



# Intergenerational Trauma among Families in El Salvador: an Exploratory Study

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## Abstract

Adverse childhood events have been shown to impact individuals through adulthood, particularly the impact on relationships. This study aimed to examine intergenerational trauma exposure among a sample of parents living in a semi-urban Salvadoran community and the relationship between child trauma exposure with maternal perceived discrimination, internal strengths and external support. Survey data was collected from 49 mothers residing in El Salvador. Bivariate analyses and multivariate linear regression analyses were used to examine the relationship between children's exposure to adverse childhood events and parents' exposure to adverse childhood events, while controlling for discrimination. The results of the regression analysis indicate that the maternal number of adverse childhood events and experience of discrimination as an adult explained 52.9% of the variance ( $R^2 = 0.59$ ,  $F(6, 43) = 10.18$ ,  $p < .0001$ ). The number of adverse childhood events was significantly predicted by maternal number of adverse events ( $B = 0.32$ , 95% CI = 0.17–0.48,  $p < .0001$ ) and experience of discrimination as adults ( $B = 5.79$ , 95% CI = 3.51–8.07,  $p < .0001$ ). Results suggest that parent exposure to adverse childhood events and parent experience with discrimination are related to the exposure to adverse childhood events of their children. Further research in this area is warranted to better understand the experiences of parents who have been exposed to childhood trauma and the day-to-day parenting challenges. Greater understanding of the impact of childhood trauma also encourages service providers to explore intergenerational interventions.

**Keywords** Intergenerational trauma · Adverse childhood events · Salvadoran mental health · Childhood trauma

## Introduction

### Adaptive Responses to Trauma

Early life experiences with primary attachment figures are immensely important (Bowlby 1988). These experiences shape the template which individuals will base future interactions. Even before birth, babies are beginning to understand

the world through the rhythms, sounds, and smells of their mothers (Greenspan and Wieder 2006). Feeling supported, cared for, and nurtured add to relational health and these early life interactions shape individuals through childhood and into adulthood (Ludy-Dobson and Perry 2010). Children whose early attachment is disrupted due to violence in the household, inconsistent parenting, and other trauma, may be given the message that others are not safe and that their needs will not be met. Trauma and toxic stress, considered to be on one end of a childhood stress continuum, greatly impact all aspects of a child's development. Trauma and toxic stress exposure have the potential to impact and cause dysfunction from lower areas to higher areas of brain functioning, disrupting function in everything from self-regulation to relationships to cognitive functioning (Perry 2009; Perry et al. 1995). As a result, the effects of childhood trauma and stress last well into adulthood to impact one's parenting styles, contributing to intergenerational consequences (Walkley and Cox 2013).

Individuals who have experienced childhood trauma have effects through adulthood, including diminished abilities to

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regulate arousal when faced with even minor stressors. Once they have gone outside of their regulated or calm state, it is difficult for them to get back, especially on their own (Ogden et al. 2006). As a result, one's ability to self-regulate emotions is diminished. When these individuals grow up to become parents, their traumatic childhood experiences may manifest as maladaptive parenting practices such as irritability, constant anxiety, neglect, and withdrawal. In turn, maladaptive parenting practices will result in negative outcomes for their children. Different types of childhood traumatic experiences, including exposure to abuse and discrimination, can lead to these intergenerational effects.

### Parent Exposure to Childhood Abuse

Adverse childhood experiences impact individuals throughout adulthood (Felitti et al. 1998). We learn how to form relationships with others during childhood. When these early relationships are marred by maltreatment, our understanding of what a healthy relationship looks like will be diminished along with our ability to form future healthy relationships such as with our own children (Perry 2009). Parents exposed to abuse in childhood are more likely to physically, emotionally, and psychologically abuse their own children while also displaying increased neglectful behaviors (Bartlett et al. 2017; Berlin et al. 2011; Betancourt 2015; Ehrensaft et al. 2015; Jordan et al. 1992; Yehuda et al. 2001). Some parents might not be more predisposed to child maltreatment simply due to their own past trauma histories. Rather, Hicks and Dayton (2019) found that parent childhood trauma to be more dependent upon parents' current trauma symptoms rather than their experiences with abuse. Additionally, current residence in violent communities may increase parents' current and on-going trauma symptoms, which may compound upon past childhood trauma exposure to heighten the probability of being abusive/neglectful parents. Specifically, parents who both live in violent communities and have their own histories of abuse and neglect during early childhood may find emotional regulation in the context of parenting to be that much more challenging which can result in maltreatment.

