

# APSAC Research to Practice Brief

**Study Title:** Intergenerational Effects of Childhood Trauma: Evaluating Pathways Among Maternal ACEs, Perinatal Depressive Symptoms, and Infant Outcomes

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## **Introduction:**

This study sought to determine whether maternal adverse childhood experiences (ACEs) influences prenatal and postnatal depression, as well as the physical and socioemotional outcomes of their children. The Adverse Childhood Experiences questionnaire is a ten question yes or no answer test that relate to childhood trauma. There are five questions that discuss personal issues (emotional and physical neglect, and physical, verbal, and sexual abuse) and five that relate to other family members (an alcoholic parent, mother as a victim of domestic violence, family member diagnosed with mental illness, disappearance of parent through death, abandonment, or divorce, and a family member in jail). Answering yes to a question scores it as a one, while answering no to a question scores it as a zero. The end result of the ten questions is an ACE score. Previous literature has stated that ACEs have been associated with negative mental and physical health throughout the life course as well as associations between negative birth outcomes and maternal ACE score.

## **Hypotheses:**

The research was guided by three hypotheses: (1) Maternal ACEs will predict higher levels of prenatal and postnatal depressive symptoms and less improvement towards a non-depressive state in the perinatal period. The associations between depressive symptoms and ACE score would be stronger for participants who had experiences of childhood maltreatment over those with household dysfunction; (2) Maternal exposure to the ACEs predict poorer reproductive outcomes (weight, at birth, premature delivery). They also predicted that this association would be mediated by the age of the mother at the time of her first pregnancy; (3) Maternal ACEs predict poorer socioemotional outcomes of the infant which would be mediated by mother's age at first pregnancy and the infant's birth weight.

## **Subjects:**

Participants were 398 pregnant woman 15 to 46 years of age at an initial prenatal assessment. Over half of the pregnant women were Caucasian, half were unemployed, while just under half were never married. Participants were recruited from Women, Infants, and Children (WIC)

offices in a Midwestern city. The subjects were assessed twice: prenatally and at a 6-month postnatal follow-up.

### **Findings:**

There were three major findings from this study. First, there are positive associations between both childhood maltreatment and household dysfunction with prenatal depressive symptoms. Only childhood maltreatment was positively correlated with maternal postnatal depressive symptoms at the 6-month mark. Second, childhood household dysfunction of the mothers was significantly negatively correlated with maternal age at first pregnancy. Birth weight was positively correlated with maternal age at first pregnancy and negatively correlated with infant socioemotional symptoms, creating an indirect relationship between maternal child household dysfunction and infant maladaptive socioemotional symptoms. Third, childhood maltreatment of the mother was associated with high levels of maladaptive socioemotional symptoms in children at 6 months. Findings support those of other studies, which show that maternal childhood maltreatment and household dysfunction increase the risk of depressive symptoms and poor functioning in young children. The age of the mother at the time of her first pregnancy is also associated with a history of childhood trauma as well as adverse reproductive outcomes. Other known risk factors for adverse birth outcomes such as African American race need to be considered as well. This helps to conclude the transitive relationship of maternal trauma in childhood to negative health outcomes for their own children.

### **Recommendation:**

Future research on risk and resilience can help to understand the relationship between childhood trauma and its effects later in life as well as birth outcomes of children whose mothers have a high ACE score. With further research, interventions can be planned, creating positive outcomes such as less stress and lower depression scores. Maternal ACEs should be considered during prenatal and postnatal care for both mother and child. This can be done by administering the ACE questionnaire during prenatal appointments. With this information, the mother can be educated on previous outcomes so that she can be aware of her predisposition to them. Since depression scores are related to ACEs, it is important to monitor this.

Psychoeducation is also crucial for pregnant women and young mothers with significant ACEs. Education can enhance outcomes of more positive mental health as well as better pregnancy outcomes (eg. stress from ACEs impacting low birth weight). If mothers are educated about the risk factors, they can, along with their healthcare provider, work on preventing the negative outcomes.

### **Bottom Line:**

Pregnant mothers' ACE score and history of childhood maltreatment make them more vulnerable to higher levels and more persistent and severe depressive symptoms after birth. This maltreatment is also associated with maladaptive socioemotional symptoms in their

children. Factors such as race, age at first pregnancy, and childhood household disfunction can have a negative impact on infant birth weight and infant socioemotional symptoms. This can affect children in all stages of life. If researchers and clinicians together can support pregnant women who have a high ACE score pre and post birth, there could be an interruption to the transmission of effects of intergenerational trauma through evidence-based practices.

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### **About the Student Research to Practice Brief Author**

**Jessica Ladd** is currently an MSW candidate, concentrating in interpersonal practice with a mental health focus, at the University of Michigan and will graduate in July of 2019. Jessica received her BSW from Saint Mary's College in 2018. Her experience includes working as an advocate and counselor for survivors of domestic violence and sexual assault at multiple organizations. This is her area of interest as well as working with women and children.

*This brief was produced as part of a collaboration between a SW708 at the University of Michigan and APSAC. The goal of this project is to teach a real-world application of research translation, offer an early opportunity for professional publication, and introduce students to how professional organizations can serve as an ongoing source of knowledge throughout their careers. By distributing the briefs among child maltreatment and child welfare professionals at all career stages, APSAC seeks to speed the dissemination of evidence-based practices and increase access to applied research findings for front line workers, while also helping to shape policy for organizations. If you would like to bring this project to your classroom, [contact Bri Stormer, MSW.](#)*