

2015

Childhood adversity, adult homelessness, and the intergenerational transmission of risk: A population-representative study of individuals in households with children

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This is a prepress version of the manuscript. The final version can be obtained from the publisher:

Cutuli, J. J., Montgomery, A. E., Evans-Chase, M., & Culhane, D. P. (2015). Childhood adversity, adult homelessness, and the intergenerational transmission of risk: A population-representative study of individuals in households with children. *Child and Family Social Work*, doi:10.1111/cfs.12207

ABSTRACT

This study tested for associations between childhood adversity, adult homelessness, and contexts of developmental risk in households with children. Data were drawn from the 2010 Washington State Behavioral Risk Factor Surveillance System, representative of the population of Washington State residents. Considering adults in households with children, those who experienced higher levels of childhood adversity were more likely to have experienced homelessness in adulthood. Meanwhile, a 10-factor index of cumulative developmental risk was independently associated with childhood adversity and with adult homelessness. Adult homelessness appears to represent a circumstance through which past childhood adversities are brought forward and associated with contexts of developmental risk for subsequent generations of children.

During 2011, an estimated 1,502,196 individuals spent at least one night in an emergency shelter or transitional housing program in the United States, and about 537,414 of these were individuals in families (U.S. Department of Housing and Urban Development, 2012). Older estimates suggest a lifetime prevalence of homelessness around 14.0% to 15.2% of the population (Link *et al.*, 1995). Adult homelessness has been associated with a variety of concomitant sociodemographic risk factors and higher rates of problems in multiple areas of functioning (Authors, 2013; Chamberlain & Johnson, 2013). Developmental risk factors refer to characteristics of a child's or family's situation or specific experiences that are associated with lower levels of functioning and worse outcomes among groups of individuals that experience those risks relative to those who do not (Obradović *et al.*, 2012). Children living in a household wherein an adult has experienced homelessness may be subjected to additional risks. Meanwhile, other factors in adults' developmental history—especially histories of adversity during their childhoods—may simultaneously contribute to risk for adult homelessness as well as to a more pervasive context of higher developmental risk for the subsequent generation. This study focuses on individuals in households with children using data from the population-representative Washington State Behavioral Risk Factor Surveillance System (BRFSS). First, we test for a positive relation between childhood adversity and adult homelessness. We then investigate whether childhood adversity accounts for the relation between homelessness and developmental risk, or if these are separate associations. Each analysis examines risk for having experienced adult homelessness once as well as risk for experiencing homelessness multiple times.

Childhood adversity and adult homelessness are each uniquely related to lower levels of functioning and higher rates of problems. Homelessness often represents a challenging circumstance directly related to the loss of housing and residential mobility, among other factors. Homelessness is also a marker for a higher level of more stable risk, as other sociodemographic risk factors and indicators of poor functioning tend to be present at higher rates among adults who experience homelessness

(Chamberlain & Johnson, 2013; Park *et al.*, 2011; Solliday-McRoy *et al.*, 2004). For example, in past analyses of Washington State BRFSS data, childhood adversity scores independently predicted adult homelessness, mental health problems, and worse health (Authors, 2013). Links between childhood adversity and negative outcomes experienced during adulthood were strongest when statistical relations between adversity and each outcome were considered in isolation. Nevertheless, higher rates of childhood adversity still imparted considerable risk for homelessness and for other problems when considered simultaneously in analyses. While homeless experiences may contribute to differences in functioning over time, factors such as an unprotected history of childhood adversity appear to contribute to multiple adult problems, of which adult homelessness is one (Anda *et al.*, 2007; Authors, 2013; Dube *et al.*, 2001; Dube *et al.*, 2003; Felitti *et al.*, 1998).

Adult functioning and wellbeing is important for the individual as well as for families with children. Advances in developmental science have called new attention to the intergenerational transmission of risk and competence (Hammen *et al.*, 2012; Shaffer *et al.*, 2009; Sroufe *et al.*, 2005): caregivers' experiences of adversity during their own childhoods, and later in life, contribute to differences in functioning with implications for subsequent generations of children through complex processes that unfold over time. Caregiver competence refers to how well caregivers are functioning in key domains (e.g., work and education, relationships, conduct, mental health, parenting behaviour), and caregiver competence is robustly associated with better outcomes for children. Caregivers with adequate functioning in key domains are more likely to have children who show competence in developmental outcomes and resilience in the context of adversity (Shaffer *et al.*, 2009; Sroufe *et al.*, 2005). In addition, higher levels of caregiver competence are associated with developmental contexts that represent lower risk for children and youth (Gest *et al.*, 1993).

