

An Extension Educator Perspective on Adverse Childhood Experiences

Abstract

Research on adverse childhood experiences (ACEs) has garnered a great deal of attention and is increasingly used to demonstrate the negative impact of stressful and traumatic childhood experiences on psychological and physical health. ACEs have become a focus of local and state organizations and coalitions concerned about the well-being of children and their families, resulting in a growing number of Extension professionals becoming involved in these initiatives. In this article we provide an overview and analysis of seminal and more recent ACEs research and offer suggestions about where an understanding of and response to ACEs might fit into the work of Extension educators.

Keywords: [adverse childhood experiences \(ACEs\)](#), [adverse experiences](#), [stress](#), [risk factors](#), [trauma](#)

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Stressful, traumatic experiences in childhood can have a major impact on future mental and physical health and lifelong well-being. Much of the foundational research in this area has referred to these events as adverse childhood experiences (ACEs). ACEs have increasingly become a focus of community and state organizations and coalitions concerned about the well-being of children and their families. This focus has led to growing involvement of Extension educators in initiatives related to ACEs. In this article we provide a brief history of the ACEs research, discuss some key concepts, note common misunderstandings, and offer suggestions about how Extension professionals might address ACEs. The article is not intended to be a comprehensive review of the literature but an opportunity to use seminal and recent literature to provide Extension professionals with an introduction to the topic and to present some ideas on how to help direct their work in this area. (For those interested in more extensive reviews of ACEs research, we include a "Recommendations for Further Reading" section at the end of the article.)

Overview of ACEs Research

In recent years, research on ACEs has garnered a great deal of attention. Much of this interest has grown out of the original ACEs study, which was jointly conducted by the health maintenance organization Kaiser Permanente

and the Centers for Disease Control and Prevention (Felitti et al., 1998). The researchers surveyed adults about whether as children they had experienced 10 of the most common types of adverse and negative childhood events; these were identified as physical abuse, sexual abuse, emotional abuse, physical neglect, emotional neglect, a mother who had been domestically abused, household substance abuse, household mental illness, parental separation or divorce, and incarceration of a family member (Felitti et al., 1998). Each individual received an ACEs score based on the number of each type of event experienced, with scores thus ranging from zero to 10 (Felitti et al., 1998).

The results from the original ACEs study were robust and surprising. Felitti et al. (1998) found that ACEs were strongly associated with a range of psychological, social, and physical health problems in adulthood. As the number of ACEs increased, the higher the chances during adulthood of problems such as smoking, alcohol and drug abuse, depression, other mental health conditions, and severe obesity (Felitti et al., 1998). What was most surprising was that ACEs also were related to the leading causes of death in adulthood, including stroke, heart disease, cancer, and chronic lung disease, and thus a shorter life span (Felitti et al., 1998). Other, more recent versions of the ACEs survey, administered at the state level, have generally replicated these findings (ACEs Connection Network, 2017).

Like other studies of risk factors in childhood and adolescence, the original ACEs study also showed that the effects were cumulative (Felitti et al., 1998). Sometimes these effects were exponential in that the severity of the relationship grew faster if a person had multiple types of adverse experiences (Felitti et al., 1998). For example, compared to having an ACEs score of zero (i.e., no ACEs), having four types of ACEs was associated with a sevenfold increase in alcoholism and a doubling of risk of being diagnosed with cancer; an ACEs score above six was associated with a 30-fold increase in attempted suicide (Felitti et al., 1998). Since the original study there has been an exponential growth in the number of investigations on ACEs, further expanding our understanding of the precursors, incidence, and impact of ACEs (Hughes et al., 2017).

