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Using Self-Compassion to Grow in the Face of Trauma: The Role of Positive Reframing and Problem-Focused Coping Strategies

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Objective: Recent research has shown a link between self-compassion, posttraumatic growth (PTG), and emotion-focused coping strategies (i.e., positive reframing and acceptance). Studies have also found evidence for the use of problem-focused strategies (i.e., active coping, planning, and instrumental support) as mediators between self-compassion and stress, and the use of these strategies has been found to predict PTG. However, no studies have directly examined the relationship between self-compassion, PTG, and the use of problem-focused coping strategies. This study investigated the association between self-compassion, emotion- and problem-focused coping, and PTG in trauma survivors. **Method:** Participants were 111 emerging adults aged 18 to 29, from Canada and the United States, who completed an online survey that included measures of coping, PTG, and self-compassion. **Results:** Self-compassion and PTG were both correlated with three coping styles, active coping, instrumental support, and positive reframing. All three coping styles predicted PTG over and above self-compassion and played multiple mediating roles between self-compassion and PTG, with no differences between the three coping styles in their mediating effects. **Conclusions:** These findings indicate that problem-focused coping strategies are also influential in mediating the development of PTG from self-compassion. Self-compassion reduces one's tendency to overidentify with negative emotions through positive reframing. The use of active coping and instrumental support also allows individuals to feel more capable in dealing with their traumatic events. Incorporating problem-focused self-compassion-based practices in cognitive behavioral and exposure-based therapies may offer additional benefits by reducing self-criticism to better promote active recovery from traumatic events.

Clinical Impact Statement


This study demonstrates that the use of positive reframing and problem-focused coping strategies, such as active coping and seeking out instrumental support, may help explain the association between self-compassion and positive change following a traumatic event. These findings have many implications for clinical practice such that the use of problem-focused compassion-based practices and interventions may help individuals reduce self-blame and self-criticism to promote posttraumatic growth. Using these methods will add additional value to combating these negative emotions to promote positive recovery for traumatic survivors.

Keywords: coping, posttraumatic growth, self-compassion, trauma, emerging adults

Trauma is defined as a disordered emotional and/or behavioral response that results from direct or indirect experience of a mental,

emotional, or physical stressor (e.g., assault, witnessing violence, sudden death of loved ones; American Psychiatric Association,

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The data reported in this article were collected as part of a larger data collection at one point in time, and one other article from this same data set is currently under review. Findings from the data collection have been reported in separate articles. The first (under review) focuses on the variables self-compassion, meaning, posttraumatic growth, and posttraumatic stress disorder

diagnosis cutoff criteria. The second (the current article) focuses on the variables self-compassion, coping, and posttraumatic growth.

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2013; May & Wisco, 2016). Trauma can affect one's mental and physical well-being and overwhelm one's ability to cope (van der Kolk, 2000). However, self-compassion can promote the use of adaptive coping strategies that may play an important role in post-traumatic growth (PTG) in the face of trauma.

As defined by Neff (2003b), self-compassion is a multidimensional construct that includes self-kindness (greater understanding toward oneself while relinquishing self-judgment), common humanity (perception of the experiences one has as being part of the larger human condition), and mindfulness (a balanced and present awareness of one's thoughts, emotions, and bodily sensations with a focus on not overidentifying with them). It may directly interfere with the negative consequences of trauma such as self-judgment, isolation, rumination, and the resulting negative beliefs about the self that may follow (Neff, 2003b). PTG is defined as a positive psychological shift in one's cognitions as a result of adversity through things like a greater appreciation for life, increased personal strength, spiritual growth, more meaningful relationships, and recognizing new possibilities (Tedeschi & Calhoun, 1996, 2004). Treating disorders that arise from exposure to multiple forms of trauma with self-compassion-based practices reduces posttraumatic stress (Winders et al., 2020). Therefore, self-compassion appears to be a significant predictor of treatment outcomes for individuals with a variety of psychiatric disorders who may have experienced trauma. Indeed, both self-compassion and PTG are positively correlated with each other (Bashpoor et al., 2020).