Other factors such as discrimination and social support may also influence the impact that childhood trauma has on adults. Perceived discrimination has been linked to negative mental health outcomes and heightened traumatic stress symptoms (Ellis et al. 2008; Flores et al. 2010; Todorova et al. 2010; Torres and Taknint 2015). Perceived discrimination acts as another environmental stressor and may put a parent who has experienced trauma at greater risk of aggressive behaviors towards children. Research suggests social support serves as a protective factor for trauma experiences (Galea et al. 2003; Yuan et al. 2011). Social support may mitigate the relationship between parent childhood trauma and the exposure to trauma of their children in the household.

### Impact of Community Violence on Parenting and Children

While parents' experiences of abuse during childhood can negatively impact their parenting style, so too can parents' exposure to community violence, as it also creates an environment of alarm, fear, and terror and requires additional coping mechanisms and adjustments to meet the needs of their children. Wolfer (2000) found that African American women who lived with chronic community violence reported "many efforts for protecting and comforting their children" and different ways of coping with the community violence that were both healthy (keeping busy, self-soothing) and unhealthy (drugs) in order to decrease their emotional responses to what was happening in their environments. For other parents, the constant stress of living in the midst of community violence may induce additional stressors that also contributes to increased maltreatment of children. As Chen and Lee (2017) found, mothers exposed to community violence reported higher psychological and physical aggressive behavior towards children. Moreover, Timshel et al.'s (2017) systematic review of risk/protective factors for family violence in refugee families found parental history of child abuse, war-related trauma exposure, PTSD symptoms, and substance abuse put families at-risk for violence. Protective factors included healthy coping strategies and family support.

Along with increased maltreatment, parents' reduced psychological well-being resulting from community violence can directly impact their children's psychological adjustment. Particularly, Panter-Brick et al. (2014) found that among Afghans living in Kabul and Peshawar, children of caregivers with higher psychological distress had on average higher post-traumatic stress symptoms, depressive symptoms, psychiatric difficulties, and social life difficulties along with lower prosocial scores. Further research found students in Lebanon with more irritable parents to have more psychological problems (Fayyad et al. 2017). Khamis' (2016) study in the Gaza Strip with 205 families probed deeper into the relationship between community violence, parents' psychological distress, and children's psychological distress. Findings suggested that, after controlling for parents' psychological distress, war trauma was not related to psychological difficulties for children. Instead, parental psychological distress both mediated and moderated this relationship, in which children whose parents were exposed to more community violence and also had greater psychological distress also reported heightened difficulties. Additionally, the relationship between community violence and children's difficulties was linked by parents' distress (Khamis 2016). This highlights the role that parents play on children's mental health outcomes in the context of community violence.

Additional studies explored the impact of community violence on parenting practices. In particular, research by Palosaari et al. (2013) found fathers' war traumas to be

associated with higher rates of psychological maltreatment and lower attachment security among their children, increased depressive symptoms, and increased aggressive behaviors. Additional research by Palosaari et al. (2016) using a sample of Palestinian children found reported psychological maltreatment to have a larger indirect effect on children's post-traumatic stress symptoms than children's war trauma.

## The Present Study

Communities in El Salvador are dealing with widespread stressors: the aftermath of the civil war (1980–1992), youth violence, organized crime, and violence in both communities and within families (Chávez 2004). Families living in this environment have to cope with both past traumas and the on-going level of trauma within their communities. As a result of these experiences, “violence became internalized in diverse social environs, such as the community, the family and the educational system – violence against women, domestic violence, child abuse and corporal punishment in schools” (Chávez 2004, p. 32).

Given heightened stressors and trauma exposure amongst parents in El Salvador, this study aims to clarify the intergenerational effects of childhood trauma by exploring the relationship between parental childhood trauma and their children's traumatic experiences. Moreover, we will further explore the relationship between their children's traumatic experiences with other parental factors including exposure to discrimination, social support, and internal strengths. We hypothesized significant relationships between parental and children's exposure to trauma; parental perceived discrimination and children's exposure to household trauma; and social support and internal strengths of the parents and children's exposure to trauma.

