Research Statement

One of the most longstanding questions in the field of developmental psychology is whether and why early experiences with parents and other caregivers have a lasting influence on individuals’ development. Despite the extensive amount of theoretical and empirical attention this question has received, many issues remain unsettled. My research has sought to address two of these issues. The first is whether early caregiving experiences shape forms of behavioral adaptation not only during childhood and adolescence but also during the years of adulthood. The second is what are the developmental processes that underlie the influence of early caregiving experiences on later behavioral adaptation. I have focused on two potential mechanisms: representations of attachment and stress neurobiology.

Past research

One source debate in this field is whether early parent-child relationships contribute to competent adaptation across the entire life-course or whether the effects of early caregiving experiences fade with time as individuals encounter other experiences, such as peer groups, neighborhood influences, and educational opportunities (e.g., Kagan, 1996; Sroufe, Coffino, & Carlson, 2010). My colleagues and I used data from a longitudinal study that prospectively followed participants from birth to adulthood to demonstrate that individuals who experienced unsupportive care during the first three years of life are at an increased risk for mental health problems during adulthood and are more likely to provide lower quality parenting several decades later. In addition, we provided evidence that individuals who experienced unsupportive early caregiving are less likely to form committed romantic partnerships and have lower educational attainment during adulthood. Importantly, the consequences of early caregiving for these outcomes did not fade with time. In other words, the effects of early caregiving for social and academic outcomes during childhood were as strong as the effects three decades later.

Another source of debate is whether correlations such as these reflect a causal effect of parental behavior on children’s outcomes or whether the associations are due to other, unmeasured variables such as genetic factors shared between parents and children or families’ socioeconomic environments (Kagan, 2010; McGue, 2010). My colleagues and I have used experimental data from a series of randomized controlled trials of a parenting-focused intervention to test the idea that early caregiving has causal effects on children’s behavior. We have shown that children of parents who received an intervention that improved supportive parenting exhibited more advanced language development and enhanced executive functioning abilities than children whose parents received the control version of the intervention.

I have also attempted to clarify the mechanisms underlying the potentially long-term effects of early caregiving experiences. One potential mediator I have examined is individuals’ cognitive representations of close relationships. My research on this topic is guided by attachment theory (Bowlby, 1988). Indeed, my research has provided evidence for several of attachment theory’s central hypotheses, including the idea that attachment security during infancy, childhood, and adulthood has its origins in childhood caregiving experiences, that individual differences in attachment security exhibit stability across development and across generations, and attachment-related representations have implications for individuals’ responses within adult romantic and parent-child relationships. I have also addressed basic psychometric issues, especially the question of whether dimensional measures of attachment more accurately characterize individual differences in attachment than the traditional categorical measures.

I have also investigated the idea that early caregiving experiences exert a long-term influence on development by becoming biologically embedded in physiological systems that facilitate individuals’ responses to threats and stressors (Shonkoff, Boyce, & McEwen, 2009). Consistent with this idea, my research has demonstrated that individuals with childhood histories of less
supportive caregiving or insecure attachments during infancy exhibit greater autonomic nervous system (ANS) reactivity during interpersonally stressful situations later in life. Recently, I have extended those analyses by examining the social regulation of children’s neuroendocrine systems. I have worked with graduate students here at the University of Utah to examine whether early experiences of adversity have lasting consequences for the functioning of hypothalamic-pituitary-adrenal (HPA) axes among children adopted internationally and whether the formation of secure attachments can facilitate recovery in HPA axis activity among this unique group of children.

**Current and future research plans**

I am extending my work on the mechanisms underlying the developmental consequences of early caregiving through a collaborative project with Elizabeth Conradt and Sheila Crowell. I am a Co-Investigator on this project, which has received funding from NIMH. The overall goal of the project is to examine the intergenerational transmission of emotional dysregulation among a sample of nearly 300 parent-child pairs. This collaboration will offer me opportunities to investigate how prenatal experiences and early postnatal caregiving experiences work together to shape infants’ basic behavioral development, attachment representations, and physiological responses to stress. The first wave of data collection will be completed Summer 2020.

I have also begun to research the development of children who have been adopted. Research with adoptive families represent a natural experiment because the influence of early caregiving experiences is disentangled from inherited genetic factors and prenatal exposures (Rutter, Pckles, Murray, & Eaves, 2001). As a first step towards constructing this program of research, my research team and I have been collected survey data from parents living in Utah who recently adopted an infant. This project has helped establish the feasibility of conducting adoption research in Utah and built a registry of Utah adoptive families that can be used for future research. Specifically, over 150 adoptive parents have participated in this project to date. In order to support this ongoing project, I will be submitting a proposal to the University of Utah’s Faculty Small Grant Program. In addition, the survey data we are collecting will serve as pilot data for a grant application to the National Institute of Child Health and Human Development for a project examining the role of the early caregiving environment for shaping the early biobehavioral development of adopted children.

In addition, I have partnered with a community organization (The Children’s Center) to implement a parenting-focused home visiting intervention here in Salt Lake City. This partnership will allow me to extend my earlier research examining the causal effects of the caregiving environment on children’s early behavioral outcomes. In order to support this new project, we submitted a letter of intent to the Utah Center for Clinical and Translational Science, and we were invited to submit a full proposal this fall. This funding will cover costs of training The Children’s Center staff in the experimental intervention as well as the costs of collecting data that will represent basic intervention outcomes. Those data will also serve as pilot data for a future NIH grant proposal.