Trauma Appraisal and Self-Compassion

Research suggests that individuals who have experienced trauma are more likely to experience negative emotions such as guilt, shame, and alienation (DePrince et al., 2011; Lee et al., 2001). Feelings of shame are highly associated with feelings of self-criticism in individuals who have undergone trauma (Harman & Lee, 2010). Self-criticism manifests when one feels devalued or like a failure, which is true for many survivors of trauma. Whether one experiences external or internal shame, ultimately this feeling may alter one's core beliefs about oneself (Lee et al., 2001). Negative trauma appraisal may also undermine any therapeutic intervention that does not target these core emotions (DePrince et al., 2011; Ebert & Dyck, 2004; Ehlers et al., 1998; Lee et al., 2001; Tangney & Dearing, 2002).

Having self-compassion for oneself can help reduce feelings of shame, guilt, alienation, and self-criticism in individuals who have been traumatized (Barlow et al., 2017; DePrince et al., 2011; Gilbert et al., 2006; Johnson & O'Brien, 2013; Woods & Proeve, 2014). Gilbert and Procter (2006) proposed that traumatized individuals may not be able to access the self-soothing system, one of three evolved emotion systems. By perceiving one's traumatic experience as one that may be shared among others (i.e., common humanity) through self-compassion, and becoming attuned to one's own trauma-related distressing emotions through mindfulness, individuals may transform their appraisal of their trauma by adopting a new perspective on one's cognitive and emotional processes (Gilbert, 2014). This transformation may engage practices that reformulate a compassionate self-identity, leading to reduced distress following trauma.

Self-Compassion and Coping With Trauma

An individual's capacity and type of coping with trauma may also predict their course of recovery from a traumatic experience. Maladaptive coping mechanisms such as avoidant coping (e.g., engaging in escapism that avoids thinking or feeling anything related to an event) significantly predict greater posttraumatic stress disorder (PTSD) symptom severity following a traumatic event (Pineles et al., 2011). Notably, individuals high in self-compassion tend to use more adaptive coping strategies in stressful and traumatic situations (Allen & Leary, 2010; Seligowski et al., 2015). Adaptive coping strategies are commonly grouped into two broad types, based on their functionality: (a) emotion-focused strategies address the emotional distress associated with the traumatic event, using strategies such as seeking emotional support, accepting the reality of the event, and positively reframing the situation to gain a more balanced perspective; (b) problem-focused coping strategies directly address the problem causing the emotional distress—for example, active coping (taking active steps to address the stressor in question), planning (planning strategies to deal with the stressor/problem), and seeking instrumental support (seeking out advice, information, or assistance from individuals who can provide social support; Carver et al., 1989).

Neff (2003b) also demonstrated a significant role for self-compassion in reducing avoidance of unwanted thoughts, especially those that generate negative affect. Although individuals are initially fearful of engaging in self-compassion following trauma (Gilbert & Procter, 2006), Lawrence and Lee (2014) found that over time, engaging in explicit self-compassion practices, sometimes in the context of therapy, lets individuals experience more positive emotions, potentially allowing them to engage in more adaptive coping over time.

How Self-Compassion and Adaptive Coping Promote Posttraumatic Growth

Kleim and Ehlers (2009) found that traumatized individuals who experience shame or increased maladaptive rumination can still experience high levels of PTG 6 months later. The initial experience of distress may motivate individuals to search for new meanings and encourage adaptive coping strategies that lead to growth. Several studies have investigated the role of adaptive coping strategies that may be essential to PTG. Two meta-analyses (Helgeson et al., 2006; Prati & Pietrantonio, 2009) found that positive reappraisal/reframing and acceptance coping significantly predicted higher levels of PTG. Many studies have also found that using problem-focused coping (e.g., planning, active coping) predicts increased PTG (Aftyka et al., 2020; Dekel et al., 2011). Among clinical populations experiencing chronic illnesses, problem-focused coping and emotion-focused coping predict greater levels of PTG (Barskova & Oesterreich, 2009).

