The Frequency and Impact of Exposure to Potentially Traumatic Events Over the Life Course

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Abstract

We examined the frequency and impact of exposure to potentially traumatic events among a nonclinical sample of older adults \(n = 3,575\), a population typically underrepresented in epidemiological research concerning the prevalence of traumatic events. Current PTSD symptom severity and the centrality of events to identity were assessed for events nominated as currently most distressing. Approximately 90% of participants experienced one or more potentially traumatic events. Traumatic events that occurred with greater frequency early in the life course were associated with more severe PTSD symptoms compared to events that occurred with greater frequency during later decades. Early life traumas did not, however, predict greater centrality to identity. Results underscore the differential impact of traumatic events experienced throughout the life course. We conclude with suggestions for further research concerning mechanisms that promote the persistence of post-traumatic stress related to early life traumas and empirical evaluation of psychotherapeutic treatments for older adults.
The Frequency and Impact of Exposure to Potentially Traumatic Events Over the Life Course

Older adults are an ideal population within which to examine the prevalence and impact of exposure to traumatic events. They have lived long enough to potentially be exposed to many types of trauma, and in general they have the requisite cognitive functions to report their experiences. Furthermore, research on older adults allows the persistence of symptoms associated with traumatic events experienced at different points throughout the life course to be examined. Despite these advantages, most studies concerning lifetime trauma exposure have examined young adults (e.g., Breslau, Davis, Andreski, & Peterson, 1991), military veterans (e.g., Schnurr, Spiro, Vielhauer, Findler, & Hamblen, 2002), or samples ranging broadly in age with older adults omitted (Kessler, Sonnega, Bromet, Hughes, & Nelson, 1995). The generalizability of results from these studies to the prevalence of traumatic events over the life course is questionable given the increasing likelihood of encountering a traumatic event with age (Creamer & Parslow, 2008; Glaesmer, Gunzelmann, Braehler, Forstmeier, & Maercker, 2010). Moreover, studies that rely primarily on young adult samples may underestimate the prevalence of age-dependent events, such as personal illness, that occur with greater frequency later in life. Likewise, research with military samples overestimates the prevalence of war-related trauma compared to the frequency of such events in the general population. The present study was designed to expand the limited knowledge concerning the prevalence and impact of lifetime trauma exposure among community-dwelling older adults to advance our understanding of the extent to which the negative consequences of traumas that are experienced throughout the life course persist and cause distress during older adulthood.
Results from the few existing studies that included subsamples of community-dwelling older adults indicate that most older adults experience at least one traumatic event during their lifetime (Norris, 1992), and that rates of exposure among older adults can be higher than the rate of exposure among younger individuals. For example, Spitzer et al. (2008) found that 76.5% of individuals aged 65 and older reported one or more traumatic life events, an approximate 4-fold increase compared to the rate of exposure among the young adult and middle-aged participants.

Research concerning the consequences of trauma exposure among older adults suggests that the severity of post-traumatic outcomes may depend on the nature and timing of the event. In a study that included subsamples of older adults from six European countries, the types of potentially traumatic events that were most strongly associated with PTSD tended to be interpersonal in nature (e.g., rape, partner violence, being beaten by a caregiver; Darves-Bornoz et al., 2008). Studies concerning the impact of trauma as a function of age-at-exposure have produced inconsistent results, with some studies indicating that young adulthood and midlife traumatic events more strongly predict negative posttraumatic outcomes during older adulthood (Dulin & Passamore, 2010; Krause, 2005) and other research showing that traumas experienced after age 50 are most consequential for late life mental health (Shrira, Shmotkin, & Litwin, 2012). Still other research has shown that the detrimental effects of trauma are greater for events encountered early in development (e.g., Colbert & Krause, 2009).

More detailed information concerning when particular types of traumas are likely to occur and the types of events that are most likely to cause distress during older adulthood is needed to clarify these findings and to advance our understanding of factors that promote adverse posttraumatic outcomes among older adults. Research aimed at identifying the aspects of traumatic
experiences that contribute to current distress among older adults may also inform clinical practice
and ultimately improve treatment services for older individuals. Such research is becoming
critically important given current demographic shifts that have resulted in older adults comprising
an increasingly disproportionate percentage of the population of the United States and other
industrialized countries.

