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The Role of Autonomy–Connectedness in the Relation Between Childhood Stressful Life Events, Current Posttraumatic Symptoms, and Internalizing Psychopathology in Adulthood

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Objective: Autonomy–connectedness (AC), the adult capacity for self-governance while being connected to others, reflects the healthy capacity of adults for self-steering. The present study's main aim was to investigate whether childhood stressful life events were associated with psychopathological symptoms in adulthood, but only in people with AC deficits. ***Method:*** We estimated path models based on data from several assessment waves, concerning childhood stressful life events, AC, and internalizing psychopathological symptoms (including posttraumatic symptoms) completed by panel members from the Longitudinal Internet Studies for the Social Sciences panel (community sample). ***Results:*** We found positive associations between AC deficits and childhood stressful life events, on one hand, and psychopathological symptoms in adulthood, on the other hand, as well as between childhood stressful life events and the AC component Sensitivity to Others. Importantly, we found that the association between childhood stressful life events and trauma-related hyperarousal symptoms was strongest in individuals with low levels of the AC components Self-Awareness and Capacity for Managing New Situations (moderation). Childhood stressful life events also interacted with Self-Awareness in predicting general mental health symptoms. All effect sizes were small. ***Conclusions:*** Deficits in AC, particularly regarding Self-Awareness and Capacity for Managing New Situations, may represent a vulnerability factor for developing trauma-related psychopathology. Enhancing AC may be a beneficial treatment approach for trauma-related psychopathology.

Clinical Impact Statement
Person characteristics and environmental risk factors may interact and together contribute to the development of psychopathology. The present study investigated the interaction between autonomy–connectedness deficits and childhood stressful life events, which both are thought to represent underlying vulnerability factors for developing psychopathology later in life. Results from this study indicated that autonomy–connectedness deficits and experience of childhood stressful life events have both unique and combined effects on psychopathological symptoms. As pilot studies showed promising results of a training enhancing autonomy–connectedness on anxiety symptoms, this approach may be beneficial for trauma-related psychopathology also.

Keywords: autonomy–connectedness, internalizing psychopathology, childhood stressful life events, stress–vulnerability, posttraumatic symptoms

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Autonomy–connectedness captures the (adult) capacity for self-governance while being connected to others. Based on favorable attachment experiences leading to a well-developed healthy self, it reflects the healthy capacity of adults for self-steering. Although the classical concept of autonomy one-sidedly emphasized independence and separation (Erikson, 1968; Kohlberg, 1984; Mahler, Pine, & Bergman, 1975), the more modern concept of autonomy–connectedness includes the ability to be close to others and to take others' needs into account while trying to meet one's own needs (Bekker, 1993).

Autonomy–connectedness contains three separate but related components (Bekker, 1993; Bekker & van Assen, 2006): Self-Awareness, Sensitivity to Others, and Capacity for Managing New Situations. Self-Awareness reflects the capacity to be aware of one's own opinions, wishes, and needs and the ability to express these in social interactions. Sensitivity to Others is

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the ability to be aware of the opinions, needs, and wishes of others and includes empathy as well as the need for intimacy and separation. Capacity for Managing New Situations comprises whether people feel at ease in new situations and whether they depend on familiar structures, as well as flexibility and an inclination to exploration. Although being too sensitive to the needs and wishes of others is dysfunctional (which is often the case in internalizing disorders), being not sensitive at all (which is more characteristic of externalizing disorders) is dysfunctional as well. With regard to Self-Awareness and Capacity for Managing New Situations, more always seems to be better, however (Bekker & van Assen, 2017).

Autonomy–connectedness is rooted in attachment theory (Bowlby, 1969, 1973), combined with the neo-analytical object–relation theory on the development of gender identity (e.g., Chodorow, 1989). However, autonomy–connectedness has only shown moderate associations with attachment styles and should therefore be considered a separate construct from attachment (Bekker & Croon, 2010), as well as from personality (van Assen & Bekker, 2009). More specifically, van Assen and Bekker showed that two thirds of the variation between people in autonomy–connectedness could not be explained by the Big Five.

