



Published in final edited form as:

J Clin Child Adolesc Psychol. 2022 ; 51(6): 982–996. doi:10.1080/15374416.2021.1894943.

Parent-Child Role Confusion: Exploring the Role of Family Processes in the Context of Parental Depression

Karissa DiMarzio¹, Justin Parent¹, Rex Forehand², Jennifer Champion Thigpen³, Juliana Acosta¹, Chelsea Dale¹, Bruce Compas³

¹Center for Children and Families, Department of Psychology, Florida International University, Miami, FL

²Department of Psychological Science, University of Vermont, Burlington, VT

³Department of Psychological Science, Vanderbilt University, Nashville, TN

Abstract

Objective: Parent-child role confusion has been shown to influence developmental outcomes for children whose parents have a history of depression; however, more research is needed to understand the pathways by which parental depression increases risk of role confusion. The current study aimed to extend previous literature by evaluating how different family processes (e.g., interparental conflict, guilt induction, family cohesion, and positive parenting practices) contribute to the development of emotional role confusion in families with a history of parental depression.

Method: The sample was comprised of 90 parent-child dyads (parent $M_{age}= 42$, 90% female, 83.3% White; child $M_{age}= 11.51$, 51.1% female, 75.6% White) participating in the control group of a randomized controlled trial. All parents had a history of depression. A longitudinal path analysis was conducted to evaluate prospective associations in the multiple mediator model.

Results: Findings from the current study suggest that parental depressive symptoms are not directly related to the development of parent-child emotional role confusion, but are instead indirectly related through increased interparental conflict observed by youth. Although not identified as significant mediators, guilt induction and positive parenting practices emerged as predictors of emotional role confusion. Lastly, family cohesion did not appear to influence the development of role confusion.

Conclusion: Findings suggest that parenting behaviors and coparenting relationship quality play important roles in the development of parent-child emotional role confusion, with interparental conflict emerging as the strongest predictor in families with a history of parental depression.

Keywords

role confusion; parental depression; family processes; interparental conflict

Introduction

Depression is an important public health concern, with a lifetime prevalence of approximately 21% (Hasin et al., 2019) and an annual cost of over \$100 billion in the United States alone (see Mrazek et al., 2015 for a review). Moreover, increasing research has focused on the risk of intergenerational transmission (see Goodman, 2020 and Gotlib et al., 2020 for reviews), suggesting that children of depressed parents may have an underlying genetic vulnerability that could increase their susceptibility to depression (Hankin, 2006; Weissman, 2005). This is particularly salient as it may perpetuate a cycle that could further increase prevalence and associated costs over time. Children's interactions with their depressed parents can also contribute to interpersonal and environmental processes, such as parenting practices and interparental conflict, that may exacerbate this risk (e.g., Hammen et al., 2012; Murray et al., 2011; Silberg et al., 2010). Further, research has shown that the consequences of parental depression can extend past increased risk of depression to also include other negative emotional, behavioral, and social outcomes for children (see Goodman et al., 2011 for a meta-analysis).

Parent-child role confusion (also commonly referred to as role reversal, boundary dissolution, parentification, spousification, and adultification) describes the dynamic in which a child takes on developmentally inappropriate responsibilities at the expense of his or her own needs, acting as a parent (e.g., assisting the caregiver in taking care of him/herself or siblings) or peer (e.g., serving as a confidante by listening and assisting in problem-solving) to a caregiver (Macfie et al., 2015). While role confusion has been associated with neutral and even adaptive effects in some contexts, such as families of military-involved or immigrant parents (e.g., Hooper et al., 2014; Kuperminc et al., 2009), it has also been associated with markedly negative effects in others, such as families of parents suffering from mental illness or addiction (e.g., Abraham & Stein, 2013; Tedgård et al., 2019) — a division which may be indicative of the amount of intrafamilial supports that children have available to them in each context. For instance, although certainly facing unique challenges, children of military-involved or immigrant parents may receive more direct or involved support from their parents than children whose parents are incapacitated by mental illness or addiction. As such, the formerly described children may not exhibit the same detrimental effects as other role-confused children due, in part, to their own emotional needs being concurrently attended to by their parents. To date, much of the research on role confusion — including the current investigation — has been conducted using samples predominately comprised of mothers. Less is known on how the prevalence, presentation, and long-term impact of role confusion may vary across other comparatively underrepresented populations, including fathers, LGBTQx parents, non-nuclear families or families with other individuals acting as the primary caregivers to children (e.g., grandparents, foster parents) (e.g., Khafi et al., 2014; Macfie et al., 2015).

