Parent and Child Factors Associated with Household versus Community Adversity among Black and Hispanic Children

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Abstract
The purpose of this study was to describe exposure to within-household and community adverse childhood experiences (ACEs) and to identify child- and parent-level factors associated with exposure to different kinds of ACEs. This cross-sectional study used a clinical sample of 257 Black and Hispanic children ages 3–16 years and their caregivers who were seeking care at two federally qualified health centers in Chicago, Illinois and screened positive for a behavioral health problem. The sample had high levels of within-household ACEs (76% reported at least one) and community ACEs (71% reported at least one). Black children experienced more overall and within-household ACEs than Hispanic children, including forced separation from a caregiver and family member incarceration. Hispanic children experienced more bullying and violent media exposure. Significant associations to all categories of ACEs were observed for depression, child behavioral problems, and older child age. Tailored assessment of ACEs and interventions such as trauma-informed care are needed in pediatric clinical settings, including assessment of ACEs children in experience in communities.

Keywords
Adverse childhood experiences · Race/ethnicity · Community violence

Approximately two-thirds of adults report at least one adverse childhood experience (ACE) before the age of 18 (Felitti et al., 1998; Merrick et al., 2018). The first major study of ACEs examined 10 types of within-household dysfunction (e.g., maltreatment, parent mental illness, incarceration of a family member) retrospectively among adults and found that within-household ACEs were associated with many of the leading causes of death and chronic illness in a dose-response fashion, where additional ACEs increased risk for poor outcomes (Felitti et al., 1998; Hughes et al., 2017). Newer evidence has suggested that ACEs present in a child’s environment and community outside the household can be as impactful as within-household ACEs and confer risk for poor outcomes (Stein et al., 2003). Community ACEs, or ACEs that occur outside of a child’s household, may include school violence, community violence, witnessing firearm violence, discrimination, law enforcement violence, and other adverse community events (Ellis & Dietz, 2017; Finkelhor et al., 2015). Both household and community ACEs can induce a toxic stress response in the absence of sufficient buffering, protective relationships, leading to a cascade of physiologic, cognitive, emotional, and behavioral dysregulation in the child and lasting developmental harm (Shonkoff et al., 2011; Theall et al., 2017).

There is evidence for race/ethnicity and other sociodemographic differences in patterns of ACE exposure at a population level from research reviews and ongoing...
cross-sectional surveillance of ACEs. Adults and children who are racial/ethnic minorities report more frequent ACEs than their white counterparts (Hatch & Dohrenwend, 2007; Sacks & Murphey, 2018). They also appear to be at greater risk for PTSD diagnosis and worse PTSD severity following traumatic experiences (Álcañtara et al., 2013; Roberts et al., 2011). Children who identify as Black or Hispanic in the US may be at higher risk for adversity (e.g., experiencing maltreatment, witnessing domestic violence) due to structural inequalities in their communities that create conditions for ACEs to flourish with fewer protective factors available to buffer toxic stress (Ellis & Dietz, 2017; Roberts et al., 2011; Liu et al., 2019; Slopen et al., 2016).

Other risk factors for high ACE exposure are lower socioeconomic status or family income, parent or child mental illness (e.g., depression, PTSD, behavioral problems), unemployment, and lower educational attainment (Chemtob et al., 2013; Merrick et al., 2018; Roberts et al., 2011). Though many studies identifying these relationships are individual and cross-sectional and focus primarily on within-household adversity, the totality of evidence on the disproportionate burden of ACEs among Black- and Hispanic-identifying children point to structural forces, including structural racism, in observed population patterns of race disparities (Merrick et al., 2018; O’Connor et al., 2020).

