

Ghosts from the Past?

The Association between Childhood interpersonal Trauma, Attachment and Anxiety and Depression in Late Life

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Abstract

Objectives. Research suggests that vulnerability for anxiety and depression in late life results from a complex interaction between (neuro)biological and environmental factors. In this context, there is growing evidence for the role of childhood trauma on vulnerability for both anxiety and depression throughout the course of life, mainly through its effects on attachment as a biologically based neurodevelopmental stress regulation system. Yet, the impact of childhood trauma on depression and anxiety in late life specifically remains unclear. The current study therefore aims to investigate the association between retrospectively reported childhood interpersonal trauma, attachment dimensions and levels of anxiety and depression in late life. **Method.** A sample of 81 community dwelling older adults completed measures of early and current adversity, attachment dimensions, and levels of anxiety and depression. **Results.** The occurrence and frequency of childhood trauma, but not later negative adult life events, was associated with late life anxiety and depression. Both attachment anxiety and avoidance were related to anxiety and depression. Only attachment anxiety affected the association between childhood trauma, and emotional neglect in particular, and late life anxiety and depression. **Conclusion.** Childhood trauma may be associated with anxiety and depression in late life. Part of this association is probably indirect, via the effect of insecure attachment and high levels of attachment anxiety in particular.

Keywords: aging, trauma, attachment, anxiety, depression

Disclosure statement

The authors report no conflicts of interest.

Introduction

Depression and anxiety are highly prevalent in late life. Indeed, estimates suggest that depression occurs in approximately 25% of the elderly (Forlani et al., 2014), whereas the prevalence of anxiety disorders ranges from 10 to 20% in older adults (Cassidy & Rector, 2008; Kirmizioglu, Dogan, Kugu, & Akyüz, 2009). Moreover, comorbidity between depression and anxiety in late life is substantial (Beekman et al., 2002) and is related to poor clinical outcome (Beekman et al., 2002; Flint, 1994; Cassidy & Rector, 2008). Studies have consistently indicated that exposure to childhood adversity increases susceptibility to both depression and anxiety in early adulthood (Anderson, Fields, & Dobb, 2011; Vink, Aartsen, & Schoevers, 2008) and many older adults have been confronted with childhood abuse or neglect. Specifically, estimated prevalence rates of childhood trauma in American adults older than 55 years were 13.5% for verbal abuse, 9.6% for physical abuse and 9.3% for sexual abuse (Bynum et al., 2010). Yet, there is still a paucity of studies in this area in older adults, and relatively little is understood about the mechanisms explaining the relationship between childhood trauma and anxiety and depression in late life.

The Life Cycle Model of Stress and Wellbeing in Late Life

The life cycle model of stress provides a comprehensive theoretical framework to understand putative links between early adversity and vulnerability for anxiety and depression in late life. This model essentially suggests that disorders that have their onset in late life might reflect ‘delayed’ manifestation effects of exposure to early life stressors (Lupien, McEwen, Gunnar, & Heim, 2009). Specifically, repeated exposure to severe distress has been suggested to produce enduring effects on the brain through activation of the hypothalamus-pituitary-adrenal (HPA) axis which leads to the production of glucocorticoids that exert harmful effects on brain tissue, particularly during so-called ‘critical time windows’ of

increased neuronal plasticity in brain areas involved in the regulation of stress, such as the hippocampus, the amygdala and the prefrontal cortex (Giedd et al., 1996; Pruessner et al., 2010). Whilst these ‘programming’ effects may manifest in early childhood or adulthood, in a substantial proportion of individuals these effects may not manifest until late life (Clark, Caldwell, Power, & Stansfield, 2010). Both age-related brain changes and age-specific challenges (and particularly experiences of loss of attachment figures) have been argued to play a key role in this context. Indeed, old age is associated with several challenges concerning physical health, sensory loss, retirement with associated changes in income, narrowing social networks, cognitive declines, and increasing awareness of mortality (Charles & Carstensen, 2010) that increase frailty which may lead to the onset of psychopathology in late life in individuals who have been exposed to early life trauma but have shown a resilience to the development of mental health issues until then. For instance, in a group of 567 community dwelling adults older than 60 years, an increased frailty as assessed using the Fried biological syndrome model was associated with more anxiety and depression compared with robust older adults (Ni Mhaolain et al., 2012). More broadly, in social sciences, there has been increasing interest in the concept of ‘cumulative’ advantage or disadvantage in several domains in explaining the impact of aging on wellbeing (Ferraro & Shippee, 2009).