Sirois et al. (2015) found evidence for the use of problem-focused strategies (active coping, planning, and instrumental support) as mediators between self-compassion and stress in individuals with chronic illnesses. Wong and Yeung (2017) also demonstrated how self-compassion predicts PTG through positive reframing, an emotion-focused strategy. Thus, through self-compassion practices, people can process their trauma through a more positive lens and not overidentify with their negative emotions; they can recognize their

past suffering as shared with others and achieve a more balanced perspective on their feelings and situation (Allen & Leary, 2010). This may promote helpful emotion- and problem-focused strategies that improve emotion regulation of the negative consequences of trauma (Neff, 2003b).

Present Study

The present study examined the relationship between self-compassion, coping, and PTG in emerging adults who have undergone trauma. Wong and Yeung (2017) have shown that self-compassion significantly promotes acceptance and positive reframing—two emotion-focused coping strategies in trauma-exposed individuals—although self-compassion only indirectly predicted PTG through positive reframing. Yet no studies have examined the relationship between self-compassion, problem-focused coping, and PTG. Therefore, the current study additionally aimed to examine the potential underlying role of self-compassion as an indirect effect on PTG through emotion- (i.e., acceptance, positive reframing, and emotional support) and problem-focused strategies (i.e., active coping, planning, and instrumental support). We hypothesized a positive correlation between self-compassion, problem- and emotion-focused coping strategies, and PTG. Additionally, we hypothesized that adaptive problem- and emotion-focused coping strategies will mediate the relationship between self-compassion and PTG.

Method

Participants

Overall, 125 emerging adults participated in our study. Fourteen participants were excluded because they did not go past the demographic questions ($n = 6$), had incoherent responses ($n = 3$), only completed the consent form ($n = 3$), or did not complete any questionnaires ($n = 2$). Therefore, our final sample consisted of 111 emerging adults (aged 18 to 29; $M = 23.86$, $SD = 3.33$). Participants were recruited online, through advertisements posted at university campuses and community centers, and through Amazon's Mechanical Turk (MTurk). Participants had experienced a traumatic event at least 2 months ago and after the age of 12. Trauma was defined according to Criterion A of the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; *DSM-5*). Twenty-three participants living in the United States were recruited from MTurk, and 88 were recruited separately online from Toronto, Canada. Of the Canadians, 70.9% were born in Canada. MTurk workers and Canadians did not differ in gender; however, they did differ in education ($p = .03$, Fischer's exact test) and age, $t(89.17) = 7.18$, $p < .001$, with the MTurk workers ($M = 26.48$, $SD = 1.38$) having a higher average age than the Canadians ($M = 23.18$, $SD = 3.36$). Given these minor differences, and the convergence between laboratory and MTurk results (Johnson & Borden, 2012; Paolacci et al., 2010) and between online and MTurk sample composition (Roulin, 2015)—including those in trauma studies (Engle et al., 2020)—the results were pooled together.

In our study, 72.1% of the participants were female, 24.3% were male, 1.8% were transgender, and 1.8% were gender nonconforming. Most participants identified as White (49.5%), followed by South Asian (10.8%), East Asian (9%), Latin American/Hispanic (7.2%), Black (6.3%), Arab/West Asian (5.4%), Southeast Asian (3.6%), Filipino, West Indian (0.9%), and "Other" (6.3%).

Most participants completed a university undergraduate degree (36.9%), followed by some university (20.7%), high school diploma or GED (17.1%), postgraduate degree (14.4%), college or trade school (9%), and grade school (1.8%).

