

Research paper

Pilot study of parental alienation items in the adverse childhood experiences scale

Joshua Marsden^{*}, Luke Saunders, Jennifer J. Harman

Colorado State University, 1876 Campus Delivery, Fort Collins, CO 80523-1876, United States of America

ARTICLE INFO

Keywords:

Parental alienation
Adverse childhood experiences
Factor analysis

ABSTRACT

Background: Adverse Childhood Experiences (ACEs) and Parental Alienation (PA) are forms of adverse events negatively affecting children globally. The current study was to identify a revised ACEs measure that includes a screening item for PA.

Methods: A total of 231 undergraduate students, ages 18 to 37, were surveyed for this analysis. A factor analyses was performed to identify what PA item, out of four, would correlate most strongly with existing ACEs scale items. Convergent and divergent validity was assessed. An exploratory factor analyses was conducted to identify factor structure of scale items and a confirmatory factor analysis of extracted factors was used to assess model fit.

Results: Over half (60 %) of the sampled population reported at least one ACEs item. All four PA items were significantly correlated with converging constructs ($r = 0.68, p < .01$). Out of four PA items, one PA item significantly outperformed the other three items in relation to convergent validity and was used to create a new ACEs-PA scale item ($r = 0.33, p < .01$). A two factor solution was identified with the new PA item loading, accounting for 35 % of the variance, explaining more variance in both outcomes ($R^2 = 0.43$ and $R^2 = 0.16$) than the original ACEs scale when comparing the adjusted R^2 values ($R^2 = 0.35$ and $R^2 = 0.13$).

Limitations This study used participant self-reporting methods subjecting it to retrospective bias.

Conclusion: Within the population, the new PA item factored significantly with existing ACEs, suggesting the capture of an additional adverse childhood experience.

1. Introduction

Adverse childhood experiences (ACEs) are traumatic events occurring prior to the age of 18, having lasting negative effects on health and wellbeing (Abe et al., 2022; Anda, 2006; Anda et al., 2010; Centers for Disease Control and Prevention, 2023). Exposure to ACEs is associated with poor mental health (Afifi et al., 2008; Afifi et al., 2009; Anda et al., 2002; Dube et al., 2001; Edwards et al., 2003; Isohookana et al., 2013; Lu et al., 2008; Schilling et al., 2007), negative physical health outcomes (Felitti et al., 1998; Irving and Ferraro, 2006; Monnat and Chandler, 2015; Roettger and Boardman, 2012; Schafer and Ferraro, 2012) and engagement in risky behaviors (Afifi et al., 2009; Anda et al., 2002; Dube et al., 2001; Felitti et al., 1998; Chapman et al., 2004). Accumulation of multiple adversities during childhood has compounding negative effects on these outcomes (Felitti et al., 1998; Gutman et al., 2003), and poorer socioeconomic outcomes into adulthood (Bellis et al., 2014; Levey et al., 2022). ACEs are common in the U.S. population (Anda et al., 2006), with

30–60 % of the population experiencing at least one ACE (Centers for Disease Control and Prevention, 2023; Carlson et al., 2020; Giano et al., 2020; Merrick et al., 2018; Sacks and Murphey, 2018).

Experiencing violence, abuse, or neglect are ACEs that have garnered considerable research (Bensley et al., 2000; Briere and Runtz, 1990; Brown et al., 1999; De Bellis et al., 2001; Johnson et al., 2002; Liebschutz et al., 2002; Mullen et al., 1996; Walsh et al., 2002) and witnessing ACEs have short- and long-term negative effects (Centers for Disease Control and Prevention, 2023). Child Affected by Parental Relationship Distress (CAPRD) is recognized as a condition in the DSM-V that refers to children who have been to, or pulled into parental conflict (American Psychiatric Association, 2013). Parental distress can involve consistent disparagement of a parent by the child's other parent, being witness to parental conflicts and intimate partner violence, and pressure to ally with a parent against the other (Bernet et al., 2016). Children affected by this parental relationship distress experience negative psychosomatic, cognitive, affective and psychosocial effects (Harman et al.,

^{*} Corresponding author.

E-mail address: joshua.marsden@colostate.edu (J. Marsden).

<https://doi.org/10.1016/j.jad.2024.09.001>

Received 28 September 2023; Received in revised form 25 June 2024; Accepted 1 September 2024

Available online 7 September 2024

0165-0327/© 2024 The Authors. Published by Elsevier B.V. This is an open access article under the CC BY license (<http://creativecommons.org/licenses/by/4.0/>).

2018).

1.1. Coercively controlling abuse and parental alienation

Parental alienation (PA) is an outcome associated with coercively controlling abuse in the family (Cocchiola, 2021; Harman and Kruk, 2022). The use of children by one parent to control and manipulate the other parent is a commonly used abusive strategy (Bancroft and Silverman, 2002; Machado et al., 2020; Domestic Abuse Intervention Program, 2023) that has negative short- and long-term effects on children (Bair-Merritt et al., 2010; Callaghan et al., 2018; Helweg-Larsen et al., 2011; Katz, 2016a; Katz, 2016b; Meltzer et al., 2009; Mullender et al., 2023; Radford et al., 2011). Manipulating a child to reject a parent is not easily accomplished, as children who are severely maltreated by a parent often engage in attachment-enhancing rather than destructive behaviors (Baker et al., 2016; Baker et al., 2019). To weaponize a child against a parent, the coercively controlling parent engages in parental alienating behaviors (PABs) designed to make the child believe their rejected parent never loved them, abandoned them, and/or is unfit or unsafe (Harman et al., 2022a). If the child believes and internalizes these falsehoods, they align with the alienating parent, reject their other parent for reasons that are unjustified, exaggerated, or false, and become “alienated” from the rejected parent (Baker and Verrocchio, 2015; Bernet et al., 2020).

There are over 50 studies published through 2020 that examined the PABs (Harman and Matthewson, 2020) including such behaviors as gaslighting, blocking communication, gatekeeping, denigration among others (Harman et al., 2022a). PABs are a form of family violence because they are abusive for both children and the targeted parent (Harman et al., 2018; Kruk, 2018).

1.2. Parental alienation as an adverse childhood experience

Alienated children often experience or witness other forms of abuse in their families, such as intimate partner violence (Baker and Darnall, 2006; Godbout and Parent, 2012; Harman et al., 2021; Rowlands et al., 2023), and child physical and sexual abuse the alienating parent (Baker, 2007; von Boch-Galhau, 2018; Clavar and Rivlin, 2013; Lorandos, 2013). Exposure to PABs is associated with low self-esteem, substance abuse disorders, insecure attachment, anxiety, and depression (Aloia and Strutzenberg, 2019; Baker, 2005; Baker and Ben-Ami, 2011; Baker and Verrocchio, 2016; Rand, 1997; Verhaar et al., 2022; Verrocchio et al., 2019). Alienated children are likely to experience internalizing and externalizing problems (Johnston et al., 2005), and adults who experienced PA as children describe experiencing PTSD, attention problems, disassociation, eating disorders and panic attacks (Bentley and Matthewson, 2020).

Despite considerable research on the causes and negative consequences of PA (Harman et al., 2022a), PA has not been scientifically established as an ACE. The current study’s purpose is to develop and test potential items for inclusion in the ACEs questionnaire that can be used to screen individuals who have or were alienated from a parent as a child. The inclusion of such items in the ACEs questionnaire can facilitate greater research on the topic.

1.3. The current study

It is estimated that about 9 % of the US adult population are currently being alienated from their child(ren) by the other parent, and PA affects an estimated 3.5 million children within the US (Harman et al., 2019). An item that effectively screens for PA within the ACEs questionnaire can offer more accurate estimates of the prevalence of PA and would fit well into the existing emotional abuse/neglect or household dysfunction factors.

This study involved a test of four pre-registered research questions (https://osf.io/a3kgc/?view_only=6e75fd3566724b1580c3560888364

6d3). First, to examine which potential PA-ACEs questions would correlate most strongly with existing validated measures of PA. Second and third, whether the new ACEs item correlates with pre-existing ACE scale items and whether the inclusion of the new proposed item fits into the existing factor structure of the ACEs questionnaire. Fourth, to examine whether the new scale explains more variance in psychological outcomes than the original ACEs scale.

2. Methods

2.1. Participants

Undergraduate students ($N = 231$) were surveyed for a study on ACEs and the potential buffering role of domestic animals (pets) on outcomes, with included PA items. The current study focused exclusively on the development and testing of a revised ACEs measure that includes a screening item for PA. Participant age ranged from 18 to 37 years old ($M = 19.86$, $SD = 2.64$) and 80 % were women. Respondents were mainly white (79 %) and non-Hispanic (81 %).

2.2. Procedure

The survey was administered via Qualtrics (Appendix A) as part of a larger study examining the extent to which the human-animal bond (i.e., childhood pets) protects against the effects of ACEs on poor health and well-being outcomes among young adults and children. Participants were informed that the goal of the study was to better understand early life experiences that may be both stressful and positive, the role of pets in their life, and their well-being. The current project’s analytic strategy and hypotheses were preregistered on Open Science Framework (https://osf.io/a3kgc/?view_only=6e75fd3566724b1580c35608883646d3).

2.3. Measures ACEs questionnaire

2.3.1. Original ACEs

All 10 original ACEs were assessed (see Table 1 for psychometric properties of the ACE module). Each item was constructed as a dummy variable with a score of 0 (never experienced) and 1 (experienced it at any time in their life).

2.3.2. Parental alienation items for the ACEs scale

The third author, and PA subject matter expert, created four items that could potentially be used to screen participants who may be experiencing, or were alienated as a child. Three items were written to capture influence and alignment with a parent against another parent, and one was related to a parent being derogated by the other parent (Appendix B).

2.4. Convergent validity

There are several measures assessing manifestations of PA that are not evident among children who have been abused in other ways (Harman and Matthewson, 2020). We used the following two measures for this study:

2.4.1. Baker Child Alienation Questionnaire (BAQ)

The Baker Child Alienation Questionnaire (BAQ) (Baker and Eichler, 2016) consists of seven items asking respondents to report whether or how often they exhibited each of the eight behavioral characteristics of PA toward each parent, as described by Gardner (Gardner, 1998). Responses for each item were coded as “alienation consistent” (1) if the responses for the mother and father items were at opposite extremes of the scale, and 0 (alienation inconsistent) if the scores on the items were not extreme. This scoring resulted in 14 which were then totaled to make an overall sum score ($\alpha = 0.73$).

Table 1
ACE-PA regression results using benevolent childhood experiences as the criterion.

Predictor	<i>b</i>	<i>b</i> 95 % CI [LL, UL]	<i>beta</i>	<i>beta</i> 95 % CI [LL, UL]	<i>sr</i> ²	<i>sr</i> ² 95 % CI [LL, UL]	<i>r</i>	Fit
(Intercept)	9.80**	[9.59, 10.01]						
ACE_PA_Sum	−0.37**	[−0.43, −0.32]	−0.65	[−0.75, −0.55]	0.42	[0.33, 0.50]	−0.65**	<i>R</i> ² = 0.425** 95 % CI[0.33,0.50]
ACE- PA Regression results using Brief Symptoms Inventory as the criterion								
(Intercept)	34.91**	[28.43, 41.39]						
ACE_PA_Sum	5.92**	[4.12, 7.73]	0.40	[0.28, 0.52]	0.16	[0.08, 0.25]	0.40**	<i>R</i> ² = 0.160** 95 % CI[0.08,0.25]
ACE Regression results using Benevolent Childhood Experiences as the criterion								
(Intercept)	9.68**	[9.46, 9.89]						
ACE_Sum	−0.49**	[−0.57, −0.40]	−0.60	[−0.70, −0.49]	0.36	[0.26, 0.44]	−0.60**	<i>R</i> ² = 0.355** 95 % CI[0.26,0.44]
ACE Regression results using Brief Symptoms Inventory as the criterion								
(Intercept)	37.08**	[30.69, 43.47]						
ACE_Sum	7.81**	[5.18, 10.44]	0.37	[0.24, 0.49]	0.13	[0.06, 0.22]	0.37**	<i>R</i> ² = 0.134** 95 % CI[0.06,0.22]

Note. A significant *b*-weight indicates the beta-weight and semi-partial correlation are also significant. *b* represents unstandardized regression weights. *Beta* indicates the standardized regression weights. *sr*² represents the semi-partial correlation squared. *r* represents the zero-order correlation. *LL* and *UL* indicate the lower and upper limits of a confidence interval, respectively. * indicates *p* < .05. ** indicates *p* < .01.

2.4.2. Parental Acceptance-Rejection Questionnaire (PARQ)

The short version of the adult PARQ is a 24-item, self-report questionnaire that assesses adults’ retrospective remembrances of acceptance or rejection toward each parent in their childhood (Rohner and Ali, 2016). The PARQ measures splitting (i.e., describing one parent as “all good” and the other as “all bad”) by quantifying the strong acceptance toward an alienating parent accompanied by the strong rejection of the alienated parent. Each item is scored on a 4-point Likert scale ranging from (4) “almost always true” to (1) “almost never true.” The PARQ demonstrates reliability across numerous samples in the US, Australia, and Italy (Gomez and Rohner, 2011; Khaleque and Rohner, 2002; Senese et al., 2016).

The PARQ-Gap score assesses the difference between realistic estrangement and PA. The gap score is the difference between the PARQ score for each parent. Bernet et al (Baker et al., 2019). found that using a PARQ-Gap score of 90 (PARQ long form) as a cut-off point was 99 % accurate when distinguishing alienated from non-alienated children. For the short form, a PARQ-Gap score of 29 or higher reliably distinguishes severely alienated from non-alienated children (RP Rohner PhD, personal communication, June 18, 2020).

2.5. Discriminant validity

Two measures testing discriminant validity of the proposed items were included. Protective factors, such as social support, can buffer the negative effects of ACEs and are associated with positive life outcomes (Hedges, 2020), and low social support in adulthood is associated with abuse and neglect during childhood (Vranceanu et al., 2007). We predicted that social support would have a small and negative correlation with the PA items. The relationship between PA and positive co-parenting behaviors has not been studied, and we predicted they would have a negative correlation because PABs are not positive or supportive of the other parent.

2.5.1. Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS (Zimet et al., 1988) is a 12-item self-report scale measuring subjectively assessed social support. Three subscales address

different sources of support: Family, friends, and significant other. Items are scored on a 7-point scale ranging from (7) Very strongly agree to (1) Very strongly disagree. This measure has good reliability, moderate construct validity, and strong factorial validity for all subscales (Zimet et al., 1988). The MSPSS is one of the most extensively validated measures worldwide (Dambi et al., 2018). The scale had excellent internal consistency ($\alpha = 0.94$).