Consistent with these concepts and assumptions, a number of studies have indeed found an association between childhood adversity and increased vulnerability for psychopathology in late life, even after controlling for early adulthood psychiatric symptoms (Clark, Caldwell, Power, & Stansfield, 2010; Falk, Hersen, & van Hasselt, 1994; Gershon, Sudheimer, Tirouvanziam, Williams, & O'Hara, 2013). Yet, more research in this area is clearly needed, particularly on the role of attachment in these relationships as the attachment system has been shown to be a key modulator of stress and adversity throughout life (Nolte et al., 2011).

The Role of Attachment

The detrimental effect of childhood interpersonal trauma may be better understood if we take into account that the development of stress and affect regulation largely occurs in the context of attachment relationships (Mikulincer & Shaver, 2007). Contemporary attachment formulations indeed converge to suggest that the attachment system may be thought of as a behavioural system that is activated when faced with threat. It involves the coordination of different subsystems aimed at reducing distress through seeking actual or imagined proximity to an attachment figure (Fonagy & Luyten, 2009; Mikulincer & Shaver, 2007; Sbarra & Hazan, 2008).

It is assumed that proximity to a sensitive caregiver who is responsive to the needs of a child fosters the development of adaptive affect regulation strategies typical of secure attachment in adulthood. Individuals who are securely attached generally have a strong sense of self-efficacy. Moreover, they perceive others as trustworthy, accessible and well-intentioned, and thus have the ability to turn to others in times of stress and adversity.

By contrast, when attachment figures have been unavailable, nonresponsive or abusing, secondary attachment strategies develop that function as habitual responses to stress in later life. The first of these secondary or compensatory strategies is typically observed in individuals with anxious attachment, and consists of a hyperactivation of the attachment system. Individuals with high levels of attachment anxiety often view themselves as incompetent in dealing with life's challenges and they are hypervigilant for signs of rejection and abandonment by significant others. Difficulties in regulating stress in adults who primarily use hyperactivating strategies are therefore typically associated with an excessive need for others (Mikulincer & Shaver, 2007), but paradoxically they are not easily comforted in times of distress because of their underlying belief that others will not be there for them.

A second compensatory attachment strategy that is observed in individuals with avoidant attachment features, entails attempts to deactivate the attachment system and avoid contact with attachment figures during stressful times. When distressed, these individuals have a tendency towards compulsive autonomy (i.e., the conviction that they have to be able to deal with distress without the help of others), and consequently they tend to suppress negative emotions. As there is a relative stability in the quality of attachment throughout life, early attachment experiences may have a continuing impact on interpersonal functioning throughout the lifespan (Van Assche et al., 2013).

Indeed, there is considerable research that has found a relationship between adult attachment insecurity and vulnerability for psychopathology in adulthood and late life (Mikulicer & Shaver, 2012; Van Assche et al., 2013). Additionally, childhood trauma as opposed to adulthood trauma has been linked to the development of insecure attachment patterns (Ogle, Rubin & Siegler, 2015), without consistent evidence for the differential impact of different types of trauma on attachment (e.g. Erozkan, 2016). Insecure attachment patterns, in their turn, affect the quality of relationships and psychological function in an ongoing fashion (Fowler, Allen, Oldham, & Frueh, 2013). Coincidentally, studies also converge to suggest that higher levels of attachment anxiety are negatively related to self-reported wellbeing in older adults (Andersson & Stevens, 1993; Bodner & Cohen-Fridel, 2010; Cicirelli, 1989; Cookman, 2005; Kafetsios & Sideridis, 2006; Park & Vandenberg, 1994; Webster, 1997, 1998; Wensauer & Grossmann, 1995). By contrast, the use of attachment deactivating strategies has been found to be positively related to greater self-reported psychological and physical wellbeing in old age in some studies (Jain & Labouvie-Vief, 2010). Although this positive association seems counter-intuitive, it may be explained by a reporting bias typical of individuals that primarily rely on attachment deactivating strategies. Jain and Labouvie-Vief (2010), for instance, found that attachment avoidance in community