Autonomy–connectedness is developed during childhood and adolescence. Attachment experiences during this time have a major impact on the development of autonomy–connectedness and personality development more in general (Bekker, 1993; Bekker & van Assen, 2006). For example, according to Kernberg (1984) and Dozier, Stovall-McClough, and Albus (2008), insecure attachment experiences determine abnormal personality development and emotion regulation strategies. In line with these theories, and relevant to autonomy–connectedness, Rutten and colleagues (2016) found that inclusion of alexithymia as a mediator between the autonomy–connectedness component of self-awareness, on one hand, and anxiety and depression, on the other hand, reduced the otherwise significant direct effects of Self-Awareness to nonsignificance.

In sum, insecure attachment experiences and resulting autonomy–connectedness deficits are thought to represent an underlying vulnerability factor for developing psychopathology later in life (Bekker & van Assen, 2017). In line with Bowlby (1969, 1973), adults who lack the ability for self-steering are not sufficiently aware of and lack access to their own needs and wishes (Self-Awareness). They (also therefore) overly rely on the needs and wishes of others (Sensitivity to Others); lack the ability to flexibly enter new situations, including potentially dangerous ones (Capacity for Managing New Situations); and are at greater risk for developing psychopathology. Indeed, a considerable amount of research investigating undergraduate, clinical, and community samples has yielded evidence that autonomy (–connectedness) deficits are related to increased psychopathology. For example, patients with anxiety disorders have shown to consistently score lower on autonomy (–connectedness) than controls (e.g., Alford & Gerrity, 1995; Bekker & Belt, 2006; Fresco, Sampson, Craighead, & Koons, 2001). Importantly, these studies showed that autonomy significantly predicted anxiety symptoms. Autonomy deficits have also been associated with other various types of psychopathology such as depression, eating disorders, and aggression (e.g., Bekker, Bachrach, & Croon, 2007; Bekker & van Assen, 2006; Burke & Haslam, 2001; Fairbrother & Moretti, 1998; Marsden, Meyer, Fuller, & Waller, 2002; Rutten et al., 2016).

Attachment also plays an important role when having to deal with childhood trauma. More specifically, traumatic experiences change expectations and beliefs about the world, self, and others. The developmental trauma model proposed by Pynoos, Steinberg, and Piacentini (1999) suggests that attachment experiences play an important role in the development of these so-called schemas. That is, the availability of and reliance on parents affect how children learn to cope with stress and trauma. For example, if uncorrected, negative self-attributions may become imbedded in character and may influence the degree someone is willing to rely on others for support and protection in life (Pynoos et al., 1999). Unavailability of attachment figures in case of stressful life events may even lead to neurobiological changes. Newman, Sivaratnam, and Komiti (2015), for example, reported that impaired caregiving and trauma appeared to affect early brain development, increasing the risk for developing psychopathology later in life.

In sum, childhood stressful life events and attachment experiences interact and may render one vulnerable for developing psychopathology later in life. We propose that childhood stressful life events may make individuals more vulnerable for psychopathology, particularly in the presence of low autonomy–connectedness. This hypothesized association is in line with developmental trauma models (Pynoos et al., 1999) as well as stress–vulnerability (or diathesis–stress) models (Monroe & Simons, 1991), which propose that person characteristics (e.g., low autonomy–connectedness) and environmental risk factors (e.g., childhood stressful life events) interact and together contribute to the development of psychopathology (Monroe & Simons, 1991). In the current study, we therefore examined these links between childhood stressful life events, autonomy–connectedness, and adult internalizing psychopathological symptoms. Both general internalizing and trauma-related psychopathological symptoms were examined. First, main effects of the various variables were inspected. We investigated whether childhood stressful life events were related to lower levels of autonomy–connectedness (i.e., low levels of Self-Awareness and Capacity for Managing New Situations, as well as high levels of Sensitivity to Others). Also, we examined the associations of childhood stressful life events and low adult autonomy–connectedness with psychopathological symptoms in adulthood. With the current study, we aimed to extend previous literature, as the majority of the abovementioned literature regarding the link between autonomy–connectedness and psychopathology has focused on internalizing psychopathology, such as anxiety and depression (e.g., Alford & Gerrity, 1995; Bekker & Belt, 2006; Fairbrother & Moretti, 1998; Fresco et al., 2001). To our knowledge, there are, however, no studies investigating the link between autonomy–connectedness and trauma-related symptoms. We expected both childhood stressful life events as well as autonomy–connectedness deficits to be associated with more psychopathological symptoms. Whether the links differed across the different autonomy–connectedness components and internalizing problems was explored.