Approximately 41.4% of participants were receiving treatment for a mental health disorder. Of the participants, 47.7% had a diagnosis for a mental health disorder other than PTSD—more specifically, 38.7% depression, 27.9% generalized anxiety disorder, 18% social anxiety disorder, 9% obsessive compulsive disorder, 8.1% eating disorder, 7.2% panic disorder, 6.3% bipolar disorder, and 16.2% some other type of mental health disorder (e.g., attention-deficit/hyperactivity disorder, autism spectrum disorder, schizophrenia, and adjustment disorder). Overall, 64 participants met the cutoff criteria for probable PTSD (i.e., score of 31+), and 47 participants did not, with scores ranging from 0–75 (note that one participant did not complete a single item, but their overall score was above 31 and was therefore considered to meet the criteria for probable PTSD). Bovin et al. (2016) and Ashbaugh et al. (2016) determined a score of 31+ to be an appropriate score for a provisional diagnosis for PTSD in a sample of veterans and undergraduate students.

Measures

Brief COPE Inventory

The Brief COPE Inventory (Carver, 1997) was used to measure coping styles. This measure consists of 28 items with 14 subscales: acceptance (e.g., "I've been accepting the reality of the fact that it has happened"), positive reframing (e.g., "I've been trying to see it in a different light, to make it seem more positive"), emotional support (e.g., "I've been getting emotional support from others"), religion (e.g., "I've been trying to find comfort in my religion or spiritual beliefs"), humor (e.g., "I've been making jokes about it"), active coping (e.g., "I've been concentrating my efforts on doing something about the situation I'm in"), planning (e.g., "I've been trying to come up with a strategy about what to do"), instrumental support (e.g., "I've been getting help and advice from other people"), denial (e.g., "I've been saying to myself 'this isn't real'"), behavioral disengagement (e.g., "I've been giving up trying to deal with it"), self-distraction (e.g., "I've been turning to work or other activities to take my mind off things"), self-blame (e.g., "I've been criticizing myself"), substance use (e.g., "I've been using alcohol or other drugs to make myself feel better"), and venting (e.g., "I've been saying things to let my unpleasant feelings escape"). Each item is rated on a 4-point Likert scale, ranging from 1 (*I haven't been doing this at all*) to 4 (*I've been doing this a lot*). In the current sample, Cronbach's alpha was good ($\alpha = .88$).

Self-Compassion Scale

The Self-Compassion Scale (Neff, 2003a) is a 26-item measure used to assess self-compassion that consists of six subscales: self-kindness (e.g., "I'm kind to myself when I'm experiencing suffering"), self-judgment (e.g., "When times are really difficult, I tend to be tough on myself"), common humanity (e.g., "When I'm down and out, I remind myself that there are lots of other people in the world feeling like I am"), isolation (e.g., "When I'm feeling down, I tend to feel like most other people are probably happier than I am"), mindfulness (e.g., "When something painful happens I try to take a balanced view of the

situation”), and overidentified (e.g., “When I fail at something important to me I become consumed by feelings of inadequacy”). Each item is rated on a 5-point Likert scale, ranging from 1 (*almost never*) to 5 (*almost always*). Scores on the subscales are computed by finding the mean of the subscale item responses. A total score is calculated by reverse scoring the negative subscale items, computing the subscale means, and then computing a grand mean of all six subscale means. In the current sample, Cronbach’s alpha was acceptable ($\alpha = .78$).

PTSD Checklist

The PTSD Checklist for *DSM-5* (PCL-5) with Life Events Checklist for *DSM-5* and Criterion A (Weathers, Blake, et al., 2013; Weathers, Litz, et al., 2013) were used to assess what traumatic events participants experienced, PTSD symptom severity, and details about the event. The PCL-5 is a 20-item measure that assesses symptom severity of PTSD according to the *DSM-5* (e.g., “In the past month, how much were you bothered by: Feeling very upset when something reminded you of the stressful experience?”). Each item is rated on a 5-point Likert scale, ranging from 0 (*not at all*) to 4 (*extremely*). In the current sample, Cronbach’s alpha for the PCL-5 was excellent, $\alpha = .96$.