Structural inequality that manifests as individual demographic differences/disparities in research on ACEs appears to be associated with higher cumulative within-household ACE exposure, but further exploration is needed about what types and patterns of ACEs affect sociodemographic subgroups and whether there are differences in exposure to within-household versus community ACEs. Large-scale studies have examined the impact of within-household ACEs on health and social outcomes and identified racial/ethnic disparities. Within-household ACEs (i.e., maltreatment, household challenges) were the focus of the earliest ACE studies and remain the most widely studied at present. However, there has been less research on community ACEs or patterns of community ACEs within sociodemographic subgroups. As a result, less is understood about how community ACEs manifest among different racial/ethnic groups of children. A recent cross-sectional study comparing White, Black, and Hispanic children on type and cumulative burden of ACE exposure found higher ACE counts for Black and Hispanic children (Slopen et al., 2016). This study considered 9 individual ACEs and also found greater likelihood for Black and Hispanic children to experience almost all ACEs at the item level, but this study had limited focus on community ACEs (Slopen et al., 2016). This need to further explore parent and child factors—including, but not limited to, race/ethnicity—associated with different types of ACEs to determine how interventions can be tailored and targeted for vulnerable communities. Understanding ACE disparities among children could inform the development of interventions that can be used to prevent the long-term harm of ACEs and racial disparities in both cumulative ACE exposure levels and poor outcomes seen in adulthood.

To address this lack of focus on community adversity exposure among children, our study team developed and validated a comprehensive ACE screener by adapting the Traumatic Events Screening Inventory (TESI) for community ACEs in partnership with community members in Chicago, Illinois neighborhoods where children experience high levels of violence (Choi et al., 2019; Ford et al., 2002; Ippen et al., 2002). Several recent community health needs assessments in Chicago highlight violence as a priority issue for community members and health systems (Lurie Children’s, 2016; Sinai Children’s Hospital, 2016). Communities with high rates of violence are often historically disadvantaged, low-income neighborhoods that are racially homogenous (Lurie Children’s, 2016; University of Chicago Crime Lab, 2017). Chicago is a segregated city where racial, cultural, and ethnic groups tend to live in the same neighborhood areas, creating racially homogenous neighborhoods. This racial segregation is part of a legacy of housing and other institutional discrimination in Chicago (Williams & Collins, 2001). Predominantly African-American and Hispanic communities experience ongoing, concentrated socioeconomic resource deprivation and institutional discrimination, resulting in limited availability of social services and medical care and high levels of community violence (Bailey et al., 2017; Phelan & Link, 2015). Community-based health clinics have helped provide access to social and medical resources for these populations. Screening with our community-specific ACE tool presented a unique opportunity to understand patterns of ACEs among children living in racially segregated neighborhoods in Chicago (Lurie Children’s, 2016; Sinai Children’s Hospital, 2016). The purpose of this study was to (1) describe the extent and type of exposure to ACEs and how they vary by child characteristics, and (2) identify child- and parent-level factors associated with overall, within-household, and community ACEs with a sample of children seeking co-located primary care services.

**Methods**

**Design**

This cross-sectional analysis used baseline data from a study of co-located mental health care models in Chicago, Illinois. The study sites were two federally qualified health centers located on the South and West sides of Chicago.
Sample

This study used a clinical sample of child/caregiver dyads. Families were recruited to participate in the study from the two clinics and were eligible if (1) the child was 0–16 years of age, (2) the child had not received mental health care from the site in the past 3 months, (3) the child and caregiver spoke either English or Spanish, (4) the child had a positive score on the Pediatric Symptom Checklist (PSC) behavioral health screen or was referred for a behavioral health or developmental disabilities evaluation, (5) the child, the caregiver, or both completed the TESI screener, and (6) the child identified as Black or Hispanic (Jellinek et al., 1999). Only 4 children in the sample identified as non-Hispanic White, and as such we could not make meaningful comparisons with this racial group. The final sample of was 257 children (additional details about sample selection are reported elsewhere) (Choi et al., 2019).

Procedures

When children were identified as being in need of mental health services, either by a positive PSC score or by referral, they were introduced to the on-site study coordinator who confirmed eligibility, obtained informed consent, and completed study enrollment. The child and caregiver then completed the baseline survey using a web-based data capture system (McCreary et al., 2019). The University of California, Los Angeles and the University of Illinois at Chicago Institutional Review Boards approved this study.

