

The Effect of Maternal Prenatal Stress on Toddler Language Development: Testing Breastfeeding as a Moderator

Selma Sarah Sabra

Previous studies have found that prenatal stress and breastfeeding are associated with child language development. However, previous studies have tended to examine specific causes of maternal prenatal stress rather than general stress, and it is unclear if breastfeeding may help to mitigate the effects of prenatal stress. I conducted this study to investigate the impact of general prenatal stress on toddler language and whether breastfeeding serves as a moderator for the relationship. I performed secondary analysis of data captured from 97 mother-child dyads enrolled in the Brain and Early Experience (BEE) Study. Indices of maternal prenatal stress were captured through self-report and hair cortisol, duration of breastfeeding was captured via maternal interview, and toddler language was assessed at 18 months through maternal report. Using multiple linear regressions, I found that neither measure of prenatal stress (self-report and hair cortisol) predicted toddler language, and breastfeeding did not serve as a protective moderator in the relationship between self-reported stress and toddler language. Breastfeeding only acted as a moderator in the association between prenatal hair cortisol and child understanding and saying words, where breastfeeding exacerbated the negative effect of prenatal stress on toddler language. I discuss possible explanations and implications for these results. Future studies should further explore these relationships by investigating at-risk populations and developing study designs that allow for the testing of causal effects concerning prenatal stress, breastfeeding, and toddler language.