dwelling older adults was at the same time associated with relatively high self-reported wellbeing, but also with elevated heart rate and blood pressure which suggests that there still are increased levels of distress on a subconscious level.

The Present Study

The present study aims to further explore the nature of the relationship between childhood interpersonal trauma and late life anxiety or depression. Specifically, we hypothesized that attachment anxiety and avoidance in adulthood would mediate the association between childhood trauma and anxiety or depression in older adults. Based on the findings reviewed above, we hypothesized that childhood trauma in the elderly will be associated with higher levels of anxiety and depression. We also predicted a dose-response effect, i.e., that levels of self-reported anxiety and depression would increase as the number of trauma's increases. Finally, we expected that the relationship between childhood trauma and late life anxiety and depression would be indirect, through the effect of associations with attachment dimensions. Specifically, we expected that findings for attachment anxiety would be strongest, as attachment avoidance has been shown to be associated with a tendency to suppress negative emotions and underreport distressing events, which can be expected to attenuate the relationship between childhood trauma and feelings of anxiety and depression in late life.

Method

Participants and Procedure

A sample of community dwelling older adults were recruited from organisations for seniors. The main researcher visited several meetings from senior citizen organisations, provided information about the current study and prepared leaflets with practical information about participation in the study (timing, fee, ...). Older adults who were present at the time of the

visits received a leaflet with information. Those willing to participate filled in a form containing demographic information such as date of birth, formal education, marital status and number of children. The candidates for participation in the study also provided a telephone number or email address. The main researcher collected all the leaflets and participants were contacted by telephone or email within two months after recruitment. Extra leaflets were given to the persons responsible for the organisations and older adults who were not present during the visits but who read the leaflet and were interested in participation, could send an email or call the main researcher. The study was approved by the ethics committee of the University Hospitals of Leuven and all subjects signed an informed consent to the inclusion of material pertaining to themselves. Participation was anonymous. In total 81 older adults aged 74.90 (SD: 6.64, range: 62-90) agreed to participate in the study. There were 29 male (36%) and 52 female volunteers (64%). Most were married (58%) or widowed (27%). A minority was single (9%) or divorced (6%). The average number of children was 2 (SD = 1.34; range 0-5). The mean number of years in formal education was 12.85 (SD = 3.66, range 6-16). A brief screening using the Mini Mental State Examination (MMSE) (Folstein, Folstein, & McHugh, 1975) showed intact cognitive functioning in all of the participants with a mean total score of 28.99 (SD: 0.13, range 26-30).

Measures

Childhood Trauma and Adult Adversity

Information about childhood adverse life events was acquired using the Childhood Trauma Questionnaire – Short Form (CTQ-SF) (Bernstein et al., 2003). The CTQ-SF contains 25 questions that need to be scored on a five point Likert scale ranging from 1 = ‘Never true’ to 5 = ‘Very often true’, pertaining to five subscales: emotional neglect, physical neglect, emotional abuse, physical abuse, sexual abuse. Besides dimensional scores, cut-off scores