Analysis of ACEs Research

The findings from the original ACEs study and subsequent investigations (e.g., Mersky, Janczewski, & Topitzes, 2017) provide a straightforward, research-based analysis of how traumatic childhood experiences can predict adult health and well-being. These findings are consistent with previous research on other negative experiences in childhood (Harvard Center on the Developing Child, 2017a), but the fact that they also show that these early experiences are related to poorer physical health and shorter life expectancy has amplified the attention the findings have received. The ACEs framework and related materials that are now available from a host of organizations, such as ACEs Too High (see <https://www.acesconnection.com/g/state-aces-action-group/blog/state-ace-survey-reports>), Centers for Disease Control and Prevention (see <https://www.cdc.gov/violenceprevention/acestudy/index.html>), and Substance Abuse and Mental Health Services Administration (see <https://www.samhsa.gov/capt/practicing-effective-prevention/prevention-behavioral-health/adverse-childhood-experiences>), can be used to share with professionals, policy makers, community leaders, and the public the importance of supporting families with young children and reducing the toxic events these families may be experiencing. There are, however, several limitations of the ACEs research that sometimes lead to misunderstandings. Recognizing these limitations can reduce the likelihood that the findings will be misinterpreted or that unwarranted conclusions will be drawn.

First, as with relationships identified in many health and social science studies, the relationship between ACEs and negative outcomes is probabilistic. This means that even if individuals have encountered multiple ACEs in

their lives, they will not necessarily experience the negative psychological and health outcomes typically identified with ACEs. This distinction is important to communicate to audiences so that misunderstandings that might lead to unnecessary distress or self-fulfilling behavior are averted.

Second, the way ACEs are usually assessed is fairly imprecise, allowing individuals a great deal of latitude regarding what they consider an adverse event. For example, the very same experience that one person might report as emotional abuse may not be reported as abuse by another. Most assessments of ACEs do not take into account the severity, frequency, or timing of the various adverse events that are measured. Thus, individuals who report the same traumatic events and have the same ACEs score may have had vastly different experiences and, therefore, have different risks for negative outcomes. Consequently, even if multiple individuals have reported experiencing an ACEs event, such as domestic violence or incarceration of a parent, that does not mean they experienced the event as equally toxic or traumatic or that it will result in long-term trauma for each person.

In addition, factors such as age when an event occurs and protective influences that are present can affect the impact the event will have on the individual. For instance, the presence of supportive, caring adults in the life of a child can significantly diminish the effects of an adverse experience, making the event less stressful and reducing the chances of later problems (Sandstrom & Huerta, 2013). In some cases, what at first glance might appear to be a traumatic event actually may be a beneficial experience (Tedeschi & Calhoun, 1996). For example, imagine a family in which an abusive adult is incarcerated. Though incarceration would be counted as an ACEs event, the absence of such an adult in the family may actually serve as a positive experience for the family member who was victimized or for others who will now avoid such an experience.

Although a growing number of longitudinal studies are showing that ACEs early in life are predictive of poorer health and well-being in adulthood, researchers are still trying to tease out the specific causal pathways (Thompson et al., 2015). Many adverse experiences may exert their effect through mechanisms that have not yet been identified. For example, the relationship between having more ACEs and a higher rate of cancer does not mean that child abuse or having an incarcerated parent causes cancer, but that these negative events might be related to other problematic conditions or experiences, such as being exposed to environmental toxins (e.g., lead or smoking) or poor health care access, that can lead to a higher risk of cancer. A better understanding of these mechanisms is important for both reducing harmful conditions and designing effective interventions and policies.

The findings from the ACEs research share a great deal with various models addressing past risk, protective factors, and resiliency that have long been common in health and prevention science (e.g., Harvard Center on the Developing Child, 2017b; National Research Council and Institute of Medicine, 2009). Research on ACEs is primarily focused on the kinds of problematic experiences we do *not* want children to have. The findings indicate little about the types of *positive* developmental opportunities and protective experiences children also need to have if they are to grow up to be psychologically and physically healthy and reach their developmental potential (e.g., see Center for the Study of Social Policy, 2017). Although reducing the risks and toxic influences in children's lives is important in order for children to grow up to be competent, well-adjusted, and healthy, they also need developmentally positive experiences. Simply being problem-free is not enough if children are to be fully prepared for life (Pittman, Irby, Tolman, Yohalem, & Ferber, 2003).

Implications for Extension Educators

Given Extension's tradition of community engagement and local programming, consideration of applying an ecological, public health framework can provide some guidance regarding the types of actions that might be

appropriate for educators. Such an approach involves recognizing that responses will need to occur at different points on the prevention–intervention continuum and across multiple levels, including community, family, and individual.