Second, as our main aim, we investigated whether the relationship between childhood stressful life events and adult psychopathological symptoms was moderated by autonomy–connectedness. More specifically, we expected childhood stressful life events to predict more psychopathological symptoms in adulthood, but only in people with low levels of autonomy–connectedness.

Method

Participants and Procedure

The group of participants in the present study comprised panel members from the LISS (Longitudinal Internet Studies for the Social Sciences; www.lissdata.nl) panel. The LISS panel consists of approximately 5,000 randomly selected households in the Netherlands and is a representative community sample operated by CentERdata in Tilburg, the Netherlands, and drawn from the population register by Statistics Netherlands.

The present study used data from different assessment waves. One of the waves was completed in 2009 and the other waves were completed in 2012. This means that the number of participants differed between waves and also questionnaires. Using the respondents' identification number, we were able to merge the data of the different waves. The largest wave consisted of 4,911 respondents. Approximately half of the panel members were female (53.3%) and the mean age of the sample was 51.79 years. Thus, on average, the mean age of the present sample seemed to be higher than would be expected based on random sampling. Other sociodemographic information is also assessed in the LISS panel. We included the variables sex, age, and educational level in our analyses. All sociodemographic information is presented in Table 1.

Measures

Childhood trauma (assessed in 2012; retrospective). The Negative Life Experiences and Trauma Questionnaire (NLETQ; Engelhard, Van den Hout, Kindt, Arntz, & Schouten, 2003) was used to assess stressful life events experienced before the age of 16. Participants are presented with a list of possible stressful life events and asked to indicate whether they experienced one of these life events, how many times, and at which age. Examples are: a life-threatening illness, physical abuse, war, and rape. The full list of life events assessed by the NLETQ is presented in supplemental online Appendix A as well as the percentage of respondents indicating having experienced these life events before the age of 16, as only these were included in the present study. We added all life events before the age of 16 to create a sum score. Impact of the stressful life event was also assessed but not included in the analyses.

Autonomy–connectedness (assessed in 2009). The Autonomy–Connectedness Scale (ACS-30; Bekker & van Assen, 2006) consists of 30 items and three subscales: Self-Awareness, Sensitivity to Others, and the Capacity for Managing New Situations. All items are measured on a 5-point Likert scale (running from 1 = *disagree* to 5 = *agree*). The ACS-30 has shown to have good psychometric properties (Bekker & van Assen, 2006). In the present study, Cronbach's alphas were .76 for Self-Awareness, .78 for Sensitivity to Others, and .74 for Capacity for Managing New Situations.

Internalizing psychopathological symptoms (assessed in 2012). The RAND Mental Health Inventory 5 (MHI5; Berwick et al., 1991) assessed internalizing psychopathological symptoms. It is a five-item questionnaire to assess mental health. Participants are asked to indicate how anxious, down, calm/peaceful, depressed/gloomy, and happy they have felt during the past month. Questions have to be answered on a 6-point Likert scale (1 = *never,* 2 = *seldom,* 3 = *sometimes,* 4 = *often,* 5 = *mostly,* 6 = *continuously*). In the present study, the total score was used, which had a Cronbach's alpha of .85. Cuijpers, Smits, Donker, ten Have, and de Graaf (2009) reported that the MHI5 has adequate validity to screen for mood and most anxiety disorders. Please note that, for the purpose of the present paper, we mirrored positively framed items, such that higher scores reflect more internalizing psychopathological symptoms.