2.5.2. Positive Co-Parenting Behavior for Mothers & Fathers (PCPB)

Ten items were used assessing positive co-parenting behaviors created by Harman et al. (Harman et al., 2016). and exhibited high reliability ($\alpha = 0.91$). These self-report items, scored on a 5-point Likert scale, range from (1) Strongly disagree to (5) Strongly agree and assessed positive co-parenting behaviors such as supporting another parent in disciplining their child. Internal consistency for this scale in this study was excellent ($\alpha = 0.92$).

2.6. Criterion validity

2.6.1. Brief Symptoms Inventory (BSI)

The BSI (Derogatis, 1975) is used to identify clinically relevant psychological symptoms in adolescents and adults consisting of 53 items covering nine symptom dimensions and three global indices of distress. Respondents ranked each feeling item by intensity of distress during the past seven days on a 5-point scale ranging from 0 (not at all) to 4 (extremely), and is reliable with an average internal consistency of $\alpha > 0.70$ and test-retest reliability ranging from 0.68 to 0.91 (Aroian and Patsdaughter, 1989; Croog et al., 1986; Derogatis, 1982; Derogatis, 1993). The BSI has been tested in relation to the ACEs scale in previous research (Cloitre et al., 2019; Riedl et al., 2020; Rudenstine et al., 2019), and had excellent internal consistency, $\alpha = 0.98$.

2.6.2. Benevolent Childhood Experiences (BCEs)

The BCEs is a ten item measure assessing positive experiences that may have served as protective factors for children at the time they experienced any traumatic experiences (ACEs), with the original BCEs study demonstrating strong test-retest reliability ($r = 0.80$) (Narayan

et al., 2018). Items were coded as (0) “no” and (1) “yes”. Examples of questions included “When you were growing up, during your first 18 years of life did you have at least one caregiver with whom you felt safe” and “Was there an adult (not a parent/caregiver) who could provide you with support or advice?”

2.7. Analytic plan

Data were examined for missing values, and continuous data were checked for outliers and deviations with none found. Psychometric properties of the ACEs questionnaire and four new PA items were analyzed by assessing content validity (i.e., convergent and discriminant measures), construct validity (i.e., relating the new PA item to the ACEs questionnaire), the factor structure of the ACEs scale with the new PA item, and criterion validity (i.e., relating the new PA item to similar outcomes that are used with the ACEs scale). All analyses used R (R Core Team, 2022) and various packages.

3. Results

Over half the sample (60 %) reported exposure to at least one original ACE item. Commonly endorsed ACEs were living with a household member with mental illness or one who attempted suicide (30 %), parental separation or divorce (24 %), and emotional abuse (24 %).

3.1. Research question #1: Content validity

Assessing content validity, new PA items were correlated with measures of similar constructs (convergent validity) and dissimilar constructs (discriminant validity) using Pearson’s R with cor() from the stats package and complete observations only (Table 2). All new PA items were positively correlated with PARQ-Gap and BAQ scores, demonstrating convergent validity, and were negatively correlated with MSPSS and PCPB scores, demonstrating discriminant validity. The PARQ-Gap scores significantly and positively correlated with BAQ sum scores ($r = 0.60, p < .01$). Results indicate that although the newly created items were positively and significantly related to the PARQ-Gap and BAQ measures, item #2 had the strongest correlation, “Do you have a parent or caregiver that you often feel you want nothing to do with? Or a parent or caregiver who you dislike and would rather not spend any time with, while at the same time prefer to be with your other parent?” ($r = 0.68, p < .01$ and $r = 0.33, p < .01$ respectively). This item captures both the child’s strong rejection and coinciding alignment with different parents, which is an important differentiating feature of alienated children and is not reflected in the other items written to capture the

behaviors of the parents. The second item was the most negatively correlated with the MSPSS ($r = -0.38, p < .01$) and the PCPB ($r = -0.37, p < .01$) demonstrating discriminant validity from those constructs. We continued our remaining analyses using only item #2 creating the new ACEs-PA item scale (Appendix C).

3.2. Research question #2: Construct validity

We assessed construct validity by calculating the average inter-item tetrachoric correlations of ACEs with the new ACEs-PA item using polychoric() from the psych package. This analysis showed how strongly related to the overall ACEs measure the new item was (Table 3). No items were too weakly or strongly correlated with the new item. The results indicated that besides capturing PA, the new item was related to other items assessing ACEs but was distinct enough to be its own item.

3.3. Research question #3: Factor structure fit

Internal consistency was assessed with ordinal alpha (Edwards et al., 2003; Zumbo et al., 2007). To explore factor structure, we conducted a parallel analysis to determine the suggested number of factors using a scree plot. We conducted an EFA in a random half of the sample ($N = 115$) based on the number of factors determined from the scree plot and used the extracted factors to conduct a CFA in the other half ($N = 116$).

3.3.1. Exploratory Factor Analysis (EFA)

We checked data factorability through the Kaiser–Meyer–Olkin (KMO) statistic. The tetrachoric correlation matrix was entered into analyses for a weighted-least-squares extraction EFA. Using oblique rotation (“oblimin”) we assumed the factors would covary, and used the scree test to decide on the maximum number of factors. We adjusted the number of factors until they had at least three items with factor loadings of ≥ 0.30 . In choosing among solutions, we tried to make sure that factors were conceptually coherent and to minimize the number of items with low communality values (< 0.70) and high loadings on more than one factor. The KMO measure was satisfactory at 0.82 as was Bartlett’s test of sphericity, $\chi^2(55) = 614.26, p < .001$. To test scale internal consistency, we calculated the ordinal alpha based on the polychoric correlation matrix resulting in excellent internal consistency (11 items, $\alpha = 0.92$). The scree plot suggested three or fewer factors (Fig. 1).

Analyses with three and two factors indicated that a two-factor solution yielded the most parsimonious fit. Factor 1 consists of three items describing violent behavior, emotional abuse, and neglect and was labeled Abuse/Neglect. Factor 2, labeled Household Dysfunction, consisted of seven items assessing disturbances in the childhood home

Table 2
Means, standard deviations, and correlations with confidence intervals.

Variable	<i>M</i>	<i>SD</i>	1	2	3	4	5	6	7
1. PARQ_GAP	8.74	10.50							
2. BAQ_Sum	0.45	1.05	0.60** [0.51, 0.68]						
3. PCPB_Sum	35.39	8.10	−0.45** [−0.56, −0.34]	−0.27** [−0.39, −0.14]					
4. MSPSS_Sum	71.14	12.63	−0.22** [−0.35, −0.09]	0.02 [−0.11, 0.15]	0.37** [0.25, 0.49]				
5. ACE_NEW_1	0.04	0.20	0.22** [0.09, 0.35]	0.31** [0.19, 0.43]	−0.24** [−0.36, −0.11]	−0.05 [−0.18, 0.08]			
6. ACE_NEW_2	0.21	0.40	0.68** [0.60, 0.75]	0.33** [0.21, 0.45]	−0.48** [−0.57, −0.36]	−0.38** [−0.48, −0.26]	0.21** [0.08, 0.33]		
7. ACE_NEW_3	0.25	0.43	0.36** [0.23, 0.47]	0.21** [0.08, 0.33]	−0.35** [−0.46, −0.22]	−0.22** [−0.34, −0.09]	0.17** [0.04, 0.30]	0.41** [0.29, 0.51]	
8. ACE_NEW_4	0.12	0.33	0.32** [0.19, 0.43]	0.26** [0.13, 0.37]	−0.41** [−0.51, −0.29]	−0.18** [−0.31, −0.05]	0.18** [0.05, 0.30]	0.34** [0.22, 0.45]	0.34** [0.22, 0.45]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95 % confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$.

Table 3
Correlations.

	1	2	3	4	5	6	7	8	9	10	11
ACE_1	–										
ACE_2	0.85	–									
ACE_3	0.37	0.40	–								
ACE_4	0.78	0.78	0.21	–							
ACE_5	0.75	0.52	0.18	0.75	–						
ACE_6	0.49	0.33	0.24	0.31	0.73	–					
ACE_PA	0.74	0.47	0.32	0.71	0.80	0.54	–				
ACE_7	0.65	0.58	0.45	0.50	0.67	0.62	0.51	–			
ACE_8	0.42	0.21	0.15	0.45	0.52	0.53	0.48	0.52	–		
ACE_9	0.49	0.35	0.27	0.52	0.67	0.40	0.53	0.89	0.57	–	
ACE_10	0.36	0.36	0.26	0.38	0.30	0.50	0.26	0.61	0.65	0.46	–

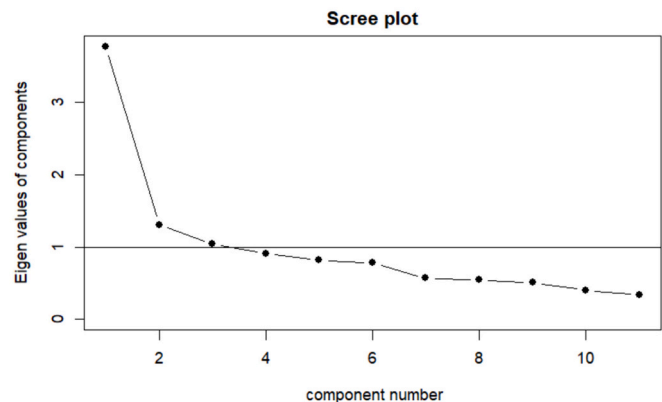


Fig. 1. Scree plot for number of factors by eigenvalue.

environment such as family member substance use, parental separation or divorce, and parental incarceration. Item 3 was dropped from our final analysis as it was the only item to load onto its own factor (sexual abuse). The new PA item loaded most strongly onto the household dysfunction factor. The two factors collectively accounted for 35 % of the variance in the remaining data (Table 4).

3.3.2. Confirmatory factor analysis

We used the extracted factors to conduct a confirmatory factor analysis (CFA) on raw ACEs data using the lavaan package. The weighted least square means and variance estimator was used to conduct the analysis of binary endogenous measures. Model fit was assessed on three goodness-of-fit indicators appropriate for binary indicators: The comparative fit index (CFI), the robust value of the root mean square error of approximation (RMSEA), and the robust value of the chi-square. A CFI of over 0.90 and an RMSEA of <0.08 were considered acceptable for model fit (Brown et al., 1999). Model fit was

further examined through factor loadings of the indicators onto the latent variables. To validate these results, we conducted a CFA. The determination of model fit was based on a comparison of the fit indices obtained from CFA with the suggested cutoff values for the CFI, TLI, RMSEA, and SRMR indices (Cattell, 1978; Gorsuch, 1983; Hoyle and Kenny, 1999). The model results are presented in Fig. 2. The two-factor model demonstrated adequate fit $\chi^2(34) = 72.24, p < .0001$, CFI and TLI < 0.90, RMSEA = 0.099, and SRMR > 0.05.

3.4. Research question 4: Criterion validity and greater explanation of variance

We tested to what extent the new ACEs-PA scale was related to the BSI and the BCE using multiple regression. We compared the adjusted R^2 values to determine if the ACEs-PA scale explained more of the variance than the original scale (see Tables 1–4).

The ACEs-PA scale explained more variance in both outcomes than the original ACEs scale when comparing the adjusted R^2 values ($R^2 = 0.43$ and $R^2 = 0.16$ and $R^2 = 0.35$ and $R^2 = 0.13$ respectively). These results suggest that the ACEs-PA scale shows promise at explaining more of the negative outcomes associated with ACEs than the original

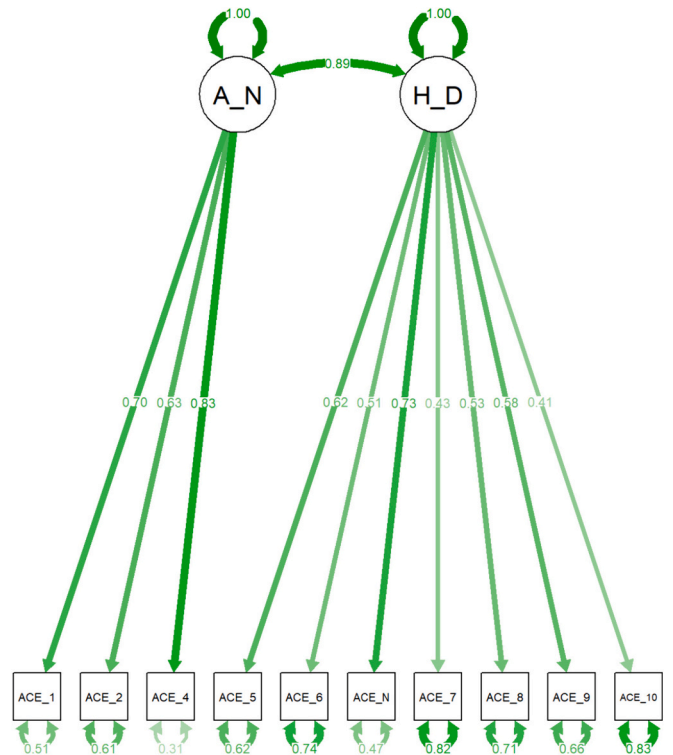


Fig. 2. Exploratory factor analysis model with two factors. A_N = Abuse/Neglect subscale, H_D = Household Dysfunction subscale.

Table 4
Two-factor loading with new PA item.

Oblimin rotated factor loadings and factor inter-correlations from the EFA of the ACE data		
Item	Abuse/neglect	Household dysfunction
1	0.915	0.03
2	0.687	−0.07
4	0.636	0.01
5	0.10	0.423
6	−0.04	0.591
New ACE-PA Item	0.247	0.352
7	0.224	0.473
8	−0.127	0.629
9	0.129	0.434
10	0.02	0.434

measure, as well as connect PA to these previously studied relationships.

4. Discussion

The ACE questionnaire was developed in response to the growing need to assess and further understand the prevalence and impact of child abuse and household environmental factors on public health outcomes. PA is an outcome of an unacknowledged form of family violence (Harman et al., 2018) that is garnering considerable research support over the last few decades (Harman et al., 2022a; Harman and Mathewson, 2020). The purpose of the current study was to examine whether a new item that can screen for PA could enhance the existing ACEs measure to aid in research and prevention services.

Our first research question tested which of the four items created to screen for PA would have the highest association with two validated measures of PA. The item with the strongest correlation captured both the rejection of an alienated parent and the alignment with the preferred parent. This item was negatively associated with the perceived social support and positive co-parenting behaviors measures, demonstrating discriminant validity. We examined the content validity of the new ACE-PA item after being added to the original scale. The new item correlated significantly with the other existing items, but not enough to indicate that it was too similar. The ACE-PA item was a related but distinct construct in the new measure.

We assessed whether and how the new ACE-PA item fit into the factor structure of the original ACE scale. An EFA and CFA found support for a two-factor structure, with the new ACE-PA item fitting into the household dysfunction subscale. This is not surprising, as PA is a product of an abusive family dynamic (Harman and Kruk, 2022; Harman et al., 2021).

