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Potentially Traumatic Events at Different Points in the Life Span and Mental Health: Findings From SHARE-Israel

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Abstract

This study addressed the association between adversity cumulated at different points in the life span and present mental health. Data of 1,130 participants aged 50+ were drawn from the Israeli component of the Survey of Health, Ageing and Retirement in Europe (SHARE). Measures included an inventory of potentially traumatic events, mental distress (depressive symptoms), and well-being (quality of life, life satisfaction). Adversity reported to have occurred early in life was positively related to mental health (i.e., to lower distress and higher well-being), whereas adversity reported to occur in late life was negatively related (i.e., to higher distress and lower well-being). Additional analyses showed that the positive association between early-life adversity and mental health was mainly restricted to adversity in which the primary harm was to another person (other-oriented adversity). In contrast, the negative association between late-life adversity and mental health was mainly restricted to adversity in which the primary harm was to the self (self-oriented adversity). This study suggests that the differential association between cumulative adversity and mental health is best captured when accounting for both time of occurrence and adversity type.

Keywords

older adults; Israelis; mental health; cumulative adversity; traumatic events; depression; self-oriented adversity; other-oriented adversity

Cumulative adversity denotes lifetime exposure to a wide spectrum of potentially traumatic events (Lloyd & Turner, 2003; Turner & Lloyd, 1995). Lifetime cumulative adversity exerts a more lasting influence on functioning than discrete events do (Green et al., 2000; Schnurr, Spiro, Vielhauer, Findler, & Hamblen, 2002). Still, cumulative adversity may have differential effects on mental health, depending on its time of occurrence and its type. For example, adversity that mainly affects the self (e.g., being at risk of death owing to accident, being a victim of assault) and that which mainly affects others (e.g., witnessing people killed by violence, learning about the death of a loved one) may have different psychological consequences.

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The current study aimed to examine the association between cumulative adversity and mental health in a national sample of late-middle-aged and older Israelis, focusing primarily on the time of occurrence and type of adversity. We first focused on adversity reported to have occurred in several distinct age periods. We then examined different types of cumulative adversity, separating between self-oriented adversity (which primarily affects the self) and other-oriented adversity (which primarily affects others). Finally, we assessed the effect of the different types of adversity reported to have occurred in various age periods.

The timing of adversity summons conflicting hypotheses proposed by two theoretical frameworks. On the one hand, there is a vast psychodynamic literature suggesting that trauma in the formative years of early life may disrupt subsequent psychological development in profound and often irreversible ways (Mitchell & Black, 1995). Accordingly, several studies found a negative relationship between age at the time of the trauma and long-term traumatic stress (Draper et al., 2008; Zlotnick et al., 2008). More recently, early-life cumulative adversity was found to be associated with various mental disorders (Green et al., 2010).

On the other hand, there are reports of resilience and flexible recovery of individuals who experienced early-life adversity (e.g., Bonanno, 2004; Valent, 1998). This phenomenon may be explained by the plasticity of personality in young age and by early-life cognitive schema of autobiographical memory that are not yet fully developed to integrate all the traumatic aspects into the identity and life story forged at a later phase (Berntsen & Rubin, 2006; Green et al., 1994). An array of studies of older people suggests that later adversity may become more salient than early-life adversity. Thus, Krause (2004, 2009; Krause, Shaw, & Cairney, 2004) and others (Dulin & Passmore, 2010) have found that adversity reported to have occurred in adulthood had the largest effect on late-life physical and mental health, whereas early-life adversity showed almost no effect.

The issue of adversity type broadly refers to the aforementioned self-oriented and other-oriented adversities. This distinction has gained more relevance as the *DSM-IV* (American Psychiatric Association, 1994) defined a traumatic event in a wider scope, providing more options of witnessing or learning about stressors that may evoke trauma. Although prior studies differentiated between various types of adversity, the *self* or *others* distinction (American Psychiatric Association, 1994, p. 427) was largely overlooked (see Breslau, Chilcoat, Kessler, & Davis, 1999, for an exception). Dwelling on this distinction, Shmotkin and Litwin (2009) found that self-oriented adversity was associated with more depressive symptoms, whereas other-oriented adversity was not significantly associated, or even negatively associated, with depressive symptoms, depending on the measure used. These initial findings invite a closer look at the self-other distinction when examining cumulative adversity.