## Methods

### Participants

Forty-nine mothers were surveyed for this study. Two non-profit organizations were involved in the recruitment, survey design, and interviews: Asociación Nuevo Amanecer de El Salvador (ANADES) and Programa Velasco. Participants were all either mothers of children attending the daycare or part of the Women's Empowerment Group run by ANADES. Surveys were administered onsite at the ANADES organization, located in a semi-urban area near San Salvador, El Salvador. Participants were asked if they would like to be a part of this survey and follow-up meetings were scheduled for those willing to participate. Consent from participants was obtained during the meetings. Surveys were conducted through interviews in Spanish in participant homes by

program staff of the two organizations. Participants requesting additional mental health services were referred for counseling with a staff psychologist. Researchers received data without any identifying information.

### Measures

Participants were administered surveys with questions related to parental exposure to adverse childhood experiences, exposure of their children to adverse childhood events in the household, perceived impact of the Salvadoran civil war, experiences of discrimination, and protective and resiliency factors. In addition, demographic information was gathered such as marital status, education level, number of children in the household, and income.

**Adverse Childhood Experiences of Mothers** A checklist of twenty-one adverse childhood experiences was utilized to measure the events that participants had experienced as children. The checklist used for this study included eight of the items found on the original Adverse Childhood Experiences questionnaire (Felitti et al. 1998). In addition to these eight items, the checklist included items related to physical violence between adults in the household, verbal violence between adults in the household, denial of education, taking care of younger children (as a child), feeling insecure and unprotected in the community, bullying, and witness to violence in the community. For each of the items on the checklist, respondents answered “never,” “once,” or “more than once.” For these 21 items, there was good reliability with a Cronbach's  $\alpha$  of 0.82.

**Impact of Civil War** Mothers responded to two questions related to the Salvadoran civil war (“Did you participate in the armed conflict in El Salvador?” and “How frequently have you felt impacted by the Salvadoran war?”). Respondents answered “yes” or “no” for the first question and “never,” “once,” or “more than once” for the second question.

**Adverse Childhood Experiences of their Children** Mothers reported the exposure of their children to adverse events in the household using a checklist of 16 items. The checklist used for this study included eight of the items found on the original Adverse Childhood Experiences questionnaire (Felitti et al. 1998). In addition to these eight items, the checklist included items related to witnessing physical and verbal violence between adults in the household, denial of education, and lack of food. For each of the items on the checklist, respondents answered “never,” “once,” or “more than once.” There was adequate reliability ( $\alpha = .72$ ).

**Perception of Discrimination** Mothers reported on the frequency that they experienced discrimination due to background, social status, or physical characteristics both during childhood and

adulthood. For each of these questions, respondents answered whether the event occurred “never,” “once,” or “more than once.”

**Protective and Resiliency Factors** A list of twelve questions were developed for this study to assess mothers’ internal and external strengths. The questions were divided into two subscales (internal strengths and external strengths) for analysis. For the internal strengths subscale, the internal consistency was marginal, with Cronbach’s  $\alpha$  of .51. For the external strengths subscale, the internal consistency was good with Cronbach’s  $\alpha$  of .83. For the full measure, the internal consistency was good, with Cronbach’s  $\alpha$  of .83.

### Analytic Plan

First, descriptive analyses were calculated for all variables and covariates. Second, to understand the bivariate relationship between variables, pairwise correlations amongst the study’s continuous variables were conducted and a correlation matrix was created for the previously described study variables. The purpose of the correlation matrix was to test the hypothesis that the children’s exposure to adverse childhood events in the household would be positively associated with maternal childhood trauma, showing a direct relationship between maternal trauma and their children’s trauma. Next, linear regression was used to examine the relationship between the dependent variable, children’s exposure to adverse childhood events and parent exposure to adverse childhood events, while controlling for discrimination. Sensitivity analyses were also conducted with the addition of demographic variables one at a time to preserve power and assess the influence on the dependent variable. Lastly, to examine the differences in group means of child trauma exposure between mothers with different exposure to adverse childhood events a one-way analysis of variance (ANOVA) was calculated. All statistical analyses were computed using Stata 14.1/IC (StataCorp 2015).

