

Research Statement

One of the most longstanding questions in the field of developmental psychology is whether early experiences with parents and other caregivers have a lasting impact on individuals' development. Although this question has received extensive theoretical and empirical attention over the decades, my research addresses several issues that have remained unresolved.

Previous and Current Research

One source of debate in this field is whether early parent-child relationships have a sustained influence on individuals' outcomes across the entire life-course or whether the consequences of early caregiving experiences weaken over time as individuals encounter other influences, such as relationships with peers and educational opportunities (Clarke & Clarke, 2000; Kagan, 1996). My colleagues and I used data from a longitudinal study that followed participants from birth to adulthood to demonstrate that individuals who experienced supportive parental care during the first three years of life are: (a) at lower risk for mental health problems during, (b) more likely to provide high quality parenting for their own children, (c) likely to form committed romantic partnerships, and (c) have higher educational attainment during adulthood. Conversely, individuals who experienced maltreatment early in life were at higher risk for problematic socioemotional and educational outcomes across childhood, adolescence, and adulthood. Importantly, the consequences of these early caregiving experiences for these outcomes did not fade with time. Indeed, the effects of early supportive care (and maltreatment) for individuals' social and academic outcomes during childhood were as strong as the effects three decades later.

Another issue in the field that remains unsettled is precisely how early caregiving experiences can have these enduring effects on developmental adaptation across the entire life-course. One potential mechanism I have focused on is individuals' mental representations of close relationships. My research has provided evidence for several of attachment theory's central hypotheses (Bowlby, 1988), including the idea that individual differences in attachment representations have their origins in childhood experiences with caregivers, exhibit stability across development and across generations, and organize individuals' thoughts, feelings, and behaviors during interactions with romantic partners and children.

I have also addressed a somewhat contentious but significant question related to the measurement of attachment, namely whether individual differences in attachment are most accurately represented using a set of dimensional constructs or the traditional attachment categories. To answer this question, I have conducted factor analyses and taxometric analyses of the two measures of attachment most commonly used within developmental psychology: the Adult Attachment Interview and the Strange Situation Procedure. For both measures, the results of these analyses have revealed that individual differences in both infant and adult attachment representations are most parsimoniously represented by two dimensions. Moreover, my research has suggested that each of these dimensions may have distinct but theoretically consistent correlations with early caregiving experiences and current socioemotional functioning.

A second mechanism potentially underlying the long-term effects of early experiences I have investigated is the neurophysiological processes. My research in this area has been guided by the idea that early caregiving experiences exert a long-term influence on health and development by becoming biologically embedded in key stress response systems (Shonkoff, Boyce, & McEwen, 2009). In general, the findings from my research on this topic has demonstrated that individuals with histories of less supportive caregiving and/or insecure attachments early in life exhibit heightened autonomic nervous system (ANS) reactivity during interpersonally stressful situations later in life. In addition, studies I have conducted with graduate students here at the University of Utah have also indicated that: (a) early experiences of adversity may have lasting consequences for the hypothalamic-pituitary-adrenal (HPA) neuroendocrine axis and (b) but the formation of secure attachments can help promote healthy HPA functioning among children with history of adversity.

Another third unresolved question in this field of research is whether the correlations between early caregiving experiences and later functioning reflect a causal effect of parents' behavior on individuals' outcomes or whether these associations are due to other, unmeasured variables, such as genetic factors shared between parents and children or families' socioeconomic environments (Kagan, 2010; McGue, 2010). To help this question, my colleagues and I have leveraged experimental data from randomized controlled trials of a parenting-focused intervention. Our research has shown that children of parents who received an intervention that focused on improving parents' supportive care exhibited advanced language development, enhanced executive functioning abilities, and healthier patterns of both ANS and HPA axis activity than children whose parents received the control version of the intervention. These findings lend support for the idea that early parent-child relationship experiences do in fact have causal effects on children's behavioral and biological functioning.

Future Research Plans

I have been extending my research identifying the mechanisms that underly the effects of early caregiving through a collaboration with Elizabeth Conradt and Sheila Crowell. Specifically, I am a Co-Investigator on a NIMH-funded longitudinal project. The overall goal of the project is to examine the intergenerational transmission of emotional dysregulation among a group of over 300 mother-infant pairs. This collaboration offers me the opportunity to investigate how early caregiving experiences shape infants' behavioral development, emerging attachment representations, and physiological responses to stress. The first wave of data collection was completed during summer 2020, and I have been working closely with members of our research team—including graduate students from Developmental and Clinical Psychology and post-doctoral researchers—to prepare conference submissions and manuscripts based on these data.

I have also been conducting research on the development of children who have been adopted. Research with adoptive families afford a unique opportunity to disentangle the effects of early caregiving experiences from potential inherited genetic factors or prenatal influences (Rutter, Pickles, Murray, & Eaves, 2001). As a first step in this line of research, my research team and I have collected survey data from over 250 parents living in Utah who recently adopted an infant. This project has established the feasibility of conducting research with adoptive families in Utah while also highlighting some of the unique risks of adoptive families. For example, students and I have presented findings at international conferences indicating that: (a) adoptive parents report experiencing alarmingly high symptoms of depression as well as unique experiences of stress related to infertility and (b) infants who were adopted at birth experience high rates of prenatal exposure to opioids and other potential teratogens. These survey data 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.

Finally, I have partnered with a community mental health organization (The Children's Center) to implement a parenting-focused early intervention here in Salt Lake City. This partnership will allow me to extend my earlier research evaluating the potential causal effects of the parent-child relationship on children's early biological and behavioral outcomes. My colleagues and I originally submitted a grant to help fund this project in 2020. However, the proposal was not funded because it was not possible to carry out the project in light of then recent COVID-19 pandemic. Since that time, I have worked with the community mental health organization to allow them to remotely offer the parenting-focused intervention to parents. As a result, we will be submitting a grant application to the National Institute of Mental Health to support the evaluation of this community-based implementation of the intervention in the Salt Lake area.