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Parental Depressive Symptoms and Youth Internalizing and Externalizing Problems: The Moderating Role of Interparental Conflict

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Abstract

The current investigation examined if interparental conflict (IPC), including psychological and physical violence, moderated the relationship between parental depressive symptoms and youth internalizing and externalizing problems, respectively, in a sample of youth with a parent with a history of Major Depressive Disorder (MDD). One hundred and eighty families with a parent with a history of MDD ($M_{\text{age}} = 41.96$; 88.9% mothers) and a youth in the target age range of 9-to-15 years (49.4% females; $M_{\text{age}} = 11.46$) participated. Findings indicated that IPC exacerbated the effect of parental depressive symptoms on internalizing, but not externalizing, problems for both males and females. Findings suggest that, in families with a parent who has a history of depression, parental depressive symptoms and IPC together have important implications for youth internalizing problems. Targeting improvement for both parent depressive symptoms and interparental conflict may directly lead to decreases in youth internalizing symptoms in the context of parental depression.

Keywords

Parental depressive symptoms; interparental conflict; youth problem behaviors

Recent estimates suggest that at least 15 million children in the United States live with a depressed parent (National Research Council/Institute of Medicine [NRC/IOM], 2009) and over 80% of these parents experience more than one depressive episode (e.g., Belsher & Costello, 1988). Parental depression is associated with both externalizing and internalizing problems in children (see Goodman et al., 2011, for a review). Extensive research in the past 20 years has focused on the mechanisms of transmission from parental depression to child problem behaviors (see Goodman & Gotlib, 1999; Goodman et al., 2011, for reviews). However, equally important to identifying mechanisms of transmission is the identification of family conditions that may exacerbate or protect youth living with a parent with a history of depression. The current study was designed to examine one such family variable: interparental conflict (IPC).

Meta-analytic work suggests that maternal depression has a significant, albeit small in magnitude, impact on both youth internalizing and externalizing problems (Goodman, Rouse, Connell, Broth, Hall, & Heyward, 2011; Harvey et al., 2011), and more limited research suggests that paternal depression has similar effects (Kane & Garber, 2009). Although it is true that genetic factors impact intergenerational transmission of internalizing problems, environmental factors also play an important role (Rice, Harold, & Thapar, 2002). Research suggests that depressed parents expose their children to more sad and irritable affect, tend to be less positive and more hostile toward their children, and display inconsistent parenting techniques (e.g., oscillating between harsh and lax discipline; Goodman & Gotlib, 1999). Further, it is suggested that depressed youth behavior may be reinforced in homes with a depressed parent (e.g., increased attention; Davis, Sheeber, & Hops, 2000) and non-depressed behavior may receive less reinforcement (Cole & Rehm, 1989). Together, this suggests that depressed parents may be unable to meet the emotional and social needs of their child and that youth may acquire some of the maladaptive, depressogenic cognitions and behaviors of their parent through social learning processes.

The impact of parental depression on youth externalizing behavior suggests that parental depression may be characterized by multifinality, such that having a depressed parent may lead to multiple maladaptive outcomes (Cicchetti & Rogosch, 1996). Similar to internalizing problems, meta-analytic work suggests that maternal depression is related to child externalizing (Goodman et al., 2011). Theory suggests that elevated levels of externalizing problems in children of depressed parents may reflect emotion regulation deficits due to genetic predispositions and inadequate modeling of proper regulatory abilities (Radke-Yarrow et al., 1992), inheritance of a genetic predisposition for behavioral disorders closely related to depression (e.g., substance abuse), or other environmental factors related to parental depression (e.g., lax or harsh parenting; Goodman et al., 2011). Thus, when examining the impact of parental depression on youth outcomes, it is important to include both externalizing and internalizing behaviors.