## Results

### Participant Characteristics

Table 1 reports demographic characteristics of the 49 mothers in this sample. At the time of the assessment, over 68% of the participants were over the age of 30, about 40% completed a Bachelor’s degree, over 80% were employed either informally or formally, and approximately 59% were married or with partner. Participants reported an average of 4.80 ( $SD = 2.39$ ) household members and average monthly income of 303.63 US dollars ( $SD = 170.58$ ). The mean number of adverse childhood events reported by mothers was 13.39 ( $SD = 7.02$ ) and the mean number of adverse childhood events of their children was 4.33 ( $SD = 3.95$ ). Forty-six percent of the mothers

**Table 1** Descriptive characteristics ( $N = 49$ )

Variable	<i>M</i>	<i>SD</i>	<i>N</i>	%
Gender				
Female			49	100%
Age				
18–22			1	2.0%
23–29			14	28.6%
30–49			24	49.0%
50 and older			10	20.4%
Education				
Primary school			3	6.7%
Secondary school			4	8.9%
High school			4	8.9%
Technical school			16	35.6%
Bachelor’s degree			18	40.0%
Employment				
Unemployed			9	18.4%
Informal employment			27	55.1%
Formal employment			13	26.5%
Monthly income	\$303.63	170.58		
Marital status				
Married/with partner			29	59.2%
Single/separated/widowed			20	40.8%
No. of people in household	4.8	2.39		
No. of adverse childhood events (parent)	13.39	7.02		
Mother felt discrimination as child				
Never			26	53.1%
Once			3	6.1%
More than once			20	40.8%
No. of adverse childhood events (children)	4.33	3.95		
Mother felt discrimination as adult				
Never			31	63.3%
Once			7	14.3%
More than once			11	22.5%
External support	22.41	6.91		
Internal strength	12.12	3.05		

reported experiencing discrimination as a child and 36% reported experiencing discrimination as an adult. The mean external support reported was 22.41 ( $SD = 6.91$ ) and the mean internal strength reported was 12.12 ( $SD = 3.05$ ).

### Adverse Childhood Experiences of Mothers and their Children

Table 2 reports the adverse experiences during childhood reported by the mothers. Over half of the mothers reported

**Table 2** Childhood adverse experiences reported by mothers (*N* = 52)

Adverse childhood experience	<i>N</i>	%
Sworn at, insulted, put down or humiliated	34	65.3%
Parents acted in a way that made them afraid they might be physically hurt	34	65.3%
Hit or hurt by a parent or adult in the household	36	69.2%
Hit so hard they have marks or were injured	24	46.2%
Physical fighting between parents or adults in the household	35	67.3%
Seen or heard parents or adults in the household yelling, swearing, insulting or humiliating	31	59.6%
Touched by an adult in a sexual way	17	32.7%
Forced to have sex with an adult	5	9.6%
Felt unloved or that they were not important or special	28	53.9%
Felt that family did not look out for each other, close, or supportive of each other	30	57.7%
Did not have enough to eat because of financial situation	11	21.2%
Denied the ability to go to school	20	38.5%
Parents had problems drug or alcohol addiction	8	15.4%
Household member suffering from depression, mental illness, or suicidal tendencies	6	11.5%
Household member went to prison	2	3.9%
Was in a residential facility/children's home	13	25.0%
Felt insecure in the community	18	34.6%
Felt that they were not protected by others in the community	27	51.9%
Bullied by classmates	25	48.1%
Saw or heard someone being hit	34	65.4%
Saw or heard someone being stabbed or shot	27	51.9%
Felt impacted by the civil war	25	48.1%
Participated in civil war	4	7.7%

experiencing the following adverse childhood events once or more than once: sworn at, insulted, put down, or humiliated (65.3%); parents acted in a way that made them afraid they might be physically hurt (65.3%); hit or hurt by a parent or adult in the household (69.2%); physical fighting between parents or adults in the household (67.3%); seen or heard parents or adults in the household yelling, swearing, insulting or humiliating (59.6%); felt unloved or that they were not important or special (53.9%); felt that family did not look out for each other, close, or supportive of each other (57.7%); felt that they were not protected by others in the community (51.9%); saw or heard someone being hit (65.4%); and saw or heard someone being stabbed or shot (51.9%). Forty-eight percent of the mothers reported feeling impacted by the civil war and approximately 8% of the mothers reported participating in the civil war.