Variables

Outcome variable

The outcome variables were overall number of ACEs, within-household ACEs, community ACEs, and other ACEs. ACEs were measured with an adapted 28-item version of the TESI (Choi et al., 2019; Ford et al., 2002; Ippen et al., 2002). The TESI assesses a variety of household and community events that are potentially adverse or traumatic, including injuries, hospitalizations, domestic and community violence, disasters, accidents, physical violence, sexual abuse, verbal abuse, threatened violence, and kidnapping. The adapted TESI used in this analysis included six additional items not present in the original measure that were added in a community-partnered measure adaptation and validation study (Choi et al., 2019). In additional to a substantial focus on community adversity, the TESI includes the following household adversity items similar to measures used in the original ACE study: household member incarceration, household member suicide, parental separation, household domestic violence, sexual abuse, physical abuse, and emotional abuse. It does not include parent divorce, parent substance use or mental health problems besides suicide, or detailed items on child neglect, which are also considered within-household ACEs. We organized all items assessed in the TESI into household adversity, community adversity, or other (see Table 1 for categorization). The TESI was administered in parent-report form to caregivers and in child-report form to children older than 12 years of age. Items were considered present if either the parent or the child endorsed the item.

Independent variables

The independent variables for this analysis were child-level factors and parent-level factors that may play a role in ACE

Table 1 ACE comparison by gender.

| Variable                          | Overall (N = 257) | Girls (N = 118) | Boys (N = 139) | p value |
|----------------------------------|-------------------|----------------|----------------|---------|
| Within-household ACEs (Any)      | 195 (75.9)        | 91 (76.9)      | 104 (74.8)     | 0.77    |
| Death/illness witness            | 120 (46.7)        | 61 (51.7)      | 59 (42.4)      | 0.18    |
| Forced separation                | 58 (22.6)         | 29 (24.6)      | 29 (20.9)      | 0.58    |
| Suicide exposure                 | 29 (11.3)         | 20 (16.9)      | 9 (6.5)        | 0.01    |
| Abusive physical punishment      | 8 (3.1)           | 2 (1.7)        | 4 (3.3)        | 0.40    |
| Family violence (physical)       | 63 (24.5)         | 28 (23.7)      | 35 (25.2)      | 0.90    |
| Family violence (verbal/emotional)| 61 (23.7)       | 32 (27.1)      | 29 (20.9)      | 0.30    |
| Incarceration of a family member  | 60 (23.3)         | 32 (27.1)      | 28 (20.1)      | 0.24    |
| Sexual trauma                    | 9 (3.5)           | 7 (5.9)        | 2 (1.4)        | 0.11    |
| Emotional abuse or neglect       | 36 (14.0)         | 18 (15.3)      | 18 (12.9)      | 0.73    |
| Community ACEs (Any)             | 183 (71.2)        | 84 (71.2)      | 99 (71.2)      | 0.99    |
| Accident experience              | 23 (8.9)          | 11 (9.3)       | 12 (8.6)       | 0.99    |
| Accident witness                 | 49 (19.1)         | 22 (18.6)      | 27 (19.4)      | 0.99    |
| Medical trauma                   | 78 (30.4)         | 26 (22.0)      | 52 (37.4)      | 0.01    |
| Bullying                         | 74 (28.8)         | 30 (25.4)      | 44 (31.7)      | 0.34    |
| Physical attack                  | 47 (18.3)         | 18 (15.3)      | 29 (20.9)      | 0.32    |
| Mugging                          | 6 (2.03)          | 3 (2.5)        | 3 (2.2)        | 0.99    |
| Attack threat                    | 22 (8.6)          | 11 (9.3)       | 11 (7.9)       | 0.86    |
| Weapon attack                    | 4 (1.6)           | 1 (1.0)        | 3 (2.2)        | 0.73    |
| Kidnapping                       | 5 (1.9)           | 2 (1.7)        | 3 (2.2)        | 0.99    |
| Animal attack                    | 17 (6.6)          | 8 (6.8)        | 9 (6.5)        | 0.99    |
| Community violence               | 95 (37.0)         | 46 (39.0)      | 49 (35.3)      | 0.63    |
| Other ACEs (any)                 | 147 (57.2)        | 68 (57.6)      | 79 (56.8)      | 0.99    |
| Other trauma                     | 37 (14.4)         | 18 (15.3)      | 19 (13.7)      | 0.86    |
| Natural disaster                 | 15 (5.8)          | 8 (6.8)        | 7 (5.0)        | 0.74    |
| War/terrorism exposure via media | 130 (50.6)        | 60 (50.8)      | 70 (50.4)      | 0.99    |
| Direct war/terrorism exposure    | 0 (0.0)           | 0 (0.0)        | 0 (0.0)        | NA      |