Posttraumatic Growth Inventory

The Posttraumatic Growth Inventory (Tedeschi & Calhoun, 1996) consists of 21 items to measure PTG on the following domains: relationships to others (e.g., “I have a greater sense of closeness with others”), new possibilities (e.g., “I established a new path for my life”), personal strength (e.g., “I know better that I can handle difficulties”), spiritual growth (e.g., “I have a better understanding of spiritual matters”), and appreciation of life (e.g., “I have a greater appreciation for the value of my own life”). Each item is rated on a 6-point Likert scale, ranging from 0 (*I did not experience this change as a result of my crisis*) to 5 (*I experienced this change to a very great degree as a result of my crisis*). Total scores are computed by summing all item responses. In the current sample, Cronbach’s alpha was excellent ($\alpha = .95$).

Procedure

The Research Ethics Board at the University of Toronto approved this study. Participants in Canada interested in participating online contacted the primary investigator through email, who sent them a unique code and link to fill out the online survey on Qualtrics. For participants on MTurk, a human intelligence task contained a similar description of the study and a link to participate in the survey. All participants gave informed consent before starting the survey. After completing the survey, participants were offered a meditation exercise (i.e., a body scan) and were given a list of mental health resources to access if they were feeling distressed.

Data Analysis

The data were checked for outliers, and none were found on our main variables of interest. Two participants did not complete the Self-Compassion Scale and were not included in the analyses. One other participant did not complete an item on the PCL-5, and therefore a total score could not be calculated. Pearson correlations were used to examine the relationship between self-compassion,

emotion-focused coping, problem-focused coping, PTG, and PTSD symptom severity. A hierarchical regression analysis was performed to determine whether self-compassion, active coping, instrumental support, and positive reframing predict PTG. Self-compassion was entered at Step 1, followed by the coping strategies in Step 2. The PROCESS Macro in SPSS 25.0 (Hayes, 2017)—a program that computes indirect and direct effects and uses bootstrapping to test hypotheses about indirect effects—was used to investigate whether active coping, instrumental support, and positive reframing acted as mediators in the relationship between self-compassion and PTG. Last, a linear regression was conducted to examine how self-compassion and PTG predict PTSD symptom severity.

Results

PTG was positively correlated with self-compassion, self-distraction, active coping, denial, emotional support, instrumental support, venting, positive reframing, planning, humor, acceptance, and religious coping but not substance use, behavioral disengagement, self-blame, or PTSD symptom severity. Moreover, self-compassion was positively correlated with active coping, instrumental support, positive reframing, and religious coping and negatively correlated with substance use, behavioral disengagement, self-blame, and PTSD symptom severity but was not correlated with self-distraction, denial, venting, humor, and surprisingly, emotional support, planning, and acceptance. PTSD symptom severity was also positively correlated with self-distraction, denial, substance use, behavioral disengagement, venting, planning, humor, and self-blame but not active coping, emotional support, instrumental support, positive reframing, acceptance, and religious coping (see Table 1 for all correlations).

Next, we ran a hierarchical regression analysis between self-compassion and PTG for active coping, instrumental support, and positive reframing (see Table 2). In Step 1, self-compassion significantly predicted PTG, $F(1, 107) = 9.57, p = .003$, and accounted for 8.2% of the variance in PTG. In Step 2, active coping, instrumental support, and positive reframing accounted for 41.7% of the variance in PTG over and above self-compassion, $F(3, 104) = 28.89, p < .001$. Self-compassion was also found not to predict PTG after accounting for the effect of active coping, instrumental support, and positive reframing.