Posttraumatic symptoms (assessed in 2012). The Impact of Events Scale (IES; Horowitz, Wilner, & Alvarez, 1979) and the hyperarousal items of the revised version of this scale (IES-R; Weiss & Marmar, 1997) were used to assess event-related posttraumatic symptoms. On this 23-item questionnaire, respondents indicated how often they suffered from symptoms during the past week on a 4-point Likert scale. The subscales mirror the *DSM–IV* posttraumatic stress symptoms—intrusions, avoidance, and hyperarousal. In the present study, Cronbach's alphas for the Intrusions subscale were .88, .90 for Avoidance, and .92 for Hyperarousal.

Table 1
Sociodemographic Characteristics of the Sample (N = 4,911)

Variable	Mean or *n*	*SD* or %
Sex		
Female	2,616	53.3%
Male	2,293	46.7%
Age, y	51.79 (range 16–92)	17.11
Level of education		
Primary school	434	8.9%
Intermediate secondary education	1,293	26.4%
Higher secondary education	535	10.9%
Intermediate vocational education	1,096	22.4%
Higher vocational education	1,118	22.8%
University degree	420	8.6%

Data Analyses

The path analyses were carried out using AMOS 22, applying the full information maximum likelihood estimation procedure, which is used in case of missing data. Unlike multiple linear regression analysis, this procedure controls for measurement error and can deal with missing values well. For this purpose, we saturated the models by adding covariances between the errors of the scale scores. Please note that fit indices cannot be provided for saturated models. Although there are alternative tests available that may better deal with multivariate normality, AMOS provides a well-known and relatively easy method to test for mediation and moderation. All analyses were controlled for sex, age, and level of education.

First, we tested the effects of childhood stressful life events (predictor) on autonomy–connectedness (criterion) as well as the effects of childhood stressful life events and autonomy–connectedness (both predictors) on internalizing and trauma-related psychopathological symptoms (both criterion variables; Model 1). We expected childhood stressful life events to predict lower levels of autonomy–connectedness (low Self-Awareness, low Capacity for Managing New Situations, high Sensitivity to Others). Also, we expected childhood stressful life events as well as low autonomy–connectedness to contribute to internalizing and trauma-related psychopathological symptoms in adulthood.

Second, we tested for moderation (Model 2). In this model, the predictor was childhood stressful life events, the criterion variables were internalizing and trauma-related psychopathological symptoms, and the three autonomy–connectedness components now served as moderators. Interaction terms were created between centered scores for childhood stressful life events and centered scores for each of the autonomy–connectedness components. Each interaction term was entered in a separate model. Centering as well as testing the interaction terms in separation both decrease multicollinearity. Path models for Model 1 and Model 2 can be found in supplemental online Appendix B.

Results

Table 2 presents mean scores on all variables under study, separated by sex. Men scored higher on Self-Awareness and Capacity for Managing New Situations, whereas women scored higher on Sensitivity to Others, which is in line with the literature (Bekker, 1993; Bekker & van Assen, 2006). Women also scored higher on general internalizing and posttraumatic psychopathological symptoms. Number of experienced stressful life events did not differ between the sexes. Table 3 shows correlations between scale scores of all variables under study.

Model 1: Associations Between Childhood Stressful Life Events, Autonomy–Connectedness, and Psychopathological Symptoms

Table 4 presents the estimated unstandardized and standardized effects for Model 1, investigating the associations between childhood stressful life events, autonomy–connectedness, and psychopathological symptoms. Although men and women differed significantly on the MHI (see Table 2), the effect of sex disappeared when taking into account level of education, age, and the three autonomy–connectedness scales. Sex was still a significant predictor for all other variables under study. The number of childhood stressful life events significantly predicted higher Sensitivity to Others. Childhood stressful life events were positively related to the IES as well as the MHI. Last, while Sensitivity to Others was positively associated with IES and the MHI, Capacity for Managing New Situations only showed significant associations with the MHI and the IES Hyperarousal subscale. All associations were in the expected direction: *Higher* Sensitivity to Others was associated with more symptoms, whereas *lower* Capacity for Managing New Situations was associated with more symptoms. All effect sizes were small.