On the basis of the previous findings, we hypothesized that cumulative adversity is associated with worse mental health. We examined this hypothesis through examination of both negative mental health (distress) and positive mental health (well-being), in view of recent evidence that these are two different, moderately related, complementary components of the mental health construct (Keyes, 2007). A main research question in our study was whether late-life adversity is indeed more strongly associated with mental health than early-life adversity. Drawing upon insights gained in previous studies about the concomitants of timing as well as the type of adversity in life among older people, we hypothesized that late-life self-oriented adversity has the strongest negative association with mental health, whereas early-life other-oriented adversity has the weakest negative association.

Method

Participants and Procedure

Data were drawn from the Israeli component of the Survey of Health, Ageing and Retirement in Europe (SHARE-Israel), which presents a national sample of Israelis aged 50 or older and their spouses, regardless of age, interviewed during 2005–2006. The design was based upon a probability sample of households within 150 representative statistical areas delineated by geographical and sociodemographic criteria. The total Israeli database included 2,598 community (i.e., noninstitutionalized) dwellers in 1,771 households. The data were collected by means of a comprehensive computer-assisted personal interview and a supplementary paper drop-off questionnaire, which was returned or collected later. Informed consent was obtained from all respondents prior to the interview. SHARE-Israel received ethical approval by the Institutional Review Board of the Hebrew University of Jerusalem (for more on SHARE-Israel, see Litwin & Sapir, 2008; Shmotkin & Litwin, 2009).

As the queries regarding cumulative adversity were included in the drop-off questionnaire, the sample addressed in this study is limited to respondents who completed this questionnaire (n = 1,725, 66% of the total sample). An initial analysis that compared the drop-off respondents with those who did not complete the drop-off questionnaire did not find differences in gender and education. However, drop-off respondents did include a higher proportion of younger (below 60) and married respondents and a lower proportion of immigrants from the former Soviet Union.

Sixty respondents who completed less than 80% of the Potentially Traumatic Events Inventory (see Measures) were omitted from the analysis. Respondents who reported experiencing at least one event but did not report their age at any event (n = 487) were also omitted, as the current study focused on the adversity in various age periods. Finally, 48 additional respondents below the age of 50 were omitted, as the minimum age of first experiencing a difficult event in the upper age period was 50 (see Data Analysis). Therefore, the final sample in the current study included 1,130 respondents. They had a mean age of 64.3 (SD = 9.8, range = 50–94) and included a slight majority of women (55%). In terms of origin, 27.1% were Israeliborn, 25.7% were of Middle Eastern or North African origin, 23.1% were of European American origin, 10% were from the former USSR, and 14% were Arab Israelis. The mean education level was 2.9 (SD = 1.7; an average education level of upper secondary education). In terms of marital status, 78.1% were married and 21.9% were unmarried. The mean gross annual household income in Euros was 28,555 (SD = 34,989).

An initial analysis that compared those who reported experiencing at least one event but did not report their age at any event to those who reported their age in at least one event did not find significant differences in gender and education. However, respondents who reported their age in at least one event were older, less frequently married, and less often of Arab Israeli ethnicity.

Measures

Cumulative adversity—Cumulative adversity was assessed by the Potentially Traumatic Events Inventory. On the basis of the Breslau et al.'s (1998) survey of lifetime traumatic events and a pilot version administered to older Israelis, this inventory was adapted especially for the drop-off questionnaire in SHARE-Israel (Shmotkin & Litwin, 2009). The inventory consisted of 17 difficult life events that included bereavement, life hardships and health vulnerabilities, war- and terrorism-related events, and other victimizations (see Table 1 for the event list). Respondents were asked to check whether each of the 17 events had

ever happened to them. If having confirmed the experience of an event, respondents were further asked to specify their age when the event had first taken place. To calculate cumulative adversity, a minimum of completion (checking yes / no) of 13 events (about 80%) was required. The overall cumulative adversity score was computed as the sum of all confirmed events. A self-oriented adversity score was computed by summing the number of confirmed events in which the primary harm was to the self (e.g., "was the victim of violence or abuse"; possible range, 0–8). An other-oriented adversity score was computed by summing the number of confirmed events in which the primary harm was to another person (e.g., "witnessing people killed by violence"; possible range, 0–9).