The present study was designed to contribute to knowledge in this area by providing base
rate information on the frequency of exposure to potentially traumatic events in a large nonclinical
sample of older adults. We also report detailed information concerning when particular types of
traumas occur in the life course and the differential effects of trauma exposure as a function of the
nature and timing of the event. Specifically, PTSD symptom severity and the perceived centrality of
the event to one’s identity were assessed for the traumatic event that bothered participants most at
the time of the study. A growing body of research indicates that greater centrality of a traumatic
event to one’s identity and life story is associated with negative posttraumatic outcomes including
symptoms of PTSD and depression (Berntsen & Rubin, 2006, 2007), reduced self-rated health
(Boals, 2010), and lower self-esteem (Robinaugh & McNally, 2011). Finally, the relative impact of
different categories of traumatic events was assessed to identify event characteristics that are
associated with distress in older adulthood. Specifically, the predictive value of several event
categories was compared, including life-threatening events, events that elicited strong emotional
reactions, interpersonal events, and events that occurred early versus later in the life course.
Method

Participants

Data were drawn from wave 12 of the University of North Carolina Alumni Heart Study (UNCAHS), a longitudinal study of students who entered the University of North Carolina, Chapel Hill (UNC) in 1964-1966 (Siegler et al., 1992). Detailed information regarding the recruitment procedures and participation rates of the UNCAHS are detailed elsewhere (Berntsen, Rubin, & Siegler, 2011; Hooker, Hoppmann, & Siegler, 2010). Because 97% (n = 3,575) of wave 12 respondents were between the ages of 55 and 69, our analyses were limited to this group to provide a more uniform age range. Mean age was 60.73 (SD = 1.85). The sample was 67% male, and 99% Caucasian, .39% African American, .08% Hispanic, .08% American Indian, and .06% mixed race. Four participants (.11%) declined to identify their ethnicity. Approximately 9% had less than a college degree, 19% had Bachelor’s degrees, 26% had Bachelor’s degrees plus additional training, 25% had Master’s degrees, and 22% had doctorate or medical degrees. The median annual household income was in the $70-99,999 range.

Measures

Potentially traumatic events. The Traumatic Life Events Questionnaire (TLEQ; Kubany et al., 2000) was used to assess lifetime exposure to potentially traumatic events. Participants reported how often they experienced each of 19 types of events (Table 1) using a 7-point scale (0 = never, 6 = more than 5 times). For the most serious occurrence of each event type, participants reported their age at the event and indicated whether the DSM-IV criterion A2 was met. The TLEQ assesses a broader spectrum of events capable of producing PTSD symptoms compared to other trauma inventories, and has strong psychometric properties and high convergent validity with structured
clinical interviews (Kubany et al., 2000). Similar to epidemiological studies of trauma exposure that used mail surveys (e.g., Kessler et al., 1995), TLEQ items were modified to provide respondents extra privacy in reporting and to reduce redundancy. Details of the modifications are described elsewhere (Ogle et al., in press). Relevant to the present analyses, for each event type, participants were also asked whether or not the event met the DSM-IV A1 criterion (i.e., “Did the event involve actual or threatened death, serious injury, or threat to the physical integrity of yourself or others?”).

To examine the extent to which the impact of trauma exposure varied for different types of events, TLEQ events that were nominated by participants as currently most distressing were classified into several dichotomies. First, individual events were categorized as either life threatening or non-life threatening according to whether or not the participant endorsed the A1 criterion. Second, individual events were classified as evoking a strong emotional response according to whether or not the participant endorsed the A2 criterion. Third, individual events were classified as interpersonal or non-interpersonal according to whether they involved intentional, personal assaultive acts or violations perpetrated by others (see superscripts in Table 2). Finally, the mean age of occurrence and the distribution of events across the life span (Table 2) were used to classify events that occurred early in life versus those that occurred later. To be categorized as an early event, the mean age of occurrence had to be less than 30, and at least 80% of the events in the category were required to occur during the first three decades of life.

**PTSD symptom severity.** The PTSD Check List-Stressor Specific Version (PCL-S; Weathers, Litz, Huska, & Keane, 1994) is a 17-item PTSD screening instrument that yields a measure of symptom severity. Using 5-point scales (1 = not at all, 5 = extremely), respondents indicate the extent to which a specific event produced each of the B, C, and D DSM-IV-TR PTSD
symptoms during the previous month. The PCL has strong psychometric properties (Blanchard, Jones-Alexander, Buckley, & Forneris, 1996) and high diagnostic agreement with the Clinician Administered PTSD Scale (Blake et al., 1990; \( r = .93 \)).

