



ADVANCING HEALTH EDUCATION & RESEARCH



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AVA Research Review

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Review Title: The interactive effects of race, income, and immigration history on childhood adversity in the United States

Reviewers:
Sanjana Pampati, BS, BA
and
Melissa T. Merrick, PhD

Article: Slopen, N., Shonkoff, J. P., Albert, M. A., Yoshikawa, H., Jacobs, A., Stoltz, R., & Williams, D. R. (2016). Racial Disparities in Child Adversity in the US: Interactions With Family Immigration History and Income. *American Journal of Preventive Medicine*, 50(1), 47-56.

Article Summary: Brief Overview

Childhood adversity, such as exposure to violence, parental incarceration, and poverty, has been associated with a host of negative health outcomes. The burden of childhood adversity and its negative health effects is greatest among certain racial and income groups. However, there is a paucity of literature that examines the specific role

of immigration history in moderating such health effects. Slopen and colleagues (2016) thus examine how race, income, and immigration history collectively affect childhood exposure to adversity.

Data for this study were obtained from 84,837 children who participated in the 2011-2012 National Survey of Children's Health (NSCH), a cross-sectional, telephone survey of households with children between the ages of 0-17. The telephone surveys were conducted by the CDC's National Center for Health Statistics.

The NSCH included a 9-item instrument to measure childhood adversity that incorporated many of the items from the CDC's Adverse Childhood Experiences (ACE) module as well as a few additional items.

Various types of childhood adversity were assessed including poverty, parental separation, parental death, parental incarceration, witnessing violence in the home, witnessing neighborhood violence, living with someone with a mental illness, living with someone with an alcohol/drug problem, and facing unfair treatment due to race/ethnicity. Adversity scores were obtained by summing the number of adversities experienced. Child's race/ethnicity was categorized as either White, Black, or Hispanic. Socioeconomic status (SES) was categorized as poor, near poor, middle income, or high income based on federal poverty guidelines and income-to-household size ratio. Immigration status was dependent on parents' birthplace, with children born outside of the U.S. or with at least one immigrant parent categorized as "children of immigrant parents" and children with two U.S. born parents categorized as "children of U.S. born parents." Other covariates included age, sex, parental education, and number of children in household.

Relevant Findings:

Forty-nine percent of the children in the sample were exposed to at least one adversity and 23% were exposed to two or more.

Compared to White children, Black and Hispanic children were exposed to more adversities; mean scores were 0.90, 1.27, and 1.26, respectively. Furthermore, this pattern was found in each individual adversity type except for having a household member with a mental illness or with a drug or alcohol problem. Income disparities in exposure to childhood adversity were larger than racial disparities. For every type of adversity except for unfair treatment, the prevalence of exposure was nearly twice as high in the lowest-income children compared to highest-income children. The income gradient was most significant amongst Whites; the incidence rate ratio for poor White children compared to high-income White children was 4.7 (95% CI = 4.37, 5.13).

There was a significant interaction between race/ethnicity and income for children of U.S. born parents ($p < 0.0001$). However, this interaction was not significant for children of immigrant parents ($p = 0.29$). For children of U.S. born parents, there were increasing racial/ethnic disparities in exposure to childhood adversity as income levels increased and racial-ethnic disparities in adversity were largest among children from high-income families.

For children of immigrant parents, there were fewer racial/ethnic disparities for each individual adversity. The mean number of adversities was lower for children of immigrant parents compared to children of U.S. born parents across all income levels.

Conclusions

The authors emphasized the need to examine race/ethnicity, income, and immigration history jointly. The many ways that different measures of social status can interact may provide an innovative framework within which to examine childhood adversity and can help identify new risk and protective factors and help tailor prevention and intervention efforts.

Limitations

There were several limitations that the authors noted, including use of parent-reported childhood adversity, lack of information on accumulated family wealth and years since immigration, and the cross-sectional nature of the study. The NSCH ACE measure does not include any questions regarding child abuse and neglect. The lack of a child abuse and neglect assessment is a significant limitation considering the large disparity between self-reports and documented

maltreatment by child protective services (Wildeman et al., 2014) and the many negative outcomes associated with such early maltreatment histories (e.g., Merrick, Fortson, & Mercy, 2014). The restriction of racial/ethnic categories to White, Black, and Hispanic and not including South Asians, Pacific Islanders, Arabs, and other immigrant populations common in the U.S. could have affected the results of this study. Further research is warranted to determine the complex interactions among race, income, and immigration history on childhood adversity exposure. In addition to examining the individual and sum effects of various forms of childhood adversity, the complex experience of adversity would be better elucidated by examining how each type of adversity interacts with the other and how such interactions are mediated by various social factors.

Reviewers' Comments

This study examined an often overlooked factor in much violence prevention research: immigration. This is one of the few studies to investigate how race/ethnicity, income, and immigration history interact with childhood adversity.

With the immigrant population comprising over 42 million people and making up 13.3% of the U.S. population (Britz et al., 2013), the need to examine how immigration interacts with other social factors such as race/ethnicity and SES is imperative. Children of immigrant parents had a lower prevalence of childhood adversity than children of U.S. born parents, indicating a potential protective effect of immigration status. Consistent with some previous research, “the healthy immigrant effect” may lessen the impact of low SES on health outcomes, as found in a Hispanic population (Flores et al., 2005). Similarly, Vaughn and colleagues (2015) confirmed that the prevalence of ACEs was significantly greater in native-born Americans and second-generation immigrants compared with first-generation immigrants. However, the role of immigration as a protective factor is contested, with several studies asserting that discrimination (Araujo et al., 2006) and limited access to health care pose significant risks for adverse health outcomes in immigrant communities (Ku et al., 2001). Furthermore, immigrant parents are at a greater risk of being exposed to the stress associated with low SES and such stress has been associated with heightened risk of perpetrating child abuse and neglect (Alink et al., 2013).

Though parental immigration status was included as a variable in this analysis, immigration could be explored further. Examining immigration in a more nuanced manner, taking into consideration factors such as acculturation, country of origin, years since immigration, and immigration status (e.g., undocumented, refugee, economic migrant) could deepen our understanding of many underlying factors that explain why U.S. born and immigrant children vary in their health outcomes. Also, identifying health disparities among immigrant groups is warranted, as homogenizing such a racially, culturally, and economically diverse group does not allow for consideration of nuances and unique features that may play out differently in certain groups.

Finally, it is likely that current ACE assessment tools do not sufficiently cover the array of adversities that may be unique to and common among immigrants. The original ACE Study was conducted in predominantly white, middle-/upper-middle-class samples and the validity in various subgroups has not been established (Cronholm et al., 2015).

Adversities such as witnessing war, experiencing religious persecution, language and cultural barriers, and sense of loss are not included in traditional ACE assessments, though more recent surveys have begun to expand their definitions of childhood adversity, such as the World Health Organization's ACE-IQ which incorporates exposure to war (World Health Organization, 2012). Thus, future research is needed to fully examine and understand which forms of childhood adversities are affecting the health and wellbeing of immigrant groups.

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This findings and conclusions in this review are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.