Caregiver competence is particularly important among children in families who experience homelessness (Cutuli & Herbers, 2014; Herbers *et al.*, 2014a; Herbers *et al.*, 2014b; Perlman *et al.*,

2012). For example, Herbers and colleagues (2011) demonstrated that higher levels of caregiver competence were related to better functioning at school among a sample of kindergarten-aged children staying in family emergency shelter, an effect that was mediated through better child cognitive functioning. Similarly, Buckner and colleagues (2003) found that higher levels of competent parenting in the form of monitoring was associated with better outcomes in a sample of very low income school-aged children and youth, in which homeless families were overrepresented. The mechanisms through which caregiver competence has a positive effect on children appear to be complex, involving processes at all levels of the individual and her context over time (e.g., interacting effects of shared physiological characteristics, family factors and experiences, neighbourhood settings Cutuli & Herbers, 2014). Given this complex continuity, it is important to understand how past adversity in caregivers' lives contributes to risk for homelessness and creates other contexts of risk for children. This may unveil novel strategies for preventing the intergenerational transmission of adversity and homelessness.

The current study tested hypotheses related to the association between adults' experience of childhood adversity, current developmental risk for children, and adult homelessness. Data were drawn from the 2010 Washington State BRFSS, a population-representative survey coordinated by the Centers for Disease Control and Prevention (CDC). Analyses examined associations between childhood adversity in the lives of parents, adult homelessness (never homeless, homeless once, or repeated homelessness), and cumulative developmental risk for children (e.g., other indicators of adult competence). Based on past findings, we hypothesized that higher levels of childhood adversity would place adults at greater risk for homelessness. Furthermore, we expected adult homelessness to be associated with higher levels of current developmental risk in the family, denoting contexts of adversity for children in these households. We tested these hypotheses with respect to participants who had never experienced homelessness, had been homeless one time, and had been homeless multiple times.

METHODS

This study was approved by the University of Pennsylvania Institutional Review Board.

Sample and Data.

This study used data from the 2010 BRFSS in Washington State, a state-based health survey. The BRFSS elicited self-report information from adults using a sample of both land-line and cellular telephone numbers. The Washington State BRFSS included questions related to participants' experience of adult homelessness and repeated homelessness. These questions, unique to Washington State, were included only during the final 5 months of data collection due to factors beyond the authors' control; therefore, this study considers only data from households that included children among the 6,017 total respondents to the questions related to adult homelessness in the 2010 BRFSS. We weighted analyses based on several survey design factors: number of residential telephones in the household, number of adults in the household, geographic stratification, telephone density stratification, and the adult population in each county. Weighting the data minimizes potential bias by maximizing the generalizability of study findings to the entire population of Washington State. In addition to questions related to adult homelessness and repeated homelessness, participants responded to a range of items asking about demographic characteristics, adverse childhood experiences, household composition, and other indicators of adult functioning and well-being.

Adult Homelessness and Repeated Homelessness. The 2010 Washington State BRFSS assessed participants' experience of adult homelessness since turning age 18. Responses to these items allowed the study team to classify individuals as (a) having never experienced homelessness, (b) having experienced homelessness one time, and (c) having experienced homelessness multiple times. Additional information on these items and response rates in the general population are published elsewhere (Authors, 2013).

Demographics. The BRFSS data include information on individual characteristics including age (continuous), sex, racial/ethnic background, income, and household composition. We dummy-coded

dichotomous variables: sex (1 = male, 2 = female) and minority status (0 = non-Hispanic/White, 1 = non-White or Hispanic). Participants noted annual household income as a range; to accommodate distributions of responses, we dichotomized annual income as more (1) or less than (0) \$25,000. This threshold was chosen to correspond in a conservative way with the requirements to qualify for at least reduced price meals under the National School Lunch Program, an established risk factor indicating low-income status for children (e.g., see Cutuli *et al.*, 2013; Herbers *et al.*, 2012). Individuals also reported the number and ages of any children living in their household; we considered individuals living with one or more person younger than 18 years to be living in a household with a child.