**Event centrality.** The Centrality of Event Scale (CES; Berntsen & Rubin, 2006) assesses the extent to which a trauma forms a central component of personal identity, a turning point in the life story, and a reference point for everyday inferences. Items are rated on 5-point scales (1 = totally disagree, 5 = totally agree). Mean scores are reported. Example items include “This event permanently changed my life,” and “I feel this event has become part of my identity.” The scale’s reported reliability is .88. Respondents completed the 7-item short version of the CES in reference to the TLEQ item that bothered them most at the time of the study.

**Procedure**

UNCAHS members first received instructions to complete the wave 12 questionnaire online. Individuals who did not respond were mailed identical paper surveys up to three times. On the wave 12 questionnaire, participants first answered questions concerning their health status, followed by the TLEQ. The CES and PCL were then completed in relation to the TLEQ event that currently bothered them most. All waves of the UNCAHS were approved by the Duke University Medical Center institutional review board.

**Data Analysis**

Statistical significance was based on two-sided tests at the .05 level. T-tests were conducted to examine differences in PTSD symptom severity and event centrality for the dichotomous event categories. The utility of each category in predicting PTSD symptom severity and event centrality was compared using multiple regression analysis. Age, education, gender, income, and marital
status were entered in regression models as possible confounders. Standardized beta weights for the final model are presented.

Results

Prevalence of Potentially Traumatic Events

Approximately 90% of respondents (n = 3,208) reported exposure to at least one type of event (M = 2.85, SD = 2.16, range = 0-13). The majority (78.21%) of individuals with a history of at least one event reported exposure to two or more types of events. When multiple occurrences of the same type of event were considered, the mean number of events was 5.31 (SD = 5.99, range 0-56).

To provide an overview of how often participants experienced each of the potentially traumatic events over the life course, Table 1 displays frequencies for lifetime exposure to the TLEQ events as a function of age-at-exposure split by decade. Although 53.37% of the sample was 60 years of age or older, only 5.71% was older than age 63, which precluded stable frequency estimates for events that occurred throughout the next decade. Therefore, data are presented for events that occurred at age 60 and younger for the 3,084 respondents who reported their age-at-exposure to TLEQ events. Prevalence rates were highest for unexpected death of a loved one. Illness or accident of a loved one and non-live birth pregnancy were also relatively common with approximately one-third of participants reporting exposure to each of these events. The age distribution of events revealed that some events such as sexual assaults occurred with greater frequency at younger ages, whereas other events (e.g., unexpected death of a loved one) were more prevalent after the transition to adulthood (≥ age 20). Similarly, illness or accident of a loved one and personal illness or accident occurred with greater frequency during later decades of the life
course. Many low frequency events, including other life-threatening events and natural disasters, were more uniformly distributed across the lifespan.

Impact of Potentially Traumatic Events

Our second research question concerned differences in the impact of potentially traumatic events as a function of event type and age-at-exposure. Table 2 presents data from a subset of participants \((n = 2,056)\) who nominated a TLEQ event that currently bothered them most and completed the PCL and the CES in reference to the event. As with Table 1, the age distribution of events in Table 2 includes those that occurred at age 60 and younger. The values for the PCL and CES include the full sample. PTSD symptom severity was greatest for non-disclosed events, followed by warfare or combat exposure. Event centrality was greatest for personal illness or accident, followed by non-disclosed events. Greater event centrality was strongly related to more severe PTSD symptoms \((r = .56, p < .001)\).

Events nominated by participants as currently most distressing were unequally distributed across the life course. Witnessed childhood family violence was the most frequent event to be nominated as most distressing at age 10 or younger, whereas unexpected deaths of loved ones was the most common trauma to be nominated for ages 11 to 60. Despite the high frequency of unexpected deaths of loved ones, on average this event was associated with lower PTSD symptom severity compared to events that occurred primarily during childhood and adolescence \((M \text{ age} < 12), t(878) = 5.23, p < .001\).