Notes. **ACE** adverse childhood experience.
exposure. Child-level factors were reported by the parent or caregiver and included child gender (boy/girl), child race/ethnicity (Black, Hispanic), child age (years), and whether or not children were at risk for a clinical-range behavioral problem (Pediatric Symptom Checklist [PSC] score ≥28). The PSC is a general psychosocial screening instrument of emotional, cognitive, and behavioral symptoms in children (Jellinek et al., 1999). Parent-level factors were parent marital status as a proxy for primary support (married/unmarried), parent insurance status as a proxy for family socioeconomic status (insured [Medicaid or Private]/uninsured), and parent risk for depression measured with the 9-item version of the Patient Health Questionnaire (PHQ-9) (Kroenke et al., 2001). The PHQ-9 is a widely used, self-report depression screening instrument with established reliability and validity for detecting depression. The PSC and PHQ variables were considered clinical factors, while all others were considered sociodemographic factors.

Statistical Analysis

All analyses were conducted using R, version 3.2.2. To address aim 1, we compared the sample by race and gender on ACE variables using chi-square tests for differences in categorical variables and ANOVA for differences in continuous variables. In these bivariate tests, we considered p ≤ 0.01 to be statistically significant, given that our analysis included multiple tests. To address aim 2, we used linear regression models to identify child-level and parent-level factors that were associated with overall ACE count, within-household ACEs, and community ACEs. The first set of models used child and parent sociodemographic factors only. The second set of model added clinical factors (PSC score for children; PHQ-9 score for parents). Missing data were multiply imputed using chained equations; all analytic variables were missing at rates of less than 3%.

Results

Children were 8.7 years of age, on average (SD = 4.0) with a mean of 4 overall ACEs (SD = 3.4) at the time of screening (Table 1). Overall, the sample was 46% girls (N = 118). The overall racial proportions were 73% Hispanic (N = 187) and 27% Black (N = 70). Fifty-four percent (N = 139) of parents/caregivers were unmarried and 77% (N = 198) of parents reported having no insurance, which was a proxy for family socioeconomic status. In regards to behavioral health risk, 26.5% (N = 68) of children had a clinical-range PSC score and 30.4% (N = 78) of parents had a clinical-range PHQ-9 score.

When comparing the sample by gender, there were gender differences in two individual ACEs: medical trauma and suicide of someone close. More boys than girls experienced medical trauma (37.4% of boys versus 22.0% of girls, P = 0.01). More girls than boys experienced the suicide of someone close (16.9% of girls versus 6.5% of boys, P = 0.01). There were no significant gender differences in overall count of ACEs, count of within-household ACEs, or count of community ACEs. When comparing the sample by race (Table 2), a higher proportion of Hispanic children had parents who were unmarried (59.4 versus 38.6% of Black children, P = 0.005). Black children experienced more within-household ACEs (M = 2.63 versus M = 1.81, P = 0.003) than Hispanic children. We then examined race differences in exposure to individual ACE items. More Black children than Hispanic children experienced forced separation from a parent/caregiver (P = 0.004), physical family violence (P < 0.001), and incarceration of a family member (P < 0.001). More Hispanic than Black children experienced bullying (P < 0.001).

In the first set of models examining overall, within-household, and community ACEs with child and parent sociodemographic factors, older child age was associated with more ACEs in all models (P < 0.01 for each ACE category)