However, the previously mentioned explanations for the maladaptive outcomes seen in children of depressed parents may not provide a complete picture of the stressors faced by these youth. Research suggests that IPC is more likely to occur in families with parental depression and may be one of the most pervasive stressors for children of depressed parents (Goodman & Gotlib, 1999). IPC is more predictive of poor youth outcomes than divorce

(e.g., Amato, 2001) and confers significant risk for the development of both externalizing and internalizing problems (e.g., Fear et al., 2009; Franck & Buehler, 2007). According to the emotional security framework (Davies & Cummings, 1994), youth develop a sense of security within the context of their parents' relationship and threats to this security result in emotional reactivity (e.g., hypervigilance), attempts at regulating the conflict exposure (e.g., avoidance, interference), and a hostile internal representation of the consequences of parental conflict on security (e.g., schema that conflict, in any form, will harm the youth). Over time, the youth's specific responses may develop into a profile of externalizing or internalizing behavior (Davies & Martin, 2014; see also Foscoe & Feinberg, 2015). Taken together, a youth in a family characterized by parental depression *and* IPC may be at increased risk for maladaptive outcomes as these two family stressors may interact to exacerbate child problem behaviors. In other words, these youth may already be at risk for internalizing and externalizing problems due to their parent's depressive symptoms (i.e., genetic risk, social learning processes) but their risk may multiply when they also live in an environment that induces hypervigilance, avoidance, and hostile cognitive biases, a common occurrence for many youth of depressed parents.

Research examining whether IPC exacerbates the negative effects of parental depressive symptoms on youth problem behavior has been sparse. Providing the most compelling support for this hypothesis, Hammen, Brennan, and Shih (2004) found that marital satisfaction interacted with parental depression (clinically depressed vs. non-depressed): Youth from homes with a depressed parent and low marital satisfaction were significantly more likely to be diagnosed with depression or an externalizing disorder (e.g., conduct disorder, attention-deficit/hyperactivity disorder) than those from homes with other combinations of these two constructs (i.e., depressed parent and high marital satisfaction; non-depressed parent and either low or high marital satisfaction). In contrast, in another examination of depressed versus non-depressed parents and multiple family risk factors including poor marital adjustment, Fendrich, Warner, and Weissman (1990) found that "most of the statistical tests for interaction effects were non-significant" (p. 48) when examining multiple youth diagnostic outcomes (i.e., depression, anxiety, conduct disorder). Finally, using a community sample, Papp (2012) failed to find an interaction between parental depressive symptoms and marital conflict when youth depressive symptoms was the outcome.

In an attempt to explain the risk factors associated with youth internalizing and externalizing problems, it would be remiss to exclude the examination of youth gender. Research suggests that females are more likely to exhibit internalizing problems and males to exhibit externalizing problems (e.g., Crick & Zahn-Waxler, 2003); thus, it would be reasonable to expect that females would exhibit internalizing problems in response to parental depression and IPC and males would exhibit externalizing problems (Cummings & Davies, 1994). However, most research on parental depression and marital conflict, respectively, has not found support for gender as a moderator (see Goodman & Gotlib, 1999; Davies & Cummings, 2006 for reviews). Nevertheless, it is important to include this youth characteristic in order to fully explicate findings.

The primary goal of the current study is to examine IPC as a moderator of the relationship between parental depressive symptoms and child problem behaviors (i.e., internalizing, externalizing). In contrast to examining depressed versus non-depressed samples or community samples, the current study is the first examination of IPC within a sample of parents with a history of depression using a moderation framework. As noted, this allows us to begin to identify family stressors that may exacerbate the effects of parental depressive symptoms on youth problem behaviors. Examining this sample of parents is especially important because research indicates that more chronic and severe depression is positively related to poorer youth outcomes (e.g., Hammen, 2009) and, as has been noted, parental depressive symptoms are related to IPC (e.g., Goodman & Gotlib, 1999). As a consequence, IPC may be particularly disruptive to youth psychosocial adjustment when parental depressive symptoms are more pronounced.