Table 3 displays the adverse childhood experiences that the children have been exposed to in the household. Mothers reported that their children have been exposed to the following adverse childhood events once or more than once: sworn at, insulted, put down, or humiliated (30.8%); parents acted in a way that made them afraid they might be physically hurt (30.8%); hit or hurt by a parent or adult in the household (36.5%); hit so hard they have marks or were injured (7.7%); physical fighting between parents or adults in the

household (30.8%); seen or heard parents or adults in the household yelling, swearing, insulting or humiliating (46.2%); touched by an adult in a sexual way (3.9%); forced to have sex with an adult (1.9%); felt unloved or that they were not important or special (25.0%); felt that family did not look out for each other, close, or supportive of each other (19.2%); did not have enough to eat because of financial situation (32.7%); denied the ability to go to school (3.9%); parents had problems drug or alcohol addiction (30.8%); household member suffering from depression, mental illness, or suicidal tendencies (19.2%); household member went to prison (13.5%); and was in a residential facility/children's home (13.5%).

**Correlation between Maternal Exposure to Trauma and their children's Exposure to Trauma**

As shown in Table 4, the number of adverse childhood events that their children have been exposed to in the household were significantly and moderately correlated with the number of adverse childhood events of the mothers ( $r = .37, p < .01$ ).

Six of the parent experiences of adverse childhood events were significantly related to the number of traumatic events that their children were exposed to: being sworn at, insulted, put down or humiliated ( $r = .47, p < .001$ ); parents acted in a

**Table 3** Childhood adverse experiences of children reported by mothers (N = 52)

Adverse childhood experience	N	%
Sworn at, insulted, put down or humiliated	16	30.8%
Parents acted in a way that made them afraid they might be physically hurt	16	30.8%
Hit or hurt by a parent or adult in the household	19	36.5%
Hit so hard they have marks or were injured	4	7.7%
physical fighting between parents or adults in the household	16	30.8%
Seen or heard parents or adults in the household yelling, swearing, insulting or humiliating	24	46.2%
Touched by an adult in a sexual way	2	3.9%
Forced to have sex with an adult	1	1.9%
Felt unloved or that they were not important or special	13	25.0%
Felt that family did not look out for each other, close, or supportive of each other	10	19.2%
Did not have enough to eat because of financial situation	17	32.7%
Denied the ability to go to school	2	3.9%
Parents had problems drug or alcohol addiction	16	30.8%
Household member suffering from depression, mental illness, or suicidal tendencies	10	19.2%
Household member went to prison	7	13.5%
Was in a residential facility/children's home	7	13.5%

way that made them afraid they might be physically hurt ( $r = .38, p < .01$ ); hit so hard they have marks or were injured ( $r = .38, p < .01$ ); seen or heard parents or adults in the household yelling, swearing, insulting or humiliating ( $r = .33, p < .05$ ); and forced to have sex with an adult ( $r = .30, p < .05$ ).

**Differences in Group Means of Child Trauma Exposure**

For three of these adverse childhood events, there were significant differences in the mean number of traumatic events their children are exposed to based on whether the mother never experienced the event, experienced it one time, or

experienced it more than once, as displayed in Table 5. For the adverse childhood event of being sworn at, insulted, put down or humiliated, there was a significant difference between the mean number of adverse childhood events that their children were exposed to for those who reported that this never happened ( $M = 2.18, SD = 2.38$ ), that it happened once ( $M = 3.14, SD = 2.54$ ), and that this happened more than once ( $M = 6.12, SD = 4.33$ ). The effect of exposure was significant ( $p = .04, \eta^2 = 0.40$ ).