### Table 2 ACE comparison by race.

| ACE Category | Overall (N = 257) | Black (N = 70) | Hispanic (N = 187) | p Value |
|--------------|-------------------|---------------|-------------------|---------|
| Within-household ACEs (any) | 195 (75.9) | 59 (84.3) | 136 (72.7) | 0.08 |
| Death/illness witness | 120 (46.7) | 34 (48.6) | 86 (46.0) | 0.82 |
| Forced separation | 58 (22.6) | 25 (35.7) | 33 (17.6) | <0.01 |
| Suicide exposure | 29 (11.3) | 7 (10.0) | 22 (11.8) | 0.86 |
| Abusive physical punishment | 8 (3.1) | 2 (2.9) | 6 (3.2) | 0.99 |
| Family violence (physical) | 63 (24.5) | 31 (44.3) | 32 (17.1) | <0.01 |
| Family violence (verbal/emotional) | 61 (23.7) | 22 (31.4) | 39 (20.9) | 0.11 |
| Incarceration of a family member | 60 (23.3) | 27 (38.6) | 33 (17.6) | <0.01 |
| Sexual trauma experience | 9 (3.5) | 2 (2.9) | 7 (3.7) | 0.99 |
| Emotional abuse or neglect | 36 (14.0) | 12 (17.1) | 24 (12.8) | 0.49 |
| Community ACEs (any) | 183 (71.2) | 49 (70.0) | 134 (71.7) | 0.92 |
| Accident experience | 23 (8.9) | 8 (11.4) | 15 (8.0) | 0.54 |
| Accident witness | 49 (19.1) | 11 (15.7) | 38 (20.3) | 0.51 |
| Medical trauma | 78 (30.4) | 22 (31.4) | 56 (29.9) | 0.94 |
| Bullying | 74 (28.8) | 8 (11.4) | 66 (35.3) | <0.01 |
| Physical attack | 47 (18.3) | 11 (15.7) | 36 (19.3) | 0.64 |
| Mugging | 6 (2.03) | 3 (4.3) | 3 (1.6) | 0.42 |
| Attack threat | 22 (8.6) | 7 (10.0) | 15 (8.0) | 0.80 |
| Weapon attack | 4 (1.6) | 1 (1.4) | 3 (1.6) | 0.99 |
| Kidnapping | 5 (1.9) | 4 (5.7) | 1 (1.0) | 0.03 |
| Animal attack | 17 (6.6) | 2 (2.9) | 15 (8.0) | 0.23 |
| Community violence | 95 (37.0) | 34 (48.6) | 61 (32.6) | 0.03 |
| Other ACEs (any) | 147 (57.2) | 30 (42.9) | 117 (62.6) | 0.01 |
| Other trauma | 37 (14.4) | 6 (8.6) | 31 (16.6) | 0.15 |
| Natural disaster | 15 (5.8) | 3 (4.3) | 12 (6.4) | 0.75 |
| War/terrorism exposure via media | 130 (50.6) | 27 (38.6) | 103 (55.1) | 0.03 |
| Direct war/terrorism exposure | 0 (0.0) | 0 (0.0) | 0 (0.0) | NA |

Notes. ACE adverse childhood experience
Identifying as Hispanic was associated with 1.09 fewer overall ACEs ($P = 0.01$) and 1.10 fewer within-household ACEs than identifying as Black ($P < 0.01$). The second set of models added child and parent clinical variables. In these models, child age remained a significantly associated with ACEs in all models and identifying as Hispanic remained negatively associated with within-household (though not overall) ACEs. The clinical variables had strong associations to all three ACE variables. Children with a positive PSC score had more ACEs of all types (Overall: $\beta = 1.31$, $P = 0.01$; Within-household: $\beta = 0.72$, $P < 0.01$; Community: $\beta = 0.49$, $P = 0.03$). Children with parents who had higher PHQ-9 scores also had significantly more ACEs of all types, although this association was weaker than the PSC associations (Overall: $\beta = 0.11$, $P < 0.01$; Within-household: $\beta = 0.05$, $P = 0.02$; Community: $\beta = 0.04$, $P = 0.03$).

