

Childhood Trauma and Emotional Reactivity to Hypothetical Media Events: A Pilot Study

To the Editor: Early adverse events in childhood, including abuse, may be associated with hypothalamic-pituitary-adrenal axis hyperresponsiveness^{1,2} as well as emotional and psychophysiological reactivity³⁻⁵ (eg, hyperreactivity with the observation of negative images⁶). Indeed, emotional hyperreactivity is one of the potential findings in bona fide posttraumatic stress disorder (PTSD).⁷ In this study, we examined emotional responses to positive, negative, and neutral forms of hypothetical media events as a function of history of childhood trauma.

Method. Participants were male and female outpatients, aged 18 or older, being seen for outpatient medical care by residents in internal medicine. Exclusion criteria were cognitive (eg, dementia), medical (eg, pain), or intellectual impairment that would preclude the successful completion of a survey booklet. Respondents (N = 70) consisted of 18 men and 52 women, ranging in age from 18 to 84 years (mean = 41.31, SD = 15.46). Most participants were white (91.4%, n = 64), with 3 being African American, 2 hispanic, and 1 Native American. Only 11.4% (n = 8) had not graduated from high school; 54.3% (n = 38) had earned a high school diploma, 15.7% (n = 11) had completed some college coursework but not a degree, 11.4% (n = 8) had earned an undergraduate degree, and 7.1% (n = 5) had earned a graduate degree.

During the appointment, patients were invited into the project as time allowed (ie, a sample of convenience). Participants completed a 6-page research booklet that explored demographic information and emotional reactions to 21 author-developed hypothetical media events. Each item was assessed by the respondent as negative or positive. Then, using a 5-point Likert-style scale, respondents were asked to rate the intensity of their emotional reaction to each event from "very minimal" to "very strong." Finally, with yes/no response options, participants were asked about any childhood history (ie, before age 12) of sexual, physical, or emotional abuse; the witnessing of violence; and/or physical neglect. Each form of abuse was followed by a brief explanation or definition.

Results. To create scales for the media items corresponding to positive, negative, and neutral forms of media events, respondents' ratings were subjected to factor analysis. Based on these results, as well as examination of scale reliabilities with and without potential items, 3 such scales were constructed (ie, positive items, negative items, and neutral items), each comprising 5 items (see Table 1).

The positive items (1, 3, 5, 6, 14) demonstrated an internal consistency coefficient (α) of .85, and each item was rated as positive by 83%–92% of respondents. The negative items (2, 7, 13, 15, 21) demonstrated an internal consistency coefficient (α) of .94, and each item was rated as negative by 67%–80% of respondents. The neutral items (9, 10, 12, 19, 20) demonstrated an internal consistency coefficient (α) of .84, and each item was rated as positive by 59%–86% of respondents.

We next calculated the correlations between the number of different forms of childhood trauma experienced and ratings of the intensity of emotional reactions to positive ($r = 0.16$, $P < .24$), negative ($r = 0.24$, $P < .08$), and neutral ($r = 0.37$, $P < .01$) media events. The mean rating of the neutral items

by participants with no childhood trauma was 1.68, whereas it was 2.34 for those with at least one form of childhood trauma. Note that while the absolute differences are relatively small in magnitude from a clinical perspective, they provide some modest sense of subtle between-group differences.

These findings support the current literature by indicating that traumatized individuals may display hyperreactive responses to environmental stimuli. However, a novel finding is that participants demonstrated overreactivity only to neutral or possibly ambiguous events. Previous literature indicates a likely overreactivity to negative events, as in PTSD. Perhaps less traumatized individuals show different patterns of reactivity (eg, hyperresponses to ambiguous stimuli), which is potentially relevant for clinicians working in the field of trauma.

The limitations of this study include the small sample size, the self-report nature of the data, and the use of a nonstandardized assessment of childhood trauma. However, these are unexpected and novel findings, and they provide some potential direction for the clinician in terms of symptom inquiry and treatment.

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See Table 1 on page e2.

Table 1. Categorization of Hypothetical Media Items

Positive items

- Birth announcement of a baby of a famous couple
- Job promotion notice of a friend in the local newspaper
- Announcement for a blood drive in the local newspaper
- Wedding announcement of a friend in the newspaper
- College graduation announcement of a friend in the newspaper

Negative items

- Automobile accident involving a grisly death
- Media coverage of a student shooting incident in a high school in the region
- Media coverage of an abandoned baby who died
- Television coverage of a child mauled by a dog
- Newspaper coverage of a child that has been abducted and is still missing

Neutral items

- Newspaper coverage of a local dog show
 - Advertisements for new cars by a local dealership
 - Newspaper announcement of a book sale at the local library
 - Media coverage of the opening of a local flower shop
 - Newspaper announcement about a remarkable improvement in the local economy
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