Including the ACE-PA item in the new ACEs measure explained more of the variance in outcomes commonly measured in ACEs research: The BSI and the BCE (Harman et al., 2016). The BSI is used widely to assess psychological distress and psychiatric symptoms. Past research demonstrates that ACEs and PABs are associated with increased risk of negative mental health outcomes such as PTSD and depression (Edwards et al., 2003; Chapman et al., 2004; Baker et al., 2016; Aloia and Strutzenberg, 2019; Baker, 2005; Baker and Ben-Ami, 2011; Rand, 1997; Verhaar et al., 2022; Verrocchio et al., 2019; Cabrera et al., 2007; MacMillan et al., 2001; Schalinski et al., 2016). Including a new item to screen for this particular outcome can capture more variance in childhood adversity outcomes. Given the new ACE-PA item loaded on the family dysfunction subscale, the inclusion of the item improved the explanation of BCE variance, as alienated children often experience tremendous loss of autonomy, identity, and support during childhood (Harman et al., 2022b).

4.1. Limitations

We relied exclusively on self-report data which can be influenced by emotional reactions to the sensitive nature of ACE survey items, retrospective bias, and/or coping developed in response to trauma. We sampled young adults in a university indicating our findings may limit some generalizability, in addition to the sample population gender being skewed female. However, as respondents are recently out of their caregivers' homes, their retrospection is potentially more honest and/or accurate than older adults who might be further removed from these experiences. In addition, many university students are alienated children, and this scale would benefit this population. Replication studies can test whether other items indicative of PA would perform psychometrically better than the item we created for this study, and whether the addition of such items would change the factor structure of the scale.

There are questions regarding conceptual issues with the ACEs scale, such as how the ACEs assigns individuals into binary categories regarding adversities (experienced vs not experienced). While this approach is useful from a screening perspective, there is potential for

false positives and it fails to capture the severity or spectrum of experiences. Future research should include measurement of perceived severity as well as timing and duration of experience.

5. Conclusions

The ACE module has been used with the BRFSS (Behavioral Risk Factor Surveillance System) (Centers for Disease Control and Prevention, 2023), used by the Center for Disease Control and Prevention. If an item indicating exposure to PA were to include an ACE module like the BRFSS, we could better estimate the prevalence of PA, measure it in a population, and assess its relationship with additional mental and physical health outcomes on a scale that PA research has yet to attain. The results of our study indicate that inclusion of the newly created item can effectively explain more variance in negative outcomes for individuals who experienced childhood adversity. Finding that a new item measuring PA fits well into the existing factor structure of the ACEs scale as household dysfunction indicates its usefulness in capturing another adverse experience. PA has yet to be studied in the ACEs context, making this a novel investigation of a family dynamic that affects millions of children.

Abbreviations

ACEs	Adverse Childhood Experiences
CAPRD	Child Affected by Parental Relationship Distress
PA	Parental Alienation
PABs	Parental Alienating Behaviors
BAQ	Baker Child Alienation Questionnaire
PARG	Parental Acceptance-Rejection Questionnaire
MSPSS	Multidimensional Scale of Perceived Social Support
PCPB	Positive Co-Parenting Behavior for Mothers & Fathers
BSI	Brief Symptoms Inventory
BCEs	Benevolent Childhood Experiences
EFA	Exploratory Factor Analysis
KMO	Kaiser–Meyer–Olkin
CFA	Confirmatory Factor Analysis
CFI	Comparative Fit Index
RMSEA	Root Mean Square Error of Approximation
BRFSS	Behavioral Risk Factor Surveillance System

Ethics approval and consent to participate

The Colorado State University's Institutional Review Board approved this study (ref: #2142). Participants were informed that participation was voluntary and anonymous and informed consent was required before proceeding. Students were given research participation credit upon completion.

Consent for publication

Not applicable.

Funding

The third author received internal funding from Colorado State University to collect data for the *Human Animal Interaction Research Initiative* under grant project 6436230. Data collected during that project was used in this study.

CRediT authorship contribution statement

Joshua Marsden: Data curation, Writing – review & editing. **Luke Saunders:** Formal analysis, Writing – original draft. **Jennifer J. Harman:** Funding acquisition, Supervision, Writing – review & editing.

Declaration of competing interest

The authors declare that they have no competing interests.

Data availability

The datasets generated and/or analyzed during the current study are

available on Open Science Framework, https://osf.io/a3kgc/?view_only=6e75fd3566724b1580c35608883646d3.

Acknowledgments

Not applicable.

Appendix A. ACEs & HAI - young adult qualtrics survey

CONSENT Consent to Participate in a Research Study: Colorado State University

TITLE OF STUDY: Adverse and Benevolent Childhood Experiences and the Role of Animals PRINCIPAL INVESTIGATORS: Jennifer Harman, PhD, Department of Psychology Email: Jennifer.Harman@colostate.edu Samantha Brown, PhD, School of Social Work Email: Samantha.Brown@colostate.edu Zeynep Biringen, PhD, Department of Human Development and Family Studies Email: Zeynep.Biringen@colostate.edu Paula Yuma, PhD, School of Social Work Email: Paula.Yuma@colostate.edu WHY AM I BEING INVITED TO TAKE PART IN THIS RESEARCH? Our goal is to understand your early life experiences that may be both stressful and positive, the role of pets in your life, and your well-being. WHO IS DOING THE STUDY? This study is being conducted by faculty at Colorado State University. WHAT IS THE PURPOSE OF THIS STUDY? The purpose of this study is to examine relationships between childhood experiences, interactions between humans and animals, and current well-being. WHAT WILL I BE ASKED TO DO? You will be asked to answer a series of questionnaires about yourself, including basic demographic characteristics, positive and negative childhood experiences, interactions with pets, and well-being. WHERE IS THE STUDY GOING TO TAKE PLACE AND HOW LONG WILL IT LAST? You will be asked to complete brief questionnaires online. If you agree to the consent information, you will then immediately begin the survey. This will take approximately 35–40 min. ARE THERE REASONS WHY I SHOULD NOT TAKE PART IN THIS STUDY? If you are under the age of 18 years, then you should not participate in this study. WHAT ARE THE POSSIBLE RISKS AND DISCOMFORTS? It is not possible to identify all potential risks in research procedures, but the researcher(s) have taken reasonable safeguards to minimize any known and potential, but unknown, risks. Some risks we foresee related to your participation in this study is that you might have some boredom, distress, or discomfort in answering some of the questions, especially those that may relate to sensitive topics. If you experience any distress or discomfort, please call Colorado Crisis Services at 1–844–493–8255. You do not have to answer any questions that you would prefer not to answer and you can stop participating at any time.

ARE THERE ANY BENEFITS FROM TAKING PART IN THIS STUDY? Although there are no known direct benefits to you as a participant, there are a number of benefits to be gained to society, which include contributing to understanding early life experiences and the role of human-animal interactions.

DO I HAVE TO TAKE PART IN THE STUDY? Your participation in this research is voluntary. If you decide to participate in the study, you may withdraw and stop participating at any time without any penalty. WHO WILL SEE THE INFORMATION THAT I GIVE? All information you provide will be kept anonymous; no identifying information will be collected from you. When we write about the study to share with other researchers, we will write about the average trends we have learned, not about individuals.

WILL I RECEIVE ANY COMPENSATION FOR TAKING PART IN THIS STUDY? No compensation is provided for your participation in this study. If you are currently enrolled in an HDFS or psychology course you may be able to receive extra credit for your completion of this study. WHAT IF I HAVE QUESTIONS? Before you decide whether to accept this invitation to take part in the study, please ask any questions that might come to mind now. Later, if you have questions about the study, you can contact one of the investigators (see the first page for contact information). If you have any questions about your rights as a volunteer in this research, contact the CSU IRB at: RICRO_IRB@mail.colostate.edu; 970-491-1553. Please save a copy of this consent form for your personal records.

☐ Yes, I consent (4)

AGE_C Are you 18 years of age or older?

☐ No (0)

☐ Yes (1)

AGE_SELF What is your current age?

REL_SELF What is your current relationship status?

☐ Single, never married (1)

☐ Married or domestic partnership (2)

☐ Divorced (3)

☐ Separated (4)

☐ Widowed (5)

☐ Prefer not to answer (99)

GENDER_SELF What is your gender?

☐ Male (1)

☐ Female (2)

☐ Non-binary (3)

☐ Other or self-identified (4)

☐ Prefer not to answer (99)

ETH_SELF What is your ethnicity?

- ☐ Hispanic origin (1)
- ☐ Not of Hispanic origin (2)
- ☐ Prefer not to answer (99)

RACE_SELF What is your race?

- ☐ American Indian or Alaska Native (1)
- ☐ Asian (2)
- ☐ Black or African American (3)
- ☐ Native Hawaiian or Pacific Islander (4)
- ☐ White (5)
- ☐ Multiple races (6)
- ☐ Prefer not to answer (99)

ZIPCODE What was your primary zip code growing up? (the zip code in which you cohabitated for the longest period between 0 and 18 years old)

INCOME_SELF What is your current estimated household income, including you and all others who contribute?

- ☐ Less than \$20,000 (1)
- ☐ \$20,000 - \$39,999 (2)
- ☐ \$40,000 - \$59,999 (3)
- ☐ \$60,000 - \$79,999 (4)
- ☐ \$80,000 - \$99,999 (5)
- ☐ More than \$100,000 (6)
- ☐ Prefer not to answer (99)

EDU_SELF What is the highest level of education you have completed?

- ☐ First year college student (1)
- ☐ Second year college student (2)
- ☐ Third year college student (3)
- ☐ Fourth year college student (4)
- ☐ Fifth year or more college student (5)
- ☐ Graduate student (6)

HHCOMP_CH What was the household composition you experienced a majority of your childhood?

- ☐ One parent only (biological or adopted) (1)
- ☐ Two parents (biological or adopted) (2)
- ☐ One parent (biological or adopted) and a step-parent (3)
- ☐ One parent (biological or adopted) and other relative or family friend (4)

HHCOME_REC What was the household composition you experienced most recently, before starting college?

- ☐ One parent only (biological or adopted) (1)
- ☐ Two parents (biological or adopted) (2)
- ☐ One parent (biological or adopted) and a step-parent (3)
- ☐ One parent (biological or adopted) and other relative or family friend (4)

BCE_INTRO The following questions will ask you about your childhood experiences.

BCE_1 When you were growing up, during your first 18 years of life:

	Yes (1)	No (0)
Did you have at least one caregiver with whom you felt safe? (1)	☐	☐
Did you have at least one good friend? (2)	☐	☐
Did you have beliefs that gave you comfort? (3)	☐	☐
Did you like school? (4)	☐	☐
Did you have at least one teacher who cared about you? (5)	☐	☐

BCE_2 When you were growing up, during your first 18 years of life:

	Yes (1)	No (0)
Did you have good neighbors? (6)	☐	☐
Was there an adult (not a parent/caregiver) who could provide you with support or advice? (7)	☐	☐
Did you have opportunities to have a good time? (8)	☐	☐
Did you like yourself or feel comfortable with yourself? (9)	☐	☐
Did you have a predictable home routine, like regular meals and a regular bedtime? (10)	☐	☐

PCPB_INTRO The following questions will ask you about your childhood experiences with your parent(s) or caregiver(s).

PCPB_LOGIC During childhood, were you cared for by two parents or caregivers?

(By parent or caregiver, we are referring to any caregiving adult in your childhood including biological, adopted, or step-parents as well as other caregiver figures)

- ☐ Yes - I had two parents or caregivers (1)
☐ No - I had a single parent or caregiver (2)

PCPB_1 Please indicate the extent to which you agree or disagree with the following statements about your parents during childhood.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
My parents encouraged me to include one another on class projects or activities, such as interviews (1)	☐	☐	☐	☐	☐
My parents were flexible with one another on pick-ups and drop off times for me when they transported me (2)	☐	☐	☐	☐	☐
My parents shared positive stories of one another to me (3)	☐	☐	☐	☐	☐
My parents hung or allowed pictures of the other parent in my room (4)	☐	☐	☐	☐	☐

PCPB_2 Please indicate the extent to which you agree or disagree with the following statements about your parents during childhood.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
My parents coordinated or planned birthday parties with one another (5)	☐	☐	☐	☐	☐
My parents communicated with one another about disciplinary issues related to me (6)	☐	☐	☐	☐	☐
My parents coordinated or cooperated with the other parent for the purchase of a gift for me (7)	☐	☐	☐	☐	☐
My parents supported each other in disciplining me (8)	☐	☐	☐	☐	☐
My parents encouraged me to do special projects together with the other parent (e.g building something) (9)	☐	☐	☐	☐	☐

MDORS_INTRO The following questions will ask you about your relationship with pets during childhood.

PETS Did you have any pets growing up? (if “yes, other pet(s), please describe below):

- ☐ Yes, pet dog(s) (1)
☐ Yes, pet cat(s) (2)
☐ Yes, other pet(s) (3) _____
☐ No (0)

PETDOG_NAME What was the name of the pet dog in which you grew up with that you felt closest to?

PETDOG_INTRO The following questions will ask you about your relationship with \${PETDOG_NAME/ChoiceTextEntryValue}.

MDORS_EC1 Please answer the following question about yourself and \${PETDOG_NAME/ChoiceTextEntryValue} while growing up.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
\${PETDOG_NAME/ChoiceTextEntryValue} helped me get through tough times. (14)	☐	☐	☐	☐	☐
\${PETDOG_NAME/ChoiceTextEntryValue} was there whenever I needed to be comforted. (13)	☐	☐	☐	☐	☐
I would have liked to have \${PETDOG_NAME/ChoiceTextEntryValue} near me all the time. (9)	☐	☐	☐	☐	☐
\${PETDOG_NAME/ChoiceTextEntryValue} provided me with constant companionship. (12)	☐	☐	☐	☐	☐

MDORS_EC2 Please answer the following question about yourself and \${PETDOG_NAME/ChoiceTextEntryValue} while growing up.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
If everyone else left me, \${PETDOG_NAME/ChoiceTextEntryValue} would have still been there for me. (10)	☐	☐	☐	☐	☐
\${PETDOG_NAME/ChoiceTextEntryValue} gave me a reason to get up in the morning. (1)	☐	☐	☐	☐	☐
I wished \${PETDOG_NAME/ChoiceTextEntryValue} and I never had to be apart. (3)	☐	☐	☐	☐	☐
\${PETDOG_NAME/ChoiceTextEntryValue} was constantly attentive to me. (8)	☐	☐	☐	☐	☐

MDORS_EC3 How often did you tell \${PETDOG_NAME/ChoiceTextEntryValue} things you didn't tell anyone else?