### Discussion

This study illuminates child-level gender and race differences in ACEs, as well as parent and child factors associated with exposure to different types of ACEs. In communities with high levels of exposure to community violence, Black children experienced more within-household ACEs than Hispanic children, including forced separation from a parent or caregiver, incarceration of a family member, and family violence. Hispanic children, on the other hand, experienced fewer total ACEs but more bullying. Though not all race differences research the level of statistical significance, at face value, we also observed higher rates of exposure to family violence among Black children and higher rates of violent media exposure among Hispanic children. When comparing the sample by gender,

#### Table 3 Factors associated with overall, within-household, and community ACEs.

|                        | 1. Overall ACEs ($R^2 = 0.29$) | 2. Overall ACEs ($R^2 = 0.35$) |
|------------------------|---------------------------------|---------------------------------|
|                        | $\beta$  | $SE$  | $P$      | $B$  | $SE$  | $P$      |
| Child age              | 0.45    | 0.05  | <0.01    | 0.41 | 0.05  | <0.01    |
| Child race (Hispanic)  | -1.09   | 0.43  | 0.01     | -0.65| 0.43  | 0.13     |
| Child gender (girl)    | -0.31   | 0.37  | 0.40     | -0.30| 0.36  | 0.04     |
| Parents unmarried      | 0.17    | 0.39  | 0.66     | 0.35 | 0.38  | 0.35     |
| Parents uninsured      | -0.55   | 0.43  | 0.21     | 0.43 | 0.42  | 0.31     |
| Child PSC Score ≥28    | 1.31    | 0.42  | 0.01     |
| Parent PHQ score       | 0.11    | 0.04  | <0.01    |

|                        | 1. Within-household ACEs ($R^2 = 0.22$) | 2. Within-household ACEs ($R^2 = 0.27$) |
|------------------------|-------------------------------------|-------------------------------------|
|                        | $\beta$  | $SE$  | $P$      | $B$  | $SE$  | $P$      |
| Child age              | 0.21    | 0.03  | <0.01    | 0.19 | 0.03  | <0.01    |
| Child race (Hispanic)  | -1.10   | 0.25  | <0.01    | -0.87| 0.25  | <0.01    |
| Child gender (girl)    | 0.09    | 0.22  | 0.69     | 0.09 | 0.21  | 0.66     |
| Parents unmarried      | -0.14   | 0.23  | 0.53     | -0.05| 0.22  | 0.82     |
| Parents uninsured      | 0.30    | 0.25  | 0.24     | 0.23 | 0.25  | 0.36     |
| Child PSC Score ≥28    | 0.72    | 0.25  | <0.01    |
| Parent PHQ score       | 0.05    | 0.02  | 0.02     |

|                        | 1. Community ACEs ($R^2 = 0.26$) | 2. Community ACEs ($R^2 = 0.30$) |
|------------------------|---------------------------------|---------------------------------|
|                        | $\beta$  | $SE$  | $P$      | $B$  | $SE$  | $P$      |
| Child age              | 0.22    | 0.03  | <0.01    | 0.20 | 0.03  | <0.01    |
| Child race (Hispanic)  | -0.04   | 0.23  | 0.86     | 0.13 | 0.23  | 0.56     |
| Child gender (girl)    | -0.38   | 0.20  | 0.05     | -0.38| 0.19  | 0.05     |
| Parents unmarried      | 0.27    | 0.20  | 0.19     | 0.34 | 0.20  | 0.09     |
| Parents uninsured      | 1.31    | 0.23  | 0.18     | 0.26 | 0.22  | 0.24     |
| Child PSC Score ≥28    | 0.49    | 0.23  | 0.03     |
| Parent PHQ score       | 0.04    | 0.03  | 0.03     |

Notes. Linear regression models examining overall ACE count, within-household ACE count, and community ACE count. The first set of models (labeled 1 for each outcome) examine relationships between ACEs and child and parent sociodemographic factors. The second set of models (labeled 2 for each outcome) add child and parent clinical factors.

ACE adverse childhood experience, PHQ patient health questionnaire (9-item version), PSC pediatric symptom checklist.
more girls than boys experienced the suicide of someone close to them, while more boys than girls experienced medical trauma. The cumulative ACE count and level of within-household versus community ACEs appeared to be relatively stable across gender and race groups. This finding may be due to the high-ACE nature of the sample (mean of four ACEs at mean age of eight years, compared with population studies finding a mean of one ACE before age 18 for 60% of adults) and lack of a low-ACE or non-exposed group for comparison (Felitti et al., 1998; Merrick et al., 2018).

