

# Exposure to Community Violence as a New Adverse Childhood Experience Category: Promising Results and Future Considerations

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Research links high youth exposure to community violence (ECV) with negative health consequences, and the World Health Organization recommends ECV as a new adverse childhood experience (ACE) category. The current study is among the first to include ECV within the ACE categories, examining ACEs and behavioral health (BH) service usage, using a population-based adult sample. Results reveal ECV and ACE associations in the expected direction. Respondents reporting ECV before age 18 had higher ACE scores than those without ECV. Results demonstrate ECV's predictive power for later BH needs and confirm its utility as a new ACE category. Practice implications include attention to ECV among adult populations and mitigating long-term costs through early intervention and prevention.

## IMPLICATIONS FOR PRACTICE

- There are potential long-term adverse effects of trauma on adult health, so routinely assessing for ECV as well as ACEs among adult populations is recommended.
- Early intervention in a school setting for youth who have experienced ECV can be an effective approach to prevent its adverse effect in later life.

The World Health Organization (WHO) and the Centers for Disease Control and Prevention (CDC) call for a more global perspective on adverse childhood experiences (ACEs) that includes community violence among ACE categories and adapts the expanded core ACE questionnaire to diverse cultures (Anda, Butchart, Felitti, & Brown, 2010; Klodnick, Guterman, Haj-Yahia, & Leshem, 2014; WHO, 2009). The WHO set forth criteria for selecting additional ACE categories, noting that they must (a) cause a biological stress response, (b) be sensitive to policies, (c) be common across societies, (d) be able to be measured quickly and easily, and (e) be proximal in respect to causality (WHO, 2009). As a result of this vetting process, exposure to community violence (ECV) has been suggested as a new ACE category for a more complete understanding of the variety of challenges faced by children worldwide (WHO, 2011).

Current ACE measures rely on 10 categories, capturing events occurring primarily within the family. Studies consistently show associations between accumulated ACEs, health risks, and serious health problems (Felitti et al., 1998; Larkin, Felitti, & Anda, 2014). ACEs have also been correlated with types of services accessed later in life (Larkin & Park, 2012). Efforts to include ECV within current childhood adversity research are promising. For example, Finkelhor and colleagues (Finkelhor, Shattuck, Turner, & Hamby, 2013, 2015; Finkelhor, Turner,

Ormrod, & Hamby, 2010) included ECV as one type of child adversity, and their studies have shown that ECV is significantly related to mental health and behavioral outcomes among children and adolescents.

The present study expands ACE inquiry beyond the family system and examines ECV as a potential ACE category. Particular attention is paid to later-life behavioral health (BH) service use as a potential long-term consequence of witnessing community violence and other adverse experiences in early life. This is expected to provide a richer understanding of the effects of community violence and adversity across the life span, as proposed by the WHO (Anda, Butchart, et al., 2010), and to advance our understanding of the prevalence of childhood adversity and its consequences in the general population.

## Prevalence and Consequence of Exposure to Community Violence

The *ECV* term comprises both the witnessing of and/or direct victimization by an array of possible violent community events impacting individuals. These include exposure to street crimes such as gang violence, physical assaults, rape, or any number of adverse community conditions. Manifestations of community violence are more likely to occur among youth (Finkelhor et al., 2010); thus, much of the ECV research has been focused on youth and early outcomes, with limited attention to outcomes later in life.

Studies have consistently yielded statistically significant ECV prevalence rates, albeit with a wide range of variance (Finkelhor et al., 2010; Stein, Jaycox, Kataoka, Rhodes, & Vestal, 2003; Turner et al., 2012; Zinzow et al., 2009). Males, older children (Stein et al., 2003), and ethnic minority urban youth show high ECV rates (Lynch, 2003), and ECV risk appears to increase for school-age youth (Richters & Martinez, 1993). ECV

also has a strong, significant association with violence exposure at home (Holtzman & Roberts, 2012; Osofsky, Wewers, & Hann, 1993; Proctor, 2006). Nationally, prevalence rates of ECV have been estimated to be as high as 38% (Zinzow et al., 2009).