Several additional aspects of our study are noteworthy. First, we include families with either a mother or father with a history of depression (see Phares, Fields, Kamboukos, & Lopez, 2005) and both intact and divorced families as IPC continues after divorce (e.g., Emery, Matthews, & Kitzmann, 1994). Second, the current study focused on IPC, rather than other dimensions of interparental functioning (e.g., marital satisfaction), for two reasons: (1) emotional security theory suggests that conflict, specifically, threatens a youth's sense of safety in the family and may have the greatest impact on youth maladaptive outcomes (Davies & Cummings, 1994); and (2) this component of interparental functioning is important in both married and divorced families (e.g., Emery et al.). Third, a continuum of IPC is assessed which ranged from arguing to physical violence. Fourth, we examined youth internalizing and externalizing problems, as both have been associated with parental depression and IPC (e.g., Fear et al., 2009; Goodman et al., 2011). Furthermore, by using a dimensional, rather than categorical, assessment of these problem behaviors, we can detect individual differences in youth outcomes more sensitively. Fifth, as youth gender is differentially associated with both internalizing and externalizing problems (Watson, Potts, Hardcastle, Forehand, & Compas, 2012; Crick & Zahn-Waxler, 2003), we conducted secondary analyses to ascertain if gender qualifies our findings. Finally, we assessed parental depressive symptoms via parent report, IPC via youth report, and youth problem behaviors via parent and youth report. Utilizing youth report of IPC can provide the most sensitive measurement of this construct when the outcome is youth psychosocial adjustment (Davies & Cummings, 1994; Grych, Seid, & Fincham, 1992). Furthermore, using both parent and youth report of problem behaviors provides a broader perspective of the outcome than a single informant.

We hypothesized that both parental depressive symptoms and IPC would be significant, unique predictors of youth internalizing and externalizing problems. Of primary importance, we hypothesized that IPC would significantly moderate the relationship between parental depressive symptoms and youth outcomes such that this relationship would be stronger among youth in families characterized by higher levels of IPC. As consistent gender differences in the associations between parental depressive symptoms or IPC and youth outcomes have not emerged, no specific hypotheses were made regarding the role of youth gender (see Davies & Cummings, 2006; Goodman & Gotlib, 1999, for reviews).

Method

Participants

One hundred and eighty families, all of which had a parent with a history of MDD ($M_{\text{age}} = 41.96$) and a youth in the target age range of 9-to-15 years (49.4% females; $M_{\text{age}} = 11.46$; $SD = 2.00$), were recruited from the larger Burlington, Vermont and Nashville, Tennessee communities and included in current analyses. For families with multiple children in the target age range, one youth was randomly selected for the current analyses. The majority of the target parents (i.e., those identified as having a history of MDD) were female (88.9%), married (61.7%) and educated (31.7% with 4-year college degree; 23.3% with graduate education). Although participant ethnic composition was primarily Caucasian, with 25.6% of youth identifying as racial/ethnic minorities, the ethnic make-up of participants was, according to 2000 U.S. Census data, representative of the regions from which they were drawn. The data reported in this study were from the baseline assessment of families enrolling in a preventive intervention program. The outcome of this intervention has been reported by Compas et al. (2009, 2011, 2015).

Procedure

All study procedures were approved by the Institutional Review Boards (IRBs) at the University of Vermont and Vanderbilt University. Families were recruited through a variety of means including flyers, newspaper and radio advertisements, and referrals from physicians. Interested families were screened over the phone and then in an in-person visit to determine eligibility. Inclusion criteria for parents included a history of MDD during the lifetime of the target child(ren) based on the Structured Clinical Interview for DSM (SCID; First, Spitzer, Gibbon, & Williams, 2001) (interrater reliability for diagnosis of MDD: 96% agreement, $\kappa = .76$). Exclusion criteria on the SCID consisted of a history of Bipolar I disorder, schizophrenia or schizoaffective disorder. If parents were either suicidal or had a current substance use problem and had a global assessment of functioning (GAF) score of 50, the family's participation was deferred, they were offered assistance with obtaining community mental health services, and rescreened at regular intervals for eligibility (see Compas et al., 2009, for training and reliability).

Youth in the age range of 9–15 years old were eligible if, based on the Schedule for Affective Disorders and Schizophrenia for School-Age Children- Present and Lifetime Version (K-SADS-PL; Kaufman et al., 1997), they were free of lifetime diagnoses of autism spectrum disorders, mental retardation, Bipolar I disorder, and schizophrenia and if they did not currently meet criteria for conduct disorder or alcohol/substance use disorders. If youth were in an episode of depression (interrater reliability on K-SADS-PL for MDD diagnosis: 93% agreement, $\kappa = .71$) at screening, the family was deferred, provided appropriate referrals, and rescreened at regular intervals.

Measures

Demographic information—Target parents provided demographic information about themselves (e.g., parental age, education) and their families (e.g., household income). Youth also reported demographic information (e.g., sex, age).