based on the CTQ manual were used to assess the presence or absence of different types of trauma (emotional abuse cut-off 12, physical abuse cut-off 9, sexual abuse cut-off 7, physical neglect cut-off 9, emotional neglect cut-off 14) (Bernstein & Fink, 1998). We also divided participants into two groups based on the presence of any type of trauma as opposed to none. Finally, we calculated a score based on the total number of traumatic events, resulting in a score ranging from 0 (= no trauma) to 5 (= 5 different types of trauma). The CTQ-SF has shown good reliability and validity as a measure for retrospective report of childhood trauma (Bernstein et al., 2003). Specifically, there was measurement invariance across different samples of individuals with substance abuse, adolescent psychiatric inpatients and a normative community sample (combined $n = 1978$). Confirmatory factor analysis showed significant factor loadings of the individual items and the scales with alpha coefficients ranging from .84 to .89 across groups on emotional abuse, .81 to .86 for physical abuse, .92 to .95 for sexual abuse, .85 to .91 for emotional neglect and slightly lower factor loadings ranging from .61 to .78 for physical neglect. Furthermore, the questionnaire has shown good criterion related validity in a subsample of 179 adolescents for whom corroborative data on trauma were available. Specifically, the CTQ latent constructs that were obtained through confirmatory factor analysis significantly predicted therapists' observations of abuse and neglect using the child maltreatment ascertainment interview (CMAI), with an excellent fit in a path model that allowed covariance among predictor variables $\chi^2(361, n = 179) = 550.08$; $p < .001$; comparative fit index (CFI) = .93; root mean square error of approximation (RMSEA) = .05 (Bernstein et al., 2003). A validation study of the Dutch CTQ-SF showed good reliability for physical abuse ($\alpha = .91$), emotional abuse ($\alpha = .89$), sexual abuse ($\alpha = .95$) and emotional neglect ($\alpha = .91$). There was a slightly lower reliability for physical neglect ($\alpha = .63$) (Thombs, Brett, Bernstein, Lobbestael & Arntz, 2009). In the current sample of older community dwelling adults, internal consistency reliability of the CTQ subscales was good in

the subscales emotional abuse ($\lambda^2 = .83$; $\alpha = .83$), sexual abuse ($\lambda^2 = .92$; $\alpha = .91$), physical abuse ($\lambda^2 = .85$; $\alpha = .80$) and emotional neglect ($\lambda^2 = .81$; $\alpha = .80$). In line with prior research, reliability was slightly lower in the physical neglect subscale ($\lambda^2 = .62$; $\alpha = .59$).

Negative life events in adulthood (from age 18 onwards) were assessed using the Psychiatric Epidemiology Research Interview (PERI) (Dohrenwend & Dohrenwend, 1982). The participants were first asked whether they had experienced specific events pertaining to several domains (work, family, friends, romantic relationships, health, crime, finance). Next, they had to indicate how distressing each event was on a Likert scale ranging from 1 to 7. The total number of events was used as a measure of adulthood adversity and the total sum of subjective distress associated with the events was used as a measure for the distress associated with adulthood adversity.

Attachment Dimensions

The Experiences in Close Relationships – Revised (ECR-R) self-report questionnaire (Fraley, Waller, & Brennan, 2000) was used to assess levels of attachment avoidance and attachment anxiety in adulthood. The ECR-R consists of 36 items which have to be scored on a 6-point Likert type scale, with 18 items measuring the level of attachment anxiety and the other 18 items assessing the level of attachment avoidance. Participants were invited to respond to the questions keeping in mind their relationship with one important attachment figure: partner, (adult) child, sibling, friend or other. In this study, scores for attachment anxiety and avoidance were averaged. Higher scores are suggestive of more attachment anxiety or avoidance. The ECR-R has demonstrated good psychometric qualities (Sibley, Fischer, & Liu, 2005) with a Cronbach's alfa of .91 for attachment avoidance and .94 for attachment anxiety. Additionally, confirmatory factor analysis showed that a two factor model exhibited an excellent fit to the data, with $\chi^2(53, n = 478) = 142.26$, CFI = .98, RMSEA = .06. A Dutch

version of the ECR-R demonstrated good reliability for attachment avoidance ($\alpha = .94$) and attachment anxiety ($\alpha = .92$). Moreover, confirmatory factor analysis showed that the hypothesized two-factor model of the ECR-R, showed a good fit with the data, $\chi^2(53, n = 262) = 169.650$, CFI = .95, RMSEA = .092 (Kooiman, Klaassens, van Heloma Lugt & Kamperman, 2013). Internal consistency reliability was also good in our sample for attachment anxiety ($\lambda^2 = .90$; $\alpha = .90$) and avoidance ($\lambda^2 = .86$; $\alpha = .85$).