To further determine the nature of events that were associated with greater PTSD symptom severity and event centrality, TLEQ items were categorized into four dichotomies using key distinctions from the PTSD literature: a) life-threatening versus nonlife-threatening events in
accordance with the DSM-IV A1 PTSD criterion; b) events that evoked a strong emotional reaction versus those that did not in accordance with the DSM-IV A2 PTSD criterion; c) interpersonal versus non-interpersonal events; and d) events that occurred early in life versus those that occurred later in life as indicated by mean age of occurrence. PTSD symptom severity was significantly higher for a) life-threatening ($M = 24.02$, $SD = 9.78$) compared to non-life-threatening events ($M = 20.81$, $SD = 6.50$); b) A2 ($M = 25.02$, $SD = 10.45$) versus non-A2 events ($M = 20.61$, $SD = 6.08$); c) interpersonal ($M = 24.73$, $SD = 11.45$) compared to non-interpersonal events ($M = 21.97$, $SD = 7.53$); and d) early life ($M = 26.27$, $SD = 12.64$) compared to later events ($M = 22.32$, $SD = 8.01$), $t(1906-2054) \geq 5.73$, $p \leq .001$. Event centrality scores were significantly higher for a) life-threatening ($M = 2.82$, $SD = 1.24$) compared to non-life-threatening events ($M = 2.11$, $SD = 1.08$); b) A2 ($M = 2.94$, $SD = 1.24$) compared to non-A2 events ($M=2.15$, $SD=1.09$); and c) early ($M = 2.72$, $SD = 1.22$) compared to later events ($M = 2.51$, $SD = 1.22$); $t(1973-2054) \geq 2.50$, $p \leq .05$. No differences in event centrality emerged for interpersonal ($M = 2.45$, $SD = 1.23$) compared to non-interpersonal traumas ($M = 2.55$, $SD = 1.22$). When warfare or combat exposure was classified as a later event, the relevant $t$-test remained significant.

Next, the relative utility of each of the four event categories in predicting PTSD symptom severity and event centrality was examined in a series of multiple regressions. In each model, socio-demographic variables were entered on the first step, followed by the event categories on step two. Because the interpersonal–non-interpersonal and early–later event dichotomies were highly correlated ($r = -.77$), they were tested in separate regressions to avoid multicollinearity. Results indicated that all four event categories significantly predicted PCL scores. Criterion A2 events were the strongest predictor of greater PTSD symptom severity ($\beta = .17$), followed by early life events ($\beta$...
= -.13), interpersonal events (β = .11), and criterion A1 events [β = .09; final model including non-interpersonal–interpersonal events, \( F(8, 1840) = 25.32, p < .001, R^2 = .10 \); final model including early–later events, \( F(8, 1946) = 28.60, p < .001, R^2 = .11 \)]. Criterion A2 events also emerged as the strongest predictor of event centrality (β = .21) followed by criterion A1 events (β = .17). Although non-interpersonal events significantly predicted event centrality (β = -.06), the magnitude of the standardized beta and the non-significant correlation (\( r = -.03 \)) between event centrality scores and interpersonal–non-interpersonal events suggests that the contribution of non-interpersonal events to event centrality was small [final model, \( F(8, 1840) = 41.26, p < .001, R^2 = .15 \)]. No association was found between the early–later dichotomy and event centrality [β = -.04; final model, \( F(8, 1946) = 42.95, p < .001, R^2 = .15 \)].

**Discussion**

The present study examined the frequency and impact of exposure to potentially traumatic events as a function of age-at-exposure and event type in a nonclinical sample of older adults. Approximately 90% of participants reported exposure to at least one type of potentially traumatic event during their lifetime. Consistent with previous research (Kessler et al., 1995), more than half reported exposure to two or more event types. Although the rate of exposure in our study is higher than in previous research that examined the DSM-III-R definition of a traumatic event in samples ranging broadly in age (Kessler et al., 1995; Resnick et al., 1993) as well as studies of non-North American samples (Creamer & Parslow, 2008; Glaesmer et al., 2010), our results are comparable to the estimate of 89.6% reported from research in which DSM-IV criteria were evaluated in a US sample (Breslau et al., 1998).
Data concerning the timing of potentially traumatic events indicated that certain types of events are more likely to occur during particular periods of the life course. Although, as expected, events such as warfare or combat exposure and non-live birth pregnancy were generally restricted to young adulthood, and childhood physical abuse was necessarily limited to childhood, the age-dependent nature of other events was also revealed. For example, sexual assaults were over thirteen times more likely to occur during the first decade of life compared to ages 31 to 60, whereas events that individuals of all ages are vulnerable to, such as unexpected deaths of loved ones, approximately doubled in frequency during each decade after the transition to adulthood.