Parent depressive symptoms—The Beck Depression Inventory, Second Edition (BDI-II; (Beck, Steer, Ball, & Ranieri, 1996), assessed current levels of parental depressive symptoms. Participants responded to 21 items, each rated on a 4-point Likert scale (e.g., 0 = “I do not feel sad”, 3 = “I am so sad or unhappy that I can’t stand it”). Higher scores reflect more depressive symptoms over the past two weeks. The BDI-II has excellent psychometric properties ($\alpha = .92$) (Beck et al., 1996) (current study $\alpha = .93$). Suggested categories for the BDI-II include: 0–13 = minimal depression; 14–19 = mild depression; 20–28 = moderate depression; and 29–63 = severe depression (Beck et al., 1996).

Children’s perceptions of interparental conflict intensity—The Children’s Perceptions of Interparental Conflict Scale (CPIC; Grych, Seid, & Fincham, 1992), the most widely used measure of youth reported IPC (Nigg et al., 2009), assessed IPC. The seven-item narrow-band Intensity subscale within the broadband conflict properties scale was used to assess youths’ perceptions of the intensity of IPC (e.g., “My parents get really mad when they argue”) because more intense conflict has shown to impact youth outcomes (Davies & Cummings, 1994). Items included ones that measured the display of psychological (e.g., yell) and physical (e.g., push or shove, throw things) violence. Each item was rated on a 0 (False) to 2 (True) scale with higher scores reflecting more conflict. Adequate reliability and validity have been reported (e.g., Grych et al., 1992) (current $\alpha = .80$). When parents were divorced or separated, families were retained because IPC often continues following separation or divorce (e.g., Emery et al., 1994).

Youth internalizing and externalizing symptoms—The Youth Self-Report for Ages 11–18 (YSR/11–18; Achenbach & Rescorla, 2001) and the parent report Child Behavior Checklist for Ages 6–18 (CBCL; Achenbach & Rescorla, 2001) are widely-used, nationally-normed assessments of youth behavioral and emotional problems. The YSR and CBCL consist of 118 items. Using a 0 (not true) to 2 (very or often true) scale, youth or parent describes how well the statements describe the youth’s symptoms/behaviors over the past 6 months. The YSR and CBCL yield broad-band factor scores of internalizing and externalizing problems. Children as young as 7 years can complete the measure (Ebesutani, Bernstein, Martinez, Chorpita, & Weisz, 2011) and there is adequate internal consistency for the YSR scales among 9 and 10 year olds (i.e., all $\alpha = .80$; see Compas et al., 2009). In the current study, all alpha coefficients were above .82. Consistent with prior research (e.g., Compas et al., 2009, 2011) raw scores were utilized in analyses to maximize variance.

Data Analytic Plan

Evaluation of the structural model—Path analysis to test the hypothesized structural model was conducted with Mplus 6.0 software (Muthén & Muthén, 2010). To account for skewed data, maximum likelihood estimation with robust standard errors (MLR) was used. The following fit statistics were employed to evaluate model fit: Chi-square (χ^2 ; $p > .05$ excellent), Comparative Fit Index (CFI; $> .95$ excellent), Root Mean Square Error of Approximation (RMSEA; $< .05$ excellent) and the Standardized Root Mean Square Residual (SRMR; $< .05$ excellent) (Hu & Bentler, 1999). As missing data were less than 4% overall for all core variables, the mechanism of missingness was treated as ignorable (missing at

random) and full information maximum likelihood estimation techniques were used for inclusion of all available data.

The effects of control variables (i.e., parent gender, parent age, parent education, marital status, race/ethnicity, and youth age) on the model were examined by running a multiple-indicator/multiple-cause (MIMIC; Muthén, 1989) model in which all outcome variables of the final structural model were regressed on the covariates separately. If paths in the structural model remained significant with the inclusion of these covariates, it was concluded that the control variables did not influence the relationships among variables in the model.