A PROCESS analysis tested whether the association between self-compassion and PTG was mediated by active coping, instrumental support, and positive reframing. Figure 1 shows that the overall mediating effect between self-compassion and PTG was significant (the total indirect effect value is $.25, SE = .06, 95\% CI [.13, .37]$); likewise, the mediating effects of active coping ($a_1 \times b_1 = .11, SE = .04, [.03, .21]$), instrumental support ($a_2 \times b_2 = .05, SE = .03, [.0003, .13]$), and positive reframing ($a_3 \times b_3 = .09, SE = .04, [.02, .17]$) between self-compassion and PTG were also significant. Further, the mediating effects of active coping, instrumental support, and positive reframing were tested by the difference of mediating effect values. Results show that the differences between the mediating effect of active coping and instrumental support (mediating effect difference was $.06, SE = .06, [-.06, .18]$), active coping and positive reframing (mediating effect difference was $.03, SE = .06, [-.09, .15]$), and instrumental support and positive reframing (mediating effect difference was $-.03, SE = .05, [-.13, .06]$) were all nonsignificant.

Table 1
Correlations Between PTG, Self-Compassion, Coping, and PTSD Symptom Severity

Variables	N	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
1. Posttraumatic growth	111	49.89	26.20	—																
2. Self-compassion	109	2.77	0.77	.29**	—															
3. Self-distraction	111	5.84	1.78	.34**	-.19	—														
4. Active coping	111	4.66	1.79	.61**	.30**	.40**	—													
5. Denial	111	5.38	1.83	.58**	.17	.47**	.76**	—												
6. Substance use	111	3.44	1.89	-.06	-.23*	.11	-.03	.01	—											
7. Emotional support	111	5.10	2.03	.43**	.16	.24*	.26**	.37**	-.03	—										
8. Instrumental support	111	4.88	2.04	.49**	.22*	.28**	.36**	.42**	-.10	.78**	—									
9. Behavioral disengagement	111	3.87	1.90	-.12	-.30**	.13	-.03	-.13	.45**	-.20*	-.11	—								
10. Venting	111	4.56	1.78	.30**	-.15	.50**	.36**	.39**	.21*	.41**	.45**	.13	—							
11. Positive reframing	111	4.35	1.98	.55**	.34**	.23*	.54**	.47**	-.17	.29**	.38**	-.08	.25**	—						
12. Planning	111	4.87	2.04	.50**	.17	.41**	.62**	.66**	-.05	.30**	.49**	-.06	.42**	.58**	—					
13. Humor	111	3.80	2.13	.19*	-.05	.29**	.13	.11	.27**	.17	.18	.23*	.23*	.10	.30**	—				
14. Acceptance	111	6.13	1.61	.29**	.18	.18	.29**	.32**	-.18	.31**	.35**	-.10	.26**	.27**	.29**	.04	—			
15. Religious coping	111	3.85	2.30	.46**	.32**	.21*	.79**	.33**	-.01	.11	.28**	.09	.27**	.47**	.46**	.18	.21*	—		
16. Self-blame	111	4.52	1.92	.07	-.44**	.34**	.13	.20*	.35**	.04	.14	.47**	.39**	.09	.33**	.39**	.07	.09	—	
17. PTSD symptom severity	110	35.88	20.97	.18	-.33**	.43**	.14	.26**	.51**	.03	.08	.41**	.35**	.13	.25**	.30**	.01	.10	.52**	—

Note. PTG = posttraumatic growth; PTSD = posttraumatic stress disorder.
* $p < .05$. ** $p < .01$.

A linear regression was conducted to examine how self-compassion and PTG predict PTSD symptom severity. Together, self-compassion ($\beta = -.41, p < .001$) and PTG ($\beta = .29, p = .003$) significantly predicted PTSD symptom severity, $F(2, 105) = 11.73, p < .001$, and accounted for 18.3% of the variance in PTSD symptom severity.