Our findings also revealed that the severity of post-traumatic outcomes experienced in older adulthood varied by event type. Consistent with previous research by Darves-Bornoz and colleagues (2008), current PTSD symptom severity was highest for non-disclosed events, which may describe highly traumatic experiences of sexual assault. Non-disclosed events were also rated as closely central to personal identity, second to personal illnesses or accidents. When the impact of exposure to various categories of TLEQ events was tested in regression analyses, life-threatening events, events that evoked strong emotional reactions, and interpersonal events emerged as significant predictors of PTSD symptom severity. In addition, events that on average occurred with greater frequency early in life predicted greater PTSD symptom severity compared to events that were more prevalent later in the life course. This finding extends previous research concerning the impact of childhood adversity on outcomes measured in young adulthood and mid-life (e.g., Kessler, Davis, & Kendler, 1997) by demonstrating that the negative consequences of traumatic events encountered early in the life course persistent into older adulthood. Early life traumas were also rated as more central to identity than later traumas, but this pattern did not hold in regression...
analyses with socio-demographic variables entered in the model. Likewise, the distinction between interpersonal versus non-interpersonal events did not reliably predict event centrality.

Our results add to previous work concerning post-traumatic outcomes (Ogle, Rubin, & Siegler, in press) by revealing when particular types of traumatic events are likely to occur in the life course, as well as the types of traumas that are most likely to become integrated into one’s identity and to cause distress during older adulthood. Our finding that the types of traumatic events that occur more frequently early in life are associated with greater PTSD symptom severity compared to more recent events underscores the need for future research to identify mechanisms that promote the persistence of post-traumatic stress associated with early traumas. One potential line of research in this area would be to examine whether differences exist in the content and quality of memories for traumatic events from different periods of the life course, and further, how these differences relate to persistence of post-traumatic symptoms. Autobiographical memory narratives of older adults who report distress related to early life traumas could be compared to the trauma narratives of individuals who report distress related to traumatic events experienced later in the life course. Results from both qualitative and quantitative analysis of various memory characteristics (e.g., number of emotion words, coherence, visual perspective) would enrich our understanding of the role of autobiographical memory in the persistence of post-traumatic stress, and in turn inform various competing models of PTSD (e.g., Brewin, Dalgleish, & Joseph, 1996; Ehlers & Clark, 2000; Rubin, Berntsen, & Bohni, 2008). Subjective ratings of the trauma memories could also be examined to identify differences in the phenomenological characteristics of memories for early life versus recent traumas. Furthermore, individuals with early life versus recent traumas could be compared on various individual difference measures (e.g., personality, attachment) to clarify the
role of individual differences in the persistence of post-traumatic stress. A study of this sort would aid researchers and clinicians in better understanding the memory-related and person-level factors that promote the maintenance of post-traumatic stress.

An ambitious extension of this research would entail a longitudinal-sequential investigation of the relation between the timing of trauma exposure and changes in symptom profiles across the life course. Individuals of a broad age range who experienced traumas during various developmental periods would be grouped according to their chronological age and their age at the time of their trauma. Repeated measures of PTSD symptoms (e.g., at five year intervals) would reveal potential differences in the longitudinal course of PTSD symptoms among individuals with histories of early life versus recent traumas, as well as which symptom clusters (re-experiencing, arousal, avoidance) drive the persistence of symptoms related to early life events. Trauma memory narratives could also be obtained at repeated intervals to examine how changes in the properties of the memories over time relate to symptom change. Applying a developmental life course framework to the study of traumatic life events may further reveal whether certain types of traumas are especially detrimental to post-traumatic adjustment when they occur during particular periods of the life course. Utilizing a longitudinal-sequential research design would also counteract cohort effects, which have limited the majority of previous longitudinal studies of trauma survivors.

Future research should aim to connect empirical findings such as ours to clinical practice with the goal of improving treatment outcomes for older adults with PTSD. One question raised by our findings is whether treatment efficacy could be enhanced by psychotherapeutic approaches that take into account the developmental timing of the traumatic event. To date, no randomized control trials (RCTs) have examined the efficacy of PTSD treatments specifically for older adults. In the
absence of well-controlled investigations of treatment outcomes with older adults, clinical recommendations are primarily based on case studies of older patients with PTSD and on RCTs of treatments empirically validated with younger adults. To our knowledge, within these two literatures it remains untested whether and how the developmental timing of trauma exposure influences treatment efficacy. Different psychotherapeutic approaches may be better suited to treat symptoms associated with early life compared to more recent traumas to the extent that age-related changes in emotion and cognition alter mechanisms associated with the development and maintenance of PTSD (e.g., emotional regulation, autobiographical memory). The development timing of trauma exposure may also influence the longitudinal course of symptom presentation, which in turn may impact treatment resistance. Results from a small number of studies indicate that although older adults with histories of early life trauma retrospectively report declines in overall symptom severity over the life course, increases in avoidance symptoms are often observed even after treatment (Maercker, 2002; Trappler, Braunstein, Moskowitz, & Friedman, 2002). However, more heterogeneous symptom trajectories have been found in prospective research with younger (Berntsen et al., 2012) and older adults (e.g., Yehuda et al., 2009) with war-related traumas. Differences in symptom profiles among individuals with early life versus recent traumas may impact treatment efficacy and require varied treatment approaches.