Results

Preliminary Analysis

Descriptive statistics and bivariate correlations among study variables can be found in Table 1. Parental depressive symptoms, which, on average, were on the borderline between mild and moderate depression, were positively correlated with youth's perceptions of the intensity of IPC, and both youth and parent reported internalizing and externalizing problems. Youth perceptions of IPC intensity ($M = 5.59$ on 0 to 14 scale range) were positively correlated with youth, but not parent, reported internalizing and externalizing problems. Internalizing and externalizing problems were significantly correlated across informants and constructs. Prior to primary analyses, youth report on the YSR and parent report on the CBCL were summed to create multi-informant composite variables for internalizing problems and for externalizing problems. Further, prior to covariate analyses, two demographic variables were dichotomized based on sample size in groups and inspection of the means. Race was dichotomized to White (0) or Person of Color (1) and marital status was dichotomized to single (0) or married/ living with a partner (1).

T scores on the YSR and CBCL scales at baseline were examined to provide a normative reference point for our sample (Achenbach & Rescorla, 2001). Mean *T* scores on the YSR and CBCL were, respectively, 54.2 and 59.0 for internalizing problems, and 49.5 and 54.5 for externalizing problems. The percent in the clinical range (i.e., *T* score > 63) on the Internalizing scale was 23.2% on the YSR and 43.6% on the CBCL; for the Externalizing scale, 9.4% on the YSR and 22.6% on the CBCL (10% would be expected to exceed this clinical cut-off based on normative data). These scores are similar to those reported for children of depressed parents in other studies, including the STAR*D trial (Foster et al., 2008). These data indicate that, as expected, this is an at-risk sample as reflected by moderately elevated mean *T* scores and the portion of the sample in the clinical range (i.e., two to four times greater than would be expected based on the norms for three of the four scales).

Primary Analyses

The proposed model demonstrated excellent fit ($\chi^2 (2, N = 166) = 1.78, p > .15, RMSEA = .00, 95\% \text{ CI } .00 - .15, CFI = 1.0, SRMR = .04$). Figure 1 displays significant standardized estimates for paths in the model. Parent depressive symptoms were significantly associated

with youth perceptions of IPC intensity. Additionally, the composite of youth and parent reported internalizing and externalizing problems were positively related. Parent depressive symptoms were significantly related to youth internalizing and externalizing problems such that higher levels of parental depressive symptoms were associated with higher levels of both problem behaviors. Further, youth perceptions of IPC intensity were related to youth internalizing, but not externalizing, problems such that youth perceptions of more intense IPC were associated with higher levels of internalizing problems. Lastly, the interaction between parent depressive symptoms and IPC was significantly related to youth internalizing, but not externalizing, problems.

MIMIC models tested the demographic effects of parent gender, age, education, marital status, race/ethnicity, and youth age on the associations in the model. Internalizing and externalizing problems were regressed on each control variable separately. Overall, all paths in the structural model were unaffected (i.e., no changes in significant or substantial changes in effect sizes) by the inclusion of these control variables; thus, it was concluded that the control variables did not influence the original relationships among variables in the model.

Figure 2 illustrates the significant interaction by depicting the regression lines of the relation between parent depressive symptoms and youth internalizing problems at high and low (+1 SD, -1 SD) scores of IPC intensity (Aiken & West, 1991). The analysis of simple slopes indicated that the conditional effect of parent depressive symptoms on youth internalizing problems was significant at high, but not low, levels of IPC ($p < .01$) such that youth exhibit the highest levels of internalizing problems in families with high levels of *both* parent depressive symptoms and IPC.

Lastly, we tested a three-way interaction of parent depressive symptoms by IPC by youth gender. All two-way interactions (parental depressive symptoms by gender; IPC by gender) and the three-way interaction were non-significant, suggesting that the associations in the model were consistent for boys and girls.

Discussion

Families with parental depressive symptoms are at increased risk for IPC (Goodman & Gotlib, 1999), including psychological and physical aggression. IPC may exacerbate the negative effects of parental depression on child behavior. In the current study, we examined the individual effects of parental depressive symptoms and IPC but, more importantly, their interactive effect on child internalizing and externalizing problems. Parental depressive symptoms were related to youth internalizing and externalizing problems, whereas IPC was only related to internalizing problems. Of primary importance, IPC exacerbated the effect of parental depressive symptoms on internalizing, but not externalizing, problems. Gender did not serve as an additional moderator, suggesting that these relationships may hold for both males and females.

With one exception, main effects are consistent with existing literature (see Goodman et al., 2011), as parental depressive symptoms were associated with both internalizing and externalizing problems, and IPC was associated with youth internalizing problems.