For the adverse childhood event of being forced to have sex with an adult, there a was significant difference between the mean number of adverse childhood events that their children

**Table 4** Correlation matrix of variables

(N = 52)	Child ACEs	Parent ACEs	Impact of civil war	Parent-discrimination as child	Parent-discrimination as adult	External support	Internal strength	Total support	Number of family members	Income
Child ACEs	1.00									
Parent ACEs	.37**	1.00								
Impact of civil war	.17	.23	1.00							
Parent-discrimination as child	.27†	.51***	.08	1.00						
Parent-discrimination as adult	.56***	.20	.09	.53***	1.00					
External support	-.08	.08	.12	.16	-.06	1.00				
Internal strength	.02	.08	-.07	.12	.00	.62***	1.00			
Total support	-.05	.09	.07	.16	-.05	.97***	.81***	1.00		
Number of family members	.14	-.24	-.29*	.09	.21	-.39**	-.22	-.37**	1.00	
Income	-.13	.12	-.11	.12	.12	.17	-.15	.18	-.10	1.00

†  $p < .10$ , \* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

**Table 5** Child’s mean trauma experiences by mother’s exposure to specific ACEs

Maternal trauma	Never	Once	More than once	
	Mean (SD)	Mean (SD)	Mean (SD)	F-ratio
Sworn at, insulted, put down	2.18 (2.38)	3.14 (2.54)	6.12 (4.33)	2.21*
Forced to have sex	3.98 (3.35)		8.25 (7.93)	2.57*
Family member in prison	3.72 (3.29)	8.67 (5.75)		2.09*

\* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

were exposed to between those who reported that this never happened ( $M = 3.98, SD = 3.35$ ) and for those who reported that this happened more than once ( $M = 8.25, SD = 7.93$ ). The effect of exposure was significant,  $F(11, 37) = 2.57, p = .02, \eta^2 = 0.43$ . For the adverse childhood event of a household member going to prison, there was a significant difference between the mean number of adverse childhood events that their children were exposed to between those who reported that this never happened ( $M = 3.72, SD = 3.29$ ) and for those that it happened once ( $M = 8.67, SD = 5.75$ ). The effect of exposure was significant,  $F(11, 37) = 2.09, p = .047, \eta^2 = 0.38$ .

**Correlation between Maternal Factors and children’s Household Trauma**

As shown in Table 4, the number of adverse childhood events that their children have been exposed to in the household was significantly correlated with parent experience of discrimination as an adult ( $r = .56, p < .001$ ). The number of adverse childhood events experienced by the mothers was significantly correlated with their experience of discrimination as a child ( $r = .51, p < .001$ ), suggesting that parents who experienced childhood trauma also experienced discrimination, which could perhaps increase the impact on parent well-being. Discrimination experienced as a child was significantly correlated with discrimination experienced as an adult ( $r = .53, p < .001$ ).

**Correlation between Parent Social Support and Internal Strengths with children’s Trauma**

As shown in Table 4, the number of adverse childhood events of the children of the participants were not significantly related to their external support, internal strengths, and total support. External support and internal strength were significantly correlated ( $r = .62, p < .001$ ). The number of family members was negatively correlated with both external support ( $r = -.39, p < .01$ ) and total support ( $r = -.37, p < .01$ ), suggesting that the size of the family may be related to how much community support is sought out.

**Relationship between children’s Exposure to Household Trauma, Maternal Exposure to Childhood Trauma, and Maternal Exposure to Discrimination**

Linear regression analyses examined the relationship between exposure of the participants’ children to adverse childhood events and the independent variables of mothers’ ACEs score, mothers’ experiences of discrimination during childhood and as an adult, and mothers’ total support (see Table 6). The results of this regression model indicated that these predictors explained 40.35% of the variance in children’s ACEs score ( $R^2 = .48, F(6, 42) = 6.41, p < 0.001$ ). After controlling for total support (both internal strengths and external support), and both experiences of discrimination as a child and as an adult, the number of traumatic events of their children was significantly predicted by the maternal number of adverse childhood events ( $B = 0.21, 95\% CI = 0.06-0.36, p = .007$ ). Specifically, every increase of one adverse childhood event reported by the parents resulted in a 0.21 increase in the number adverse childhood events their children have been exposed to. In addition, the parent experience of discrimination as adults predicted the number of traumatic events of their children ( $B = 6.37, 95\% CI = 3.75-8.98, p < .0001$ ). For parents reporting more than two experiences of discrimination as adults, there was a 6.37 increase in the number of adverse childhood events their children have been exposed to.