- ☐ Never (1)
☐ Once a Year (2)
☐ Once a Month (3)
☐ Once a Week (4)
☐ At Least Once a Day (5)

MDORS_EC4 How traumatic was it for you when \${PETDOG_NAME/ChoiceTextEntryValue} died? (or, how traumatic do you think it will be for you when \${PETDOG_NAME/ChoiceTextEntryValue} dies?)

- ☐ Not Traumatic At All (1)
☐ Not Traumatic (2)
☐ Neither Traumatic Nor Not Traumatic (3)
☐ Traumatic (4)
☐ Very Traumatic (5)

CTAQ_1 Growing up, how often did you engage in the following behaviors with your pet(s)?

	Never (1)	Sometimes (2)	Often (3)
Play with (1)	☐	☐	☐
Give food or water to (2)	☐	☐	☐
Take for a walk (3)	☐	☐	☐
Pet (4)	☐	☐	☐

CTAQ_2 Growing up, how often did you engage in the following behaviors with your pet(s)?

	Never (1)	Sometimes (2)	Often (3)
Cuddle with (5)	☐	☐	☐
Cry with when you were sad (6)	☐	☐	☐
Talk to (7)	☐	☐	☐
Allow to stay in your room (8)	☐	☐	☐

CTAQ_3 Growing up, how often did you engage in the following behaviors with your pet(s)?

	Never (1)	Sometimes (2)	Often (3)
Play dress up with (9)	☐	☐	☐
Groom (10)	☐	☐	☐
Tell secrets to (11)	☐	☐	☐
Spend time with (12)	☐	☐	☐

ACE_INTRO The following questions will ask about your childhood experiences that might have been stressful.

Each question refers to any event that you may have experienced before the age of 18.

ACE_1 Did a parent or other adult in the household often or very often swear at you, insult you, put you down humiliate you? Or act in a way that made you afraid that you might be physically hurt?

- ☐ Yes (1)
☐ No (0)

ACE_2 Did a parent or other adult in the household often or very often push, grab, slap, or throw something at you? Or ever hit you so hard that you had marks or were injured?

- ☐ Yes (1)
☐ No (0)

ACE_3 Did an adult person at least 5 years older than you ever touch, fondle you or have you touch their body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with you?

- ☐ Yes (1)
☐ No (0)

ACE_4

While you were growing up, the first 18 years of life...

Did you often or very often feel that no one in your family loved you or thought you were important or special? Or your family didn't look out for each other, feel close to each other, or support each other?

- ☐ Yes (1)
☐ No (0)

ACE_5 Did you often or very often feel that you didn't have enough to eat, had to wear dirty clothes, and had no one to protect you? Or your parents were too drunk or high to take care of you or take you to the doctor if you needed it?

- ☐ Yes (1)
☐ No (0)

ACE_6 Were your parents ever separated or divorced?

- ☐ Yes (1)
☐ No (0)

ACE_NEW_1 Did one of your parents or caregivers involve you with legal matters against your other parent or caregiver, such as testifying against them in court?

- ☐ Yes (1)
☐ No (0)

ACE_NEW_2 Do you have a parent or caregiver that you often feel you want nothing to do with? Or a parent or caregiver who you dislike and would rather not spend any time with, while at the same time prefer to be with your other parent?

- ☐ Yes (1)
☐ No (0)

ACE_7 Was your parent or caregiver often or very often pushed, grabbed, slapped, or had something thrown at them? Or sometimes, often or very often kicked, bitten, hit with a fist, or hit with something? Or ever repeatedly hit at least a few minutes or threatened with a gun or knife?

- ☐ Yes (1)
☐ No (0)

ACE_NEW_3 Was one of your parents or caregivers often or very often yelled at or put down by your other parent or caregiver?

- ☐ Yes (1)
☐ No (0)

ACE_8 Did you live with anyone who was a problem drinker or alcoholic or who used street drugs?

- ☐ Yes (1)
☐ No (0)

ACE_9 Was a household member depressed or mentally ill or did a household member attempt suicide?

- ☐ Yes (1)
☐ No (0)

ACE_10

While you were growing up, the first 18 years of life...

Did a household member go to prison/jail?

- ☐ Yes (1)
☐ No (0)

ACE_11

Did you experience repeated bullying as a child?

- ☐ Yes (1)
☐ No (0)

ACE_NEW_4

Did you ever feel like you and one of your parents or caregivers were allies against your other parent because they were bad or posed a danger to you?

- ☐ Yes (1)
☐ No (0)

ACE_12

Did you repeatedly experience discrimination as a child (e.g., based on gender, skin color)?

- ☐ Yes (1)
☐ No (0)

ACE_13

While you were growing up, the first 18 years of life...

Did you ever live in a foster home or group home?

- ☐ Yes (1)
☐ No (0)

ACE_14

Was crime high in your neighborhood?

- ☐ Yes (1)
☐ No (0)

ACE_15

Did you feel unsafe in your neighborhood?

- ☐ Yes (1)
☐ No (0)

MOTH_INTRO The next set of questions will be asking about your biological or adoptive mother.

AC_1 Type the word “yellow” in the box below:

MOTH During childhood, who did you most identify as a mother?

- ☐ Biological mother (1)
☐ Adopted mother (2)
☐ Step-mother (3)
☐ Foster mother (4)
☐ Other family member (Aunt/Grandmother/Sister) (5)
☐ Other caregiver fig. (6) _____

MOTH_FUP In addition to this mother figure, did you also have a biological or adopted mother during childhood?
 (Even if they were not consistently present in your life or passed away during childhood)

- ☐ Yes - Biological mother (1)
☐ Yes - Adopted mother (2)
☐ No (0)

MOTH_NAME What is your biological or adopted mother’s first name? (please provide a pseudonym and not your mother’s real name).

MOTH_AKIVE Was \${MOTH_NAME/ChoiceTextEntryValue} alive for a majority of your childhood

- ☐ Yes (1)
☐ No - She passed away when I was an infant or toddler (3 years old or younger) (2)
☐ No - She passed away when I was a young child (4–12 years old) (3)
☐ No - She passed away when I was a teenager (13–18 years old) (4)

EDU_MOTH What is the highest level of education \${MOTH_NAME/ChoiceTextEntryValue} completed?

- ☐ Less than high school degree (1)
☐ High school graduate (high school diploma or equivalent including GED) (2)
☐ Some college but no degree (3)
☐ Associate degree in college (2-year) (4)
☐ Bachelor's degree in college (4-year) (5)
☐ Master's degree (6)
☐ Doctoral degree (7)
☐ Professional degree (8)

PARENT_STATUS During your first 18 years of life, what was the relationship status of your parents (biological or adopted)?

- ☐ They were married my whole childhood (12)
☐ They got divorced before or during childhood (1)
☐ They got separated before or during childhood (2)
☐ My parents were never married (9)
☐ One of my parents was widowed during childhood (8)
☐ Other (7) _____

CUSTODY We know that custody arrangements can change, but what was the custody arrangement your parents had for you for most of your childhood after they separated/divorced?

In other words, how was your time split between your parents for most of your childhood?

- ☐ It was fairly equal; I spent about the same amount of time with both parents (1)
☐ I lived primarily with my mother and had some parenting time with my father (e.g., alternating weekends, holidays, summers) (2)
☐ I lived primarily with my father and had some parenting time with my mother (e.g., alternating weekends, holidays, summers) (4)
☐ I lived entirely with mother and never, or almost never had parenting time with my father (5)
☐ I lived entirely with my father and never, or almost never had parenting time with [my mother] (6)
☐ Other (please describe) (7) _____

BAQ_P_INTRO The following questions will ask you about \${MOTH_NAME/ChoiceTextEntryValue}.

(If \${MOTH_NAME/ChoiceTextEntryValue} has passed away or you no longer have a relationship with her, reflect back to the caregiver-child relationship that you recall most recently).

BAQ_M_1 Do you think \${MOTH_NAME/ChoiceTextEntryValue} was/is a good caregiver to you?

- ☐ Not at all (1)
☐ A little bit (2)
☐ Somewhat (3)
☐ Mostly (4)
☐ Completely (5)

BAQ_M_2 How many good memories do you have of being with \${MOTH_NAME/ChoiceTextEntryValue}?

- ☐ None (1)
☐ A few (2)
☐ Some (3)
☐ Many (4)
☐ Very Many (5)

BAQ_M_3 What is one good memory of being with \${MOTH_NAME/ChoiceTextEntryValue}?

_____.

BAQ_M_4 How much do you think \${MOTH_NAME/ChoiceTextEntryValue} could be/could have been a better caregiver?

- ☐ Not at all (1)
☐ A little bit (2)
☐ Somewhat (3)
☐ Much (4)
☐ Very much (5)

BAQ_M_5 Do/did you enjoy spending time with \${MOTH_NAME/ChoiceTextEntryValue}?

- ☐ Not at all (1)
- ☐ A little bit (2)
- ☐ Somewhat (3)
- ☐ Much (4)
- ☐ Very much (5)

BAQ_M_6 If you had your way, how much time would you want to spend with \${MOTH_NAME/ChoiceTextEntryValue}?

- ☐ No time with \${MOTH_NAME/ChoiceTextEntryValue} (1)
- ☐ Fifty-fifty with \${MOTH_NAME/ChoiceTextEntryValue} and other caregiver (2)
- ☐ Full-time with \${MOTH_NAME/ChoiceTextEntryValue} (3)

BAQ_M_7 Tell us some nice things about \${MOTH_NAME/ChoiceTextEntryValue}:

_____.

BAQ_M_8 What were/are your favorite things to do with \${MOTH_NAME/ChoiceTextEntryValue}?

_____.

BAQ_M_9 What are some things you don't like about \${MOTH_NAME/ChoiceTextEntryValue}?

_____.

BAQ_M_10 How angry or unhappy with \${MOTH_NAME/ChoiceTextEntryValue} are you right now?

- ☐ Not at all (1)
- ☐ A little bit (2)
- ☐ Somewhat (3)
- ☐ Much (4)
- ☐ Very much (5)

BAQ_M_11 What are some reasons you feel that way toward \${MOTH_NAME/ChoiceTextEntryValue}?

_____.

BAQ_M_12 Do you think you have done anything to hurt \${MOTH_NAME/ChoiceTextEntryValue}?

- ☐ Not at all (1)
- ☐ A little bit (2)
- ☐ Somewhat (3)
- ☐ Much (4)
- ☐ Very much (5)

BAQ_M_13 If \${MOTH_NAME/ChoiceTextEntryValue} and another caregiver do not agree about something about you, who is usually right?

- ☐ Always \${MOTH_NAME/ChoiceTextEntryValue} (1)
- ☐ Sometimes \${MOTH_NAME/ChoiceTextEntryValue} sometimes other caregiver (2)
- ☐ Always other caregiver (3)

BAQ_M_14 The feelings you have about \${MOTH_NAME/ChoiceTextEntryValue} come from:

- ☐ Only you (1)
- ☐ Partly you and partly what other people tell you about them (2)
- ☐ Only from other people (3)

BAQ_M_15 How do you feel about \${MOTH_NAME/ChoiceTextEntryValue}'s family? (your grandparents, aunts, uncles and cousins, on \${MOTH_NAME/ChoiceTextEntryValue}'s side)

- ☐ I used to like them but now I don't (1)
- ☐ I never liked them (2)
- ☐ I used to like them and still do (3)

PARQ_M_INTRO The following questions contain statements describing the way parents sometimes act toward their children. Think about how each of these fits the way \${MOTH_NAME/ChoiceTextEntryValue} treated you when you were younger and today.

Remember there is no right or wrong answer to any statement, so be as honest as you can. Respond to each statement the way you feel your mother or father really is rather than the way you might like them to be.

(If \${MOTH_NAME/ChoiceTextEntryValue} has passed away or you no longer have a relationship with her, think about your relationship with him/her prior to passing).

PARQ_M_1 \${MOTH_NAME/ChoiceTextEntryValue} says/said nice things about me.

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)

☐ Almost never true (1)

PARQ_M_2 \${MOTH_NAME/ChoiceTextEntryValue} pays/paid no attention to me.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_M_3 \${MOTH_NAME/ChoiceTextEntryValue} makes/made it easy for me to tell them things that are important to me.

☐ Almost always true (4)

☐ Sometimes true (3)

☐ Rarely true (2)

☐ Almost never true (1)

PARQ_M_4 \${MOTH_NAME/ChoiceTextEntryValue} has hit me even when I did not deserve it.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_M_5 \${MOTH_NAME/ChoiceTextEntryValue} sees/saw me as a big nuisance.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_M_6 \${MOTH_NAME/ChoiceTextEntryValue} punishes/punished me severely when they are angry.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_M_7 \${MOTH_NAME/ChoiceTextEntryValue} is/was too busy to answer my questions.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_M_8 \${MOTH_NAME/ChoiceTextEntryValue} seems/seemed to dislike me.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_M_9 \${MOTH_NAME/ChoiceTextEntryValue} is/was really interested in what I do/did.

☐ Almost always true (4)

☐ Sometimes true (3)

☐ Rarely true (2)

☐ Almost never true (1)

PARQ_M_10 \${MOTH_NAME/ChoiceTextEntryValue} says/said many unkind things to me.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_M_11 \${MOTH_NAME/ChoiceTextEntryValue} pays/paid no attention when I ask for help.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_M_12 \${MOTH_NAME/ChoiceTextEntryValue} makes/made me feel wanted and needed.

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)
- ☐ Almost never true (1)

PARQ_M_13 \${MOTH_NAME/ChoiceTextEntryValue} pays/paid a lot of attention to me.

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)
- ☐ Almost never true (1)

PARQ_M_14 \${MOTH_NAME/ChoiceTextEntryValue} goes/went out of the way to hurt my feelings.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_M_15 \${MOTH_NAME/ChoiceTextEntryValue} forgets/forgot important things I think they should remember.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_M_16 \${MOTH_NAME/ChoiceTextEntryValue} makes/made me feel unloved if I misbehave.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_M_17 \${MOTH_NAME/ChoiceTextEntryValue} makes/made me feel like what I do is important.

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)
- ☐ Almost never true (1)

PARQ_M_18 \${MOTH_NAME/ChoiceTextEntryValue} frightens or threatens me when I do something wrong.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_M_19 \${MOTH_NAME/ChoiceTextEntryValue} cares/cared about what I think and likes to talk to me about it.

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)
- ☐ Almost never true (1)

PARQ_M_20 \${MOTH_NAME/ChoiceTextEntryValue} feels/felt other children are better than I am no matter what I do.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)

☐ Almost never true (4)

PARQ_M_21 \${MOTH_NAME/ChoiceTextEntryValue} lets/let me know I am not wanted.

- ☐ Almost always true (1)
☐ Sometimes true (2)
☐ Rarely true (3)
☐ Almost never true (4)

PARQ_M_22 \${MOTH_NAME/ChoiceTextEntryValue} lets/let me know they love me.