Additional support for the idea that early life versus recent traumas may require different treatment approaches is drawn from research on developmental trauma disorder. A growing number of studies have shown that chronic childhood trauma, especially experiences that are interpersonal in nature (e.g., prolonged childhood sexual abuse), can result in impairments and dysregulation in more diverse domains of functioning (e.g., affective, relational, somatic) compared to similar
traumas that occur later in the life cycle, such as adulthood sexual assault (e.g., van der Kolk, Roth, Pelcovitz, Sunday, & Spinazzola, 2005). Therapeutic interventions that incorporate affect and interpersonal regulation skills training with traditional cognitive-behavioral therapies to treat PTSD related to severe childhood trauma have shown promising results in studies with young and middle-aged adults (Cloitre et al., 2010; Ford et al., 2005). Empirical studies that test these protocols in older adults with histories of early life trauma are needed to determine if such treatments are safe and effective with older individuals. More broadly, clinical knowledge concerning best practices for treating PTSD symptoms in older adults would benefit from RCTs that assess and compare the efficacy of treatments designed to address PTSD related to early life trauma to cognitive-behavioral therapies that have been empirically validated with young adult and middle-aged populations (e.g., prolonged exposure, cognitive processing therapy), as well as structured life review techniques that have been found to be effective in case studies of older adults with PTSD (e.g., Maercker, 2002).

Our results should be interpreted in the context of several limitations. First, because the UNCAHS is primarily comprised of former undergraduates from the 1960s, the sample is not representative of the general population with respect to education, gender, or ethnicity. Despite the underrepresentation of females and individuals with low education in the UNCAHS, both of which are risk factors for PTSD (Breslau et al., 1998; Kessler et al., 1995), our results indicate that trauma exposure and post-traumatic stress were not uncommon, even among well-educated older adults for whom support resources (e.g., financial, interpersonal) may be more available. Second, as with all cross-sectional analyses, the causal relation between lifetime trauma exposure and current PTSD symptom severity and event centrality cannot be determined and may have been caused by shared factors that were not examined in this study. Third, although the PCL is a reliable and valid measure
of PTSD symptom severity (e.g., Blanchard et al., 1996), clinical interviews may be necessary to identify which cases of elevated PTSD symptom severity met criteria for diagnosis. Fourth, our findings may be subject to bias resulting from potential memory errors related to retrospective reports and defensive reporting due to the perceived stigma of certain events (e.g., childhood sexual abuse, rape). Finally, similar to epidemiological studies of PTSD (e.g., Kessler et al., 1995), PTSD symptoms were assessed for only one event per participant, which may have lead to an underestimation of symptoms. Despite these limitations, our findings demonstrate that distress experienced in older adulthood can be traced to traumatic events endured decades earlier. Moreover, exposure to particular types of traumatic events, specifically those that are life-threatening, events that elicit strong emotional reactions, traumas that are interpersonal in nature, and traumas that occur early in life may be especially consequential for post-traumatic outcomes in older adulthood.

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References


Table 1. *Lifetime Prevalence of Potentially Traumatic Events as a Function of Age-at-Exposure by Decade*