Mental health—Mental health was addressed by two complementary indicators: mental distress and well-being. Mental distress—a negative indicator of mental health—was assessed by two measures: the European Depression scale (Euro-D; Prince et al., 1999) and an adapted version of the Center for Epidemiological Studies-Depression scale (ACES-D). The Euro-D refers mostly to depressive cognitions and lack of motivation, whereas the ACES-D is more oriented toward feelings and interpersonal symptoms.

The Euro-D contains 12 items that specify recent depressive symptoms (e.g., "In the last month, have you cried at all?"), scored as a sum of no (0) and yes (1, indicating presence of a symptom) encoded answers. Five items were phrased in positive terms (e.g., "Do you keep up your interests?"). In the present analysis, a minimum of completion of 10 items was required for scoring a sum, with scores of 10–11 items being interpolated by dividing the sum score by the number of completed items and then multiplying that value by 12. Cronbach's alpha coefficient of internal consistency for the Euro-D in the current study was .75.

The ACES-D was comprised of 11 items from the original CES-D (Radloff, 1977) and three others from parallel measures, based upon the instrument used in the Health and Retirement Survey baseline questionnaire. Each item specified a depressive symptom (e.g., "I felt sad"). Participants were asked to rate the frequency with which they had experienced each item in the last week on a scale ranging from 0 (*almost none of the time*) to 3 (*almost all of the time*). Four items were phrased positively (e.g., "I was happy") and reverse coded. The respondent's score was the sum of ratings over the 14 items. In the present analysis, a minimum of 80% completion of 11 items was required for scoring, with scores of 11–13 items being interpolated. Cronbach's alpha coefficient for the ACES-D in the current study was .87.

Well-being—Well-being—a positive indicator of mental health—was also assessed by two measures: the CASP-12 (Von Dem Knesebeck, Wahrendorf, Hyde, & Siegrist, 2007) and a global measure of life satisfaction. The CASP-12 contains 12 items originating from CASP-19 (Hyde, Wiggins, & Blane, 2003). The items reflect having a sense of control, autonomy, self-realization, and pleasure, and the rating scale ranges from 1 (*never*) to 4 (*often*). In the present analysis, a minimum of completion of 10 items was required for scoring a sum, with scores of 10–11 items being interpolated. The alpha coefficient for the CASP-12 in the current study was .80. Life satisfaction was assessed by asking the participants to rate how satisfied they were with their lives in general on a scale of 1 (*very dissatisfied*) to 4 (*very satisfied*).

Background characteristics—Background characteristics considered in this analysis included age, gender, and geographical origin (Israeli-born Jews, Jews born in the Middle East or North Africa, Jews born in Europe or America, Jews born in the former Soviet Union, and Israeli Arabs). Education was recorded by one of the seven education levels according to the International Standard Classification of Educational Degrees (ISCED-97;

United Nations Educational, Scientific and Cultural Organization, 1997), ranging from 0 (*preprimary*) to 6 (*second-stage tertiary education*).

Data Analysis

We first handled descriptive and correlative statistics, including at the level of single events. We then conducted four series of hierarchical multiple regression analyses in which the mental distress and well-being measures acted as dependents. In these regression series, covariates were included in Step 1, consisting of age, gender, origin, and education. Cumulative adversity was added to the equation in Step 2. In the first regression series, Step 2 included the overall cumulative adversity score. In the second regression series, Step 2 included two cumulative adversity scores of self- and other-oriented events, respectively. In the third regression series, Step 2 included cumulative adversity scores for each of three major age periods: 0–19, 20–49, and 50+. The first period refers to childhood and adolescence (see Green et al., 2010), the second period reflects young and early-middle adulthood, and the third period refers to late-middle and old age. The three chosen age periods encompassed distinctive segments across the life span while also providing optimal frequencies of events in each age period.

