Genes, Experience, and Parenting Behaviour

R. Bisceglia, C. Barr, K. Wigg, T. O’Connor & J.M. Jenkins

We know quite a bit about what children need for healthy development. Primary among those things is sensitive and responsive parenting. Mothers who show these kinds of behaviours are more likely to have kids who do better in school, are more socially adept, and have fewer mental health problems.

In a recent study, Dr. Rossana Bisceglia and her colleagues wanted to see what factors affected mothers’ ability to provide sensitive care to their children. The hypothesis was that both biological and environmental variables would impact mothers’ sensitivity, and that certain combinations of factors would be more detrimental to parenting than others.

The Kids, Families, & Places study, led by Dr. Jennifer Jenkins at the Ontario Institute for Studies in Education, was used to examine the relationship between mothers’ early adversity (e.g. exposure to abuse), their genetic makeup, and their parenting styles. 501 mothers participated. Authors found that mothers who experienced more early adversity were less sensitive toward their children. Also, mothers with a specific genetic makeup – two copies of the long variant of the AVPR1a gene – were less sensitive than mothers

with two short copies, or one long and one short copy. Interestingly, mothers facing early adversity and having two copies of the long gene variant had the lowest sensitivity scores (see Graph above).

Together, these results suggest that both genetic and environmental factors affect parenting. However, only when mothers experience high early adversity are they likely to be less sensitive, regardless of their genetic makeup. Thus, to improve mothers’ well-being and children’s development, we need programs that alleviate the burden of early risk and improve parenting, thereby fostering better outcomes.