- ☐ Almost always true (4)
☐ Sometimes true (3)
☐ Rarely true (2)
☐ Almost never true (1)

PARQ_M_23 \${MOTH_NAME/ChoiceTextEntryValue} pays/paid no attention to me as long as I do nothing to bother them.

- ☐ Almost always true (1)
☐ Sometimes true (2)
☐ Rarely true (3)
☐ Almost never true (4)

PARQ_M_24 \${MOTH_NAME/ChoiceTextEntryValue} treats/treated me gently and with kindness.

- ☐ Almost always true (4)
☐ Sometimes true (3)
☐ Rarely true (2)
☐ Almost never true (1)

FATH During childhood, who did you most identify as a father?

- ☐ Biological father (1)
☐ Adopted father (2)
☐ Step-father (3)
☐ Foster father (4)
☐ Other family member (Uncle/Grandfather/Brother) (5)
☐ Other caregiver fig. (6) _____

FATH_FUP In addition to this father figure, did you also have a biological or adopted father during childhood?
 (Even if they were not consistently present in your life or passed away during childhood)

- ☐ Yes - Biological father (1)
☐ Yes - Adopted father (2)
☐ No (0)

FATH_NAME What is your biological or adopted father's first name? (please provide a pseudonym and not your father's real name).

_____.

FATH_ALIVE Was \${FATH_NAME/ChoiceTextEntryValue} alive for a majority of your childhood?

- ☐ Yes (1)
☐ No - He passed away when I was an infant or toddler (3 years old or younger) (2)
☐ No - He passed away when I was a young child (4–12 years old) (3)
☐ No - He passed away when I was a teenager (13–18 years old) (4)

EDU_FATH What is the highest level of education \${FATH_NAME/ChoiceTextEntryValue} completed?

- ☐ Less than high school degree (1)
☐ High school graduate (high school diploma or equivalent including GED) (2)
☐ Some college but no degree (3)
☐ Associate degree in college (2-year) (4)
☐ Bachelor's degree in college (4-year) (5)
☐ Master's degree (6)
☐ Doctoral degree (7)
☐ Professional degree (JD, MD) (8)

BAQ_F_INTRO The following questions will ask you about \${FATH_NAME/ChoiceTextEntryValue}.

(If \${FATH_NAME/ChoiceTextEntryValue} has passed away or you no longer have a relationship with him/her, reflect back to the caregiver-child relationship that you recall most recently).

BAQ_F_1 Do you think \${FATH_NAME/ChoiceTextEntryValue} was/is a good caregiver to you?

- ☐ Not at all (1)
- ☐ A little bit (2)
- ☐ Somewhat (3)
- ☐ Mostly (4)
- ☐ Completely (5)

BAQ_F_2 How many good memories do you have of being with \${FATH_NAME/ChoiceTextEntryValue}?

- ☐ None (1)
- ☐ A few (2)
- ☐ Some (3)
- ☐ Many (4)
- ☐ Very many (5)

BAQ_F_3 What is one good memory of being with \${FATH_NAME/ChoiceTextEntryValue}?

BAQ_F_4 How much do you think \${FATH_NAME/ChoiceTextEntryValue} could be a better caregiver?

- ☐ Not at all (1)
- ☐ A little bit (2)
- ☐ Somewhat (3)
- ☐ Much (4)
- ☐ Very much (5)

BAQ_F_5 Do/did you enjoy spending time with \${FATH_NAME/ChoiceTextEntryValue}?

- ☐ Not at all (1)
- ☐ A little bit (2)
- ☐ Somewhat (3)
- ☐ Much (4)
- ☐ Very much (5)

BAQ_F_6 If you had your way, how much time would you spend with \${FATH_NAME/ChoiceTextEntryValue}?

- ☐ No time with \${FATH_NAME/ChoiceTextEntryValue} (1)
- ☐ Fifty-fifty with \${FATH_NAME/ChoiceTextEntryValue} and other caregiver (2)
- ☐ Full-time with other caregiver (3)

BAQ_F_7 Tell us some nice things about \${FATH_NAME/ChoiceTextEntryValue}:

BAQ_F_8 What are/were your favorite things to do with \${FATH_NAME/ChoiceTextEntryValue}?

BAQ_F_9 What are some things you don't like about \${FATH_NAME/ChoiceTextEntryValue}?

BAQ_F_10 How angry or unhappy are you with \${FATH_NAME/ChoiceTextEntryValue} right now?

- ☐ Not at all (1)
- ☐ A little bit (2)
- ☐ Somewhat (3)
- ☐ Much (4)
- ☐ Very much (5)

BAQ_F_11 What are some reasons you feel that way about \${FATH_NAME/ChoiceTextEntryValue}?

BAQ_F_12 Do you think you have done anything to hurt \${FATH_NAME/ChoiceTextEntryValue}?

- ☐ Not at all (1)
- ☐ A little bit (2)
- ☐ Somewhat (3)
- ☐ Much (4)
- ☐ Very much (5)

BAQ_F_13 The feelings you have about \${FATH_NAME/ChoiceTextEntryValue} come from:

- ☐ Only you (1)
- ☐ Partly you and partly what other people tell you about \${FATH_NAME/ChoiceTextEntryValue} (2)
- ☐ Only from other people (3)

BAQ_F_14 How do you feel about \${FATH_NAME/ChoiceTextEntryValue}'s family? (grandparents, aunts, uncles, and cousins on \${FATH_NAME/ChoiceTextEntryValue}'s side)

- ☐ I used to like them but now I don't (1)
- ☐ I never liked them (2)
- ☐ I used to like them and I still do (3)

PARQ_F_INTRO The following questions contain statements describing the way parents sometimes act toward their children. Think about how each of these fits the way \${FATH_NAME/ChoiceTextEntryValue} treated you when you were younger and today.

Remember there is no right or wrong answer to any statement, so be as honest as you can. Respond to each statement the way you feel your mother or father really is rather than the way you might like them to be.

(If \${FATH_NAME/ChoiceTextEntryValue} has passed away, think about your relationship with him/her prior to passing).

PARQ_F_1 \${FATH_NAME/ChoiceTextEntryValue} says/said nice things about me

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)
- ☐ Almost never true (1)

PARQ_F_2 \${FATH_NAME/ChoiceTextEntryValue} pays/paid no attention to me.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_3 \${FATH_NAME/ChoiceTextEntryValue} has hit me even when I did not deserve it.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_4 \${FATH_NAME/ChoiceTextEntryValue} makes/made it easy for me to tell them things that are important to me.

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)
- ☐ Almost never true (1)

PARQ_F_5 \${FATH_NAME/ChoiceTextEntryValue} sees/saw me as a big nuisance.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_6 \${FATH_NAME/ChoiceTextEntryValue} punishes/punished me severely when they are angry.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_7 \${FATH_NAME/ChoiceTextEntryValue} is/was too busy to answer my questions.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_8 \${FATH_NAME/ChoiceTextEntryValue} seems/seemed to dislike me.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_9 \${FATH_NAME/ChoiceTextEntryValue} is/was really interested in what I do.

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)
- ☐ Almost never true (1)

PARQ_F_10 \${FATH_NAME/ChoiceTextEntryValue} says/said many unkind things to me.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_11 \${FATH_NAME/ChoiceTextEntryValue} pays/paid no attention when I asked for help.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_12 \${FATH_NAME/ChoiceTextEntryValue} makes/made me feel wanted and needed.

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)
- ☐ Almost never true (1)

PARQ_F_13 \${FATH_NAME/ChoiceTextEntryValue} pays/paid a lot of attention to me.

- ☐ Almost always true (4)
- ☐ Sometimes true (3)
- ☐ Rarely true (2)
- ☐ Almost never true (1)

PARQ_F_14 \${FATH_NAME/ChoiceTextEntryValue} goes/went out of their way to hurt my feelings.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_15 \${FATH_NAME/ChoiceTextEntryValue} forgets/forgot important things I think he should remember.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_16 \${FATH_NAME/ChoiceTextEntryValue} makes/made me feel unloved if I misbehaved.

- ☐ Almost always true (1)
- ☐ Sometimes true (2)
- ☐ Rarely true (3)
- ☐ Almost never true (4)

PARQ_F_17 \${FATH_NAME/ChoiceTextEntryValue} makes/made me feel like what I do is important.

- ☐ Almost always true (4)

☐ Sometimes true (3)

☐ Rarely true (2)

☐ Almost never true (1)

PARQ_F_18 \${FATH_NAME/ChoiceTextEntryValue} frightens or threatens me when I do/did something wrong.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_F_19 \${FATH_NAME/ChoiceTextEntryValue} cares/cared about what I think, and likes me to talk about it.

☐ Almost always true (4)

☐ Sometimes true (3)

☐ Rarely true (2)

☐ Almost never true (1)

PARQ_F_20 \${FATH_NAME/ChoiceTextEntryValue} feels/felt other children are better than I am no matter what I do.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_F_21 \${FATH_NAME/ChoiceTextEntryValue} lets/let me know I was not wanted.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_F_22 \${FATH_NAME/ChoiceTextEntryValue} lets/let me know they love me.

☐ Almost always true (4)

☐ Sometimes true (3)

☐ Rarely true (2)

☐ Almost never true (1)

PARQ_F_23 \${FATH_NAME/ChoiceTextEntryValue} pays/paid no attention to me as long as I do nothing to bother them.

☐ Almost always true (1)

☐ Sometimes true (2)

☐ Rarely true (3)

☐ Almost never true (4)

PARQ_F_24 \${FATH_NAME/ChoiceTextEntryValue} treats/treated me gently and with kindness.

☐ Almost always true (4)

☐ Sometimes true (3)

☐ Rarely true (2)

☐ Almost never true (1)

PCPB_INTRO The following questions will ask you about your childhood experiences with \${MOTH_NAME/ChoiceTextEntryValue} and \${FATH_NAME/ChoiceTextEntryValue}.

PCPB_1 Please indicate the extent to which you agree or disagree with the following statements about \${MOTH_NAME/ChoiceTextEntryValue} and \${FATH_NAME/ChoiceTextEntryValue}.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
\${MOTH_NAME/ChoiceTextEntryValue} and \${FATH_NAME/ChoiceTextEntryValue} encouraged me to include one another on class projects or activities, such as interviews (1)	☐	☐	☐	☐	☐
\${MOTH_NAME/ChoiceTextEntryValue} and \${FATH_NAME/ChoiceTextEntryValue} were flexible with one another on pick-ups and drop off times for me when they transported me (2)	☐	☐	☐	☐	☐

(continued on next page)

(continued)

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
`\${MOTH_NAME/ChoiceTextEntryValue}` and `\${FATH_NAME/ChoiceTextEntryValue}` shared positive stories of one another to me (3)	☐	☐	☐	☐	☐
`\${MOTH_NAME/ChoiceTextEntryValue}` and `\${FATH_NAME/ChoiceTextEntryValue}` hung or allowed pictures of the other in my room (4)	☐	☐	☐	☐	☐

PCPB_2 Please indicate the extent to which you agree or disagree with the following statements about `\${MOTH\_NAME/ChoiceTextEntryValue}` and `\${FATH\_NAME/ChoiceTextEntryValue}`.

	Strongly disagree (1)	Disagree (2)	Neither agree nor disagree (3)	Agree (4)	Strongly agree (5)
`\${MOTH_NAME/ChoiceTextEntryValue}` and `\${FATH_NAME/ChoiceTextEntryValue}` coordinated or planned birthday parties with one another (5)	☐	☐	☐	☐	☐
`\${MOTH_NAME/ChoiceTextEntryValue}` and `\${FATH_NAME/ChoiceTextEntryValue}` communicated with one another about disciplinary issues related to me (6)	☐	☐	☐	☐	☐
`\${MOTH_NAME/ChoiceTextEntryValue}` and `\${FATH_NAME/ChoiceTextEntryValue}` coordinated or cooperated with the other parent for the purchase of a gift for me (7)	☐	☐	☐	☐	☐
`\${MOTH_NAME/ChoiceTextEntryValue}` and `\${FATH_NAME/ChoiceTextEntryValue}` supported each other in disciplining me (8)	☐	☐	☐	☐	☐
`\${MOTH_NAME/ChoiceTextEntryValue}` and `\${FATH_NAME/ChoiceTextEntryValue}` encouraged me to do special projects together with the other (e.g building something) (9)	☐	☐	☐	☐	☐

MSPSS_INTRO The following questions will ask you about your sources of support.

MSPSS_1 There is a special person who is around when I need

- ☐ Very strongly agree (7)
☐ Strongly agree (6)
☐ Agree (5)
☐ Neither agree nor disagree (4)
☐ Disagree (3)
☐ Strongly disagree (2)
☐ Very strongly disagree (1)

MSPSS_2 There is a special person with whom I can share my joys and sorrows

- ☐ Very strongly agree (7)
☐ Strongly agree (6)
☐ Agree (5)
☐ Neither agree nor disagree (4)
☐ Disagree (3)
☐ Strongly disagree (2)
☐ Very strongly disagree (1)

MSPSS_3 My family really tries to help me

- ☐ Very strongly agree (7)
☐ Strongly agree (6)
☐ Agree (5)
☐ Neither agree nor disagree (4)
☐ Disagree (3)
☐ Strongly disagree (2)
☐ Very strongly disagree (1)

MSPSS_4 I get the emotional help and support I need from my family

- ☐ Very strongly agree (7)
☐ Strongly agree (6)
☐ Agree (5)
☐ Neither agree nor disagree (4)
☐ Disagree (3)
☐ Strongly disagree (2)
☐ Very strongly disagree (1)

MSPSS_5 I have a special person who is a real source of comfort to me

- ☐ Very strongly agree (7)
- ☐ Strongly agree (6)
- ☐ Agree (5)
- ☐ Neither agree nor disagree (4)
- ☐ Disagree (3)
- ☐ Strongly disagree (2)
- ☐ Very strongly disagree (1)

MSPSS_6 My friends really try to help me

- ☐ Very strongly agree (7)
- ☐ Strongly agree (6)
- ☐ Agree (5)
- ☐ Neither agree nor disagree (4)
- ☐ Disagree (3)
- ☐ Strongly disagree (2)
- ☐ Very strongly disagree (1)

MSPSS_7 I can count on my friends when things go wrong

- ☐ Very strongly agree (7)
- ☐ Strongly agree (6)
- ☐ Agree (5)
- ☐ Neither agree nor disagree (4)
- ☐ Disagree (3)
- ☐ Strongly disagree (2)
- ☐ Very strongly disagree (1)

MSPSS_8 I can talk about my problems with my family

- ☐ Very strongly agree (7)
- ☐ Strongly agree (6)
- ☐ Agree (5)
- ☐ Neither agree nor disagree (4)
- ☐ Disagree (3)
- ☐ Strongly disagree (2)
- ☐ Very strongly disagree (1)

MSPSS_9 I have friends with whom I can share my joys and sorrows

- ☐ Very strongly agree (7)
- ☐ Strongly agree (6)
- ☐ Agree (5)
- ☐ Neither agree nor disagree (4)
- ☐ Disagree (3)
- ☐ Strongly disagree (2)
- ☐ Very strongly disagree (1)

MSPSS_10 There is a special person in my life who cares about my feelings

- ☐ Very strongly agree (7)
- ☐ Strongly agree (6)
- ☐ Agree (5)
- ☐ Neither agree nor disagree (4)
- ☐ Disagree (3)
- ☐ Strongly disagree (2)
- ☐ Very strongly disagree (1)

MSPSS_11 My family is willing to help me make decisions

- ☐ Very strongly agree (7)
- ☐ Strongly agree (6)
- ☐ Agree (5)
- ☐ Neither agree nor disagree (4)

- ☐ Disagree (3)
☐ Strongly disagree (2)
☐ Very strongly disagree (1)

MSPSS_12 I can talk about my problems with my friends

- ☐ Very strongly agree (7)
☐ Strongly agree (6)
☐ Agree (5)
☐ Neither agree nor disagree (4)
☐ Disagree (3)
☐ Strongly disagree (2)
☐ Very strongly disagree (1)

BSI_Intro The following statements will ask you about problems people sometimes have.