Model 2: Moderation of the Relation Between Childhood Stressful Life Events and Psychopathological Symptoms by Autonomy–Connectedness

Table 5 shows the unstandardized and standardized coefficients for Model 2, investigating whether childhood stressful life events predict more psychopathological symptoms, but only in people with low levels of autonomy–connectedness (low Self-Awareness and Capacity for Managing New Situations, as well as high Sensitivity to Others). We entered the interaction terms between childhood stressful life events and the autonomy–connectedness components separately, which means we tested three models. To avoid redundancy, in Table 5, we only present the estimates from the model where we included the interaction between childhood stressful life events and Self-Awareness. Estimates for the remaining models are presented in online supplemental Appendix C. Estimates varied only slightly between the models. The only exception was the effect of Capacity for Managing New Situations on Hyperarousal, which lost significance in the model where the interaction between childhood trauma and Capacity for Managing New Situations was included (also see note below the table). Again, all effect sizes were small.

Table 5 shows that the associations between childhood stressful life events and the autonomy–connectedness components, on one hand, and the IES and the MHI, on the other hand, were very similar to Model 1. The final three rows of the table indicate that the associations between childhood stressful life events and the MHI as well as the IES Hyperarousal subscale were significantly moderated by Self-Awareness. The associations between childhood stressful life events and the IES Hyperarousal subscale were furthermore moderated by Capacity for Managing New Situations. These significant interaction effects are plotted in online supplemental Appendix D.

Discussion

The aim of the present study was twofold. First, we aimed at examining the associations between, respectively, childhood stressful

Table 2
Means and Standard Deviations of All Variables Under Study and Tests of Gender Differences

Variable	Range	Women, Mean (*SD*)	Men, Mean (*SD*)	*t*	*df*	*d*	*Skewness*	*Kurtosis*
N stressful life events ($N = 4{,}911$)	0–8	.33 (.73)	.30 (.71)	−1.33	4,850.87	.04	3.14 (.04)	13.48 (.07)
ACS-30 ($N = 3{,}430$)								
Self-Awareness	7–35	26.10 (4.93)	27.55 (4.51)	9.01*	3,427.38	.31	−.41 (.04)	−.20 (.08)
Sensitivity to others	19–83	58.01 (8.49)	51.90 (8.55)	−21.01*	3,428	.72	−.03 (.04)	.35 (.08)
Capacity for managing new situations	6–30	17.54 (4.84)	19.05 (4.77)	9.20*	3,428	.31	−.03 (.04)	−.32 (.08)
Mental Health Inventory ($N = 4{,}793$)	5–30	11.69 (4.22)	10.80 (4.01)	−7.48*	4,764.87	.22	.98 (.04)	.81 (.07)
IES ($N = 2{,}650$)								
Intrusions	7–28	13.00 (5.22)	11.30 (4.65)	−8.85*	2,625.18	.34	.72 (.05)	−.46 (.10)
Avoidance	8–32	14.13 (5.88)	12.61 (5.23)	−7.03*	2,625.26	.27	.79 (.05)	−.41 (.10)
Hyperarousal	8–32	12.17 (5.44)	11.11 (4.75)	−5.37*	2,632.28	.21	1.46 (.05)	1.35 (.10)

Note. ACS-30 = Autonomy–Connectedness Scale; IES = Impact of Events Scale.
* $p < .001$.

Table 3
Correlations Between All Variables Under Study

Variable	1	2	3	4	5	6	7	8
1. *N* events	—	.005*	.042**	−.041***	.080	.111	.099	.136
2. SA		—	−.34	.42	−.31	−.09	−.11	−.12
3. SO			—	−.34	.24	.13	.13	.11
4. CMNS				—	−.28	−.09	−.11	−.12
5. MHI					—	.31	.29	.42
6. Intrusions						—	.84	.78
7. Avoidance							—	.76
8. Hyperarousal								—

Note. *N* events = number of childhood stressful life events; SA = ACS-30 Self-Awareness; SO = ACS-30 Sensitivity to Others; CMNS = ACS-30 Capacity for Managing New Situations; MHI = Mental Health Inventory (Intrusions, Avoidance, and Hyperarousal are the three IES subscales); ACS-30 = Autonomy–Connectedness Scale.
* $p = .770$. ** $p = .014$. *** $p = .015$. All other correlations were significant with $p < .001$.

life events, autonomy–connectedness (i.e., Self-Awareness, Capacity for Managing New Situations, and Sensitivity to Others), and psychopathological symptoms (general internalizing and trauma-related psychopathological symptoms specifically). Second, we aimed to investigate whether individuals exposed to childhood stressful life events were more likely to experience trauma-related and other internalizing problems if they also had low levels of autonomy–connectedness (moderation).