In fully saturated models exploring child and parent factors associated with community, within-household, and overall ACEs, older child age was associated with more ACEs in all categories. This finding is consistent with studies using both clinical and community samples. Because ACEs accumulate over time, older children and adolescents tend to report more ACEs than younger children (McCutcheon et al., 2009). Younger children also may not have the developmental maturity, vocabulary, or emotional factors to identify ACEs without a parent’s supplemental report, though this particular issue may have been mitigated in our analysis because parent reporting was used. Identifying with Hispanic race was associated with fewer within-household ACEs, compared to ACEs for children identifying with Black race. This finding is consistent with prior studies finding lower rates of ACEs among Hispanic families (Slopen et al., 2016). First-generation Hispanic families are known to have protective social characteristics in family practices, such as positive socialization and developmental support for their young children (Fuller & Coll, 2010). Another possible explanation is under-reporting of ACEs among this study subgroup. The higher levels of within-household ACEs among Black children may in part reflect unique structural racism factors affecting Black parents and families in the Chicago community that increase children’s risk for exposure to adverse familial or household events. These factors may include historical redlining of minority neighborhoods, concentrated gang activity and community crime, socioeconomic resource deprivation, targeted policing and law enforcement, and mass incarceration (Del Torro et al., 2019; Krig et al., 2016; Rigg et al., 2019). Many of these issues directly affect parents and households, creating an indirect pathway to child harm.

In addition to these child and parent sociodemographic factors, there was a strong relationship of child and parent clinical factors to ACEs. Having risk for a clinical-range behavioral problem for children was associated with higher levels of ACEs in all categories. Because this particular sample was of children who had not received treatment for mental health, these findings also point to potentially concerning unmet need for mental health services among Black and Hispanic children. Children with behavioral health problems—as well as those with developmental disabilities—are more vulnerable to child abuse and other kinds of adversity than children without behavioral health problems, and there are simultaneously known racial/ethnic disparities in mental health service access that may compound the deleterious impact of adversity for children who racial/ethnic minorities (McElroy & Rodriguez, 2008; Stringer & La Greca, 1985). Children with behavioral problems may be more difficult to parent effectively and empathize with, contributing to harsh discipline practices and low frustration tolerance among caregivers (McElroy & Rodriguez, 2008).

Likewise, parent risk for depression was associated with higher levels of ACEs in all categories. Evidence suggests that depression among parents is a strong risk factor for ACEs in the lives of their children, particularly for parents who have their own ACE history (Chaffin et al., 1996; Chemtob et al., 2013; Pears & Capaldi, 2001). Parents with depression have been found to exhibit more negative affect states, more intrusive parenting, less appropriate response to emotional signals or needs from their children, and less attention and engagement with their children (Dawson et al., 1994). Together, these characteristics can impede parents’ ability to detect safety threats to their children or even contribute to parents being a source of stress or adversity to their children (Chemtob et al., 2013).

One of the challenges of disentangling the relationships between child ACEs, child risk for behavioral problems, and parent risk for depression is that all three of these variables are interconnected and bi-directional. While child behavioral problems and parent depression can contribute to increased risk for ACEs, ACEs can lead to child behavioral problems and parenting challenges that affect parent mental health. Many studies on these relationships are cross-sectional, including the current study, and more prospective, longitudinal research is needed to identify the direction and strength of relationships among all three variables. However, the racial/ethnic differences found in this sample are consistent with prior studies. Evidence suggests that Black children compared with children from other racial groups may be more likely to experience physical abuse and parental incarceration, due in part to race-related structural inequities in communities and society, as was found in our sample (Bailey et al., 2017; Thombs et al., 2007; Perry et al., 2013; Wildeman et al., 2018). Bullying and media exposure to violence were experienced by more Hispanic children than Black children in our sample, though only bullying exposure was significantly different in bivariate tests. These results have been found with other samples comparing White, Black, and Hispanic youth.