Discussion

Overall, the majority of our hypotheses were supported. Self-compassion had an indirect effect on PTG through positive reframing, active coping, and instrumental support. Surprisingly, not all emotion- or problem-focused strategies were correlated with self-compassion, including planning (a problem-focused strategy), emotional support, and acceptance (two emotion-focused strategies). Chishima et al. (2018) similarly found no significant relationship between self-compassion, planning, emotional support, and acceptance. Although they found a significant relationship between self-compassion and positive reframing, no significant relationship was found between self-compassion, active coping, and instrumental support (Chishima et al., 2018). Previous research has found that acceptance coping was positively associated with positive self-compassion and PTG (Wong & Yeung, 2017) but did not find acceptance coping to mediate the relationship between positive self-compassion and PTG when considering all mediators (positive reframing, presence of meaning, acceptance) together. These differences may be attributed to population differences. Further studies are needed to examine these differences in trauma-exposed individuals.

Lazarus and Folkman (1987) suggested a person’s appraisal of an event and other situational factors may determine the type of coping strategy they engage in. Coping strategies, such as positive reframing, may be recruited in the initial phases of one’s posttraumatic life to help manage emotional distress (Lazarus & Folkman, 1984). Janoff-Bulman’s (1992) shattered assumptions theory states that PTG can still occur in the presence of distress following trauma through positive reframing. Although individuals may initially view the world as benevolent and meaningful, a traumatic event may shatter these assumptions, which may generate mental disorders. However, individuals may begin to build newer meanings more congruent with their current experiences through positive reframing, which can facilitate growth from adversity that may co-occur with one’s current distress (Joseph, 2011). As an individual ascribes new meaning to their posttraumatic world and progressively manages their emotional distress, problem-focused coping approaches may also be recruited to manage their posttraumatic cognitions and feelings and to establish specific behavioral strategies to tackle them (Lazarus & Folkman, 1984). Although traumatic events may diminish someone’s perception of control, self-compassion’s association with increased perceived controllability and adaptive coping strategies may also explain why PTG arises through these problem-focused approaches (Bolstad & Zinbarg, 1997; Chishima et al., 2018; Zoellner & Maercker, 2006). An internal locus of control may be promoted through the recruitment and use of personal resources, which may promote the engagement in adaptive problem-focused strategies (Zoellner & Maercker, 2006). Increased self-compassion may encourage individuals to seek instrumental support or engage in active coping, which in turn may help them positively reinterpret their traumatic

Table 2
Hierarchical Regression Predicting Posttraumatic Growth

Variables	R^2	ΔR^2	B	$SE(B)$	β	p value
Step 1: Self-compassion	.08	.08	9.76	3.16	.29	.003**
Step 2: Self-compassion	.50	.42	1.22	2.55	.04	.63
Active coping			5.51	1.24	.38	<.001***
Instrumental support			3.15	.99	.25	.002**
Positive reframing			3.33	1.14	.25	.004**

Note. SE = standard error.
** $p < .01$. *** $p < .001$.

experiences and associated threats, regaining a sense of control and promoting the development of PTG.

Self-compassion-based treatments may be instrumental in reducing negative core emotions that develop following trauma. A recent study found compassion-based therapy significantly reduced trauma-related shame and PTSD symptoms, along with significant increases in self-compassion and decreases in self-blame (Au et al., 2017). Indeed, self-compassion-based psychotherapies should provide additional benefits to individuals experiencing trauma-related shame and other PTSD symptomatology.

