Social Support Mediates the Relationship between Trauma Centrality and Posttraumatic Growth and Stress

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Introduction

◆ Numerous factors influence whether individuals experience lasting distress (e.g., posttraumatic stress disorder [PTSD]) or positive change (e.g., posttraumatic growth [PTG]) following trauma exposure.

◆ The Centrality of Event Scale (CES) measures the extent to which traumatic memories are viewed as turning points in a person's life and are used as central references for understanding personal identity and meaning of other life events.

◆ Centrality appraisals have positively predicted both PTSD and PTG, independently of other related factors such as coping style, cognitive style of processing, challenges to core beliefs, and rumination, (see Boals et al., 2011; Groleau et al., 2012).

◆ The valence (i.e., positive vs. negative) of centrality appraisals may differentially predict post-trauma experiences, but this has yet to be assessed.

◆ The current investigation explored whether referencing a traumatic event as central and negative, or as central and positive, differentially predicts symptoms of PTSD and PTG.

◆ Interpersonal support was assessed as a mediator between the valence of trauma centrality and PTSD and PTG, respectively.

Methods

◆ A total of 519 American community members (52% men; M_{age} = 47.98, SD = 11.71) completed self-report measures online as part of a larger data collection project exploring trauma responses.

◆ Self-report measures included:
   ◆ PTSD Checklist for DSM-5 (PCL-5; Weathers et al., 2013)–20 items rated on a 5-point Likert scale.
   ◆ Posttraumatic Growth Inventory (PTGI; Tedeschi & Calhoun, 1996)–21 items rated on a 6-point Likert scale.
   ◆ Interpersonal Support Evaluation List, Short Form (ISEL-SF; Cohen et al., 1985)–12 items rated on a 4-point Likert scale.
   ◆ Centrality of Event Scale Modified (CES-M; Berntsen & Rubin, 2006)–original 20 items administered using a bivalent Likert scale ranging from -4 (*Totally Agree, for the Worse*) to +4 (*Totally Agree, for the Better*). Responses of *Disagree* or *Don't Know* were scored as 0.

◆ Regression analyses were used to examine whether positive or negative ratings of event centrality differentially predicted PTSD and PTG.

◆ Mediation analyses were used to determine whether interpersonal support mediated the relationship between event centrality and trauma responses.

Results

◆ All variables of interest were correlated (all *p*s <.05) in theoretically consistent ways (i.e., ISEL-SF and CES-M scores were negatively correlated with PCL-5 scores and positively correlated with PTGI scores; see Table 1).

◆ Ratings of event centrality negatively correlated with PTSD symptoms, but accounted for minimal variance in scores (1%; see Table 2).

◆ Ratings of event centrality positively correlated with PTG symptoms, and accounted for a significant proportion of variance (21%; see Table 3).

◆ Social support mediated the relationship between ratings of event centrality and symptoms of PTSD (see Figure 1), albeit a small indirect effect (κ^2 =.03, 95% CI [0.014, 0.059]).

◆ Social support mediated the relationship between ratings of event centrality and symptoms of PTG (see Figure 2), albeit a small indirect effect (κ^2 =.03, 95% CI [0.014, 0.060]).

Note: An exploratory factor analysis (principal axis factoring, direct oblimin rotation; Field, 2013) was conducted on the CES-M prior to all other analyses. Eigenvalues (>1), Cattell's Scree test, and parallel analysis suggested a unitary factor structure including all 20 items that accounted for 59% of the variance (all items loadings were >.48).

Discussion

◆ How individuals reference traumatic experiences for understanding themselves and subsequent experiences differentially predicts post-trauma reactions.

◆ Appraising traumatic events positively and as central references appears related to PTG, whereas appraising traumatic events negatively and as central references appears related to PTSD.

◆ Positive and central appraisals of traumatic events appear to predict greater social support, which in turn influences whether an individual experiences distress or growth following trauma. More central and positive appraisals may help prevent individuals from isolating themselves following trauma, which may in turn contribute to growth rather than distress.

◆ Explicit assessment of event centrality and the valence of appraisal may facilitate therapeutic planning for cognitive restructuring. For example, knowing that a client is appraising a traumatic experience in a negative way can guide a clinician to work on challenging or reframing some of the beliefs to be more positive.

◆ Assessment of the valence of event centrality may also help to inform clinicians as to which clients are at greater risk of isolating themselves, and in turn, who might benefit the greatest from facilitated peer-support programs (Dallaire, 2012).