With regard to the first aim, and in line with our expectations, the experience of childhood stressful life events and lower levels of autonomy–connectedness were related to greater general internalizing as well as trauma symptoms in adulthood. It must be noted that results regarding Capacity for Managing New Situations were quite inconsistent, however. As previous research has never investigated the association between autonomy–connectedness and trauma-related psychopathological symptoms before, our results extend previous research.

Childhood stressful life events and low autonomy–connectedness were associated with more psychopathological symptoms later in life, but effect sizes were small. Exposure to childhood stressful life events was also related to higher sensitivity to others. People scoring high on Sensitivity to Others may have the tendency to think of someone else first, before thinking of themselves, or to continually cross their own boundaries (Bekker, 1993; Bekker & van Assen, 2006). For example, in the case of child abuse, a child may develop the belief the abuse was his or her own fault. The child may furthermore learn he or she is worthless and that expressing his or her own opinions is not valued or even punished. As a consequence, the child may learn to monitor the parents' emotions and needs very carefully and to behave accordingly, as well as may learn to rely on other people telling him or her what to do. Our results thus tentatively suggest that experience of childhood stressful life events is mainly related to having the tendency to rely on other people and that it may be less strongly related to knowing one's own needs and the ability to cope with new situations. Please note that because of the cross-sectional nature of our study, future longitudinal studies should investigate this hypothesis further.

The number of stressful life events did not differ between the sexes. In a large literature review, Tolin and Foa (2006), however, showed that women were more likely to be exposed to certain types of life events, such as sexual assault and child sexual abuse, whereas men were more likely to experience accidents, nonsexual assaults, witnessing death/injury, disaster/fire, and combat/war. In the present study, we did not look at the sex difference between the specific subsets of life events but only reported sex differences between the total life event score, as the number of life events was low. Although there is evidence in the literature that women may be at a higher risk for exposure to life events in general, other literature reports no sex differences at all (Kendler, Thornton, & Prescott, 2001). Therefore, our results may not be that uncommon, especially considering the fact we used a representative community sample and only looked at stressful life events before the age of 16.

Most important, concerning our second and main aim, we found that childhood stressful life events and deficits in autonomy–connectedness interact. Specifically, childhood stressful life events interacted with Self-Awareness in predicting general mental health symptoms and hyperarousal; they also interacted with Capacity for Managing New Situations in predicting hyperarousal. The remaining nine interactions were not significant and effect sizes were small. Nevertheless, these findings are in line with our hypotheses and emphasize the importance of individual differences in sensitivity to psychopathology after exposure to stress or trauma. Hyperarousal is an important part of posttraumatic stress disorder, and it is associated with symptoms such as irritability, and trouble sleeping, and concentrating.

With respect to Self-Awareness, people scoring low on this component may not have learned to sufficiently recognize their own needs. According to developmental trauma models, lack of availability and/or responsiveness of attachment figures can have a major influence on the degree people are willing to rely on others for support and protection (Pynoos et al., 1999). This could have happened because they lacked support or opportunities to learn this in the past. For example, through early experiences, they may have learned that important others will not meet their needs anyway, a pattern often seen in patients with insecure attachment styles (Bachrach, Bekker, & Croon, 2013). Mikulincer and Shaver (2007) explained how different attachment styles are associated with tendencies to deactivate or to hyperactivate the attachment system, with different consequences in terms of emotion regulation strategies and resulting types of psychopathology. Avoidantly attached people may be inclined to deactivate their attachment system, coinciding with strategies aimed at suppression of

Table 4
Unstandardized and Standardized Effects of Model 1: Associations Between Childhood Stressful Life Events, Autonomy–Connectedness, and Psychopathological Symptoms