Educating community members, especially local leaders and professionals, about the prevalence and consequences of ACEs can be a useful first step in a comprehensive approach to Extension involvement with this issue. We are part of a team of Extension educators in Wisconsin who have been involved in efforts to increase awareness and understanding of ACEs among local leaders, elected officials, and a wide range of professionals, such as school personnel, law enforcement, and early childhood educators.

As with other complex family issues, a multisector, community collaboration can be an effective approach (Mincemoyer et al., 2008) to addressing ACEs. Thus, another appropriate role for Extension is to initiate or work with coalitions that have adopted the ACEs framework and are trying to reduce such risks. In our state, Extension educators have held county-wide forums and summits whereby community leaders and professionals from across the service spectrum gain a common understanding of the issue and begin to plan comprehensive community or county-wide strategies. Strong multisector coalitions also have the potential to marshal resources to address both the prevention and the treatment of ACEs. Moreover, these efforts include not only initiating prevention and intervention programs but also working on local policies that can improve community settings, reduce environmental risks, and strengthen community services and programs (Oral et al., 2016).

At the family and individual levels, there are universal and selective prevention programs that can be directly delivered to children and adults who have been exposed to ACEs. For instance, Extension educators in Wisconsin have taught trauma-informed parenting using an evidence-informed curriculum from the National Child Traumatic Stress Network that teaches caregivers how to recognize trauma symptoms and adjust their caregiving to best support and protect children who have experienced trauma (see <https://www.nctsn.org/resources/resource-parent-curriculum-rpc-training-modules>). In addition, a growing number of evidence-based and evidence-informed programs and practices are available for use with adults, parents, and children who have been exposed to particular ACEs or are dealing with some of their consequences (see Stevens, 2013). These include programs directed at advancing the prevention and treatment of domestic violence; programs directed at assisting parents who are at risk for abuse and neglect, children with behavioral problems, and adults and children with mental health concerns; and programs that promote early development, resiliency, health, and well-being. Because Extension is an educational organization, Extension educators are not likely to be directly involved in clinical work or the delivery of direct treatment interventions. However, that does not preclude Extension educators from educating others about the availability and benefits of such programs and practices and working with others who are trying to improve the quality and availability of such services. Information about such programs and practices can be found at various evidence-based online program registries, including these:

- California Evidence-Based Clearinghouse for Child Welfare (<http://www.cebc4cw.org/>),
- Child Trends' What Works (<https://www.childtrends.org/what-works>),
- Child Welfare Information Gateway (<https://www.childwelfare.gov/topics/management/practice-improvement/evidence/registries-resources/registries/prevention/>),
- Office of Juvenile Justice and Delinquency Prevention Model Programs Guide (<https://www.ojjdp.gov/mpg/Topic/Details/1>),

- Promising Futures: Best Practices for Serving Children, Youth and Parents Experiencing Domestic Violence (<http://promising.futureswithoutviolence.org/interventions-for-children/>), and
- Substance Abuse and Mental Health Services Administration's National Registry of Evidence-Based Programs and Practices (<https://www.samhsa.gov/nrepp>).

Conclusion

The research on ACEs reminds us of the importance of early intervention and the need for supporting families who live in challenging environments. It also reinforces the value of much of Extension's traditional work with children and families as well as the organization's growing role in leading or assisting community partners to address difficult, complex problems that families and communities often face.

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Recommendations for Further Reading

Those interested in more extensive reviews of ACEs research may wish to consult the following sources:

- "The Effect of Multiple Adverse Childhood Experiences on Health: A Systematic Review and Meta-Analysis," by K. Hughes, M. Bellis, K. Hardcastle, D. Sethi, A. Butchart, C. Mikton, L. Jones, and M. Dunne, 2017, *Lancet Public Health*, 2, e356–366. [https://doi.org/10.1016/S2468-2667\(17\)30118-4](https://doi.org/10.1016/S2468-2667(17)30118-4)
- "Health Consequences of Adverse Childhood Experiences: A Systematic Review," by K. A. Kalmakis and G. E. Chandler, 2015, *Journal of the American Association of Nurse Practitioners*, 27, 457–465. doi:10.1002/2327-6924.12215

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