Table 1
Pearson Correlations

	M	SD	1	2	3
1. PCL-5	20.15	18.37			
2. PTGI	65.33	27.25	.28**		
3. ISEL-SF	34.04	8.12	-.19**	.24**	
4. CES-M	9.19	33.08	-.10*	.45**	.18**

Note. PCL-5 = PTSD Checklist for DSM-5; PTGI = Posttraumatic Growth Inventory; Interpersonal Support Evaluation List, Short Form; CES-M = Centrality of Event Scale Modified.
*significant at the 0.05 level (2-tailed); ** significant at the < .001 level (2-tailed).

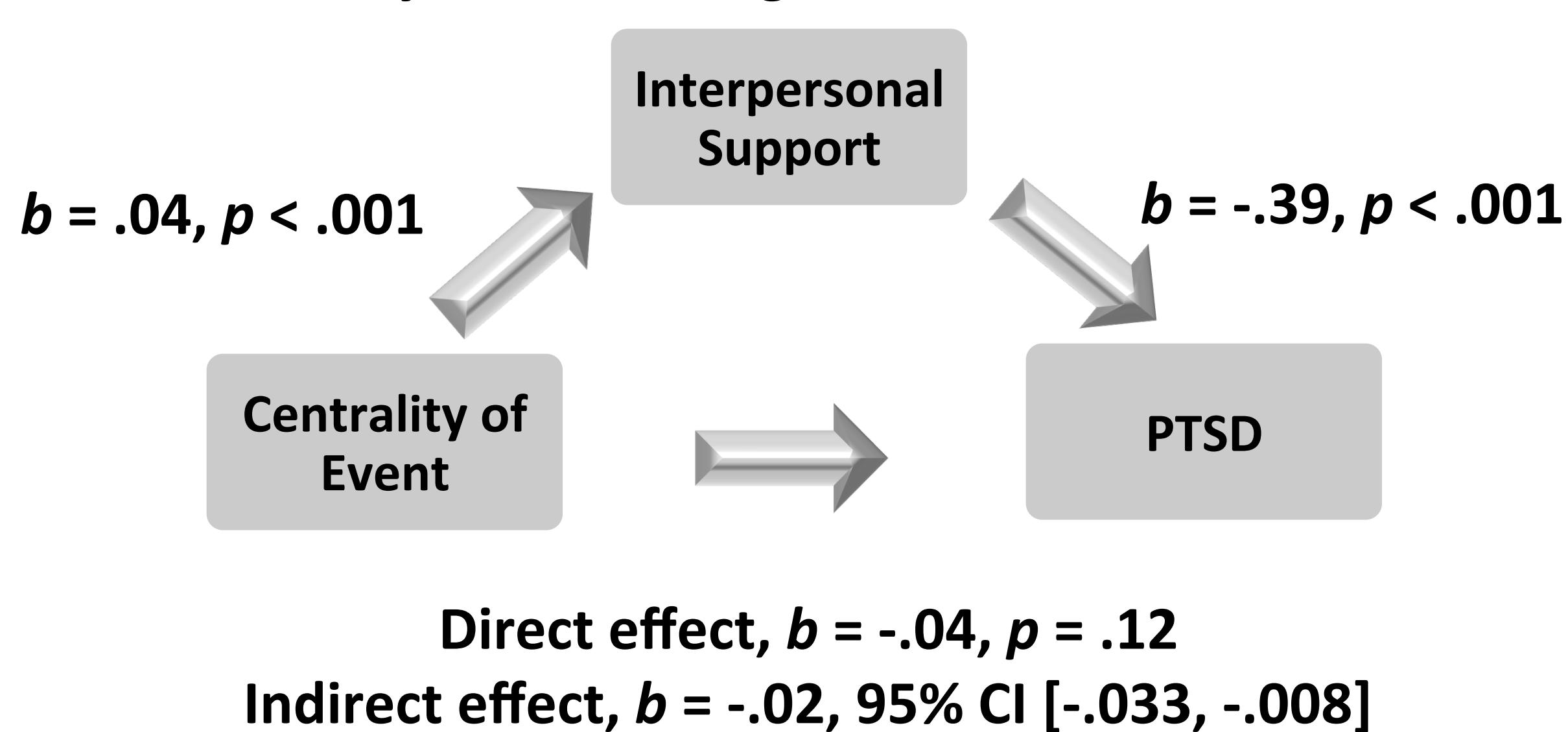### Table 2
Linear Regression Predicting PCL-5

Independent variable	Coefficients				Model Statistics		
	b	β	t	p	R^2	F	p
CES-M	-.06	-.10	-2.31	.021	.10	5.34	.021