Variable	SA		SO		CMNS		MHI		Intrusions		Avoidance		Hyperarousal	
	B (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*
Sex	−1.35*** (−.14)	.16	6.21*** (.34)	.29	−1.39*** (−.14)	.16	−.01 (−.00)	.12	1.29*** (.13)	.20	1.01*** (.09)	.23	.53* (.05)	.21
Age	.04*** (.13)	.01	−.02 (−.03)	.01	.01 (.02)	.01	−.03*** (−.12)	.00	.04*** (.14)	.01	.05*** (.16)	.01	.01*** (.05)	.01
Level of education	.18*** (.06)	.05	.28** (.05)	.10	.39*** (.12)	.05	−.17*** (−.06)	.04	−.31*** (−.09)	.06	−.39*** (−.11)	.07	−.35*** (−.10)	.06
N events	−.09 (−.01)	.11	.51* (.04)	.21	−.22 (−.03)	.12	.55*** (.10)	.08	.48*** (.07)	.13	.43** (.06)	.15	.78*** (.11)	.13
SA							−.18*** (−.20)	.02	−.05 (−.05)	.03	−.09** (−.07)	.03	−.10*** (−.10)	.03
SO							.05*** (.12)	.01	.04** (.08)	.01	.05** (.08)	.02	.03*** (.05)	.05
CMNS							−.12*** (−.14)	.02	−.03 (−.03)	.03	−.05 (−.04)	.03	−.05* (−.05)	.03

Note. Each column represents a different criterion being predicted from the predictors shown in the first column. *N* events = number of childhood stressful life events; SA = ACS-30 Self-Awareness; SO = ACS-30 Sensitivity to Others; CMNS = ACS-30 Capacity for Managing New Situations; MHI = Mental Health Inventory (Intrusions, Avoidance, and Hyperarousal) are the three IES subscales; ACS-30 = Autonomy–Connectedness Scale.
* $p < .05$. ** $p < .01$. *** $p < .001$.

(support-eliciting) emotions. Individuals high on attachment anxiety, on the other hand, may apply hyperactivating strategies and try to guarantee proximity by, for example, exacerbating distress and hypervigilance. In case of both insecure attachment styles, individuals may have learned it is not functional (rewarding) to be aware of and express one's own needs in social contact. The hyperarousal typical for posttraumatic stress disorder might be understandable in that light and seems to be in line with our finding that hyperarousal symptoms were associated with low Self-Awareness. Low Capacity for Managing New Situations, on the other hand, may reflect that people are so hyperfocused on their symptoms or feared situations that they are not open to explore new situations. Of course, thus far, we can only speculate about why hyperarousal symptoms were particularly high in the group characterized by both the experience of a childhood stressful life event as well as these autonomy–connectedness deficits. Future research may want to investigate autonomy–connectedness in a clinical sample suffering from posttraumatic stress disorder.

We need to mention several limitations. First, we used an online database consisting of data collected with online questionnaires. Data were not collected specifically for the purpose of this study. Next to a possible social desirability bias accompanying self-report, filling out questionnaires online might have additional downsides, because participants might have been distracted or disturbed while filling out the questionnaires. Data from the LISS panel are open access data and can be used by researchers to examine a large variety of topics by merging data sets. It is possible that the temporal distance between the questionnaires used in our study may have diluted or biased observed associations between the variables under study. A final limitation related to the use of an online database is that we merged several assessment waves, which means that the subset of participants in the present study was not a random selection of LISS panel members. Our sample on average seemed to be older than would be expected based on random sampling, and we must therefore be careful in generalizing our results to younger samples. For example, older adults often show less psychopathology when compared to younger adults (e.g., Erskine, Kvavilashvili, Conway, & Meyers, 2007).

As childhood stressful life events were assessed retrospectively, a so-called reporting bias may have played a role in the present study: People with symptoms may be more likely to report events as having been stressful or traumatic (e.g., Monroe, 2008). Importantly, the present study was cross-sectional, which precludes us from drawing conclusions on causal relationships between the variables.

One must also note that the mean number of reported childhood stressful life events was very low. This may have affected the (variability in) posttraumatic symptoms in the sample. Correlations between variables were also low. The fact that our sample consisted of a large community sample of course contributed to this but also minimized selection biases common in clinical samples and enabled us to observe the full range of possible scores of both autonomy and psychopathological symptoms.