Childhood Adversity. The Washington State BRFSS used an 11-item assessment of childhood adversity that inform eight categories, following from the work of Felitti and colleagues' (1998) Adverse Childhood Experiences (ACE) scale. This 11-item scale includes the following adversities: mental illness or substance abuse in household; an incarcerated household member; parental separation or divorce; physical aggression between parents; physical aggression toward child; emotional abuse; and sexual abuse. These items produce an ACE score (maximum = 8) based on the number of adversity categories endorsed by the individual's recollection of their own childhood experiences. The ACE scale has been used widely in past work, linking childhood adversity to a range of health and mental health outcomes (Edwards *et al.*, 2003; Felitti *et al.*, 1998).

Cumulative Developmental Risk Score. As described, caregiver competence and family composition factors have been linked to differential outcomes for children. Cumulative risk scores are an established means of indexing the amount of risk in a household context, a method commonly used in developmental science (Cutuli & Herbers, 2014; Masten *et al.*, 2009; Obradović *et al.*, 2012). We computed cumulative risk scores to reflect the sum of the number of risk factors based on adult functioning and wellbeing as well as family composition (Burchinal *et al.*, 2000; Sabates & Dex, 2013). Each of these risk factors is established by past work in developmental science, linking the presence of

these factors to lower average levels of functioning among groups of children who experience them (e.g., see Burchinal *et al.*, 2000; Cutuli & Herbers, 2014; Masten *et al.*, 2009; Obradović *et al.*, 2012; Sabates & Dex, 2013). These risk factors are:

Fair or Poor Health. Participants described their health on a five-point scale from “excellent” to “poor.” Risk was noted for individuals who reported “poor” or “fair” health.

History of Incarceration. Respondents reported whether they had ever served time or were sentenced to serve time in prison, jail, or other corrections facility after age 18.

Alcohol Problem. An alcohol problem was present for individuals who reported either binge drinking or heavy alcohol consumption during the previous 30 days. Binge drinking refers to any episode of drinking five or more drinks for men or four or more drinks for women on one occasion. Heavy alcohol consumption refers to two or more drinks per day for men or one or more drinks per day for women.

Mental Health Problem. Individuals completed the six-item version of the Kessler Psychological Distress Scale. This scale asks about the frequency of symptoms related to anxiety, hopelessness, restlessness, and depression over the preceding 30 days. This six-item scale has been validated in past work (Kessler *et al.*, 2002; Kessler *et al.*, 2003; Kessler *et al.*, 2010), and is commonly used in epidemiological surveys like the BRFSS. We used a threshold (total score of 13 or greater) to indicate developmental risk.

Unemployed. We considered individuals who were out of work or unable to work to be unemployed; this did not include individuals identified as students, retired, or homemakers.

No High School Diploma. Risk was noted based on whether each individual either completed grade 12 or obtained a General Educational Development (GED) certificate.

Single-Adult Households. Risk was noted for single-adult households, indicated by at least one child and an unpartnered and unmarried adult.

Younger than Age 18 at Birth of Oldest Child. We calculated respondent ages relative to the age of the oldest child in the household. This risk factor was noted for individuals who were less than 18 years older than the oldest child in the household.

Four or More Children in Household. We categorized individuals based on whether there were four or more people in the household younger than 18 years.

Two Children Born within Two Years. We created a variable to reflect households that included two children whose ages were within two years of each other.

Analytic Approach.

The analyses tested for associations between adult homelessness, childhood adversity experienced by the respondent, and cumulative developmental risk for children and youth in the household. Analyses considered groups separately based on whether they had experienced no homelessness, a single episode of homelessness, or multiple episodes. We first analysed relations between continuous variables using Pearson's correlation coefficient. We then used multinomial logistic regression analyses to predict adult homelessness from childhood adversity, statistically controlling for the influence of respondent age, sex, minority status, and income. Finally, we tested for associations between current cumulative developmental risk and both childhood adversity and homelessness experience using analysis of covariance, again controlling for age, sex, minority status, and income.

RESULTS

Table 1 presents rates and averages of key variables. A weighted total of 5.5% ($n = 50,866$) of individuals reported experiencing homelessness at least once as an adult, and 2.2% ($n = 19,716$) noted that they had been homeless more than once since turning 18. When considered without covariates, childhood adversity is mildly but positively and significantly related to cumulative developmental risk ($r = 0.26$; $p < 0.001$).