Internal strengths and external support could not explain the relationship between parent exposure to childhood trauma and their children’s exposure to trauma in the household. Since the covariates of age, education, employment, income, marital status, and number of people in the household were not significantly associated with the dependent variable (number of traumatic events of the children), they were left out of the final regression model. When running the models with these covariates, the significance and stability of the coefficients of both the parent ACES ( $B = 0.41, p < .0001$ ) and parent discrimination as adults more than twice stayed consistent ( $B = 6.19, p < .0001$ ).

**Discussion**

The first hypothesis that maternal childhood trauma would be positively associated with their children’s traumatic

**Table 6** Results of linear regression predicting children exposure to adverse events

Variable	<i>B</i>	<i>SE</i>	95% <i>CI</i>	$\beta$	<i>p</i>
Number of ACES (parent)	0.21***	0.07	0.06-0.36	0.37	0.007
Experienced discrimination as adult					
Never	Reference				
Once	0.39	1.38	-2.40-3.18	0.03	0.78
More than once	6.37***	1.3	3.75-8.98	0.68	<0.000
Experienced discrimination as child					
Never	Reference				
Once	2.30	2.04	-1.81-6.42	0.14	0.27
More than once	-2.25	1.25	-4.77-0.28	-0.28	0.08
Total support (external and internal strength)	-0.01	0.05	-0.11-0.09	-0.03	0.79
<i>Adjusted R</i> <sup>2</sup>			0.40		
<i>F</i>			6.41		

\*\*\**p* < .001

experiences faced in their household was supported by the data in this study. This is consistent with past research suggesting that parents who are exposed to trauma as children are at greater risk of child maltreatment and that the more traumatic experiences parents are exposed to as children, the more likely they are to report worse outcomes and interpersonal problems (Finkelhor et al. 2007; Higgins and McCabe 2001; Kwong et al. 2003; Mouzos and Makkai 2004; Oliver 1993; Pears and Capaldi 2001; Richmond et al. 2009). Although not all parents who have experienced trauma as children display aggressive behaviors, it is important to understand that it may put parents at greater risk of instability in the home environment. More research is still warranted in this area to better understand the mechanisms through which the unsafe environments are created at home and what effective strategies may decrease this risk for parents.

The second hypothesis that factors such as community violence and discrimination would be related to their children's exposure to household trauma was partially supported. Results from the analyses suggest that maternal perceived discrimination as an adult is strongly related to the exposure to adverse childhood events of their children. This finding is in line with past research finding an association between perceived discrimination and heightened trauma symptoms (Flores et al. 2010; Torres and Taknint 2015). This relationship may be due to perceived discrimination adding further stress to the mother, exacerbating the trauma symptoms experienced during childhood and putting parents at greater risk of aggressive behavior towards their children. Further research related to the understanding of perceived discrimination is warranted particularly in this Salvadoran community to better understand discrimination faced by the families and how it may be worsening trauma symptoms and adding to unsafe home environments.

The third hypothesis was that social support and internal strengths of the parents would mitigate some of the impact of

the maternal childhood trauma and therefore be negatively correlated with the amount of trauma experienced by their children. This hypothesis was not supported by the data in this study as regression analyses did not find a significant relationship between support and child's ACEs. Our findings were inconsistent with studies that suggest that external support and internal coping strategies are protective factors for family-related violence (Timshel et al. 2017). Inconsistent findings in the area of social support have been found with other studies and factors such as methodological and assessment challenges may play a role (Flannery 1990).

Results from this study suggest that the type of childhood trauma may make a difference on the impact on parents. For parents who were exposed to verbal abuse, sexual abuse, or family incarceration, there were significant differences in the mean number of traumatic events their children were exposed to. This suggests that not only does the number of adverse childhood events impact the exposure of their children to adverse events, but that perhaps certain adverse childhood events may have a greater impact on intergenerational trauma. This deserves further study to better understand the role that type of trauma may play in these relationships.