Last, we did not include other measures of mental health, and we did not assess the subjective emotional experiences associated with the stressful life event. Traumatic or stressful events, however, have a broader effect on mental health than is reflected by the measures in the present study. With regard to subjective emotional

Table 5
Unstandardized and Standardized Effects of Model 2: Moderation of the Relation Between Childhood Stressful Life Events and Psychopathological Symptoms by Autonomy–Connectedness

Variable	SA		SO		CMNS		MHI		Intrusions		Avoidance		Hyperarousal	
	B (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*	*B* (Beta)	*SE*
Sex[a]							−.01 (−.00)	.12	1.29*** (.13)	.20	1.01*** (.09)	.23	.55** (.05)	.21
Age[a]							−.03*** (−.12)	.00	.04*** (.14)	.01	.05*** (.16)	.01	.01* (.05)	.01
Level of education[a]							−.17*** (−.06)	.04	−.31*** (−.09)	.06	−.39*** (−.11)	.07	−.34*** (−.10)	.06
N events[a]							.56*** (.10)	.08	.48*** (.07)	.13	.43** (.06)	.15	.78*** (.11)	.13
SA[a]							−.17*** (−.20)	.02	−.05 (−.04)	.03	−.08** (−.07)	.03	−.09*** (−.08)	.03
SO[a]							.05*** (.12)	.01	.04** (.08)	.01	.05** (.08)	.02	.03 (.05)	.01
CMNS[a]							−.12*** (−.14)	.02	−.03 (−.03)	.03	−.05 (−.04)	.03	−.05* (−.05)	.03
N events × SA							−.04* (.10)	.02	−.04 (.07)	.03	−.02 (.06)	.03	−.10*** (.11)	.03
N events × SO							.00 (.01)	.01	−.01 (−.01)	.01	−.02 (−.02)	.02	.01 (.02)	.01
N events × CMNS							−.02 (−.02)	.02	−.02 (−.02)	.03	−.03 (−.02)	.03	−.06* (−.05)	.03

Note. Each column represents a different criterion being predicted from the predictors shown in the first column. *N* events = number of childhood stressful life events; SA = ACS-30 Self-Awareness; SO = ACS-30 Sensitivity to Others; CMNS = ACS-30 Capacity for Managing New Situations; MHI = Mental Health Inventory (Intrusions, Avoidance, and Hyperarousal are the three IES subscales); ACS-30 = Autonomy–Connectedness Scale.
[a] Interactions between childhood stressful life events and the autonomy–connectedness scales were entered separately. In this table, we reported the estimates as found in the model with the *N* events × SA interaction. See online supplemental Appendix C for the other models.
* $p < .05$. ** $p < .01$. *** $p < .001$.

experiences, certain stressful or traumatic experiences (e.g., death of a parent) may have a larger impact than others (e.g., breakup), which is furthermore highly idiosyncratic. Future research may want to consider adding more indices of mental health as well as the emotional weight associated with the stressful life event and adopt a cohort design.

In conclusion, results from this study suggest that autonomy–connectedness and experience of childhood stressful life events have both unique and combined effects on psychopathological symptoms. As pilot studies showed promising results of a training enhancing autonomy–connectedness on anxiety symptoms (Bekker et al., 2017), this approach may be beneficial for trauma-related psychopathology as well. Autonomy–connectedness enhancing training specifically focuses on strengthening Self-Awareness, regulating Sensitivity to Others, and enhancing Capacity for Managing New Situations with respect to various life domains, including friendships and relationships, body perception and sexuality, and parent–child relationships. Our results tentatively suggest that hyperarousal symptoms may need extra attention when treating individuals who have suffered from childhood stressful life events. Moreover, getting more into contact with oneself and one's own needs (strengthening Self-Awareness) and learning to more flexibly handle new situations (enhancing Capacity for Managing New Situations) might especially contribute to coping with these hyperarousal symptoms. However, future research first needs to elucidate the temporal aspects with regard to childhood stressful life events, autonomy–connectedness, and the development of adult internalizing psychopathology, using a prospective cohort design.

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