A multiple logistic regression tested for the hypothesized relation between childhood adversity predicting homeless experience (never; single episode, multiple episodes) controlling for age, minority status, sex, and income. Relative to never homelessness individuals, each one-point increase in childhood adversity score increased the risk of having experienced a single episode of homelessness by 56.7% ($\text{Exp}(B) = 1.57$; 95% CI: 1.56–1.58; $p < 0.001$). Meanwhile, each one-point childhood adversity score increased the risk of having experienced multiple episodes of homelessness by 51% ($\text{Exp}(B) = 1.51$; 95% CI: 1.50–1.52; $p < 0.001$). A planned contrast noted that each one-point increase in childhood adversity score reduced the risk of multiple episodes of homelessness relative to that of single episode homelessness by 3.6% ($\text{Exp}(B) = 0.96$; 95% CI: 0.96–0.97; $p < 0.001$).

Figure 1 illustrates the relation between childhood adversity score and individuals' experience of adult homelessness (combining both single episode and multiple episode cases). The proportion of individuals who report experiencing adult homelessness increased with the number of childhood adversities that they endorsed. For example, 1.4% of individuals who reported a childhood adversity score of 0 reported adult homelessness, while 38.5% of those who reported a childhood adversity score of 8 reported adult homelessness.

An analysis of covariance tested for the hypothesized relations predicting current cumulative developmental risk from childhood adversity scores and homelessness experience, again controlling for age, minority status, sex, and income. When considered together in the model, childhood adversity score ($F(1, 803087) = 35,169.23$; $p < .001$) and homelessness experience ($F(2, 803087) = 8,611.89$; $p < .001$) each predicted the cumulative developmental risk score. Follow-up pairwise comparisons (least significant difference) revealed significant differences in the marginal means for the never homeless group relative to the group that had been homeless only one time (marginal mean difference = -0.66 ; std. error = 0.01 ; $p < .001$) and relative to those who had been homeless multiple times (marginal mean difference = -0.69 ; std. error = 0.01 ; $p < .001$). We also found a small but significant difference in

cumulative developmental risk score between the group with a single homelessness episode compared to those with multiple episodes of homelessness (marginal mean difference = -0.03; std. error = 0.01; $p = .009$).

DISCUSSION

Adult homelessness is a prevalent problem for individuals in households with children, signalling a context wherein past childhood adversity is carried forward and associated with current contexts of developmental risk for the subsequent generation of children. In the present study, almost 51,000 (5.5%) individuals in households with children experienced homelessness at some point during their adult lives, with nearly one-half of those experiencing homelessness more than once. Increasing levels of childhood adversity were related to higher risk for ever having experienced adult homelessness, including both single-episode and multiple-episodes of homelessness, even when accounting for the influence of other key factors (e.g., sex, age, minority status, income).

Childhood adversity in the lives of the adult participants and adult homelessness were each linked to the current level of developmental risk in the household. Ten established risk factors measured the level of cumulative developmental risk for children in the context of each household. Childhood adversity and cumulative developmental risk were significantly related, even when taking into account the influences of other factors like the sex, age, income level, and minority status of the participant. Those who had experienced adult homelessness were more likely to be living in contexts of greater developmental risk for the subsequent generation of children. Homelessness seems to be simultaneously and independently related to both past childhood adversity for adults in the household and current contexts of developmental risk for children in the household.

Adults' experiences of adversity in their own childhoods were also related to later adult homelessness. These findings are consistent with past work that links histories of adversity to homelessness (Authors, 2013; Blankertz *et al.*, 1993; Burt, 1999; Herman *et al.*, 1997; Koegel *et al.*, 1995;

Nyamathi *et al.*, 2001; Piliavin *et al.*, 1993; Shinn *et al.*, 1991; Stein *et al.*, 2002; Tam *et al.*, 2003), and a variety of other outcomes such as differences in physiological functioning (Cutuli *et al.*, 2010; Shonkoff *et al.*, 2012), health and chronic disease (Anda *et al.*, 2006; Dong *et al.*, 2003; Dong *et al.*, 2004; Dube *et al.*, 2009), foster care placement, mental illness (Anda *et al.*, 2007; Anda *et al.*, 2006; Anda *et al.*, 2002; Dube *et al.*, 2009), alcohol and substance use problems (Anda *et al.*, 2002; Dube *et al.*, 2003), relationship problems (Slominski *et al.*, 2011; Wolfe *et al.*, 2001), lower educational achievement (Perlman & Fantuzzo, 2010), and juvenile justice involvement and incarceration (Herz *et al.*, 2010; Huang *et al.*, 2012; Maschi *et al.*, 2008). The negative influences of childhood adversity on multiple domains of developmental competence likely contribute to pathways of risk for adult homelessness and other problems.