Anxiety and Depression

The anxiety subscale of the Hospital Anxiety and Depression Scale (HADS-A) (Zigmond & Snaith, 1983) and the Geriatric Depression Scale (GDS) (Yesavage et al., 1982) were used to assess current levels of anxiety and depression, respectively. Both instruments are brief, easy to administer and have been shown to have good psychometric properties with a Cronbach α of .83 for the HADS-A (Herrmann, 1997; Bjelland, Dahl, Haug & Neckelmann, 2002) and .82 for the Dutch translation in a group of adults aged more than 65 years (Spinhoven, Ormel, Sloekers, Kempen, Speckens & van Hemert, 1997). There was a Cronbach α of .94 for the English version of the GDS (Yesavage et al., 1982) and a Cronbach α of .87 for the Dutch version of the GDS (van Marwijk, Wallace, de Bock, Hermans, Kaptein & Mulder, 1985). Internal consistency reliability in our sample is good for the HADS-A ($\lambda^2 = .85$; $\alpha = .84$) and GDS ($\lambda^2 = .82$; $\alpha = .81$). Scores of 7 or higher on the HADS-A are considered clinically significant. The GDS distinguishes between mild depression (scores between 11 and 13), moderate depression (scores ranging from 14-20) and severe depression (scores > 20).

Cognition

Finally, a standardized Dutch version of the Mini Mental Status Examination (MMSE) (Folstein et al., 1975; Kok, Verhey, & Schmand, 2004) was used as a tool for the assessment

of cognitive abilities. It measures orientation skills, memory function, concentration, language and praxis. The maximum score is 30, with 23 considered as an appropriate cut-off value with a sensitivity of 0.82 (Bour, Rasquin, Boreas, Limburg, & Verhey, 2010). Scores below this cut-off are suggestive of cognitive dysfunction that is more pronounced than normal.

Data Analysis

Associations between the study variables were explored based on bivariate Pearson correlations and biserial correlations for the association between continuous and dichotomized variables. Next, mediation analyses were performed using a bias-corrected bootstrapping approach, because of the relatively small sample size, to investigate the hypothesized mediation models involving adult attachment, dimensional measures of childhood trauma and depression and anxiety in late life (Preacher & Hayes, 2004). Analyses were performed using SPSS Version 24. Results were considered statistically significant at the $p < .05$ level.

Results

Almost half of the participants reported having experienced at least one type of childhood trauma. Emotional and physical neglect were reported most (see Table 1). Participants reported on average 11 negative life events in adulthood ($SD = 3.6$; range 3-19), with most events relating to the family (e.g. a severe illness or death of a family member), children or friends (e.g. severe illness or death of a friend, falling out with a friend) and health (e.g. surgery, reduced mobility). Work, financial adversity, crime or issues related to romantic relationships accounted for only a small proportion of the negative life events reported (Table 1).

There was an average level of anxiety of 4.41, with a range of 0 to 18. Twenty individuals reported elevated levels of anxiety (cut-off value of 7 or more). There was an average level of

5.56 for the GDS, with a range of 0 to 22. There were nine individuals who reported clinically significant depressive feelings (cut-off value of 11 or more). Anxiety and depression were strongly correlated, as was expected based on prior research ($r = .59$, $p < .01$).

Zero-order correlations between childhood traumatic events, adulthood negative life events and anxiety and depression are shown in Table 2. First, the presence of any childhood trauma was positively related to current levels of anxiety and depression. The total number of childhood traumatic events reported, was significantly positively correlated with anxiety, but not with depression. The number of negative life events experienced in adulthood was not significantly correlated with depression or anxiety.