Limitations and Future Directions

Our study has several limitations, including the use of self-report measures and a cross-sectional design. Our sample mainly consisted of young women between 18 and 29 years of age residing in a large city in Canada who met criteria for a variety of clinical disorders. Additional research would be needed to see whether these results are the same for men, for other age groups (e.g., older adults), and for different geographical regions. One interesting finding was that denial had the highest correlation with PTG. This is supported by previous research that has found an association between denial and PTG (Helgeson et

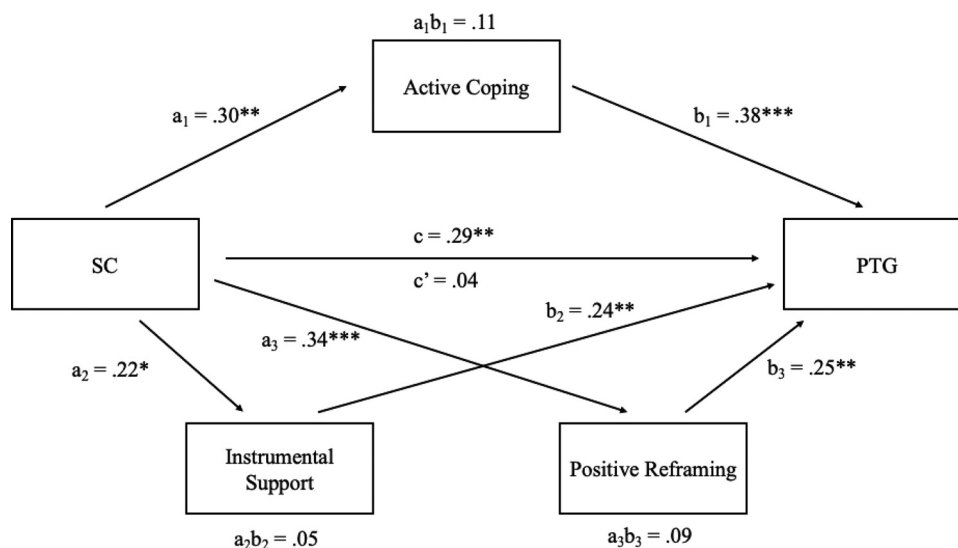
al., 2006), especially as an early coping strategy (Butler et al., 2005), but future studies should examine this relationship further.

Future research could also expand on our findings to examine the unique variance of mindfulness and self-compassion in predicting PTG or levels of PTG in longitudinal designs following treatment through self-compassion-based interventions that promote adaptive coping. The evaluation of self-compassion using multimethod experimental measures (e.g., behavioral or experience sampling methods) is also needed. In our sample, 57.7% met probable diagnosis for PTSD using a self-report measure. Future studies may want to assess whether these results also translate in PTSD populations. Finally, examining whether potential mediators found in the current literature (e.g., trauma appraisal) predict PTG in different trauma samples—for example, individuals with different disorders or different trauma types (e.g., sexual assault vs. emotional abuse)—may further advance a more holistic understanding of how to expand outcomes beyond symptom reduction in clinical populations.

Conclusions

Based on the results of this study, self-compassion appears to have an indirect effect on PTG through active coping, instrumental

Figure 1
Mediation Between Self-Compassion and Posttraumatic Growth



Note. Standardized regression coefficients for the relationship between self-compassion (SC) and posttraumatic growth (PTG), as mediated by coping.
* $p < .05$. ** $p < .01$. *** $p < .001$.

support (problem-focused strategies), and positive reframing (emotion-focused strategy). Because of the established negative relationship between self-compassion and negative trauma appraisal (Barlow et al., 2017; DePrince et al., 2011; Johnson & O'Brien, 2013; Woods & Proeve, 2014) and the influence of negative trauma appraisal on trauma-related distress, posttraumatic symptoms, and a range of self-blaming behaviors (e.g., self-criticism, guilt, and shame; Lee et al., 2001; Tangney & Dearing, 2002), engaging in self-compassionate practices may lead to less overidentification with one's negative emotions and promote greater emotional self-management, allowing individuals to begin to positively reframe their posttraumatic world in a more balanced way. This reframing through self-compassion may also increase perceived controllability and reduce the perceived threat of the traumatic experience and other subsequent stressors (Chishima et al., 2018), which may also promote engagement in problem-focused coping (Compas et al., 1991). Together, positive reframing and problem-focused coping may promote increased PTG.

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