Prior studies suggest that poor parental communication, family processes, school difficulties, and acculturation or language challenges could be associated with higher levels
of bullying among Hispanic youth (Pottie et al., 2015; Spriggs et al., 2007). There is a wide literature on the harm of violent media exposure on children, and its behavioral and health sequelae are similar to that of other ACEs. However, violent media exposure is not often conceptualized as an ACE and little is known about racial differences in exposure to this ACE (Munzer et al., 2018; Strasburger et al., 2010). The higher levels of exposure to violent media found with Hispanic youth in our sample may be related to the open expression of violence in Hispanic media, high levels of gang violence, and government corruption in Latin American countries that contribute to normalization of violence exposure (Briceno-Leon & Zubillaga, 2002; Lugo, 2008). Community partners from our study noted that Black families in Chicago often report that they do not watch the news—a likely source of media violence exposure—due to not having cable access, avoiding violent stories, lack of availability during cable news hours, cultural preferences for other genres, or to attempt to reduce electricity bills. Research on ACEs in the future should consider the role of violent media exposure as a potentially traumatic experience and explore sociodemographic differences in violent media exposure with clinical and community samples.

There are strengths and limitations to this analysis. The sample included racial/ethnic minority youth with high levels of ACEs who were from vulnerable communities, allowing for an in-depth analysis of differences in ACEs. Our study used a comprehensive ACE screener that included both within-household and community ACEs as well as ACEs identified by community partners as relevant to youth they serve. This broad range of ACEs is not always assessed in research or clinical practice and was useful for identifying race and gender differences with our sample. The study had limitations as well. The data were cross-sectional and there was no White or non-exposed comparison group. As such, the direction of associations identified in this analysis are not known and there may be additional disparities for racial minorities as a whole that our study did not capture. While the high-ACE nature of the sample was useful for identifying patterns of ACEs within sociodemographic subgroups, homogeneity in this domain may have prevented us from detecting sociodemographic differences in cumulative ACE count that is seen in more representative community-based samples. It is possible that there were other unmeasured confounders in the kinds of families who agreed to participate in this research that our analysis cannot account for, and we did not have detailed information about parents/caregivers. For children under the age of 12, only parent-report data was available for ACEs. It is possible that parents with more depression symptoms were either more likely to perceive ambiguous stressors as traumatic or to be under-informed on their child’s traumatic experiences. The findings of this study are not generalizable to all communities, as the study used a clinical sample.

This study suggests that there are racial/ethnic differences in ACEs not only in cumulative ACE count, but also by type of ACE. It also suggests that both parent and child mental health vulnerabilities are associated with ACEs of all kinds. ACE screeners typically include within-household ACEs, but youth may also encounter a broader range of ACEs in their communities that go unassessed and unaddressed (Felitti et al., 1998). In pediatric settings, clinicians who screen for ACEs should consider including community ACEs and should be aware that certain types of ACEs, especially those arising from community environments, may harm the health of children (Mersky et al., 2017). Generalizations regarding specific gender and race differences in ACE exposure cannot be applied to every individual child, but awareness of ACEs that might disproportionately affect certain communities or patient populations can help clinicians tailor treatment recommendations and make connections to other child-serving organizations in the community.

In practice, trauma-informed care processes and attention to intergenerational trauma may be useful for targeting risk associated with ACEs among minority children (Yang et al., 2018). This may involve ACE screening for parents as well as children in settings where parent support resources are available and trauma-informed approaches to pediatric care. Trauma-informed care is an approach to service delivery that involves recognizing and responding to the potential impact of trauma on individuals, mobilizing strengths and protective factors, and avoiding service delivery structures that might be disempowering or retraumatizing (Substance Abuse & Mental Health Services Administration, 2014). Such care also involves attention to the needs of parents/caregivers and connecting both children and parents with evidence-based, trauma-specific treatment (e.g., trauma-focused cognitive behavioral therapy) when indicated. Integrated care settings, such as the FQHCs included in this research, are ideal for intergenerational ACE screening and trauma-informed practice. Future research on ACEs should further explore the structural conditions (e.g., structural racism, segregation, socioeconomic resource deprivation, over-policing) that allow ACEs to flourish in communities and whether policies targeting these conditions can reduce exposure to ACEs among children.

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Compliance with Ethical Standards

Conflict of Interest The authors declare no competing interests.

Ethics Approval This research involved human subjects and was approved by ethical review boards at the University of California, Los Angeles and the University of Illinois, Chicago. This study was performed in accordance with the ethical standards set in the 1964 Declaration of Helsinki and its later amendments.

Informed Consent Informed consent was obtained from all parents and caregivers.

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