Table 3
Linear Regression Predicting PTGI

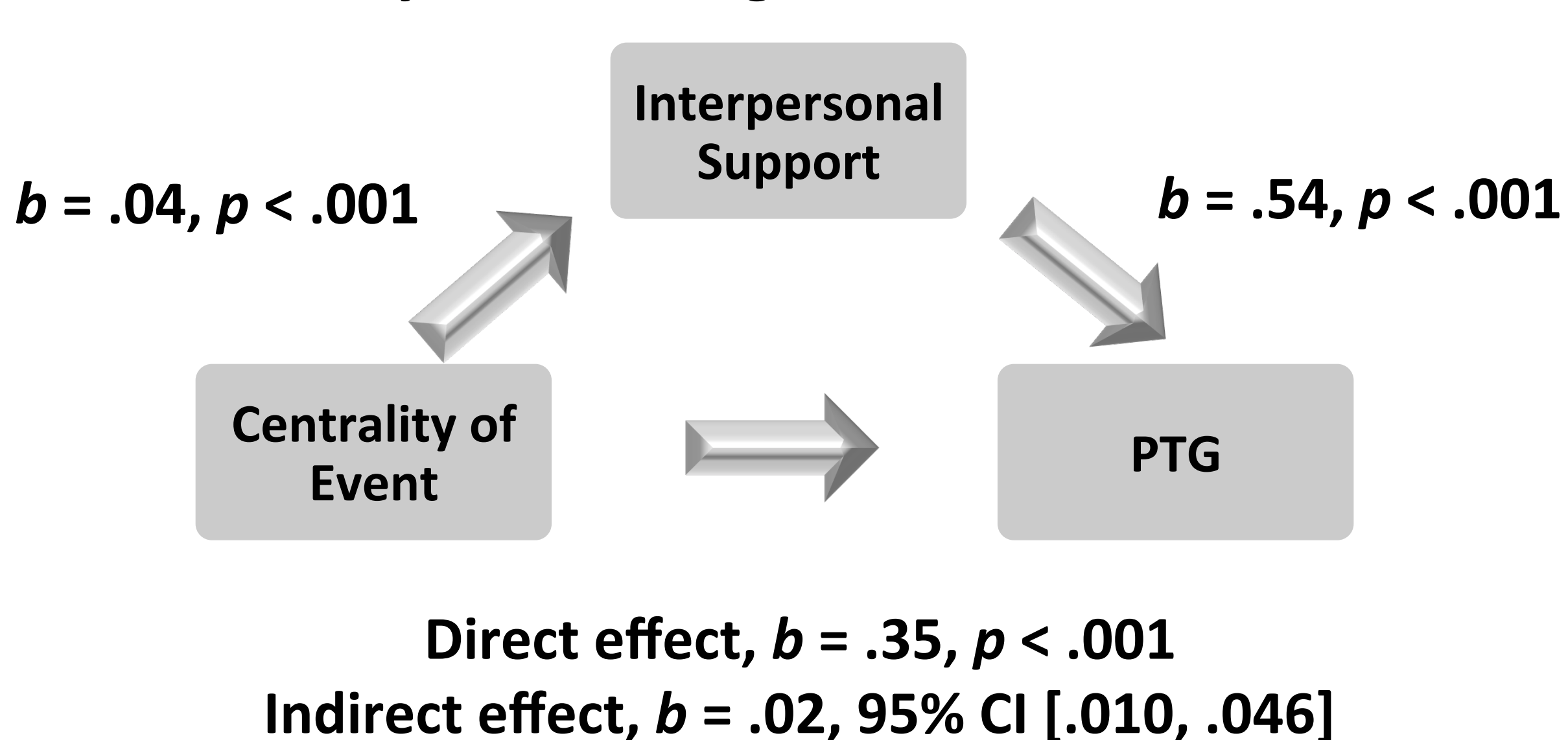| Independent variable	Coefficients				Model Statistics		
	b	β	t	p	R^2	F	p
CES-M	.37	.45	11.58	<.001	.21	134.11	<.001

Note. PCL-5 = PTSD Checklist for DSM-5; PTGI = Posttraumatic Growth Inventory; CES-M = Centrality of Event Scale Modified.

Figure 1
Mediation Analysis Predicting PCL-5

Centrality of Event → Interpersonal Support: b = .04, p < .001
Interpersonal Support → PTSD: b = -.39, p < .001

Direct effect, b = -.04, p = .12
Indirect effect, b = -.02, 95% CI [-.033, -.008]

Note. PCL-5 = PTSD Checklist for DSM-5; PTSD = Posttraumatic Stress Disorder.

Figure 2
Mediation Analysis Predicting PTGI

Centrality of Event → Interpersonal Support: b = .04, p < .001
Interpersonal Support → PTG: b = .54, p < .001

Direct effect, b = .35, p < .001
Indirect effect, b = .02, 95% CI [.010, .046]

Note. PTGI = Posttraumatic Growth Inventory; PTG = Posttraumatic Growth.