Higher ECV is associated with externalizing, aggressive behaviors (Foster & Brooks-Gunn, 2009; McCabe, Hough, Yeh, Lucchini, & Hazen, 2005; McMahan, Felix, Halpert, & Petropoulos, 2009), aggressive social cognition (Guerra, Rowell Huesmann, & Spindler, 2003), and delinquency (Mrug & Windle, 2010), reinforcing a proclivity for situations escalating to violence (Cicchetti & Lynch, 1993; Foster & Brooks-Gunn, 2009). High ECV is also associated with early-life mental health conditions (Cooley-Quille, Boyd, & Frantz, 2001; Zinzow et al., 2009), while chronic exposure, event proximity, and victim familiarity correlate with poorer mental health outcomes (Martinez & Richters, 1993). Similar ECV-related symptomatology is found across countries and gender (Schwab-Stone, Kogosov, Vermeiren, & Ruchkin, 2013).

When youth traumatized by ECV are not offered timely treatment, they may eventually engage in high-risk behaviors such as substance abuse (Lynch, 2003) to cope with unresolved trauma (Felitti et al., 1998; McChesney, Adamson, & Shevlin, 2015). Violence exposure—particularly in the family—in adolescence is associated with poorer mental health and increased adulthood BH service use (Franzese, Covey, Tucker, McCoy, & Menard, 2014).

Only a few studies have examined adult ECV backgrounds and later-life outcomes. Desmarais et al. (2014) reported higher ECV among adults with mental health diagnoses. Early-life perceptions of high neighborhood violence predicted lower later-life employment odds (Covey, Menard, & Franzese, 2013). These results align with the documented relationship between unemployment and poorer adult mental health (Butterworth, Leach, Pirkis, & Kelaher, 2012; Pharr, Moonie, & Bungum, 2012) and the ACEs and unemployment linkage (Liu et al., 2013).

Despite a large body of research on ECV prevalence and consequences, ECV has only recently been proposed as an ACE category (Anda, Butchart, et al., 2010; Finkelhor et al., 2013, 2015; WHO, 2009). Given the weakness of some ACE items and the strength of ECV in predicting BH service use, some scholars propose their replacement with ECV (Finkelhor et al., 2013, 2015). Yet, much of the ECV literature is drawn from youth samples, with limited ECV research on adult samples and limited understanding of health outcomes in later life.

## Adverse Childhood Experiences and Behavioral Health

### *ACEs and Later-Life Health Risks*

Research has demonstrated a strongly correlated, graded relationship between accumulated ACEs and mental health and substance abuse issues. In fact, the medical doctors authoring the original ACE study refer to these as “dose-response” relationships. Psychiatric illnesses, particularly depression and posttraumatic stress disorder (PTSD) in adulthood, have been found to be associated with higher ACE scores (Chapman et al., 2004; Molnar, Buka, & Kessler, 2001; Penza, Heim, & Nemeroff, 2003; Widom, DuMont, & Czaja, 2007). Similarly, a variety of substance use behaviors have been identified as ACE consequences, including early initiation of alcohol use (Dube et al., 2006), problem drinking behavior into adulthood (Dube, Anda, Felitti, Edwards, & Croft, 2002), heavy smoking during adulthood (Ford, Zhao, Tsai, & Li, 2011), prescription drug use (Anda, Brown, Felitti, Dube, & Giles, 2008), and illicit drug use self-reported addiction (Dube et al., 2003).

Because psychiatric disorders and substance dependence are highly comorbid in both clinical and non-clinical populations (Grant et al., 2004; Nunes & Rounsaville, 2006; Schuckit, 2006), the relationship between higher ACE scores and these conditions continues to be of interest (Douglas et al., 2010).

### *BH Service Use in Later Life*

Although adult BH service use has steadily increased from 1990 to 2012, anticipated reduction in the prevalence of mental health disorders has not been realized (Kessler, Wang, & Zaslavsky, 2005; Mojtabai & Jorm, 2015). Existing research has examined some early-life contributors to these trends, but none explored ECV's contributing role on adult BH service use.