Results

Descriptive Statistics of Cumulative Adversity

Some two thirds of respondents ($n = 756$) reported having experienced at least one difficult life event during their lifetime, the average being 2.20 events ($SD = 2.35$). Table 1 presents the number of respondents who reported the occurrence of each of the 17 difficult events, as well as the mean age (and standard deviation) at which each of the events was reported to have occurred. In terms of trauma type, 466 respondents reported at least one self-oriented event and 705 reported at least one other-oriented event. On average, respondents reported 0.69 self-oriented events ($SD = 1.09$) and 1.50 other-oriented events ($SD = 1.59$). The number of respondents who reported at least one difficult event in the age range of 0–19 was 221; in the age range of 20–49, 488; and in the age range of 50+, 456. The mean number of difficult life events in the respective age periods was 0.29 ($SD = 0.69$), 0.75 ($SD = 1.13$), and 0.64 ($SD = 0.96$).

Correlations Between Event Age and Mental Health

Before resorting to cumulative indices of adversity at different points in the life span, we examined the relationship between the respondents' age at the occurrence of single difficult events and current mental health. For these analyses, specific events were chosen if the number of respondents who reported their occurrence exceeded 50, and if the range of the event age reflected a considerable portion of the life span (SD for age ≥10). Eleven events met these criteria.

In all 15 (of 44) instances where a significant correlation was observed, event age was negatively related to mental health, that is, related to higher mental distress and lower well-being. For example, age when first needing long-term care correlated .27 ($p < .01$) and .21 ($p < .05$) with Euro-D and A-CESD, respectively; −.34 ($p < .01$) with CASP-12 and −.22 ($p < .05$) with life satisfaction. The age when first having had a loved one at risk of death because of illness or accident correlated .18 ($p < .01$) and .19 ($p < .001$) with Euro-D and A-CESD, respectively; −.19 ($p < .01$) with CASP-12 and −.14 ($p < .05$) with life satisfaction.

The Association Between Cumulative Adversity and Mental Health

Covariates were moderately associated with mental health: Age was positively associated with distress and negatively associated with quality of life, women reported higher distress,

immigrants from the former USSR reported higher distress and lower well-being, and education was negatively associated with distress and positively associated with well-being. After controlling for covariates, the first regression series showed that overall cumulative adversity was associated with Euro-D (β = .09, $p < .01$, $\Delta R^2 = .01$) but was unrelated to A-CESD (β = .001), CASP-12 (β = .02), and life satisfaction (β = −.003).

The second regression series showed that self-oriented adversity was related to Euro-D, but other-oriented adversity was not (β = .12, $p < .0001$ and β = −.01, *ns*, respectively; $\Delta R^2 = .01$). Both self- and other-oriented adversities were related to A-CESD (β = .13, $p < .0001$ and β = −.11, $p < .01$, respectively; $\Delta R^2 = .02$), CASP-12 (β = −.07, $p < .05$ and β = .07, $p < .05$, respectively; $\Delta R^2 = .01$) and life satisfaction (β = −.11, $p < .01$ and β = .09, $p < .01$, respectively, $\Delta R^2 = .01$).

To summarize these findings, the effect of overall cumulative adversity was significant only with one measure of mental distress (Euro-D), possibly because of the opposite effects that self-and other-oriented adversity had on mental health. This is corroborated by the findings that self-oriented adversity was negatively associated with mental health, whereas other-oriented adversity showed a positive association with mental health.

The Association Between Cumulative Adversity at Different Age Periods and Mental Health

Table 2 presents the results of the third regression series that examined the effect of adversity reported to have occurred at different age periods on mental health. Difficult events reported to have occurred at ages 0–19 were, in general, positively associated with mental health, being associated with lower scores on the distress measure of Euro-D and higher scores on the two well-being measures of CASP-12 and life satisfaction. Difficult events reported to have occurred at ages 50+ were generally negatively associated with mental health, being associated with higher scores on the distress measures of Euro-D and A-CESD. Difficult events reported to have occurred at ages 20–49 were unrelated to mental health.

