The Relationship between Maternal Depression and Negative Outcomes in Children: Parenting Deficits’ Impact on Children’s Emotional Regulation and Behavioral Expression

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Abstract

The present study examines the relationships between maternal depression, parenting practices and children’s emotional and behavioral expressions. This population was chosen because children of depressed mothers in certain vulnerable developmental stages, such as the adolescent period, are at a heightened risk for adverse outcomes. Indeed, past research suggests that children of depressed mothers have particular difficulties with emotion regulation capacities and suboptimal internalizing and externalizing behaviors. It has also been found that maternal depression is linked with negative parenting deficits, such as harsher forms of discipline. The current study proposes that mothers with a current diagnosis of Major Depression Disorder will be positively associated with such harsher parenting practices and that maternal depression will be positively associated with child emotion dysregulation as well as with child internalizing and externalizing behavior problems in pre-adolescent and adolescent children.

The current study is a secondary analysis of a previous cross-sectional and cross-generational study (Maternal aggression, self-regulation and adverse child outcomes, DA 08963) funded by the National Institute for Drug Abuse (NIDA) that examined the pathways between maternal impairments (crack/cocaine use disorder, general psychopathology, and self-regulation deficits), child-rearing deficits (parenting deficits, child neglect, child physical/sexual abuse), and adverse child outcomes (substance abuse, aggressive/delinquent behaviors, and child self-regulation deficits). The findings that will be discussed have broad public health implications for mental
healthcare and clinical interventions for mothers who have experienced depression and children who have been exposed to its effects.

Methodology

Quantitative analyses occurred in several phases. First, I examined descriptive statistic and bivariate associations to assess the association of the key variables with demographic variables. Second, I iteratively conducted a series of regression models to examine the associations between maternal depression, child’s emotion regulation, maternal punitive punishment, and children’s internalizing and externalizing behavior problems. Third, I fit a series of hierarchal linear regression mediation models to examine whether mother’s reports of depression and their child’s behavior is mediated by mother’s reports of parenting style and their child’s emotion regulation. Lastly, I examined differences in internalizing and externalizing behaviors by the sex of the child. Additionally, I examined the role of potential covariates, such as mother’s employment, on each of the key variables. Each model was also examined by adjusting for theoretically relevant covariates, such as child age and mother’s employment status. These analyses helped determine which confounders or covariates to include in the final mediation models.

Descriptive statistics. Preliminary investigations of key variables included an assessment of descriptive statistics (i.e. mean, median, standard deviation, interquartile range), tests for normality such as examining histograms, kurtosis values, and Fisher’s skewness coefficient (skewness divided by the standard error of skewness). If variables were not normally distributed, they were transformed or dichotomized.

Mediation Models. A series of hierarchal linear regression mediation models were employed to predict both outcome variables (child’s internalizing and externalizing behavior) as a function of mother’s current depression, parenting style, and child emotion regulation. Mediation models consisted of three pairs of measure variables. The $X$ variables represented mother’s depression, the $M$
variables represented the mediators such as child’s emotion regulation and mothers parenting style, and the Y variables were the child externalizing and internalizing behavioral problems.

To determine whether relationship between child’s emotion regulation and mothers parenting style mediated the association between mothers’ reports of depression and the child’s externalizing and internalizing behavior problems, a series of models were tested using causal steps approach (Baron & Kenny, 1986). In addition to establishing a significant association between the predictor and outcome variables, four additional steps were required to establish mediation and each step must produce a significant result in order to proceed to the next step (Baron & Kenny, 1986). For example, for the predictor variable “parenting style”, I first tested whether mothers reports of depression were positively associated with the proposed mediator, child’s emotion regulation. Then, I tested whether the mediators predicted each of outcome variables, externalizing and internalizing behavioral problems. Next, I tested whether the mediated paths using bootstrap analysis. Bootstrapping was the preferred method of choice because it is a more sensitive test than others (e.g., Sobel’s test), it is appropriate for smaller sample sizes, and it does not assume a normal distribution. In these analyses, if the 95% confidence interval that is generated by the bootstrap test does not include zero, significant mediation is achieved. Finally, I tested the direct paths from child’s emotion regulation to each outcome variable when adjusting for mothers depression to determine whether mediation is partial or complete. If the direct effects of the predictor on the outcome variable remained significant, after adjusting for the mediator, partial mediation would be found. The same procedures were followed for mother’s parenting style.