<table>
<thead>
<tr>
<th>Event type</th>
<th>M</th>
<th>SD</th>
<th>≤ 10</th>
<th>≤ 20</th>
<th>≤ 30</th>
<th>≤ 40</th>
<th>≤ 50</th>
<th>≤ 60*</th>
<th>Total</th>
</tr>
</thead>
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<td>Childhood physical abuse</td>
<td>9.51</td>
<td>3.74</td>
<td>110</td>
<td>65</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>175</td>
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<td>Witnessed childhood family violence</td>
<td>10.60</td>
<td>4.53</td>
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<td>6</td>
<td>1</td>
<td>1</td>
<td>0</td>
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<td>Sexual assault</td>
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<td>167</td>
<td>33</td>
<td>5</td>
<td>3</td>
<td>2</td>
<td>348</td>
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<tr>
<td>Warfare or combat exposure</td>
<td>25.49</td>
<td>7.76</td>
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<td>247</td>
<td>9</td>
<td>15</td>
<td>9</td>
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<td>Physical assault by stranger</td>
<td>26.87</td>
<td>12.81</td>
<td>7</td>
<td>69</td>
<td>64</td>
<td>21</td>
<td>12</td>
<td>18</td>
<td>191</td>
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<tr>
<td>Witnessed an attack or murder</td>
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<td>11.65</td>
<td>1</td>
<td>43</td>
<td>58</td>
<td>14</td>
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<td>Non-disclosed</td>
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<td>Non-live birth pregnancy</td>
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<td>Motor vehicle accident</td>
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<td>Other life-threatening accident</td>
<td>31.43</td>
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<td>54</td>
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<td>50</td>
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<td>Other life-threatening event</td>
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<td>60</td>
<td>73</td>
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<td>Stalked</td>
<td>34.70</td>
<td>13.33</td>
<td>4</td>
<td>23</td>
<td>55</td>
<td>39</td>
<td>36</td>
<td>26</td>
<td>183</td>
</tr>
<tr>
<td>Robbery</td>
<td>34.85</td>
<td>12.24</td>
<td>6</td>
<td>20</td>
<td>91</td>
<td>80</td>
<td>47</td>
<td>37</td>
<td>281</td>
</tr>
<tr>
<td>Physical assault by partner</td>
<td>35.23</td>
<td>11.28</td>
<td>2</td>
<td>11</td>
<td>98</td>
<td>63</td>
<td>53</td>
<td>26</td>
<td>253</td>
</tr>
<tr>
<td>Natural disaster</td>
<td>38.52</td>
<td>16.02</td>
<td>18</td>
<td>17</td>
<td>25</td>
<td>17</td>
<td>64</td>
<td>54</td>
<td>195</td>
</tr>
<tr>
<td>Unexpected death of a loved one</td>
<td>39.41</td>
<td>14.55</td>
<td>26</td>
<td>188</td>
<td>324</td>
<td>303</td>
<td>376</td>
<td>493</td>
<td>1710</td>
</tr>
<tr>
<td>Personal illness or accident</td>
<td>43.98</td>
<td>16.71</td>
<td>48</td>
<td>30</td>
<td>45</td>
<td>57</td>
<td>106</td>
<td>304</td>
<td>590</td>
</tr>
<tr>
<td>Illness or accident of a loved one</td>
<td>45.84</td>
<td>12.74</td>
<td>12</td>
<td>47</td>
<td>93</td>
<td>148</td>
<td>261</td>
<td>473</td>
<td>1034</td>
</tr>
</tbody>
</table>

*Note.* Events are presented in ascending order by mean age-at-exposure. *To adjust for the number of participants who were not old enough to report on events that occurred at ages 56 through 60, multiply frequencies in the < 60 column by 1.08.*
Table 2. Prevalence of Most Distressing Potentially Traumatic Events, Age-at-Exposure by Decade, PTSD Symptom Severity, and Event Centrality Scores