BSI_1 Please indicate how much you have been bothered or distressed by the following statements in the past 7 days, including today.

	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
Nervousness or shakiness inside (1)	☐	☐	☐	☐	☐
Faintness or dizziness (2)	☐	☐	☐	☐	☐
The idea that someone else can control your thoughts (3)	☐	☐	☐	☐	☐
Feeling others are to blame for most of your troubles (4)	☐	☐	☐	☐	☐
Trouble remembering things (5)	☐	☐	☐	☐	☐
Feeling easily annoyed or irritated (6)	☐	☐	☐	☐	☐
Pains in heart or chest (7)	☐	☐	☐	☐	☐
Feeling afraid in open spaces or on the streets (8)	☐	☐	☐	☐	☐
Thoughts of ending your life (9)	☐	☐	☐	☐	☐
Feeling that most people cannot be trusted (10)	☐	☐	☐	☐	☐
Eating glass for breakfast (11)	☐	☐	☐	☐	☐

BSI_2 Please indicate how much you have been bothered or distressed by the following statements in the past 7 days including today.

	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
Poor appetite (1)	☐	☐	☐	☐	☐
Suddenly scared for no reason (2)	☐	☐	☐	☐	☐
Temper outbursts that you could not control (3)	☐	☐	☐	☐	☐
Feeling lonely even when you are with people (4)	☐	☐	☐	☐	☐
Feeling blocked in getting things done (5)	☐	☐	☐	☐	☐
Feeling lonely (6)	☐	☐	☐	☐	☐
Feeling blue (7)	☐	☐	☐	☐	☐
Feeling no interest in things (8)	☐	☐	☐	☐	☐
Feeling fearful (9)	☐	☐	☐	☐	☐
Your feelings being easily hurt (10)	☐	☐	☐	☐	☐

BSI_3 Please indicate how much you have been bothered or distressed by the following statements in the past 7 days, including today.

	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
Feeling that people are unfriendly or dislike you (1)	☐	☐	☐	☐	☐
Feeling inferior to others (2)	☐	☐	☐	☐	☐
Nausea or upset stomach (4)	☐	☐	☐	☐	☐
Feeling that you are watched or talked about by others (5)	☐	☐	☐	☐	☐
Trouble falling asleep (6)	☐	☐	☐	☐	☐
Having to check and double-check what you do (7)	☐	☐	☐	☐	☐
Difficulty making decisions (8)	☐	☐	☐	☐	☐
Feeling afraid to travel on buses, subways, or trains (9)	☐	☐	☐	☐	☐
Trouble getting your breath (10)	☐	☐	☐	☐	☐
Hot or cold spells (11)	☐	☐	☐	☐	☐

BSI_4 Please indicate how much you have been bothered or distressed by the following statements in the past 7 days, including today.

	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
Having to avoid certain things, places, or activities because they frighten you (1)	☐	☐	☐	☐	☐
Your mind going blank (2)	☐	☐	☐	☐	☐
Numbness or tingling in parts of your body (4)	☐	☐	☐	☐	☐
The idea that you should be punished for your sins (5)	☐	☐	☐	☐	☐
Feeling hopeless about the future (6)	☐	☐	☐	☐	☐
Trouble concentrating (7)	☐	☐	☐	☐	☐
Feeling weak in parts of your body (8)	☐	☐	☐	☐	☐
Feeling tense or keyed up (9)	☐	☐	☐	☐	☐
Thoughts of death or dying (10)	☐	☐	☐	☐	☐
Having urges to beat, injure, or harm someone (11)	☐	☐	☐	☐	☐

BSI_5 Please indicate how much you have been bothered or distressed by the following statements in the past 7 days, including today.

	Not at all (0)	A little bit (1)	Moderately (2)	Quite a bit (3)	Extremely (4)
Having urges to break or smash things (1)	☐	☐	☐	☐	☐
Feeling very self-conscious with others (2)	☐	☐	☐	☐	☐
Feeling uneasy in crowds, such as shopping or at a movie (4)	☐	☐	☐	☐	☐
Never feeling close to another person (5)	☐	☐	☐	☐	☐
Spells of terror or panic (6)	☐	☐	☐	☐	☐
Getting into frequent arguments (7)	☐	☐	☐	☐	☐
Feeling nervous when you are left alone (8)	☐	☐	☐	☐	☐
Others not giving you proper credit for your achievements (9)	☐	☐	☐	☐	☐
Feeling so restless you couldn't sit still (10)	☐	☐	☐	☐	☐
Feelings of worthlessness (11)	☐	☐	☐	☐	☐
Feeling that people will take advantage of you if you let them (12)	☐	☐	☐	☐	☐
Feelings of guilt (13)	☐	☐	☐	☐	☐
The idea that something is wrong with your mind (14)	☐	☐	☐	☐	☐

The following questions will ask you about how the coronavirus disease (COVID-19) pandemic has changed your life.

For each statement below, please indicate whether the pandemic has impacted you or other members of your residence in the way described.

EPPII_WELLB Since the COVID-19 pandemic began, what has changed?

	Yes (me) (1)	Yes (person in residence) (2)	No (0)
Increase in mental health problems or symptoms (e.g., mood, anxiety, stress). (1)	☐	☐	☐
Increase in sleep problems or poor sleep quality. (2)	☐	☐	☐
Increase in use of alcohol or substances. (3)	☐	☐	☐
Unable to access mental health treatment or therapy. (4)	☐	☐	☐
Not satisfied with changes in mental health treatment or therapy. (5)	☐	☐ indicate how much you have been bothered or	☐
Spent more time on screens and devices (e.g., looking at phone, playing video games, watching TV). (6)	☐	☐	☐

EPPII_HEALTH Since the COVID-19 pandemic began, what has changed?

	Yes (me) (1)	Yes (person in residence) (2)	No (0)
Increase in health problems not related to this disease. (1)	☐	☐	☐
Less physical activity or exercise. (2)	☐	☐	☐
Overeating or eating more unhealthy foods (e.g., junk food). (3)	☐	☐	☐
More time sitting down or being sedentary. (4)	☐	☐	☐
Important medical procedure cancelled (e.g., surgery). (5)	☐	☐	☐
Unable to access medical care for a serious condition (e.g., dialysis, chemotherapy) (6)	☐	☐	☐
Got less medical care than usual (e.g., routine or preventive care appointments). (8)	☐	☐	☐

EPPII_POS Since the COVID-19 pandemic began, what has changed for you?

	Yes (me) (1)	Yes (person in residence) (2)	No (0)
More quality time with family or friends in person or from a distance (e.g., on the phone, email, social media). (1)	☐	☐	☐
Improved relationships with family or friends. (2)	☐	☐	☐
New connections made with supportive people. (3)	☐	☐	☐
Increase exercise or physical activity. (4)	☐	☐	☐
More time in nature or being outdoors. (5)	☐	☐	☐
More time doing enjoyable activities (e.g., reading, books, puzzles). (6)	☐	☐	☐
Developed new hobbies or activities. (8)	☐	☐	☐

(continued on next page)

(continued)

	Yes (me) (1)	Yes (person in residence) (2)	No (0)
Paid more attention to personal health. (9)	☐	☐	☐
Spent less time on screens or devices outside of work hours (e.g., looking at phone, playing video games, watching TV). (10)	☐	☐	☐
Donated time or goods to a cause related to this disease (e.g., made masks, donated blood, volunteered). (11)	☐	☐	☐
Found greater meaning in work, employment, or school. (12)	☐	☐	☐

For this next set of questions, we would like to know about your feelings related to both of your parents. Please indicate how much you agree with each statement.

LB1 I feel like I am caught in the middle of my parents and their problems.

- ☐ Strongly agree (1)
☐ Somewhat agree (2)
☐ Neither agree nor disagree (3)
☐ Somewhat disagree (4)
☐ Strongly disagree (5)

LB2 I feel like both my parents want me to be on their side

- ☐ Strongly agree (8)
☐ Somewhat agree (9)
☐ Neither agree nor disagree (10)
☐ Somewhat disagree (11)
☐ Strongly disagree (12)

LB3 I feel worried that if I am loyal to one of my parents, I will be disloyal to the other one.

- ☐ Strongly agree (8)
☐ Somewhat agree (9)
☐ Neither agree nor disagree (10)
☐ Somewhat disagree (11)
☐ Strongly disagree (12)

LB4 Both of my parents talk bad about each other.

- ☐ Strongly agree (8)
☐ Somewhat agree (9)
☐ Neither agree nor disagree (10)
☐ Somewhat disagree (11)
☐ Strongly disagree (12)

LB5 I try hard to keep the peace between my parents.

- ☐ Strongly agree (8)
☐ Somewhat agree (9)
☐ Neither agree nor disagree (10)
☐ Somewhat disagree (11)
☐ Strongly disagree (12)

LB6 Both of my parents seem to be able to put aside their own wishes and desires so that my needs are met.

- ☐ Strongly agree (1)
☐ Somewhat agree (2)
☐ Neither agree nor disagree (3)
☐ Somewhat disagree (4)
☐ Strongly disagree (5)

LB7 I avoid talking to both of my parents in order to avoid problems.

- ☐ Strongly agree (1)
☐ Somewhat agree (2)
☐ Neither agree nor disagree (3)
☐ Somewhat disagree (4)
☐ Strongly disagree (5)

LB8 I love both my parents and have felt like they have wanted me to love one more than the other.

- ☐ Strongly agree (1)
☐ Somewhat agree (2)
☐ Neither agree nor disagree (3)
☐ Somewhat disagree (4)
☐ Strongly disagree (5)

LB9 Both of my parents tell me things about their relationship with each other.

- ☐ Strongly agree (1)
☐ Somewhat agree (2)
☐ Neither agree nor disagree (3)
☐ Somewhat disagree (4)
☐ Strongly disagree (5)

POW1 If you were to rate the overall power balance between your parents, how would you distribute it? (total should equal 100 %).

____ Mother (1)
 ____ Father (2)

POW2 If you were to rate the power balance between the following family members, how would you distribute it? (again, total should be 100 %).

____ Mother (1)
 ____ Father (2)
 ____ Me (and siblings if applicable) (3)

HDFS Thank you for participating!

If you are an HDFS student, please copy the code below and paste this into the HDFS Subject Pool site to show that you participated and to be awarded your credit.

Please click NEXT to finish and record your responses.

Appendix B

1. “Did one of your parents or caregivers involve you with legal matters against your other parent or caregiver, such as testifying against them in court?”
2. “Do you have a parent or caregiver that you often feel you want nothing to do with? Or a parent or caregiver who you dislike and would rather not spend any time with, while at the same time prefer to be with your other parent?”
3. “Was one of your parents or caregivers often or very often yelled at or put down by your other parent or caregiver?”
4. “Did you ever feel like you and one of your parents or caregivers were allies against your other parent because they were bad or posed a danger to you?”

Appendix C

ACE category	Question text
Emotional Abuse	“Did a parent or other adult in the household often or very often swear at you, insult you, put you down humiliate you? Or act in a way that made you afraid that you might be physically hurt?”
Physical Abuse	“Did a parent or other adult in the household often or very often push, grab, slap, or throw something at you? Or ever hit you so hard that you had marks or were injured?”
Sexual Assault	“Did an adult person at least 5 years older than you ever touch, fondle you or have you touch their body in a sexual way? Or attempt or actually have oral, anal, or vaginal intercourse with you?”
Emotional Neglect	“Did you often or very often feel that no one in your family loved you or thought you were important or special? Or your family didn’t look out for each other, feel close to each other, or support each other?”
Physical Neglect	“Did you often or very often feel that you didn’t have enough to eat, had to wear dirty clothes, and had no one to protect you? Or your parents were too drunk or high to take care of you or take you to the doctor if you needed it?”
Parental Separation or Divorce	“Were your parents ever separated or divorced?”
Parent/caregiver Treated Violently	“Was your parent or caregiver often or very often pushed, grabbed, slapped, or had something thrown at them? Or sometimes, often or very often kicked, bitten, hit with a fist, or hit with something? Or ever repeatedly hit at least a few minutes or threatened with a gun or knife?”
Household Substance Abuse	“Was a member of the household a problem drinker or alcoholic or who used street drugs?”
Household Mental Illness	“Was a member of the household depressed or mentally ill or did they attempt suicide?”
Incarcerated Household Member	“Had a member of the household been sent to prison or jail?”
Parental Alienation	“Do you have a parent or caregiver that you often feel you want nothing to do with? Or a parent or caregiver who you dislike and would rather not spend any time with, while at the same time prefer to be with your other parent?”