Nevertheless, childhood adversity and adult homelessness are related to adult functioning and cumulative developmental risk in ways that are at least partially independent. The cumulative developmental risk score in the current study largely indexes aspects of poor adult functioning that have been implicated in worse child outcomes; the relations between childhood adversity and cumulative risk had links to adult homelessness that were largely independent. As in other studies (Authors, 2013), measures of adult functioning did not wholly account for the association between childhood adversity and adult homelessness when considered together. This underscores both the heterogeneity of pathways to homelessness (Chamberlain & Johnson, 2013) as well as the heterogeneity of adult outcomes following childhood adversity (Rutter, 2013). Developmental science has long recognized that pathways are probabilistically influenced by many factors in complex ways, with change possible at many points leading the individual toward either competent functioning and resilience or maladaptation and problems (Cicchetti & Rogosch, 1996; Cutuli & Herbers, 2014; Masten *et al.*, 2009; Rutter & Sroufe, 2000; Sroufe, 1997; Sroufe & Rutter, 1984). The current study provides insight into these pathways using broad indicators and the strength of a population-representative design. Additional research utilizing a

range of different approaches is necessary and warranted to better understand the detailed processes that comprise the heterogeneous pathways beginning with childhood adversity and leading toward or away from adult homelessness.

Compared to those who had never been homeless as adults, the pattern of findings is generally similar when considering individuals who had experienced one episode of adult homelessness and those who experienced homelessness multiple times: each group showed higher levels of both childhood adversity and current cumulative developmental risk relative to the never-homeless group. However, findings differed when comparing those who experienced adult homelessness one time and those with multiple homeless episodes. The difference in cumulative developmental risk for the group who had been repeatedly homeless was greater than the single-episode group, but to a much more modest degree. Furthermore, the direction of the effect of childhood adversity changed: higher levels of childhood adversity were associated with lower risk for repeated adult homelessness compared to single-episode homelessness. We are not aware of any other work that compares individuals with one versus multiple episodes of homelessness on childhood adversity. These findings require replication, but suggest that childhood adversity makes a stronger contribution to single-episode homeless profiles than profiles involving more than one episode of homelessness.

Limitations and Future Directions.

The inclusion of housing and residential instability questions in the Washington State BRFSS permitted analyses that can inform practice and policy decision making. The BRFSS contains data on a wealth of outcomes and contextual factors of relevance to stakeholders interested in the wellbeing of individuals and families experiencing homelessness. The population-representative approach yielded findings of a quality that is rare among studies on the contexts of homelessness. Nevertheless, analyses were limited by the information available in the BRFSS data, which includes imprecision in certain constructs: the nature of the relationship between the participant and the child(ren) in the household;

when the homelessness episode(s) occurred; specific information on the nature of the homelessness experience; and whether the child(ren) were present during the homeless episode(s). In addition, child outcomes were not available. It is similarly unclear as to the timing of the homelessness episode relative to the developmental risks. It may be that the developmental risk factors contributed to homelessness in some cases, that homelessness contributed to the aetiology of developmental risk factors in some cases, and that, in some cases, the presence of developmental risk factors are unrelated to the homelessness experience. Additional work is needed to understand more detailed processes of risk and developmental trajectories of maladaptation beyond the information that is available in the BRFSS.

The BRFSS is intended to provide information on epidemiological patterns ‘writ large,’ without much information on detailed processes. Future work should continue to elaborate on explanatory models of developmental pathways from childhood adversity to adult homelessness, on pathways of resilience, and the relation between adult homelessness and the transmission of developmental risk to subsequent generations (Cutuli & Herbers, 2014).

Implications.

The current findings emphasize the links between adults’ childhood adversity, experience of homelessness during adulthood, and ongoing contexts of developmental risk for children. Childhood adversity continues to be a significant predictor of worse adult functioning—in this case, homelessness—which is also associated with broader contexts of risk for the next generation. Preventing childhood adversity and/or providing compensating protective factors holds the potential to not only prevent later adult homelessness, but also interdict associated intergenerational transmission of risk through bolstering caregiver competence in multiple domains. Additional work should add to the evidence base for effective programs with respect to ameliorating the negative impact of childhood adversity and homelessness (Herbers & Cutuli, 2014).