Evidence points to the cumulative influence of early-life adversities on poorer older adulthood physical performance (Sousa et al., 2014). Yoon and Bernell (2013) also observed that significant BH service use increases among adults with poor physical health, noting a correlation between BH use rate and number of adverse health events. Another study found increased psychological distress and greater unmet BH needs among adults with a chronic medical condition and lower than a high school education (Whitney, Bell, Bold, & Joseph, 2015). These results are striking in view of the compounding role of ACEs on later-life physical, BH, and social problems (Chartier, Walker, & Naimark, 2010; Edwards, Holden, Felitti, & Anda, 2003; Lu, Mueser, Rosenberg, & Jankowski, 2008; Mersky, Topitzes, & Reynolds, 2013).

Neighborhood social disadvantage has been linked to higher adulthood mental health disorder rates (Silver, Mulvey, & Swanson, 2002). ACEs and early-life social disadvantage each influence adult mental health, while access to resources and social support can ameliorate adverse mental health outcomes in adults with multiple ACEs (Nurius, Logan-Greene, & Green, 2012).

Early-life socioeconomic disadvantage is a predictive factor for adverse adult mental health (Nikulina, Widom, & Czaja, 2011). ECV exhibits a compounding trajectory with correlates, such as family dysfunction and neighborhood disadvantage, resulting in diminished economic and social supports, which may reduce social coping and have negative adulthood outcomes (Foster & Brooks-Gunn, 2009). Adults in disadvantaged communities with high violent crime rates show poorer mental health (Stockdale et al., 2007).

### Conceptual Framework

Social work, with its defining person-in-environment framework, calls for integrated individual and community prevention and intervention strategies to reduce high ACE costs (Larkin et al., 2014). Applying the biopsychosocial perspective on adverse health outcomes (Gatchel, 2004; Larkin et al., 2014; Read, Fink, Rudegeair, Felitti & Whitfield, 2008), this article suggests that ACEs, including ECV, have a measurable effect on BH service needs among the adult population. The study extends the current conceptualization of ACEs through inclusion of ECV in the examination of BH service use. Specifically, the study aims to (a) discuss ACE and ECV prevalence in a general adult population, (b) explore the association between ACEs and ECV, and (c) examine the merits of ECV as an additional ACE category.

## Study Design and Methods

### Data Collection

The current study conducts a secondary analysis of data collected as part of the 2009 New York State (NYS) Omnibus Survey. This annual survey was conducted by a university-based survey center (with the institution's internal review board approval), and the instrument was generated as multiple researchers combined proprietary questions of interest. Contributing researchers received responses to their questions while sharing responses to common questions on a range of sociodemographic information.

The Omnibus Survey used a list-assisted method of random-digit dialing to obtain phone numbers for the sample. Up to 15 contact attempts were made at each household phone number before the interviewer moved onto a new phone number. Once the contact was successful, a household member who was 18 years of age or older at the time and had the most recent birthday

was asked to participate in the survey. The household level cooperation rates for the Omnibus Survey were 24%, calculated from the number of the completed interviews (807) divided by the sum of the completed interviews (807) and the number of refused interviews (2,615), which included hard refusal, hang-up, and partial interviews.

To reflect the population, the sample was weighted on gender, age, race, educational attainment, and region, based on the 2006–2008 U.S. Census American Community Survey data. The sampling and weighting methods reasonably ensured a representative sample of individuals that accurately reflected New York State's geographic, economic, and racial/ethnic diversity.

### Measures

**ACEs.** We included the 10 ACEs items used by the CDC and Kaiser Permanente (Dong et al., 2004; Dube et al., 2001). Replication allows us to compare our results with other studies. Responses to the 10 ACEs were either yes, no, or missing response; missing responses were less than 5%. After summing the ACE categories, two variables were constructed: a cumulative ACEs category (none, 1 or 2 ACEs, and 3 or more ACEs) and a dichotomous category of having at least 1 ACE or not.

