ABSTRACT: It is possible that reported links between postnatal depression and children's cognitive deficits can be completely explained by vulnerability factors in the child such as male gender and pre- and perinatal insults as well as known risk factors in the social environment. This hypothesis was evaluated, using prospective longitudinal data that had previously been obtained from a community sample of primiparous North London women, followed from early pregnancy until the children were 4 years old. Re-analysis of those data provided support for the original finding of an association between postnatal depression and impaired cognitive abilities in the children. There were, however, some important modifications: Low birth-weight infants and the infants of less educated mothers were most at risk. Perceptual and performance abilities were most affected.

KEY WORDS: Postnatal Depression; Infants; Cognitive Development.

The aim of this paper is to examine whether the experience of being cared for by a depressed mother stunts an infant's intellectual development. We tested that hypothesis against an alternative one, namely, that factors within the child and family situation that provoke maternal depression independently influence the child's intellect. We are thus taking a second, critical look at findings reported some years ago by the second author which showed that four-year-old children had reliably lower cognitive scores if their mothers had been depressed in the first year post-partum.

Contemporary theories of intelligence stress the interplay between affect and cognition and the role of emotional factors in information-processing. In line with this emphasis, there are various indica-
tions of cognitive problems, as well as dysregulated emotion, in the offspring of depressed parents. In particular, the children of depressed women have been reported to show attentional deficiencies as well as generally lower performance on standardized tests of intellectual ability and reading skill.

Murray undertook a detailed analysis of the effect of a mother's depression on intellectual development in the first year of life in a community sample of mothers and their infants. Those infants whose mothers were depressed postnatally were reliably more likely than other infants to fail Piagetian tasks of object permanence at 9 and 18 months of age. Infants whose mothers had a history of depression prior to the birth, but had not experienced postnatal illness, were not reliably different from the children of well women. The mother's postnatal illness did not have a main effect on the standardized assessments of mental development (Bayley Scales) and language (Reynell Scales), but appeared to potentiate social class effects: Social class predicted the infant's score on the standardized measures only in the presence of postnatal depression.

The infant's understanding of the permanence of objects has been described by many theorists as an ability to search—i.e., to direct attention to cues in the environment in an effort to find invisible or partially visible objects. As such, individual differences in the ability to regulate attention would play a considerable role in the passing or failing of object permanence tasks such as those administered by Murray. Direct measures of attentional abilities and recognition memory in infancy, as opposed to standardized developmental assessments, such as Bayley Scales, predict IQ performance in later childhood. Indeed, the association between attentional measures in infancy and later IQ scores is higher in risk samples than in populations not at risk for developmental problems. This association, coupled with Murray's observations of poorer performance on search tasks, suggests that the mother's depression in the first months of life may disrupt naturally occurring social processes that facilitate the infant's abilities to attend to and recall its experiences.

However, before accepting this evidence as support for the claim that early experiences shape intelligence, we must consider alternative explanations. It is at least possible that genetically or congenitally derived characteristics of some infants predispose their mothers to depression. These characteristics may thus independently predict the mother's likelihood of depression in the postnatal months and the child's eventual intellectual attainments. Newborns whose mothers