Table 3 presents the results of the fourth regression series that examined the effect of self- and other-oriented adversity reported to have occurred at different age periods on mental health. Self-oriented adversity reported to have occurred at ages 0–19 was unrelated to mental health. Self-oriented adversity reported to have occurred at ages 20–49 was associated with higher scores on the distress measure of Euro-D. Self-oriented adversity reported to have occurred at age 50+ was negatively associated with mental health across three measures, being associated with higher scores on the two distress measures of Euro-D and A-CESD and with lower scores on the well-being measure of life satisfaction.

Other-oriented adversity reported to have occurred at ages 0–19 was positively associated with mental health across all measures, thus being associated with lower scores on the distress measure of Euro-D and A-CESD and with higher scores on the well-being measures of CASP-12 and life satisfaction. The positive association between other-oriented adversity reported to have occurred at ages 20–49 and mental health was still evident, but only in two measures: It was associated with lower scores on the distress measure of A-CESD and with higher scores on the well-being measure of CASP-12. Other-oriented adversity reported to have occurred at age 50+ was generally unrelated to mental health with the exception of being associated with higher scores on the distress measure of Euro-D.

To summarize these findings, the negative effect of self-oriented adversity on mental health was evident especially for events reported to have occurred in later life. The positive effect of other-oriented adversity on mental health, on the other hand, was evident especially for events reported to have occurred in early life.

Discussion

Paying special attention to the timing of adversity occurring along the life span, this study found contrasting effects in the association of cumulative adversity with present mental health. A primacy effect pointed to a positive association with mental health by adversity occurring early in life, whereas a recency effect pointed to a negative association by adversity occurring late in life. Further examination revealed that these contrasting effects were contingent upon the type of adversity. Thus, the positive association of early-life adversity with mental health was best explained by other-oriented adversity, whereas the negative association of late-life adversity with mental health was best explained by self-oriented adversity. Overall, this study suggests that the differential associations of cumulative adversity with mental health are captured by accounting for both time of occurrence and type of adversity.

This pattern of findings elucidates why our initial hypothesis received only partial support. After adjusting for sociodemographic covariates, the cumulative adversity index was weakly associated with depressive symptoms on one measure only. However, when the cumulative index was restricted to self-oriented adversity, the regression results confirmed the hypothesis, revealing associations with both higher distress and lower well-being. In turn, an opposite trend emerged in which a cumulative index restricted to other-oriented adversity was associated with fewer depressive symptoms (in one of the two measures) as well as with more quality of life and life satisfaction.

These findings extend the implications of Shmotkin and Litwin's (2009) distinction between self- and other-oriented adversities to the positive aspect of mental health (well-being) as well. The rationale for this distinction was based on the supposition that commitment—an essential ingredient of valued relationships—becomes stronger in adversity (Brickman & Coates, 1987). That is, persons exposed to other-oriented, rather than to self-oriented, adversity must often exercise commitment to the care or the remembrance of those who were primarily harmed. Consequently, debilitating effects (e.g., depression) on the part of persons exposed to other-oriented adversity must frequently be limited, deferred, or declined. Additionally, by putting one into the role or perspective of another person, other-oriented adversity may strengthen the empathetic motive to relieve those who suffer or need help (Staub & Vollhardt, 2008). Hence, we suggest that future research should examine how the sense of commitment and responsibility toward those who were the primary targets of affliction in cases of other-oriented adversity may act to foster one's posttraumatic well-being and growth (Weiss, 2004).

