Explanatory Style as a Moderator between Negative and Potentially Traumatic Life Events and PTSD Symptoms

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ABSTRACT

- Individual characteristics and cognitive interpretation of events may be partially responsible for determining the effect of negative and potentially traumatic events on one’s psychological health.
- Our study examines optimistic explanatory style as a potential moderator of the relationship between negative and potentially traumatic life events and symptoms of Post Traumatic Stress Disorder.
- Results suggest that traumatic events are significantly positively associated with PTSD symptoms and that optimistic explanatory style moderates this relationship.

INTRODUCTION

- Individuals who experience negative and potentially traumatic life events are at increased risk for developing symptoms of Post Traumatic Stress Disorder (PTSD; Ozer, Best, Lipsey & Weiss, 2008).
- PTSD symptoms include recurrent images of the traumatic event, avoidance of people, things and places that share characteristics of or symbolize the trauma, and hyperawareness of one’s surroundings (American Psychiatric Association, 2000).
- An estimated 50-60% of the general population experience trauma in their lifetime, and 10-40% of those individuals will develop PTSD (Haden, Scarpa, Jones & Ollendick, 2007).
- In a study of college students, 67% reported having experienced a past traumatic event (Bernat, Ronsfeld, Calhoun, & Arias, 1998).
- Not all individuals that experience negative and potentially traumatic life events develop symptoms of PTSD, suggesting that other factors, such as individual psychological characteristics, influence the effect of stressors.
- Explanatory style, or one’s tendency to explain causes for good or bad events in a consistent manner, may influence the experience of negative life events (Burns & Seligman, 1989).
- Optimistic explanatory style refers to transient, specific and external accounts for negative events, whereas pessimistic attributional style refers to a stable, global and internal explanation for negative life events (Ho, Chu & Yu, 2008).
- Optimistic explanatory style is associated with improved mental health outcomes, such as reduced depression and suicidal behavior (Hirsch et al, 2008; Puskar et al., 1999), and a similar effect might be expected with PTSD symptoms.
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- Our study examines the role of optimistic explanatory style as a potential moderator of the association between negative and potentially traumatic life events and PTSD symptoms.

METHODS

Participants:
- Undergraduate volunteers (N=138; 73.9% female) from a rural, Eastern state college
- Ethnicity: White (91%), Black (5%), Native American (2%), Hispanic (2%), Asian/Pacific Islander (1%)
- Mean Age=22.6 (SD=6.1); Range=18-57 years

Measures:
- Expanded Attributional Style Questionnaire (EASQ; Peterson & Villanova, 1988)
  - Contains 24 scenarios of negative life events which subjects rate according to internality, stability and globality
  - Trauma Scale: A clinical checklist of negative and potentially traumatic life events that a subject might have experienced
  - PTSD Symptoms Scale: Checklist containing 17 items assessing the presence and severity of PTSD symptoms.

RESULTS

- At least one negative and potentially traumatic life event was experienced by the majority of our sample (N=110; 82%).
- On average, each person in the sample experienced approximately 4 (M = 3.78, SD = 3.45) negative and potentially traumatic life events, with a range of 0-17.
- Negative and potentially traumatic life events were significantly positively correlated with number of PTSD symptoms (r = .51, p < .001).
- Optimistic explanatory style was significantly negatively correlated with PTSD symptoms (r = -.40, p < .001; See Table 1).
- A hierarchical linear regression, controlling for age, gender and depressive symptoms, indicated that explanatory style moderated the association between negative life events and PTSD symptoms (ΔR² = .06, β = .006, SE = .002, β standardized = .25, p < .01).

Table 1: Gender Age Trauma PTSD Depression Symptoms

| Age | -0.01 |
| Trauma | -0.06 | 32** |
| PTSD Symptoms | .12 | .14 | 51*** |
| Depression | .14 | -.10 | -.27** | .45*** |

Optimistic Explanatory Style

- Optimistic Explanatory Style: .00 | -.06 | -.22*** | -.40*** | -.51***

Note: *** p < .001, ** p < .01, * p < .05
For gender, 0 = male, 1 = female

DISCUSSION

- As hypothesized, the experience of negative and potentially traumatic life events was significantly related to increased PTSD symptomology, and the presence of optimistic explanatory style was significantly related to reduced PTSD symptoms. Further, optimistic explanatory style moderated the association between trauma and PTSD symptoms.
- In the context of having experienced one or more negative and potentially traumatic life events, individuals with an optimistic explanatory style were less likely to experience post traumatic stress symptoms.
- These findings are consistent with previous research supporting optimistic explanatory style as a potential buffer in the relationship between life stress and psychopathological symptoms, such as depression and suicide ideation (Hirsch et al., 2008; Joseph, Yule, & Williams, 1993).
- Importantly, the moderating role of explanatory style was supported even after controlling for the effects of age, gender and depressive symptoms, which are known risk factors for PTSD symptoms following trauma.
- The manner in which an individual explains a traumatic life event may have consequences for the development of psychiatric symptoms, including emotional and stress reactions and PTSD symptoms.

LIMITATIONS

- Use of a college sample may limit generalizability.
- Use of cross-sectional data precludes causal inference.
- Bidirectionality in the relationship between explanatory style and the experience of negative and potentially traumatic life events may exist, and should be examined.

IMPLICATIONS

- For patients, promotion of an optimistic explanatory style may buffer against the deleterious effects of negative and potentially traumatic life events.
- Attributional style modification therapy (Milgrim, 1985), and other Cognitive Therapies, focus on changing cognitions about event causality and transforming pessimistic explanations into optimistic explanations.
- Future longitudinal, community and clinical research are needed to further examine explanatory style moderating PTSD symptoms.

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