References

- Abe, Y., Sirichokchatchawan, W., Sangkomkamhang, U., Satthapit, S., Maes, M., 2022. Adverse childhood experiences combined with emotional and physical abuse by the partner predict antenatal depression. *J. Affect. Disord.* 298 (Pt A), 194–201. <https://doi.org/10.1016/j.jad.2021.10.099> (Feb 1).
- Afifi, T.O., Enns, M.W., Cox, B.J., Asmundson, G.J., Stein, M.B., Sareen, J., 2008. Population attributable fractions of psychiatric disorders and suicide ideation and attempts associated with adverse childhood experiences. *Am. J. Public Health* 98 (5), 946–952. <https://doi.org/10.2105/AJPH.2007.120253> (May).
- Afifi, T.O., Boman, J., Fleisher, W., Sareen, J., 2009. The relationship between child abuse, parental divorce, and lifetime mental disorders and suicidality in a nationally representative adult sample. *Child Abuse Negl.* 33 (3), 139–147. <https://doi.org/10.1016/j.chiabu.2008.12.009> (Mar).
- Aloia, L.S., Strutzenberg, C., 2019. Parent–child communication apprehension: the role of parental alienation and self-esteem. *Commun. Rep.* 32 (1), 1–14. <https://doi.org/10.1080/08934215.2018.1514641>.
- American Psychiatric Association, 2013. *Diagnostic and Statistical Manual of Mental Disorders*, 5th ed. (Washington, DC).
- Anda, R.F., 2006. The health and social impact of growing up with alcohol abuse and related adverse childhood experiences: the human and economic costs of the status quo. *Nacoa.net*. Accessed January 30, 2023. http://www.nacoa.net/pdfs/Anda%20NACoA%20Review_web.pdf.
- Anda, R.F., Whitfield, C.L., Felitti, V.J., Chapman, D., Edwards, V.J., Dube, S.R., Williamson, D.F., 2002. Adverse childhood experiences, alcoholic parents, and later risk of alcoholism and depression. *Psychiatr. Serv.* 53 (8), 1001–1009. <https://doi.org/10.1176/appi.ps.53.8.1001> (Aug).
- Anda, R.F., Felitti, V.J., Bremner, J.D., Walker, J.D., Whitfield, C., Perry, B.D., Dube, S.R., Giles, W.H., 2006. The enduring effects of abuse and related adverse experiences in childhood. A convergence of evidence from neurobiology and epidemiology. *Eur. Arch. Psychiatry Clin. Neurosci.* 256 (3), 174–186. <https://doi.org/10.1007/s00406-005-0624-4> (Apr).
- Anda, R.F., Butchart, A., Felitti, V.J., Brown, D.W., 2010. Building a framework for global surveillance of the public health implications of adverse childhood experiences. *Am. J. Prev. Med.* 39 (1), 93–98. <https://doi.org/10.1016/j.amepre.2010.03.015> (Jul).
- Aroian, K.J., Patsdaughter, C.A., 1989. Multiple-method, cross-cultural assessment of psychological distress. *Image J. Nurs. Sch.* 21 (2), 90–93. <https://doi.org/10.1111/j.1547-5069.1989.tb00105.x> (Summer).
- Bair-Merritt, M.H., Jennings, J.M., Chen, R., Burrell, L., McFarlane, E., Fuddy, L., Duggan, A.K., 2010. Reducing maternal intimate partner violence after the birth of a child: a randomized controlled trial of the Hawaii healthy start home visitation Program. *Arch. Pediatr. Adolesc. Med.* 164 (1), 16–23. <https://doi.org/10.1001/archpediatrics.2009.237> (Jan).
- Baker, A.J.L., 2005. The long-term effects of parental alienation on adult children: a qualitative research study. *Am. J. Fam. Ther.* 33 (4), 289–302. <https://doi.org/10.1080/01926180590962129>.
- Baker, A.J.L., 2007. *Adult Children of Parental Alienation Syndrome: Breaking the Ties that Bind*. W. W. Norton & Co.
- Baker, A.J.L., Ben-Ami, N., 2011. To turn a child against a parent is to turn a child against himself: the direct and indirect effects of exposure to parental alienation strategies on self-esteem and well-being. *J. Divorce Remarriage* 52 (7), 472–489. <https://doi.org/10.1080/10502556.2011.609424>.
- Baker, A.J.L., Darnall, D., 2006. Behaviors and strategies employed in parental alienation: a survey of parental experiences. *J. Divorce Remarriage* 45 (1–2), 97–124. https://doi.org/10.1300/J087v45n01_06.
- Baker, A.J., Eichler, A., 2016. The linkage between parental alienation behaviors and child alienation. *J. Divorce Remarriage* 57 (7), 475–484. <https://doi.org/10.1080/10502556.2016.1220285>.
- Baker, A.J.L., Verrocchio, M.C., 2015. Parental bonding and parental alienation as correlates of psychological maltreatment in adults in intact and non-intact families. *J. Child Fam. Stud.* 24 (10), 3047–3057. <https://doi.org/10.1007/s10826-014-0108-0>.
- Baker, A.J.L., Verrocchio, M.C., 2016. Exposure to parental alienation and subsequent anxiety and depression in Italian adults. *Am. J. Fam. Ther.* 44 (5), 255–271. <https://doi.org/10.1080/01926187.2016.1230480>.
- Baker, A.J.L., Creagan, A., Quinones, A., Rozelle, L., 2016. Foster children's views of their parents: a review of the literature. *Child Youth Serv. Rev.* 67, 177–183. <https://doi.org/10.1016/j.chilcyouth.2016.06.004>.
- Baker, A.J.L., Miller, S., Bernet, W., Adebayo, T., 2019. The assessment of the attitudes and behaviors about physically abused children: a survey of mental health professionals. *J. Child Fam. Stud.* 28 (12), 3401–3411. <https://doi.org/10.1007/s10826-019-01522-5>.
- Bancroft, L., Silverman, J., 2002. The batterer as parent: addressing the impact of domestic violence on family dynamics. *Psychiatry Psychol. Law* 9 (2), 284–285.
- Bellis, M.A., Hughes, K., Leckenby, N., Perkins, C., Lowey, H., 2014. National household survey of adverse childhood experiences and their relationship with resilience to health-harming behaviors in England. *BMC Med.* 12, 72. <https://doi.org/10.1186/1741-7015-12-72> (May 2).
- Bensley, L.S., Van Eenwyk, J., Simmons, K.W., 2000. Self-reported childhood sexual and physical abuse and adult HIV-risk behaviors and heavy drinking. *Am. J. Prev. Med.* 18 (2), 151–158. [https://doi.org/10.1016/s0749-3797\(99\)00084-7](https://doi.org/10.1016/s0749-3797(99)00084-7) (Feb).
- Bentley, C., Matthewson, M., 2020. The not-forgotten child: alienated adult children's experience of parental alienation. *Am. J. Fam. Ther.* 48 (5), 509–529. <https://doi.org/10.1080/01926187.2020.1775531>.
- Bernet, W., Wamboldt, M.Z., Narrow, W.E., 2016. Child affected by parental relationship distress. *J. Am. Acad. Child Adolesc. Psychiatry* 55 (7), 571–579. <https://doi.org/10.1016/j.jaac.2016.04.018> (Jul).
- Bernet, W., Gregory, N., Rohner, R.P., Reay, K.M., 2020. Measuring the difference between parental alienation and parental estrangement: the PARQ-gap. *J. Forensic Sci.* 65 (4), 1225–1234. <https://doi.org/10.1111/1556-4029.14300> (Jul).
- Briere, J., Runtz, M., 1990. Differential adult symptomatology associated with three types of child abuse histories. *Child Abuse Negl.* 14 (3), 357–364. [https://doi.org/10.1016/0145-2134\(90\)90007-g](https://doi.org/10.1016/0145-2134(90)90007-g).
- Brown, J., Cohen, P., Johnson, J.G., Smailes, E.M., 1999. Childhood abuse and neglect: specificity of effects on adolescent and young adult depression and suicidality. *J. Am. Acad. Child Adolesc. Psychiatry* 38 (12), 1490–1496. <https://doi.org/10.1097/00004583-199912000-00009> (Dec).
- Cabrera, O.A., Hoge, C.W., Bliese, P.D., Castro, C.A., Messer, S.C., 2007. Childhood adversity and combat as predictors of depression and post-traumatic stress in deployed troops. *Am. J. Prev. Med.* 33 (2), 77–82. <https://doi.org/10.1016/j.amepre.2007.03.019> (Aug).
- Callaghan, J.E.M., Alexander, J.H., Sixsmith, J., Fellin, L.C., 2018. Beyond “witnessing”: children's experiences of coercive control in domestic violence and abuse. *J. Interpers. Violence* 33 (10), 1551–1581. <https://doi.org/10.1177/0886260515618946> (May).
- Carlson, J.S., Yohannan, J., Darr, C.L., Turley, M.R., Larez, N.A., Perfect, M.M., 2020. Prevalence of adverse childhood experiences in school-aged youth: a systematic review (1990–2015). *Int. J. Sch. Educ. Psychol.* 8 (Sup1), 2–23. <https://doi.org/10.1080/21683603.2018.1548397>.
- Cattell, R.B., 1978. *The Scientific Use of Factor Analysis in Behavioral and Life Sciences*. Plenum, New York. <https://doi.org/10.1007/978-1-4684-2262-7>. Accessed on February 12, 2023.
- Centers for Disease Control and Prevention, 2023. Behavioral risk factor surveillance system. *CDC.gov*. Accessed January 30. <https://www.cdc.gov/brfss/index.html>.
- Chapman, D.P., Whitfield, C.L., Felitti, V.J., Dube, S.R., Edwards, V.J., Anda, R.F., 2004. Adverse childhood experiences and the risk of depressive disorders in adulthood. *J. Affect. Disord.* 82 (2), 217–225. <https://doi.org/10.1016/j.jad.2003.12.013> (Oct 15).
- Clawar, S.S., Rivlin, B.V., 2013. *Children Held Hostage: Identifying Brainwashed Children, Presenting a Case, and Crafting Solutions*. American Bar Association, Chicago, IL.
- Cloitre, M., Khan, C., Mackintosh, M.A., Garvert, D.W., Henn-Haase, C.M., Falvey, E.C., Saito, J., 2019. Emotion regulation mediates the relationship between ACEs and physical and mental health. *Psychol. Trauma* 11 (1), 82–89. <https://doi.org/10.1037/tra0000374> (Jan).
- Cocchiola, C.M., 2021. COVID-19 and sheltering in place: the experiences of coercive control for college students returning home. In: *Shared Trauma, Shared Resilience During a Pandemic: Social Work in the Time of COVID-19*. Springer Nature Switzerland AG, pp. 79–92. https://doi.org/10.1007/978-3-030-61442-3_9.
- Croog, S.H., Levine, S., Testa, M.A., Brown, B., Bulpitt, C.J., Jenkins, C.D., Klerman, G.L., Williams, G.H., 1986. The effects of antihypertensive therapy on the quality of life. *N. Engl. J. Med.* 314 (26), 1657–1664. <https://doi.org/10.1056/NEJM198606263142602> (Jun 26).
- Dambi, J.M., Corten, L., Chiwaridzo, M., Jack, H., Mlambo, T., Jelsma, J., 2018. A systematic review of the psychometric properties of the cross-cultural translations and adaptations of the multidimensional perceived social support scale (MSPSS). *Health Qual. Life Outcomes* 16 (1), 80. <https://doi.org/10.1186/s12955-018-0912-0> (May 2).
- De Bellis, M.D., Broussard, E.R., Herring, D.J., Wexler, S., Moritz, G., Benitez, J.G., 2001. Psychiatric co-morbidity in caregivers and children involved in maltreatment: a pilot research study with policy implications. *Child Abuse Negl.* 25 (7), 923–944. [https://doi.org/10.1016/s0145-2134\(01\)00247-2](https://doi.org/10.1016/s0145-2134(01)00247-2) (Jul).
- Derogatis, L.R., 1975. Brief symptom inventory. Baltimore, MD Clin. Psychometr. Res.
- Derogatis, L.R., 1982. *The Brief Symptom Inventory (BSI): Administration and Procedures Manual-1*. Johns Hopkins University School of Medicine, Clinical Psychometric Research Unit.
- Derogatis, L.R., 1993. *BSI Brief Symptom Inventory: Administration, Scoring, and Procedure Manual*. National Computer Systems.
- Domestic Abuse Intervention Program, 2023. Home of the Duluth Model. Accessed February 12, *TheDuluthModel.org*. <http://www.theduluthmodel.org/training/wheels.html>.
- Dube, S.R., Anda, R.F., Felitti, V.J., Chapman, D.P., Williamson, D.F., Giles, W.H., 2001. Childhood abuse, household dysfunction, and the risk of attempted suicide throughout the life span: findings from the adverse childhood experiences study. *JAMA* 286 (24), 3089–3096. <https://doi.org/10.1001/jama.286.24.3089> (Dec 26).
- Edwards, V.J., Holden, G.W., Felitti, V.J., Anda, R.F., 2003. Relationship between multiple forms of childhood maltreatment and adult mental health in community respondents: results from the adverse childhood experiences study. *Am. J. Psychiatry* 160 (8), 1453–1460. <https://doi.org/10.1176/appi.ajp.160.8.1453> (Aug).
- Felitti, V.J., Anda, R.F., Nordenberg, D., Williamson, D.F., Spitz, A.M., Edwards, V., Koss, M.P., Marks, J.S., 1998. Relationship of childhood abuse and household dysfunction to many of the leading causes of death in adults. The adverse childhood experiences (ACE) study. *Am. J. Prev. Med.* 14 (4), 245–258. [https://doi.org/10.1016/s0749-3797\(98\)00017-8](https://doi.org/10.1016/s0749-3797(98)00017-8) (May).
- Gardner, R.A., 1998. Recommendations for dealing with parents who induce a parental alienation syndrome in their children. *J. Divorce Remarriage* 28 (3–4), 1–23. https://doi.org/10.1300/J087v28n03_01.
- Giano, Z., Wheeler, D.L., Hubach, R.D., 2020. The frequencies and disparities of adverse childhood experiences in the U.S. *BMC Public Health* 20 (1), 1327. <https://doi.org/10.1186/s12889-020-09411-z> (Sep 10).