When examining the timing of adversity along the life span at a level of bivariate correlations of single potentially traumatic events, the data showed that older, rather than younger, age at which adverse events had occurred was associated with lower mental health. At a multivariate level, where the effects by adversity occurring in different age periods were net of each other, overall cumulative adversity was associated with lower mental health only when it concerned late-life (50+) adversity and mental distress indices. In contrast, overall cumulative adversity was associated with higher mental health only in relation to early-life (0–19) adversity. Notably, overall cumulative adversity in young and early-middle adulthood (20–49) was not associated with mental health on the whole. However, it was only with the division of cumulative adversity into the self-oriented versus the other-oriented types that the differential time-bound effects of adversity became clearer. Summing up, the results confirmed the hypothesis that it was late-life self-oriented adversity that had the strongest negative association with mental health. However, instead of merely showing the weakest negative association, early-life other-oriented adversity actually showed a positive association with mental health.

In view of these varied results, our rationale for a distinction between self- and other-oriented adversities would seem to benefit from the inclusion of an age-related component. Thus, self-oriented adversity, which assaults core elements of one's physical and mental integrity (as by directly threatening one's ability to survive, or by making one a targeted prey for evil and pain), may cause irreversible damage as age advances. Indeed, Table 1 showed that late-life self-oriented adversity mainly (but not exclusively) included disability and victimization. Such trauma in late life is likely to disrupt the increasingly shakable balance between gains and losses (Hobfoll & Wells, 1998) or to hamper already strained mechanisms for the maintenance of well-being (Shmotkin, 2005, 2011).

In contrast, Table 1 showed that early-life other-oriented adversity mainly included events such as losing a loved one in war or witnessing close people fatally hit in an accident or violence. Such other-oriented adversity that challenges one's social commitments and valued relationships at a younger age may still have time to be beneficially worked out through identity formation processes. Such developmental processes, which typically take place during adolescence and emerging adulthood, establish personal commitments (i.e., behaviors and beliefs a person values and feels bound to) that define one's social identity in a way that can flexibly incorporate new, and possibly adverse, life experiences (Kunnen, Sappa, van Geert, & Bonica, 2008; Luyckx, Schwartz, Soenens, Vansteenkiste, & Goossens, 2010). Accordingly, there is evidence that younger people may be more likely to show positive postadversity change, but this age-related trend is often confounded by other factors. For example, posttraumatic growth potentially cumulates over time, so that the longer the time elapsing since the critical event, the greater the extent of positive postadversity change (Helgeson, Reynolds, & Tomich, 2006; Linley & Joseph, 2004; Zoellner & Maercker, 2006). Future research should disentangle the confounded associations of young age and the time from the adverse event with positive postadversity change. It is also important to further examine why other-oriented adversity lends itself to this positive change more than self-oriented adversity does. As the event composing self- and other-oriented adversity changes across the life span, future studies should also examine whether the unique compositions of early-life other-oriented adversity and late-life self-oriented adversity account for their differential effects on mental health.

The differential age-related implications of self- versus other-oriented adversity, as currently suggested, may help to integrate opposing theoretical accounts regarding the effect of trauma timing. Much of these opposing accounts relied on studies of massive traumas. As these studies often merged both self- and other-oriented adversities, part of them found resilience among those who had been younger at the time of the trauma (Berntsen & Rubin, 2006; Green et al., 1994; Sack et al., 1995; Sigal & Weinfeld, 2001; Yehuda, Schmeidler, Siever, Binder-Brynes, & Elkin, 1997), whereas others found them as more distressed than those who had been older at the time of the trauma (Brom, Durst, & Aghassy, 2002; Dekel & Hobfoll, 2007; Engdahl, Dikel, Eberly, & Blank, 1997; Kivelä, Luukinen, Koski, Viramo, & Pahkala, 1998).