**ECV.** The following question was added to examine ECV as an ACE: "Did you ever see someone in your neighborhood threaten or seriously hurt another person?" A 5-point Likert-type scale recorded responses from *never* to *very often*. Like other ACEs questions, this was limited to the respondents' experience prior to age 18. After examining the response category distribution, a dichotomous ECV variable was created, indicating 1 (*every so often, sometimes, and very often*) and 0 (*rarely and never*).

**BH services.** BH service use was a measure for a later-life outcome of interest. The survey asked whether the respondent ever used inpatient or outpatient substance abuse or mental health services. A 5-point Likert-type scale recorded responses from *never* to *very often*. The distribution of the responses was skewed, and we created a dichotomous variable, where the value of *no* indicated that the respondent never or rarely used either substance abuse treatment or mental health services.

**Sociodemographic variables.** The following sociodemographic data were collected from each respondent: date of birth, race and Hispanic origin, gender, educational level, employment status, marital status, family income, and county of residence. We constructed age at the time of the survey and recoded race and ethnicity (Hispanic, Black, White, Asian, and other), employment status (employed or not) and region (New York City [NYC] vs. rest of NYS). Years of education were created based on the grade completed.

**Analysis Plan**

First, descriptive statistics were run on the key variables to examine whether the sample reflected the NYS population. We examined missing data, outliers, and inconsistent responses. Then bivariate analyses, including chi-square tests and *t* tests, were conducted to examine relationships among ACEs, ECV, and BH service use. Chi-square tests were used to detect statistically significant differences for categorical data (e.g., BH service use). Finally, we ran separate logistic regression models to estimate ACE effects on later-life BH service use as well as ECV effects. Logical regression was selected given that the dependent variable of interest, BH service use, was coded as categorical (yes/no). All analyses were done with weights provided by the survey center. We first ran unweighted analyses to ensure a sufficient number as well as consistency, and then we ran the analyses with the weights. No significant differences were found in the findings of the unweighted and weighted analyses.

**Results**

**Sample Characteristics**

The survey sample (*n* = 807) reflects the diverse characteristics of the NYS population (Table 1). This sample includes a sizable number of historically disadvantaged minority residents; 16% of the sample identified themselves as Black and 12% as Hispanic. The sample has a good range of educational and income levels, with women and men equally represented. The proportion of younger adults in the sample is high: 29% were adults aged between 18 to 34. Unfortunately, a significant proportion of respondents did not provide family income; 15% were missing. Survey results do indicate that the sample was drawn from both low- and high-income NYS residents. It appears that the respondents also had educational attainments comparable to those of the NYS residents: 31% of respondents had college degrees. The sample was drawn from across NYS, and its geographic areas were diverse. Reflecting the city’s large

**TABLE 1.** Selected Characteristics of the New York State Respondents (*N* = 807)\*

Characteristics	% **	Characteristics	% **
<i>Gender</i>		<i>Region</i>	
Women	52	NYC	43
Men	48	Rest of the state	57
<i>Annual income</i>		<i>Age</i>	
Under \$35,000	23	18–34	29
35,001–60,000	21	35–49	27
60,001–100,000	21	50–64	25
Over 100,000	17	65 and over	17
Unknown/refused	18	<i>Marital status</i>	
<i>Race and ethnicity</i>		<i>Employment status</i>	
White	63	Married/ domestic partner	48
Black	16	Divorced, separated or widowed	21
Hispanic	12	Never married	30
Asian and other	7	<i>Education</i>	
<i>Education</i>		<i>Employment status</i>	
Less than high school	16	Employed	55
High school graduate	28	Unemployed	14
Some college	23	Retired	18
College and beyond	31	Student	8
<i>Adverse childhood experiences (ACEs)</i>		Other	5
None	41	<i>Behavioral health service use</i>	
1 or 2 ACEs	38	Never or rarely	87
3 or more ACEs	21	Every so often, sometimes, or very often	13
<i>Exposure to community violence</i>			
Never or rarely	75		
Every so often, sometimes, or very often	25		

\* Weighted sample; \*\* due to missing data, distribution totals may not equal 100%.

share of the NYS population, slightly less than half of the sample was from NYC.