- Godbout, E., Parent, C., 2012. The life paths and lived experiences of adults who have experienced parental alienation: a retrospective study. *J. Divorce Remarriage* 53 (1), 34–54. <https://doi.org/10.1080/10502556.2012.635967>.
- Gomez, R., Rohner, R.P., 2011. Tests of factor structure and measurement invariance in the United States and Australia using the adult version of the parental acceptance-rejection questionnaire. *CC Res. J. Com. Soc. Sci.* 45 (3), 267–285. <https://doi.org/10.1177/1069397111403111>.
- Gorsuch, R., 1983. *Factor Analysis*. L. Erlbaum Associates, Hillsdale, NJ.
- Gutman, L.M., Sameroff, A.J., Cole, R., 2003. Academic growth curve trajectories from 1st grade to 12th grade: effects of multiple social risk factors and preschool child factors. *Dev. Psychol.* 39 (4), 777–790. <https://doi.org/10.1037/0012-1649.39.4.777> (Jul).
- Harman, J.J., Kruk, E., 2022. The same coin: intimate partner violence, child abuse, and parental alienation. In: Russell, B., Hamel, J. (Eds.), *Gender and Domestic Violence: Contemporary Legal Practice and Intervention Reforms*. Russell & J. Hamel/Oxford University Press.
- Harman, J.J., Matthewson, M., 2020. Parental alienating behaviors. In: *Parental Alienation: Science and Law*. Charles C Thomas Publisher, pp. 82–141.
- Harman, J.J., Biringen, Z., Ratajack, E.M., Outland, P.L., Kraus, A., 2016. Parents behaving badly: gender biases in the perception of parental alienating behaviors. *J. Fam. Psychol.* 8 <https://doi.org/10.1037/fam0000232>. Published online August.
- Harman, J.J., Kruk, E., Hines, D.A., 2018. Parental alienating behaviors: an unacknowledged form of family violence. *Psychol. Bull.* 144 (12), 1275–1299. <https://doi.org/10.1037/bul0000175> (Dec).
- Harman, J.J., Bernet, W., Harman, J., 2019. Parental alienation: the blossoming of a field of study. *Curr. Dir. Psychol. Sci.* 28 (2), 212–217. <https://doi.org/10.1177/0963721419827271>.
- Harman, J.J., Maniotis, C.R., Grubb, C., 2021. Power dynamics in families affected by parental alienation. *Pers. Relat.* 28 (4), 883–906. <https://doi.org/10.1111/pere.12392>.
- Harman, J.J., Warshak, R.A., Lorandos, D., Florian, M.J., 2022a. Developmental psychology and the scientific status of parental alienation. *Dev. Psychol.* 58 (10), 1887–1911. <https://doi.org/10.1037/dev0001404> (Oct).
- Harman, J.J., Matthewson, M.L., Baker, A.J.L., 2022b. Losses experienced by children alienated from a parent. *Curr. Opin. Psychol.* 43, 7–12. <https://doi.org/10.1016/j.copsyc.2021.05.002>.
- Hedges, K., 2020. Coping with Negative Life Events during Childhood. Oklahoma State University. Undergraduate Thesis. Accessed February 12, 2023. https://shareok.org/bitstream/handle/11244/329435/oksd_hedges_HT_2020.pdf?sequence=1.
- Helweg-Larsen, K., Frederiksen, M.L., Larsen, H.B., 2011. Violence, a risk factor for poor mental health in adolescence: a Danish nationally representative youth survey. *Scand. J. Public Health* 39 (8), 849–856. <https://doi.org/10.1177/1403494811421638> (Dec).
- Hoyle, R.H., Kenny, D.A., 1999. *Sample Size, Reliability, and Tests of Statistical Mediation. Statistical Strategies for Small Sample Research*. Sage.
- Irving, S.M., Ferraro, K.F., 2006. Reports of abusive experiences during childhood and adult health ratings: personal control as a pathway? *J. Aging Health* 18 (3), 458–485. <https://doi.org/10.1177/0898264305280994> (Jun).
- Isohookana, R., Riala, K., Hakko, H., Räsänen, P., 2013. Adverse childhood experiences and suicidal behavior of adolescent psychiatric inpatients. *Eur. Child Adolesc. Psychiatry* 22 (1), 13–22. <https://doi.org/10.1007/s00787-012-0311-8> (Jan).
- Johnson, J.G., Cohen, P., Kasen, S., Brook, J.S., 2002. Childhood adversities associated with risk for eating disorders or weight problems during adolescence or early adulthood. *Am. J. Psychiatry* 159 (3), 394–400. <https://doi.org/10.1176/appi.ajp.159.3.394> (Mar).
- Johnston, J.R., Lee, S., Olesen, N.W., Walters, M.G., 2005. Allegations and substantiations of abuse in custody-disputing families. *Fam. Court. Rev.* 43 (2), 283–294. <https://doi.org/10.1111/j.1744-1617.2005.00029.x>.
- Katz, E., 2016a. Beyond the physical incident model: how children living with domestic violence are harmed by and resist regimes of coercive control. *Child Abuse Rev.* 25 (1), 46–59. <https://doi.org/10.1002/car.2422>.
- Katz, E., 2016b. Coercive control-based domestic abuse: impacts on mothers and children. Jan; Accessed February 12, 2023, *Childhood and Youth Studies*, Liverpool Hope University. <https://avaproject.org.uk/wp-content/uploads/2016/03/Emma-Katz-2016.pdf>.
- Khaleque, A., Rohner, R.P., 2002. Perceived parental acceptance-rejection and psychological adjustment: a meta-analysis of cross-cultural and intracultural studies. *J. Marriage Fam.* 64 (1), 54–64. <https://doi.org/10.1111/j.1741-3737.2002.00054.x>.
- Kruk, E., 2018. Parental alienation as a form of emotional child abuse: current state of knowledge and future directions for research. *Fam. Sci. Rev.* 22 (4), 141–164. Accessed February 12, 2023. <https://childrightsngo.com/newdownload/downloadsection9/Parental%20Alienation%20as%20form%20of%20Emotional%20Abuse%20Family%20Science%20Review%202018%20Edward%20Kruk.pdf>.
- Levey, E.J., Chang, A.R., Sanchez, M.L.J., Harrison, A.M., Rodriguez, A.E.M., Gelaye, B., Rondon, M.B., 2022. Manifestations of intergenerational trauma during the perinatal period among adolescent mothers in Lima, Peru: a qualitative analysis. *J. Child Adolesc. Trauma* 16 (1), 21–30. <https://doi.org/10.1007/s40653-022-00477-y> (Aug 12).
- Liebschutz, J., Savetsky, J.B., Saitz, R., Horton, N.J., Lloyd-Travaglini, C., Samet, J.H., 2002. The relationship between sexual and physical abuse and substance abuse consequences. *J. Subst. Abuse Treat.* 22 (3), 121–128. [https://doi.org/10.1016/s0740-5472\(02\)00220-9](https://doi.org/10.1016/s0740-5472(02)00220-9) (Apr).
- Lorandos, D., 2013. Parental alienation and North American law. In: *Parental Alienation: The Handbook for Mental Health and Legal Professionals*. Charles C Thomas, pp. 348–424.
- Lu, W., Mueser, K.T., Rosenberg, S.D., Jankowski, M.K., 2008. Correlates of adverse childhood experiences among adults with severe mood disorders. *Psychiatr. Serv.* 59 (9), 1018–1026. <https://doi.org/10.1176/ps.2008.59.9.1018> (Sep).
- Machado, A., Hines, D., Douglas, E.M., 2020. Male victims of female-perpetrated partner violence: a qualitative analysis of men's experiences, the impact of violence, and perceptions of their worth. *Psychol. Men Masculinity* 21 (4), 612–621. <https://doi.org/10.1037/men0000285> (Oct).
- MacMillan, H.L., Fleming, J.E., Streiner, D.L., Lin, E., Boyle, M.H., Jamieson, E., Duku, E. K., Walsh, C.A., Wong, M.Y., Beardslee, W.R., 2001. Childhood abuse and lifetime psychopathology in a community sample. *Am. J. Psychiatry* 158 (11), 1878–1883. <https://doi.org/10.1176/appi.ajp.158.11.1878> (Nov).
- Meltzer, H., Doos, L., Vostanis, P., Ford, T., Goodman, R., 2009. The mental health of children who witness domestic violence. *Child Fam. Soc. Work* 14 (4), 491–501. <https://doi.org/10.1111/j.1365-2206.2009.00633.x>.
- Merrick, M.T., Ford, D.C., Ports, K.A., Guinn, A.S., 2018. Prevalence of adverse childhood experiences from the 2011–2014 behavioral risk factor surveillance system in 23 states. *JAMA Pediatr.* 172 (11), 1038–1044. <https://doi.org/10.1001/jamapediatrics.2018.2537> (Nov 1).
- Monnat, S.M., Chandler, R.F., 2015. Long term physical health consequences of adverse childhood experiences. *Sociol. Q.* 56 (4), 723–752. <https://doi.org/10.1111/tsq.12107> (Sep).
- Mullen, P.E., Martin, J.L., Anderson, J.C., Romans, S.E., Herbison, G.P., 1996. The long-term impact of the physical, emotional, and sexual abuse of children: a community study. *Child Abuse Negl.* 20 (1), 7–21. [https://doi.org/10.1016/0145-2134\(95\)00112-3](https://doi.org/10.1016/0145-2134(95)00112-3) (Jan).
- Mullender, A.E., Kelly, L., Hague, G.M., Imam, U., 2023. Children's needs, coping strategies and understanding of woman abuse. *Academia.edu*. Accessed February 12, 2023. https://www.academia.edu/25023279/CHILDRENS_NEEDS_COPIING_STRATEGIES_AND_UNDERSTANDINGS_OF_WOMAN_ABUSE_Award_No_L129_25_1037.
- Narayan, A.J., Rivera, L.M., Bernstein, R.E., Harris, W.W., Lieberman, A.F., 2018. Positive childhood experiences predict less psychopathology and stress in pregnant women with childhood adversity: a pilot study of the benevolent childhood experiences (BCEs) scale. *Child Abuse Negl.* 78, 19–30. <https://doi.org/10.1016/j.chiabu.2017.09.022>.
- Radford, L., Aitken, R., Miller, P., Ellis, J., Roberts, J., Firkic, A., 2011. Meeting the needs of children living with domestic violence in London. *CityBridgeTrust.org*. Accessed February 12, 2023. <https://www.citybridgetrust.org.uk/wp-content/uploads/2016/06/DomesticViolenceFull.pdf>.
- Rand, D.C., 1997. The spectrum of parental alienation syndrome (Part I). *Am. J. Forensic Psychol.* 15 (3), 23–52. Accessed February 16, 2023. <http://www.sakkyndig.com/psychologi/artvit/rand1997.pdf#:~:text=%EE%80%80THE%20SPECTRUM%20OF%20PARENTAL%20ALIENATION%20SYNDROME%20%28PART%20I%EE%80%81%29,or%20exaggerated%20denigration%20of%20the%20other%2C%20target%20parent>.
- Riedl, D., Lampe, A., Exenberger, S., Nolte, T., Trawöger, I., Beck, T., 2020. Prevalence of adverse childhood experiences (ACEs) and associated physical and mental health problems amongst hospital patients: results from a cross-sectional study. *Gen. Hosp. Psychiatry* 64, 80–86. <https://doi.org/10.1016/j.genhosppsych.2020.03.005> (May-Jun).
- Roettger, M.E., Boardman, J.D., 2012. Parental incarceration and gender-based risks for increased body mass index: evidence from the National Longitudinal Study of adolescent health in the United States. *Am. J. Epidemiol.* 175 (7), 636–644. <https://doi.org/10.1093/aje/kwr409> (Apr 1).
- Rohner, R.P., Ali, S., 2016. Parental acceptance-rejection questionnaire (PARQ). In: *Encyclopedia of Personality and Individual Differences*. Springer, Cham, pp. 1–4. https://doi.org/10.1007/978-3-319-24612-3_56.
- Rowlands, G.A., Warshak, R.A., Harman, J.J., 2023. Abused and rejected: the link between domestic intimate partner violence and parental alienation. *Partn. Abus.* 14 (1) <https://doi.org/10.1891/PA-2022-0001>.
- Rudenstine, S., Espinosa, A., McGee, A.B., Routhier, E., 2019. Adverse childhood events, adult distress, and the role of emotion regulation. *Traumatology* 25 (2), 124–132. <https://doi.org/10.1037/trm0000176>.
- Sacks, V., Murphey, D., 2018. The prevalence of adverse childhood experiences, nationally, by state, and by race or ethnicity. *ChildTrends.org*. Accessed February 11, 2023. <https://www.childtrends.org/publications/prevalence-adverse-childhood-experiences-nationally-state-race-ethnicity>.
- Schafer, M.H., Ferraro, K.F., 2012. Childhood misfortune as a threat to successful aging: avoiding disease. *Gerontologist* 52 (1), 111–120. <https://doi.org/10.1093/geront/gnr071> (Feb).
- Schalinski, I., Teicher, M.H., Nischik, D., Hinderer, E., Müller, O., Rockstroh, B., 2016. Type and timing of adverse childhood experiences differentially affect severity of PTSD, dissociative and depressive symptoms in adult inpatients. *BMC Psychiatry* 16, 295. <https://doi.org/10.1186/s12888-016-1004-5> (Aug 19).
- Schilling, E.A., Aseltine Jr., R.H., Gore, S., 2007. Adverse childhood experiences and mental health in young adults: a longitudinal survey. *BMC Public Health* 7, 30. <https://doi.org/10.1186/1471-2458-7-30> (Mar 7).
- Senese, V.P., Bacchini, D., Miranda, M.C., et al., 2016. The adult parental acceptance-rejection questionnaire: a cross-cultural comparison of Italian and American short forms. *Parent Sci. Pract.* 16 (4), 219–236. <https://doi.org/10.1080/15255192.2016.1180943>.
- Verhaar, S., Matthewson, M.L., Bentley, C., 2022. The impact of parental alienating behaviours on the mental health of adults alienated in childhood. *Children (Basel)* 9 (4), 475. <https://doi.org/10.3390/children9040475> (Mar 30).
- Verrocchio, M.C., Marchetti, D., Carrozzino, D., Compare, A., Fulcheri, M., 2019. Depression and quality of life in adults perceiving exposure to parental alienation

- behaviors. *Health Qual. Life Outcomes* 17 (1), 14. <https://doi.org/10.1186/s12955-019-1080-6> (Jan 14).
- von Boch-Galhau, W., 2018. Parental Alienation (Syndrome) – Eine ernst zu nehmende Form von psychischer Kindesmisshandlung [Parental Alienation (Syndrome) - a serious form of child psychological abuse]. *Neuropsychiatr* 32 (3), 133–148. Sep, German. <https://doi.org/10.1007/s40211-018-0267-00>.
- Vranceanu, A.M., Hobfoll, S.E., Johnson, R.J., 2007. Child multi-type maltreatment and associated depression and PTSD symptoms: the role of social support and stress. *Child Abuse Negl.* 31 (1), 71–84. <https://doi.org/10.1016/j.chiabu.2006.04.010> (Jan).
- Walsh, C., MacMillan, H., Jamieson, E., 2002. The relationship between parental psychiatric disorder and child physical and sexual abuse: findings from the Ontario health supplement. *Child Abuse Negl.* 26 (1), 11–22. [https://doi.org/10.1016/S0145-2134\(01\)00308-8](https://doi.org/10.1016/S0145-2134(01)00308-8) (Jan).
- Zimet, G.D., Dahlem, N.W., Zimet, S.G., Farley, G.K., 1988. The multidimensional scale of perceived social support. *J. Pers. Assess.* 52 (1), 30–41. https://doi.org/10.1207/s15327775jpa5201_2.
- Zumbo, B.D., Gadermann, A.M., Zeisser, C., 2007. Ordinal versions of coefficients alpha and theta for Likert rating scales. *J. Mod. Appl. Stat. Methods* 6 (1), 21–29. <https://doi.org/10.22237/jmasm/1177992180>.