Furthermore, attention to individuals' developmental histories will likely yield useful information for practitioners and providers charged with tailoring comprehensive social service interventions. Comprehensive attention in this regard includes not only attention to adversity and failure in people's developmental histories, but also strengths, protective factors, and competence (Cutuli & Herbers, 2014). Practitioners can ask about individuals' history with adversity as but one part of an assessment that includes a range of other factors alongside current functioning and challenges to guide clients toward more effective services.

The links between adult homelessness and contexts of developmental risk also represent an opportunity for prevention and coordinated intervention. On one hand, housing and other mainstream services for homeless adults could continue to target developmental risk factors, especially those that denote parent competence like addressing alcohol use problems, mental illness, and education. Developmental education and parenting interventions may also be warranted for those experiencing family homelessness (Cutuli & Herbers, 2014; Perlman *et al.*, 2012), though not necessarily during the acute phase of a homeless episode. In addition, services for at-risk adults and families may need to attend to housing concerns through primary, secondary, and tertiary intervention efforts given the prevalence and relations with homelessness. This will require interagency collaboration, especially between housing and child and family services agencies.

Conclusion.

Past childhood adversity predicts adult homelessness, which is also associated with contexts of increased cumulative developmental risk for the subsequent generation. While additional research is needed to understand the mechanisms and processes of this intergenerational transmission of risk, the current study affirms connections between these social ailments applying a population-representative design to produce findings that are uniquely informative. The findings underscore that problems are interrelated, sometimes across many years. Because needs are not confined to domains typically

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associated with a single agency's mandate, services to address these needs must be integrated across agencies with the aim of increasing adult functioning and preventing the intergenerational transmission of homelessness and risk.

Table 1. Frequencies of Key Variables (N = 916,827)

	Total	Ever homeless		Homeless	
		Yes	No	Once	Repeated
Number	916,827 (100.0%)	50,866 (5.5%)	865,941 (94.5%)	29,631 (58.3%)	19,716 (38.8%)
Repeated Adult Homelessness	19,716 (2.2%)	19,716 (38.8%)	0	0	19,716
Race & Ethnicity					
Non-Hispanic, White	665,195 (72.6%)	39,622 (77.9%)	625,573 (72.2%)	23,185 (78.2%)	15,379 (78.0%)
Non-White and/or Hispanic	240,394 (26.2%)	9,696 (19.1%)	230,699 (26.6%)	5,798 (19.6%)	3,418 (17.3%)
Sex					
Male	446,648 (48.7%)	18,535 (36.4%)	428,112 (49.4%)	10,286 (34.7%)	7,968 (40.4%)
Female	470,179 (51.3%)	32,350 (63.6%)	437,828 (50.6%)	19,345 (65.3%)	11,748 (59.6%)
Annual Household Income					
Less than \$25,000	157,261 (17.2%)	26,019 (51.1%)	131,242 (15.2%)	14,756 (49.8%)	9,898 (50.2%)
Greater than \$25,000	655,109 (71.5%)	21,466 (42.2%)	633,643 (73.2%)	13,518 (45.6%)	7,775 (39.4%)
Age in Years, M (SD)	37.49 (10.48)	36.50 (8.73)	37.54 (10.57)	37.89 (9.19)	35.20 (7.27)
ACE Score, M (SD)	1.90 (2.02)	4.35 (2.07)	1.75 (1.93)	4.38 (1.89)	4.19 (2.24)
Cumulative Developmental Risk Score, M (SD)	1.07 (1.21)	2.41 (1.77)	0.99 (1.12)	2.32 (1.47)	2.59 (2.19)

Notes. Values may not sum as a result of missing data. Percentages reported for number of participants in each category are row, rather than column, percentages.

Table 2. Multinomial logistic regression analysis predicting homelessness group. Values refer to odds ratios (95% confidence intervals).