However, in contrast to prior research, IPC was not associated with youth externalizing problems. Foscoe and Grych (2010) have proposed that IPC can lead to externalizing problems when youth, particularly adolescents, become involved in the conflict between their parents in that “they are exposed to and may engage in more hostile and aggressive interactions with their parents” (p. 263). Rhoades (2008) found that, for most dimensions of conflict, child responses (i.e., cognitions, behavior, emotions) to IPC is more strongly related to internalizing than externalizing problems; however, child involvement in interparental conflict was related similarly to both internalizing and externalizing problems. Our failure to find that IPC was related to externalizing problems either as a main effect or through an interaction with parental depressive symptoms may have resulted from these youth not being involved in their parents’ conflict. Perhaps youth of parents with a history of depression engage in less hostile and aggressive interactions with their parents because this could exacerbate their parent’s depressive symptoms. However, it should also be noted that the mean scores for externalizing problems were lower than for internalizing, perhaps suggesting that the range of symptoms in these youth was constricted more so than internalizing symptoms and, therefore, helps to account for the nonsignificant findings. Future research in this area should examine the extent to which youth are involved in IPC.

In contrast to externalizing problems, a significant interaction between parental depressive symptoms and IPC emerged for youth internalizing problems. Our findings, which are consistent with those of Hammen and colleagues (2004) with depressed versus non-depressed samples, indicated that IPC worked in a multiplicative manner with parental depressive symptoms to increase youth internalizing problems. In families with a parent with a history of depression, parental depressive symptoms have been associated with not only increased heritability of internalizing problems but also negative parenting. This parenting style is characterized by vacillations between hostile/over-intrusive involvement with the child and a lack of involvement and responsiveness to the child (see Goodman et al., 1999). IPC may be particularly detrimental in these families as youth depressive and/or anxious behaviors are further exacerbated by threats to their security emerging from the interparental relationship (Davies & Cummings, 1994; Foscoe & Feinberg, 2015). However, it is also possible youth with a parent with high levels of depressive symptoms and their own internalizing problems may be more likely to over-report, or be overly sensitive to, IPC. Future work should utilize multiple reporters of IPC in order to explore this notion.

As noted in the preliminary analyses section, the majority of our sample was not in the clinical range for internalizing or externalizing problems. However, if viewed from a developmental psychopathology perspective, the results of this study still offer important insights for clinical populations. Specifically, “developmental psychopathology refers not simply to the search for the indicators or predictors of later disturbance...but also to the description of the interactive processes that lead to the emergence and guide the course of disturbed behavior” (Cicchetti, 2006, p. 8). Further, developmental psychopathologists emphasize the importance of studying both clinical and at-risk populations in an effort to understand the emergence of psychopathology. A benefit of understanding atypical development within the context of typical development is that maladaptation is viewed as an outcome of developmental processes and not a disease entity such that psychopathology is viewed on a dimension from typical to atypical (Cummings, Davies, & Campbell, 2000).

This, in turn, has unique implications for prevention and intervention efforts that target key developmental processes implicated in the development of maladaptive behaviors. Indeed, at-risk populations are optimal for understanding, “the continuity of discontinuity of adaptive and maladaptive behavioral patterns and the pathways by which normal and pathological developmental outcomes may be achieved” (Cicchetti, 2006, p. 2). Thus, utilizing a non-clinical, at-risk population provides valuable insight as to which youth are more likely to exhibit problem behaviors in certain contexts.

Limitations and Practical Implications

The current study was limited in several ways. First, the cross-sectional design of the study limits the conclusions that can be made about causality. Future research would benefit from examining this model in a longitudinal framework. Second, although the sample was representative of the regions from which it was drawn, it was composed of primarily Caucasian mothers. Third, the sample was selected for a prevention program; therefore, youth who had a diagnosis of Conduct Disorder (CD) or current MDD were excluded from participating in the study. Consequently, the sample is not entirely representative of children of depressed parents and the incidence of youth’s maladjustment may be underestimated, as symptoms of CD and MDD are included in externalizing and internalizing symptoms, respectively. Fourth, all information was gathered using questionnaires. Although questionnaire data from both parent and child were included, future work would benefit from the use of multiple methods. For example, observations of IPC or of children in a setting outside the home could speak to any bias resulting from parent or child report. Fifth, our sample size may have not provided sufficient power to detect three-way interactions. Thus, any conclusions regarding the role of youth gender should be viewed with caution.