**Linkage Between ACEs and ECV**

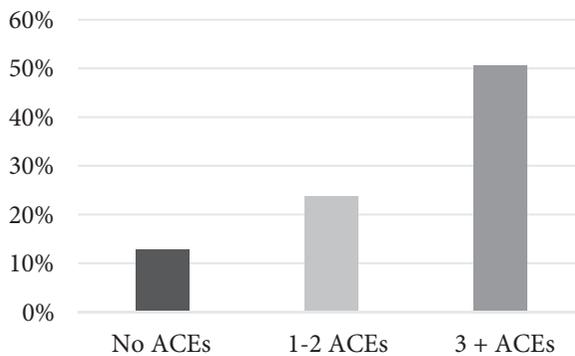
**Prevalence of ACEs and ECV.** Consistent with findings from other population-based studies, ACE prevalence using the 10 categories reflects the characteristics of the general population. Among the 807 NYS Omnibus Survey participants, 41% had no ACEs, 38% 1 or 2 ACEs, and 21% had 3 or more ACEs (see Table 1). The ACE score ranged from 0 to 9 (average = 1.45). There were no differences in ACE scores of 3 or more by gender and race. However, NYS residents with more education were less likely to have a higher ACE score. ECV was surprisingly prevalent among the sample of everyday NYS residents. One in four adults indicated they “saw someone in your neighborhood threaten or seriously hurt another person” before age 18. Men were more likely to report ECV than women, and Black and

**TABLE 2. Odds Ratios for Ever Using Behavioral Health Services (n = 763)**

Variables	Model 1	Model 2	Model 3
<b>Covariates</b>			
Black <sup>1</sup>	.501*	.543^	.455*
Latino/a <sup>1</sup>	.611	.716	.567^
Years of education <sup>2</sup>	.982	1.027	1.0175
Age	.991	.992	.994
Living in NYC	.720	.665^	.681^
Woman	.874	1.100	.948
<b>Predictors</b>			
Having at least one ACE	2.745***		2.414***
ECV		2.680***	2.265***

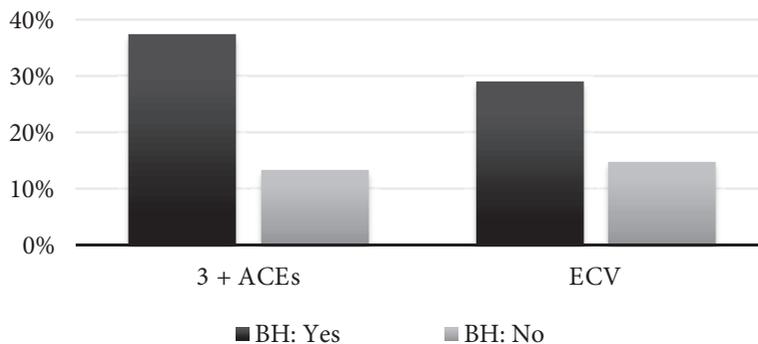
Note. ACE = adverse childhood experience; ECV = exposure to community violence. Reference categories: <sup>1</sup> White and others; <sup>2</sup> years of education ranges from 8 years (8th grade) to 18 years (postsecondary education). ^ p < .01; \* p < .05; \*\*\* p < .001.

**FIGURE 1. Prevalence of exposure to community violence by ACEs.**



Note. ACEs = adverse childhood experiences.

**FIGURE 2. Comparative behavioral health service use with ACEs and exposure to community violence.**



Note. ACEs = adverse childhood experiences; BH = behavioral health service use; ECV = exposure to community violence.

Hispanic residents were more like to report ECV than White and Asian residents, based on bivariate analysis.

**Association between ACEs and ECV.** The association between ACE scores and ECV is significant in the expected direction. Respondents with ECV have higher mean ACE scores than those who did not (2.4 vs. 1.1). Furthermore, there is an unequivocal relationship between ACE score and ECV (Figure 1). While only 13% of the NYS residents without any ACEs reported ECV, 24% of the residents with 1 or 2 ACEs did. 51% of the residents with 3 or more ACEs experienced witnessing community violence while growing up ( $\chi^2 = 84.41, p = .000$ ).