Limitations and Conclusions

Like most studies that address the long-term impact of life adversities, we still lack longitudinal data, so that our cross-sectional analyses cannot ascertain probable causal links. It is plausible to assume, however, that cumulative adversity affects people's vulnerability, or else resilience, during their later phases of life. This interpretation is in line with longitudinal studies as well as with the incremental knowledge obtained by cross-sectional studies (Lloyd & Turner, 2003). On the other hand, we cannot rule out an alternative dynamic interpretation by which current mental health status shapes how past life adversities are remembered and reported. Highly pertinent to this interpretation are the effects of

endowment and contrast in autobiographical memory (Shrira & Shmotkin, 2008; Tversky & Griffin, 1991; Wilson & Ross, 2003). In the current study, early adverse events were associated with increased mental health, thus denoting a contrast effect, whereas more recent adverse events were associated with decreased mental health, thereby reflecting an endowment (i.e., assimilation) effect. Our results are consistent with previous findings indicating that a contrast effect was more probable when past events were subjectively separate from one's life or distant in time, whereas an endowment effect was more probable when past events were subjectively integral to one's life or recent in time (Clark, Collins, & Henry, 1994).

Other dynamic interpretations are also open to further investigation. For example, recall biases may lead to underreporting of adverse events, mainly remote in time (Hardt & Rutter, 2004). Also, certain predispositions may render people prone to be afflicted by both adverse events and consequent distress (Green et al., 2010). Finally, associations between past adversity and current mental health may not necessarily reflect direct paths but rather mediating effects (Schumm, Stines, Hobfoll, & Jackson, 2005).

Beyond the limitation of its cross-sectional design, this study has some additional qualifications to consider. As the current sample was confined to the respondents of the drop-off questionnaire who reported their age in at least one event, it lost some of the representativeness of the full sample in SHARE-Israel. Nevertheless, our data still presented a large heterogeneous sample drawn in a national survey. Another question about the generalizability of the results stems from the unique characteristics of the study population. There is evidence that the prevalence of depression in the older population of Israel is nearly twice as high as expected among populations of similar age in the United States and most European countries (Shmotkin & Litwin, 2009). This elevated level of depression may be attributed to highly stressful events endured by a large portion of older Israelis, such as the Holocaust experience, immigration, and wars (Litwin, 1995; Lomranz, 1990). In addition, the mental health outcomes in the current inquiry did not include a symptomatology index of posttraumatic stress disorder (PTSD), which is relevant to life adversity. This limitation is offset by the fact that PTSD risk concerns relatively small proportions of the population, whereas depressive symptoms (assessed in SHARE by two complementary measures) are applicable to large community populations (Prince et al., 1999). Moreover, the additional use of positive measures (quality of life and life satisfaction) provided a more valid profile of mental health status.

A final limitation to be noted is that the variance explained in the mental health indices was modest. However, as the effects of event timing and type on mental health differs across studies (e.g., Dulin & Passmore, 2010; Krause, 2004), there is still no conclusive evidence about the extent of the role that the trauma timing and type play in later life. Thus, it is possible that the effect size varies according to the differences in sample composition and measures. Therefore, further research on the effect of trauma timing and type is warranted, and additional aspects (e.g., subjective appraisal of event impact) should be considered as well.

In conclusion, the current study points to the need for a differential outlook on the constituents of the relationship between past adversity and present mental health. The findings place past adversity within a life span context and show that the timing of the adverse events matters. In addition, the effect of timing proved in this study to be pertinent to the type of adverse event, thus substantiating a previously proposed distinction between self- and other-oriented adversities. Such a differential approach provides more clues as to whether past adversity dooms people to lingering suffering or rather opens an avenue to better mental health.

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Table 1

Themes, Occurrence, and Age of Potentially Traumatic Events

Theme and event	*n*	Mean age	*SD*
Bereavement			
Experienced the death of a spouse (O)	163	60.0	13.9
Experienced the death of a child or grandchild (O)	113	49.3	15.9
Life hardship and heath vulnerability			
Had a loved one at risk of death owing to illness or accident (O)	339	46.0	16.5
Experienced extremely severe economic deprivation (S)	226	25.7	16.5
Was at risk of death owing to illness or serious accident (S)	137	49.0	18.7
Needed long-term care owing to difficulty in caring for herself/himself (S)	96	55.5	18.7
Provided long-term care to a disabled or impaired relative (O)	80	48.0	13.1
War and terrorism			
Lost a loved one in a war or in military service (O)	205	27.8	13.7
Witnessed the serious injury or the death of someone in war or military action (O)	176	23.6	9.2
Experienced the injury or the death of a loved one in a terrorist act (O)	63	50.2	17.0
Was wounded in war or military action (S)	58	23.8	7.1
Witnessed a terrorist act in which she/he was not harmed personally (O)	46	45.2	17.2
Was wounded in a terrorist act (an attack by terrorists against civilians) (S)	6	47.7	7.5
Victimization			
Was the victim of crime (such as robbery or fraud) (S)	104	52.7	14.4
Witnessed an accident or violent act in which someone was seriously injured or killed (O)	76	33.9	17.6
Was the victim of violence or abuse (S)	22	23.7	18.1
Experienced sexual assault (rape or harassment) (S)	12	15.3	15.0

