Nature of Trauma and Type of Exposure Influence PTSD Symptom Presentation

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Introduction

- PTSD can develop in response to a variety of traumatic events, including sexual assault, physical assault, and other shocking events. These traumatic events may be experienced directly or indirectly.
- Research suggests that the nature of a traumatic event and type of exposure influence PTSD symptom presentation.
  - Sexual assaults have been associated with greater PTSD symptom severity compared to motor vehicle accidents and the sudden death of a loved one (Kelley et al., 2009; Lancaster et al., 2014).
  - Directly experienced traumatic events have been associated with an increased risk of developing PTSD symptoms and a greater number of PTSD symptoms compared to indirectly experienced traumatic events (May & Wisco, 2016).
- Limited research has examined differences in PTSD symptom presentation associated with both the nature and type of exposure to the traumatic event. The current study examines whether the nature of a traumatic event and type of exposure influence overall PTSD symptom severity and symptom profile.

Methods

Participants and Measures

- Participants were 744 trauma-exposed community adults who completed the Life Events Checklist - 5. This involved identifying the most stressful event (index trauma) and reporting how they experienced the event (e.g., "it happened to me directly," "I witnessed it"; Weathers et al., 2013).
- Participants also completed the PTSD Checklist for *DSM*-5 (PCL-5; Weathers et al., 2013) based on the index trauma ($M = 23.76$, $SD = 19.25$, range: 0-80)
- Participants were 51.4% female ($n = 397$), mean age was 48.2 ($SD = 11.92$).

Analyses

- Index traumas were classified by type of exposure (direct, $n = 504$; indirect, $n = 246$) and type of trauma (sexual assault, $n = 83$; physical assault, $n = 182$; shocking events, e.g., natural disasters and sudden accidental deaths, $n = 508$).
- PCL-5 items were used to create standardized subscale scores that reflected *DSM*-5 PTSD symptom clusters (i.e., reexperiencing, avoidance, hyperarousal, and NACM; APA, 2013).
- Profile analyses were used to (1) determine whether the symptom profiles for direct and indirect traumas differed, and (2) to assess differences in symptom profiles for different trauma types (i.e., sexual, assault, or shocking) within each exposure type (i.e., direct or indirect).
- Paired and independent samples t-tests were used to evaluate differences at the symptom level.
- Indirect sexual traumas were excluded from analysis due to a limited number cases ($n = 6$).

Figure 1. PTSD symptom profiles by exposure type.

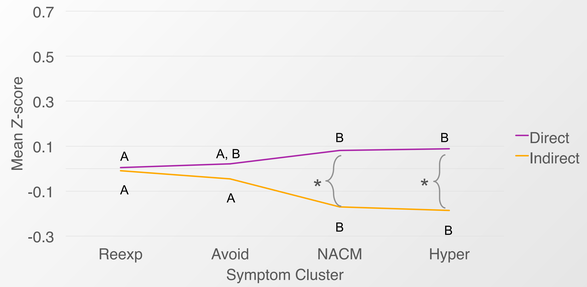


Figure 2. PTSD symptom profiles by type of trauma for directly experienced traumas.

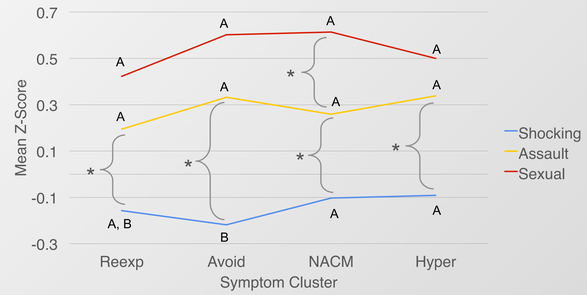
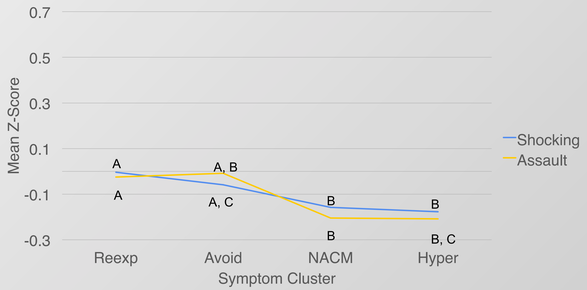


Figure 3. PTSD symptom profiles by type of trauma for indirectly experienced traumas.



Note. Reexp = reexperiencing; Avoid = avoidance; NACM = negative alterations in cognition and mood; Hyper = hyperarousal. Asterisks (i.e., *) denote significant differences in symptom cluster scores between trauma types ($p < .05$). Differing superscript letters denote significant differences between symptom clusters within each trauma type.

Results

Direct vs. Indirect Exposure Profile Analysis (Figure 1):

- Direct traumas were associated with more symptom severity, $\eta_p^2 = .006$, $F(1, 742) = 4.809$, $p = .029$.
- No main effect of symptom cluster, $\eta_p^2 = .002$, $F(3, 2226) = 1.216$, $p = .302$.
- There was a significant interaction between type of exposure and symptom cluster, $\eta_p^2 = .013$, $F(3, 2226) = 9.661$, $p < .001$. Direct traumas were associated with more severe NACM and hyperarousal ($ps \leq .001$), but did not differ from indirect traumas on reexperiencing and avoidance ($ps \geq .395$).

Direct Exposure Only Profile Analysis (Figure 2):

- There was a main effect of trauma type, $\eta_p^2 = .083$, $F(2, 501) = 22.811$, $p < .001$. Post hoc tests revealed that assaults (sexual and physical) were associated with greater symptom severity compared to shocking events ($p < .001$).
- No main effect of symptom cluster, $\eta_p^2 = .005$, $F(2.8, 1417.2) = 2.654$, $p = .051$.
- There was a significant interaction between type of trauma and symptom cluster, $\eta_p^2 = .008$, $F(5.7, 1417) = 2.144$, $p = .50$. Compared to shocking events, sexual and physical assaults were associated with greater severity for all symptom clusters ($ps \leq .002$). Compared to physical assaults, sexual assaults were only associated with more severe NACM ($p = .024$)

Indirect Exposure Only Profile Analysis (Figure 3):

- The main effect of trauma type was not significant, $\eta_p^2 < .000$, $F(1, 238) = .011$, $p = .917$.
- A main effect of symptom cluster ($\eta_p^2 = .028$, $F(2.6, 611.2) = 6.771$, $p < .001$) revealed that reexperiencing and avoidance were more severe than hyperarousal and NACM ($ps \leq .012$)
- The interaction between type of trauma and symptom cluster was not significant, $\eta_p^2 = .001$, $F(2.6, 611.2) = 0.351$, $p = .757$.

Discussion

- This study is the first to examine how symptom profiles vary according to trauma and exposure type.
- When traumas are directly experienced, sexual and physical assaults are associated with greater symptom severity compared to shocking traumas, and sexual assaults are associated with more NACM compared to physical assaults.
- When traumas are indirectly experienced, shocking events and physical assaults are not associated with different symptom profiles; however, indirectly experienced traumas are characterized by relatively less severe NACM and hyperarousal compared to reexperiencing and avoidance.
- Although further research is needed, the results suggest that PTSD treatment outcomes may vary depending on the type of trauma and whether the trauma was experienced directly or indirectly. Future research should assess if nature and type of trauma influence treatment outcomes and evaluate the effectiveness of different PTSD interventions for specific symptom profiles.

For more information about this project contact the presenting author: amerongk@uregina.ca

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