### **ACEs, ECV, and BH Service Utilization**

**Prevalence of BH service use.** On average, 13% of respondents reported BH service use (mental health or substance abuse) at least somewhat often in their lifetime. However, BH use is significantly associated with elevated ACE scores. While 13% of respondents with 2 or fewer ACEs reported accessing BH services, 37% of those with 3 or more ACEs did ( $\chi^2 = 51.51, p = .000$ ). A similar pattern was observed for ECV and BH service use (Figure 2). BH use was significantly more likely among respondents who witnessed community violence often or more while growing up than those who never or rarely witnessed it ( $\chi^2 = 20.37, p = .000$ ). Compared to 15% of those who rarely or never had ECV, 29% with ECV reported BH service use.

**Predictive power of ECV for BH service use.** To further examine ECV effects on BH service use, a series of multivariate models were used to test the relative effects of ECV and having 1 ACE. All models use the binary BH service use as a dependent variable while controlling for age, gender, education, race, and regional differences. The first model used a binary measure for having at least 1 ACE as a predictor for BH service use. Respondents with at least 1 ACE were 2.6 times more likely to have used BH services than those with no ACEs. The results support the premise that ACE scores of 1 or more contribute to negative later-life consequences. African Americans were half as likely to use services compared to Whites. No other sociodemographic factor was found to be significant (Table 2).

The second model examined ECV effects on BH service use, excluding any current ACE measure. The ECV's odds ratio shown in Model 2 is robust given that ECV is a single measure of an experience until the respondent turns 18. Respondents who reported witnessing community violence were 2.7 times more likely to have used BH services than those who did not. Similar to the first model, being African American lowered the probability of service use, although the significance level was marginal. Interestingly, NYC respondents were

35% less likely to access BH services than those in other parts of NYS.

The last model included both ACE and ECV to examine whether each had an independent effect on BH use and to estimate each measure's relative strength. Results from the last model confirm our belief on ECV's unique contributions to potential health risk in later life. Both measures were significantly associated with BH use in later life. Neither the odd ratios nor the statistical significance of the last model diminished compared to the models with only a single measure. The findings indicate that NYS adults with at least 1 ACE and who witnessed community violence were almost 5 times more likely to have used BH services than those without an ACE and ECV. Also interesting are the sustained effects of living in NYC and being African American. Even if they had similar experiences of witnessing community violence and childhood adversity, African American men and women were only half as likely to utilize services they may need.

### **Discussion and Implications**

This investigation makes an original contribution to the current knowledge of childhood adversity by examining ECV as a new ACE category and testing associations between childhood adversity, ECV, and later-life outcomes. In addition to providing evidence linking early-life ECV and BH service use in adulthood, our findings contribute to early knowledge development examining ECV as an ACE category (Finkelhor et al., 2010, 2013, 2015) in accordance with WHO recommendations (WHO, 2009).

For the general population, ACE prevalence could be understood in the typology of three groups: the first with no ACEs, the second with 1 or 2 ACEs, and the last group with 3 or more ACEs. The ACE prevalence in our study is similar to those based on samples drawn from a general population (Anda, Tietjen, Schulman, Felitti, & Croft, 2010; Bynum et al., 2010). Adults with ACE scores of 3 or more made up the smallest group of survey participants (21%) but were most likely to experience poor health outcomes.

One of four adults in the sample reported having witnessed community violence at least sometimes while growing up. Respondents who acknowledged witnessing community violence every so often, sometimes, or very often, revealed significantly higher BH service use rates compared to those who reported never or rarely witnessing community violence while growing up. It is important to note that while ECV and ACEs are closely associated with each other, they independently predict the probability of respondents seeking BH. The findings add evidence to previous research suggesting increased BH service use among adults with ACEs (Brook, Lee,

Balka, Finch, & Brook, 2014; Franzese et al., 2014) and negative consequences of community violence exposure on mental health (Finkelhor et al., 2015; Luthar & Goldstein, 2004; Zinzow et al., 2009).

