and thereby emotion dysregulation among youth with a maltreatment history.

It is noted in the current study that the overall severity of childhood maltreatment fell into the low to moderate range. Moreover, the measure evaluating childhood maltreatment did not differentiate the identity of the abuser, the specific period of the abuse, or the participant's emotional response to the abuse. Research has shown that the impact of childhood maltreatment varies not only with the severity of abuse, but also with the relationship to the abuser, the duration of abuse, the recency of the abuse, and others' responses to the abuse, among other factors (Feiring et al. 2002; Kendall-Tackett 2002). No measure used in this study recorded whether the maltreatment was by a caregiver, if it was ongoing, or if there were any protective factors against deleterious effects of childhood maltreatment. Future research would benefit from further clarifying the maltreatment circumstances, and determining the extent to which the current study's findings generalize to more severe levels of abuse, ongoing abuse, or abuse by different perpetrators, for example. It may be that in more recent, imminent, severe, or intimate partner abuse situations, the potentially buffering effects of self-compassion would be over-ridden by other, more immediate emotional responses to emotional or physical abuse, including confusion, fear, dissociation, anger, or self-blame. Further investigation would establish whether self-compassion, as a resilience factor or behavioural intervention is a relevant protective factor only in relation to milder historical abuse, or has similar buffering benefits in more recent, imminent relational contexts.

Future research would also benefit from exploring whether the results of this research, which focused on a population seeking treatment in an addictions and mental heath facility, would generalize to non-treatment seeking, or non-problem-substance using populations. Not all individuals with childhood abuse and current emotion regulation difficulties have substance use issues, or seek treatment for these concerns. Thus, it would be important to conduct future research with other non-treatment seeking populations to establish the generalizability of our findings to non-clinical populations.

In summary, the current cross-sectional, self-report study points to the potential significance of self-compassion as a mitigator of the association between history of childhood maltreatment and later emotional regulation difficulties. Future research would benefit from the examination of larger and more varied samples and the implementation of experimental and treatment methodologies. Such research would shed light onto the causal role of self-compassion on emotion regulation outcomes, and demonstrate the potential for applying self-compassion-based interventions in the context of youth substance misuse treatment.

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