	<u>Homelessness Group</u> ^a	
	<u>Single-Episode</u>	<u>Multiple-Episodes of Homelessness</u>
Age	1.022 (1.021 - 1.024)	1.007 (1.005 - 1.009)
Minority Status ^b	1.566 (1.517 - 1.617)	1.891 (1.815 - 1.969)
Sex ^c	0.778 (0.758 - 0.799)	1.094 (1.058 - 1.130)
Income ^d	4.271 (4.156 - 4.389)	6.068 (5.862 - 6.282)
Childhood Adversity Score	1.567 (1.558 - 1.576)	1.511 (1.500 - 1.522)

^a Never homeless was the comparison group^b Racial/Ethnic minority was the comparison group^c Female is the comparison group^d Higher income is the comparison group

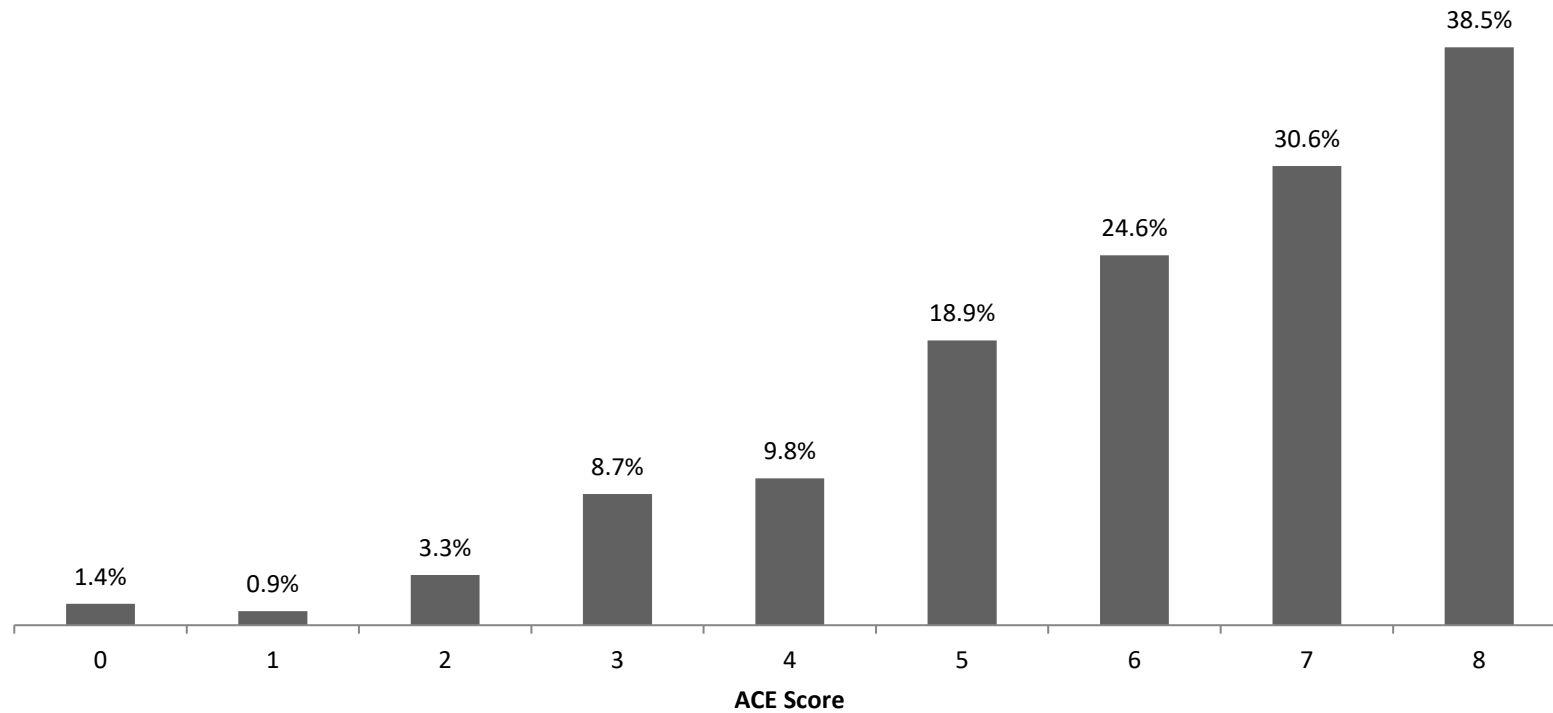
Note: All p-values < .001

Table 3. Analysis of covariance predicting current cumulative developmental risk score.

	F	<u>Partial</u> <u>η^2</u>
Age	9,438.82	.012
Minority Status	1,381.26	.002
Sex	706.87	.001
Income	119,685.27	.132
Childhood Adversity Score	34,459.88	.042
Homelessness Group	8,438.19	.021

Note: All p-values < .001

Figure 1. Proportion of individuals in households with children experiencing adult homelessness by childhood adversity score. Proportions reflect observed, unweighted data to accommodate distributions of childhood adversity scores.



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