With respect to specific types of trauma, both emotional abuse and neglect showed a positive association with current levels of anxiety. Emotional neglect was also significantly and positively related to depression. Physical neglect, physical abuse, and sexual abuse, however, were not significantly correlated with depression or anxiety (Table 2).

Physical abuse was strongly negatively correlated with attachment avoidance. Emotional neglect, on the other hand, was significantly positively associated with attachment anxiety. There were no significant correlations between attachment anxiety or avoidance and physical neglect, emotional abuse or sexual abuse. Both attachment anxiety and attachment avoidance showed a significant positive correlation with current levels of anxiety and depression (Table 2).

Hence, only for attachment anxiety and emotional neglect, conditions for mediation were satisfied and we thus investigated whether emotional neglect was associated with late life anxiety and depression through the effect of attachment anxiety. Results showed that there was indeed an indirect effect of emotional neglect on late life anxiety through attachment anxiety (Table 3). There was no evidence that emotional neglect influenced current levels of anxiety directly ($c' = 1.85$, $p = .06$). The indirect effect coefficient was .04 (confidence

intervals: .00-.15). Additionally, there was an indirect relationship between emotional neglect and late life depression through the effect of attachment anxiety (Table 4). Again, there was no evidence that emotional neglect influenced current levels of depression directly ($c' = 1.83$, $p = .14$). The indirect effect coefficient was .05 (confidence intervals: .00-.17).

Discussion

In this sample of community-dwelling older adults approximately half of all participants reported having been exposed to at least one type of childhood trauma, which slightly exceeds prevalence rates usually reported in younger cohorts (Saunders & Adams, 2014). Prior research indeed suggests that the occurrence of childhood maltreatment has declined in some regions, particularly in Western countries (Finkelhor & Jones, 2006), leading to lower prevalence rates in younger cohorts. Moreover, emotional and physical neglect was reported more often than abuse, which may also reflect cohort effects, as pedagogic changes and greater improvements in welfare have occurred over the past few decades.

Surprisingly, only childhood trauma, but not negative life events that occurred in adulthood, were related to late life anxiety and depression. We also found a dose-response effect as individuals who were exposed to different types of childhood trauma, experienced higher levels of both anxiety and depression. These findings are consistent with prior research on the enduring effects of childhood trauma (Lupien et al., 2009). Indeed, other researchers have also looked into the differential impact of early versus adulthood trauma and they found a significant interaction between the developmental timing of the trauma and attachment anxiety, showing that attachment anxiety was stronger in older individuals with Post Traumatic Stress Disorder (PTSD) symptoms and childhood trauma compared with older adults with PTSD symptoms and adulthood trauma (Ogle, Rubin & Siegler, 2015).

In line with these findings, attachment anxiety was positively related to emotional neglect in early youth in our sample of older adults and it was also related to current levels of anxiety and depression. Moreover, the relationship between childhood emotional neglect and current levels of anxiety and depression was indirect, via the effect of attachment anxiety. Cognitive-affective schema's in individuals with high levels of attachment anxiety are assumed to encompass the belief that one is incompetent to solve problems oneself. This belief might lead to higher levels of anxiety and depression in late life, when individuals are exposed to more age-related losses and social networks typically decrease (Kafetsios & Sideridis, 2006). However, at the same time, individuals with high levels of attachment anxiety may be inclined to 'over-report' trauma, and emotional neglect in particular. Indeed, because of their excessive need of reassurance, individuals with high levels of attachment anxiety might feel neglected more easily when attachment figures have been unable to meet their emotional needs (Mikulincer & Florian, 1998).