<table>
<thead>
<tr>
<th>Event type</th>
<th>M</th>
<th>SD</th>
<th>≤10</th>
<th>≤20</th>
<th>≤30</th>
<th>≤40</th>
<th>≤50</th>
<th>≤60</th>
<th>M</th>
<th>SD</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Childhood physical abuse a</td>
<td>9.50</td>
<td>2.97</td>
<td>14</td>
<td>8</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>25.27</td>
<td>8.14</td>
<td>2.96</td>
<td>1.22</td>
</tr>
<tr>
<td>Witnessed childhood family violence a</td>
<td>10.54</td>
<td>4.07</td>
<td>47</td>
<td>33</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>25.21</td>
<td>11.76</td>
<td>2.64</td>
<td>1.16</td>
</tr>
<tr>
<td>Sexual assault a</td>
<td>11.81</td>
<td>6.43</td>
<td>24</td>
<td>34</td>
<td>2</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>26.76</td>
<td>13.57</td>
<td>2.44</td>
<td>1.30</td>
</tr>
<tr>
<td>Warfare or combat exposure a</td>
<td>25.08</td>
<td>7.96</td>
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<td>5</td>
<td>76</td>
<td>1</td>
<td>3</td>
<td>4</td>
<td>27.12</td>
<td>13.70</td>
<td>2.93</td>
<td>1.19</td>
</tr>
<tr>
<td>Non-live birth pregnancy b</td>
<td>31.01</td>
<td>6.96</td>
<td>0</td>
<td>4</td>
<td>50</td>
<td>37</td>
<td>7</td>
<td>1</td>
<td>19.44</td>
<td>3.96</td>
<td>1.90</td>
<td>0.94</td>
</tr>
<tr>
<td>Physical assault by stranger a</td>
<td>33.22</td>
<td>15.98</td>
<td>0</td>
<td>6</td>
<td>8</td>
<td>2</td>
<td>1</td>
<td>6</td>
<td>22.70</td>
<td>9.46</td>
<td>1.68</td>
<td>1.06</td>
</tr>
<tr>
<td>Non-disclosed</td>
<td>33.67</td>
<td>15.73</td>
<td>2</td>
<td>6</td>
<td>4</td>
<td>8</td>
<td>5</td>
<td>5</td>
<td>31.94</td>
<td>13.07</td>
<td>3.16</td>
<td>1.22</td>
</tr>
<tr>
<td>Life-threatening accident b</td>
<td>33.77</td>
<td>13.33</td>
<td>0</td>
<td>5</td>
<td>14</td>
<td>14</td>
<td>3</td>
<td>8</td>
<td>22.09</td>
<td>7.04</td>
<td>2.31</td>
<td>1.10</td>
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<td>Motor vehicle accident b</td>
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<td>14.90</td>
<td>3</td>
<td>24</td>
<td>29</td>
<td>21</td>
<td>18</td>
<td>28</td>
<td>21.30</td>
<td>6.40</td>
<td>1.95</td>
<td>1.11</td>
</tr>
<tr>
<td>Other life-threatening event</td>
<td>36.97</td>
<td>17.17</td>
<td>10</td>
<td>13</td>
<td>22</td>
<td>17</td>
<td>11</td>
<td>39</td>
<td>24.74</td>
<td>10.06</td>
<td>2.56</td>
<td>1.28</td>
</tr>
<tr>
<td>Physical assault by partner a</td>
<td>38.40</td>
<td>10.16</td>
<td>0</td>
<td>0</td>
<td>12</td>
<td>5</td>
<td>10</td>
<td>3</td>
<td>24.67</td>
<td>9.11</td>
<td>2.56</td>
<td>1.29</td>
</tr>
<tr>
<td>Death threat a</td>
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<td>15.56</td>
<td>0</td>
<td>3</td>
<td>6</td>
<td>4</td>
<td>4</td>
<td>10</td>
<td>21.04</td>
<td>6.86</td>
<td>1.84</td>
<td>0.91</td>
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<tr>
<td>Witnessed attack or murder a</td>
<td>39.57</td>
<td>11.55</td>
<td>0</td>
<td>0</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>1</td>
<td>20.00</td>
<td>3.22</td>
<td>2.08</td>
<td>1.06</td>
</tr>
<tr>
<td>Stalked a</td>
<td>40.00</td>
<td>13.70</td>
<td>0</td>
<td>1</td>
<td>4</td>
<td>3</td>
<td>1</td>
<td>4</td>
<td>21.15</td>
<td>6.49</td>
<td>1.57</td>
<td>0.73</td>
</tr>
<tr>
<td>Robbery a</td>
<td>40.88</td>
<td>12.21</td>
<td>0</td>
<td>1</td>
<td>6</td>
<td>12</td>
<td>5</td>
<td>10</td>
<td>20.19</td>
<td>7.99</td>
<td>1.77</td>
<td>0.99</td>
</tr>
<tr>
<td>Unexpected death of a loved one b</td>
<td>40.92</td>
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<td>9</td>
<td>63</td>
<td>118</td>
<td>118</td>
<td>152</td>
<td>231</td>
<td>21.79</td>
<td>7.99</td>
<td>2.51</td>
<td>1.19</td>
</tr>
<tr>
<td>Natural disaster b</td>
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<td>2</td>
<td>1</td>
<td>2</td>
<td>1</td>
<td>15</td>
<td>16</td>
<td>19.71</td>
<td>4.38</td>
<td>1.94</td>
<td>0.96</td>
</tr>
<tr>
<td>Illness or accident of a loved one b</td>
<td>48.07</td>
<td>10.98</td>
<td>0</td>
<td>5</td>
<td>20</td>
<td>25</td>
<td>51</td>
<td>126</td>
<td>22.31</td>
<td>7.68</td>
<td>2.70</td>
<td>1.21</td>
</tr>
</tbody>
</table>
Personal illness or accident $^b$ 48.57 12.80 7 5 11 18 48 132 23.85 7.70 3.20 1.19

*Note.* Events are presented in ascending order by mean age-at-exposure. $^a$ Interpersonal events. $^b$ Non-interpersonal events. Events without superscripts were not included in this classification because the nature of the event was unspecified. PCL = PTSD Checklist Total Severity Scores. CES = Event centrality scores. $n = 2056.$