Note. Results are for 1,130 respondents who completed at least 13 of 17 items of the Potentially Traumatic Events Inventory and who reported their age in at least one event. S = self-oriented event; O = other-oriented event. Items are listed in descending order of occurrence within each theme.

Table 2

Hierarchical Multiple Regressions Predicting Mental Health by Cumulative Adversity in Different Age Periods

	Mental distress		Well-being	
Variable	**Euro-D**	**A-CESD**	**CASP-12**	**Life satisfaction**
Step 1: Background characteristics				
ΔR^2	.14***	.18***	.23***	.07***
Age	.15***	.17***	−.17***	−.03
Gender[a]	.14***	.09**	−.01	−.05
Origin: Mid-East/North Africa[b]	.08*	.06	−.06	−.07
Origin: Europe/America[b]	−.07	−.05	−.01	−.04
Origin: former USSR[b]	.12***	.21***	−.21***	−.09**
Origin: Arab Israelis[b]	−.08*	.16***	−.29***	.16***
Education[c]	−.25***	−.23***	.24***	.19***
Step 2: Cumulative adversity				
ΔR^2	.02***	.01*	.01*	.01
Events ages 0–19	−.06*	−.05	.07**	.07*
Events ages 20–49	.02	−.03	.03	−.01
Events age 50+	.13***	.08**	−.04	−.06
R^2	.16***	.18***	.23***	.08***
F	20.83	25.16	33.19	8.73
df	10,1110	10,1103	10,1096	10,1070

Note. Reported are results after a listwise deletion of missing data. Only additional variables are shown in the results of Step 2. Entries for the predicting variables are standardized regression coefficients (βs). Euro-D = European Depression scale; A-CESD = Adapted version of the Center for Epidemiological Studies-Depression scale.

[a] Coded 0 = man, 1 = woman.

[b] Dummy variables of origin contrasted with Israeli-borns.

[c] Coded by seven categories ranked from no schooling to graduate academic degree.

* $p < .05$.

** $p < .001$.

*** $p < .0001$.

Table 3

Results of Step 2 in Hierarchical Multiple Regressions Predicting Mental Health by Self- and Other-Oriented Cumulative Adversity in Different Age Periods

	Mental distress		Well-being	
Variable	**Euro-D**	**A-CESD**	**CASP-12**	**Life satisfaction**
ΔR^2	.03***	.02***	.01**	.02**
Self-oriented events ages 0–19	−.00	.03	−.02	−.03
Other-oriented events ages 0–19	−.06*	−.09**	.10**	.11**
Self-oriented events ages 20–49	.06*	.06	−.02	−.05
Other-oriented events ages 20–49	−.03	−.09**	.06*	.04
Self-oriented events age 50+	.12***	.10**	−.05	−.10**
Other-oriented events age 50+	.06*	.02	−.01	.01
R^2	.17***	.19***	.23***	.09***
F	16.82	21.02	26.33	8.00
df	13,1107	13,1100	13,1093	13,1067

Note. Reported are results after a listwise deletion of missing data. Only the additional variables entered in Step 2 are shown. Entries for the predicting variables are standardized regression coefficients (bs). Euro-D = European Depression scale; A-CESD = Adapted version of the Center for Epidemiological Studies-Depression scale.

* $p < .05$.

** $p < .001$.

*** $p < .0001$.