**Limitations.** Despite the study's significant contributions, there are a number of limitations. First and foremost is that the data are cross-sectional. All information was gathered in a single telephone call during which survey questions on ACEs, ECV, and BH service use were asked. Therefore, causal relationships cannot be drawn between childhood adversity and BH service use. Use of retrospective survey data, as opposed to archived records, also poses potential limitations due to possible respondent recall bias. Another concern for survey data is possible reporting bias. Those who reported ACEs or ECV may be more likely to report BH service use. Given the personal nature of the questions, ACEs and BH service use may have been underreported. Finally, with the current measures, we do not know the severity or chronic nature of each ACE category.

### ***ECV as an Additional ACE Category***

Our study set out to examine whether to include ECV as an additional ACE. The answer is affirmatively yes. Not only was the ECV measure consistently associated with different measures of ACEs in expected directions, but it was also sufficient to predict later health outcomes. Its predictive power was equal to any ACE item as currently measured. Combined with ACEs, ECV provides a better understanding of later health outcomes. To align with current ACE question use, we recommend using yes/no responses instead of ECV frequency. The question could incorporate ECV severity with the following: Prior to your 18th birthday, did you often or frequently see someone in your neighborhood threaten or seriously hurt another person? Finally, while we appreciate the merits of efforts to improve the ACE scale by removing some original items and adding new items such as ECV, this was beyond the scope of our study. Future research could examine the issue and improve our understanding of childhood adversity and later-life outcomes.

### ***Practice Implications***

The study's findings, along with existing research on ACEs, ECV, and their long-term outcomes, suggest the importance of policies, programs, and practices directly intervening with ECV. Given the high costs of ACEs, including ECV, this research can inform policy-makers seeking to save costs through strategic policies and investments.

First, we recommend communities invest in preventive measures to decrease the level of violence. This may start by educating citizens and other key stakeholders in the community about the prevalence of violence and the negative impact on all who live and work in

the community. The community may want to consider implementation of a proven community interventions, such as Communities That Care, that have proven effective in addressing youth problem behaviors including violence, underage drinking, tobacco use, delinquency, school dropout rate, and substance use (Washington Institute for Public Policy, 2015).

While the current study examines ECV as an ACE among adults, the findings speak to the value of intervening earlier. A school-based, trauma- and grief-focused group intervention has shown promise in reducing PTSD symptoms for youth with ECV trauma (Layne et al., 2008; Saltzman, Layne, Pynoos, Steinberg, & Aisenberg, 2001). Considering the reported effectiveness of this approach, its specific focus on youth with ECV, and the higher prevalence of traumatized adolescents utilizing school-based services (McChesney et al., 2015), we recommend its implementation in a school setting for youth who have experienced ECV.

Research also shows that strengthening both parent-child and community relationships is helpful to youth who have experienced ECV (Davis, Ammons, Dahl, & Kliever, 2015). We recommend use of the Positive Parenting Program ("Triple P;" Bodenmann, Cina, Ledermann, & Sanders, 2008; Larkin et al., 2014). Community and school climate are important, with research showing their potential to moderate parent and peer influences on youth substance abuse (Mayberry, Espelage, & Koenig, 2009). These efforts could help prevent the many long-term economic, social, and health-related burdens associated with ACEs (Larkin et al., 2014).

The current study further demonstrates the need for routinely assessing ECV as an ACE category among adult populations. We also suggest that practitioners take into consideration the potential long-term adverse effects of trauma on adult health. While clinical providers are often more experienced in addressing child abuse or neglect by family members than assessing and treating ECV, research points to the importance of assessing severity of ECV-related disturbances (Guterman & Cameron, 1999). Questionnaires, such as the "Things I have Seen and Heard," assess ECV effects on youth (Hamby & Finkelhor, 2001).

Together, these findings point to the value of an integrated micro-macro-policy approach: engaging in community development to build protective factors that foster resilience, advocating for policies to improve service access for high-risk groups, and ensuring ACEs (including ECV) are assessed and appropriately treated in practice. Restorative Integral Support is an example of a useful model set forth for a comprehensive ACE response approach that includes these elements (Larkin, Beckos, & Shields, 2012).

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