Attachment avoidance, to the contrary, was associated with a smaller number of reported childhood trauma's. This was particularly the case for physical abuse. Although it is difficult to draw strong conclusions based on the current cross-sectional data, this latter finding is similar to findings from other studies suggesting that individuals high on attachment avoidance tend to cope with distress through defensive attempts to deemphasize the importance of negative emotions related to these events (Shaver, Collins, & Clark, 1996). This may also result in a tendency to underreport distressing events. However, this mechanism, which may be adaptive in the short term, might become counterproductive in the longer term, and especially in late life, as it may increasingly fail, leading to higher levels of self-reported anxiety and depression in individuals with high levels of attachment avoidance (Jain & Labouvie-Vief, 2010). Indeed, Gross and Levenson (1993) have reported that suppression of negative emotions actually puts individuals under constant and considerable

strain as it results in greater physiological arousal, which could lead to physical and emotional ‘wear and tear’ and ultimately a collapse of emotion regulation strategies resulting in higher self-reported anxiety and depression.

In summary, results suggest that childhood trauma may negatively impact on late life wellbeing, especially in individuals with higher levels of attachment insecurity. Hence, a systematic screening of early life trauma in older patients seems important and an awareness of the importance of security in attachment to the therapist as well as for instance family members or nursing staff. Specifically, attachment based interventions may be beneficial in treating older patients who present with anxious or depressive symptoms and who have a history of trauma (Mikulincer & Florian, 1998). Also, the clinician needs to be aware of the possibility of underreporting distress and distressing events in individuals with avoidant attachment characteristics.

Further longitudinal research is needed, however, to replicate these findings. Furthermore, the mechanism underlying this association may be different in individuals that have high levels of attachment avoidance versus those with high levels of attachment anxiety.

Other limitations of the current study include the relatively small sample size ($n=81$), which possibly reduces statistical power. Power analysis for multiple correlations indeed showed that a sample of 87 individuals would insure a power of .80 to detect correlations with a coefficient of at least .30 and alpha set at .05 (Gatsonis & Sampson, 1989; Hulley, Cummings, Browner, Grady & Newman, 2013). Still, the use of bootstrapping in the mediation analyses mitigates this limitation somewhat (Preacher & Hayes, 2004). However, because of the small sample size, we were not able to conduct analyses for men and women separately, although gender has often been shown to play an important role in research on the impact of childhood trauma (Varese et al., 2012). Second, the cross-sectional nature of the study design limits the possibilities for causal interpretation. Retrospective reports of

childhood trauma may introduce an important bias. It is likely, as we have discussed, that the quality of current attachment working models has an influence on the reporting and recollection of childhood traumatic events, with attachment avoidance leading to a tendency to under-report such events, whereas attachment anxiety, to the contrary, may lead to the over-reporting of negative affect and/or negative events. Next, an important methodological limitation is the lack of data on PTSD symptoms in our group. Also, we did not assess adulthood trauma, but adulthood negative life events that might not necessarily be traumatic and thus less harsh. This may already explain a difference in the observed associations of adulthood versus childhood adversity. Indeed, some prior researches have even demonstrated an inverse relationship (Shrira, Shmotkin & Litwin, 2012). Specifically, when data concerning potentially traumatic adulthood and childhood events were collected in 1130 older Israeli participants, and these were correlated with measures of wellbeing, only adulthood adversity was significantly and negatively related to wellbeing. Importantly, the authors refer to a cumulative effect, suggesting that at a certain point throughout the lifespan individuals may have reached a critical threshold and wellbeing starts to reduce with each additional adverse event. This threshold for experiencing (possibly non-traumatic) adversity may not have been reached in early youth, explaining the absence of a significant relationship between wellbeing and childhood adversity in their sample. Finally, we have studied a sample of community dwelling older adults and hence the current findings might not be generalizable to clinical populations.

Taking into account these limitations, the current results suggests that early life trauma shows a positive association with anxiety and depression in late life (Comijs et al., 2013), especially in individuals with insecure attachment features. Still, even though findings in the current study are in line with earlier findings from studies on childhood adversity and diverse

psychopathology throughout the lifespan, prospective research is needed to replicate and extend the current findings.

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