Despite these limitations, the current study also had a number of strengths. First, the sample consisted of parents with a history of MDD. Youth in these homes may be particularly at-risk for maladaptive outcomes because more chronic and severe depression is related to poorer youth outcomes (e.g., Hammen, 2009). Second, the study is the first to examine how IPC exacerbates the effects of parental depressive symptoms in such a sample. Third, focusing on this sample helped diminish floor effects that occur when studying psychopathology in community samples. Fourth, the sample size was relatively large which provided the statistical power to detect two-way interactions. Fifth, IPC behaviors ranging from psychological to physical aggression was assessed from the youth’s perspective. Research and theory (i.e., cognitive-contextual framework) suggest that a youth’s appraisal of the conflict is linked to his/her (mal)adjustment (Grych & Fincham, 1990; Fosco, BeBoard, & Grych, 2007) and, thus, is important to assess.

Overall, the current study suggests that both parental depressive symptoms and IPC can have important implications for youth internalizing and externalizing and that together these stressors can have especially important implications for youth internalizing. Findings from this and future studies can lead to the enhancement of parent education and skills training programs focused on decreasing internalizing problems in children of depressed parents (e.g., Compas et al., 2009, 2010, 2011, 2015). Results from the present study suggest that targeting improvement for both parent depressive symptoms and IPC may directly lead to

decreases in youth internalizing symptoms in the context of parental depression. However, other more proximal variables to the youth also should be examined for inclusion in intervention programs. Specifically, difficulties in parenting among depressed parents (Lovejoy, Graczyk, O'Hare, & Newman, 2000) and those with IPC (e.g., Cui & Conger, 2008; Schoppe-Sullivan, Schermerhorn, & Cummings, 2007) have been identified in the literature. Indeed, the Social Interactional Model suggests that certain parenting behaviors (e.g., coercive discipline) increase the probability that youth will develop externalizing problems (Granic & Patterson, 2006) and that coercive parent-child interactions are the "fundamental behavioral mechanisms" (p. 101) that explain the emergence and stability of youth externalizing problems. Similarly, there is evidence that parenting practices are related to child internalizing problems (e.g., McLeod, Weisz, & Wood, 2007; McLeod, Wood, & Weisz, 2007; Rapee, 2012). Additional cognitive (e.g., internal working models) and emotional (e.g., shame, empathy) variables also should be examined in the context of the current model in order to explore how these factors may play a role in both child and parent psychosocial adjustment in families with interparental conflict and depression. Comprehensive parenting programs need to assess and, if necessary, include treatment for all three areas of family functioning (i.e., parental depression, IPC, and, parenting) and individual characteristics (e.g., insecure internal working model).

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Figure 1.

Standardized Estimates for Structural Model

* $p < .05$, ** $p < .01$, *** $p < .001$.Note: Model fit: $\chi^2 (2, N = 166) = 1.78, p > .15$, RMSEA = .00, 95% CI .00 – .15, CFI = 1.0, SRMR = .04.

Figure 2.
The Relation between Parent Depressive Symptoms and Youth Internalizing Problems at High and Low (+1 SD, -1 SD) Scores of Interparental Conflict Intensity

Table 1

Descriptive Data and Bivariate Correlations Among Study Variables

	M (SD)	Range	2	3	4	5	6
1. BDI	19.23 (12.6)	0 – 52	.22**	.18*	.29**	.16*	.29**
2. CPIC Intensity	5.59 (3.5)	0 – 14	--	.29**	.10	.21**	.10
3. YSR Internalizing	13.57 (9.5)	0 – 44	--	--	.42**	.73**	.41**
4. CBCL Internalizing	11.8 (7.9)	0 – 34	--	--	--	.27**	.53**
5. YSR Externalizing	9.53 (7.0)	0 – 37	--	--	--	--	.47**
6. CBCL Externalizing	9.74 (8.2)	0 – 46	--	--	--	--	--

Note:

* $p < .05$,** $p < .01$.

BDI = Beck Depression Inventory; CPIC = Children's Perceptions of Interparental Conflict; YSR = Youth Self Report; CBCL = Child Behavior Checklist.