Greater understanding of the intergenerational impact of parental childhood trauma has the potential to affect our approach to mental health services. As we explore factors that influence the impact that childhood trauma may have on parenting, we can begin to target interventions and services that decrease risk factors and support protective factors. Through early assessment and identification of parental exposure to adverse childhood events, providers can target families that may be at greater risk of exposure to adverse events in the household and provide the appropriate resources to potentially prevent exposure. By reducing exposure to adverse experiences during childhood, children and parents can have improved outcomes in a variety of areas. Particularly, research suggests that children of parents, particularly mothers, with

histories of childhood trauma are at greater risk for both internalizing and externalizing behavior problems such as hyperactivity and emotional disturbance and that the parents themselves are also at risk for physical health problems, mental health problems, suicidal behavior, and alcohol and substance abuse (Felitti et al. 1998; Gilbert et al. 2009; Kendall-Tackett 2002; Norman et al. 2012; Schickedanz et al. 2018; Springer et al. 2007; Widom et al. 2007). Early identification of families that may be at risk can also help to mitigate some of the longer-term impact on both the parents and the children.

For families who live in areas with long histories of community violence and war, schools may represent an efficient and effective place to provide trauma-informed mental health services to children and their families (Allison and Ferreira 2017; Mancini 2019; Jaycox et al. 2012; Pfeiffer and Goldbeck 2017; Trentacosta et al. 2016). Furthermore, providing low-threshold, easily accessible school-based interventions that focus on developing emotional regulation skills through somatic-based activities may assist children who are not ready for more intensive, trauma treatment (Farina and Mancini 2017; Mancini 2019; Allison and Ferreira 2017; Jaycox et al. 2012; Warner et al. 2014).

Trauma-focused interventions tend to focus only on trauma-related symptoms. In order to take into account the intergenerational impact, a more holistic approach of both assessment and interventions is crucial. Services should include interventions for both parents and their children. Interventions should specifically target and support parenting; and prevention strategies could be implemented for safe parenting practices.

## Limitations

This study has several limitations that should be discussed. First, the use of a small, nonrandom convenience sample prevents a broader generalization of these results to other communities and does not control for selection bias or effects. The limited survey questions asked for this sample also prevents further analysis of other factors that may play a role in the relationship between maternal childhood trauma and exposure of their children to trauma in the household. For example, the age range of the children was not available to include in the analysis, preventing better understanding of how reporting of their children's exposure adverse events may be impacted by the child's age. In addition, all data was collected solely from the mothers, missing the perspective of their children and other caregivers. This may bias findings in a few ways. Mothers may be subject to social desirability bias, in which they are predisposed to respond in a way that they think is most socially acceptable. Particularly related to their children's exposure to violence, they may be unwilling to admit certain traumatic experiences occurred in their household if they think it will make them look like a bad parent. Mothers

may also be concerned about any legal consequences of admitting their children's trauma. For example, responding that their children were sexually abused could potentially warrant investigation by the criminal justice system. Although mothers in this study did not express this as a belief, this is a potential concern when asking about sensitive information such as exposure to trauma. Even though program staff told participants that their information would be confidential, participants understand there are limitations to confidentiality. Interviewers were also mandated reporters, making this a limitation when collecting this type of information. Moreover, mothers may not be fully aware of their children exposure to adverse experiences. Particularly related to sexual abuse, children may have been sexually abused by another family member and not have reported this experience to their mothers. With regard to mothers' reporting of their own adverse experiences during childhood, this is subject to recall bias, as mothers may simply have forgotten certain events. In order to mitigate discrepancies related to reporting bias, longitudinal studies may help to track symptoms and behaviors over time and control for some of the day to day fluctuations. It is also recommended that information be collected from the children, particularly related to their trauma histories, symptoms, and behaviors. Further research is also recommended with larger and randomized samples in order to better generalize findings. Finally, the use of a clinician-constructed measure for external support and internal strengths is subject to measurement error. At the time of the study, the questions were developed to capture what the participating organizations felt were culturally appropriate and relevant to the study participants. Future studies should include normed and validated measures.

## Conclusion

The results from this study aid in the overall body of research related to intergenerational trauma and point to several areas of additional examination. Further research is needed to better understand the experiences of parents who have been exposed to childhood trauma and their day-to-day parenting challenges to help identify parenting interventions that may mitigate the relationship between parental childhood trauma and exposure of their children to adverse events, particularly in the household. Better understanding of perceived discrimination and how it may impact parenting should also be explored in future research. Greater understanding of the intergenerational impact of childhood trauma also encourages service providers to explore interventions for family members at different life stages.

## Compliance with Ethical Standards

**Conflict of Interest** On behalf of all authors, the corresponding author states that there is no conflict of interest. No author disclosures to report.

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