More specifically to the current paper, role confusion has been observed among children whose parents have a history of depression (Abraham & Stein, 2013; Champion et al., 2009). Research examining role confusion and parental depression has highlighted the differential roles of emotional (e.g., problem solving for parent or serving as a confidante) and instrumental (e.g., caring for siblings, running errands, completing household tasks)

caregiving in determining how role confusion influences youth outcomes. For example, in their cross-sectional investigation, Champion and colleagues (2009) found that only emotional caregiving was associated with internalizing symptoms and social problems among adolescents whose mothers had a history of depression. Although research on role confusion is relatively new, both concurrent and prospective studies have helped to illuminate deleterious consequences that can arise for children taking on these caregiving roles (e.g., Hooper & Wallace, 2010; Prussien et al., 2018). Still, greater empirical attention is warranted, particularly with regard to longitudinal and experimental research designs.

To date, our knowledge of role confusion in families impacted by parental depression is largely based on cross-sectional and qualitative investigations (e.g., Abraham & Stein, 2013; Champion et al., 2009; Van Loon et al., 2017), making complementary and theoretically driven quantitative work a much needed addition to this area of study. Family systems theory, in particular, presents as a promising framework from which researchers can evaluate the construct of role confusion. Family systems theory suggests that individuals in a family function in connection to one another with one individual's behavior affecting the family unit as a whole (Paley, 1997). In a family system affected by depression, a parent may be incapacitated by his or her symptoms and consequently unable to care for a child who, in turn, might take over neglected household chores or family roles (e.g., acting as a caregiver to siblings) to compensate for the absence of stable parenting. Alternatively, increased interparental conflict as a result of a parent's depressive symptoms might result in a child intervening and offering emotional support to one or both parents. In both examples, there is a dissolution of boundaries in the parent-child subsystem that sets the stage for the development of role confusion through the child's attempts to reestablish a sense of normalcy in the family system.

Relatedly, the spillover hypothesis suggests that dysfunction in one subsystem can impact the functioning of another (Erel & Burman, 1995). Returning to the previous example, interparental conflict could impact the parent-child relationship, with the child's interference and protectiveness of the depressed parent increasing the likelihood of negative parenting (e.g., withdrawal, hostility) from the other. In line with the spillover hypothesis, the tension and conflict initially confined to the parental subsystem "spills over" to the parent-child subsystem, creating dysfunctional patterns of behavior across both. Within such contexts, role confusion can present as an emotionally maladaptive exchange with the parent expecting the child to take on instrumental or emotional responsibilities without reciprocating the support (Hooper, 2007). In other words, the child contributes more to the relationship or family than what the parents, themselves, provide in return — a dynamic that can leave limited space for the child to express and cope with their own thoughts and emotions. Interactions such as these may be important to consider given that lack of transactional support and perceived unfairness were associated with children's maladjustment in a prior cross-sectional study (Jankowski et al., 2013).

Despite identifying the presence of role confusion in families with a history of parental depression, research has not yet disentangled the specific underlying mechanisms explaining its development. Investigations conducted in the context of the broader literature have highlighted interparental conflict and parenting practices as two interfamilial processes

associated with role confusion that may hold promise in providing elaboration. For instance, both concurrent and prospective research has found a significant relation between role confusion and interparental conflict, with role confused adolescents having a higher tendency to intervene in interparental conflict compared to their non-confused counterparts (Borchet & Lewandowska-Walter, 2017; Peris et al., 2008). Given parental depression has been well-documented as having a significant impact on the family system, including coparenting relationship quality and conflict (e.g., Hanington et al., 2012; Tissot et al., 2017), interparental conflict presents a promising avenue for further study. There is also an abundance of research demonstrating how parental depression can influence parenting practices (e.g., see Lovejoy et al., 2000 and Wilson & Durbin, 2010 for meta-analyses). Of the practices commonly studied, withdrawn parenting appears to be most related to role confusion (Champion, 2009). Specifically, Champion et al. (2009) found that withdrawn parenting was significantly associated with emotional caregiving by youth. A longitudinal study found similar results stemming from infancy, with mothers who reported higher rates of role confusion also having reported “significantly more withdrawing from interaction with their infants at 18 months” (Vulliez-Coady et al., 2013). From previous research, it is evident that the way in which a family functions plays an important role in the development of role confusion; however, this work represents only a small fraction of family dynamics, with other parent-child interactions left largely understudied.

Guilt induction, a form of psychological control employed to make youth comply with parental expectations, is one such interaction that warrants further examination. Donatelli and colleagues (2007) found that 68% of adolescents whose mothers had a history of depression reported feelings of guilt as a result of not being able to sufficiently meet their mother’s needs. Importantly, these adolescents also reported that their mothers were less likely to engage in behaviors meant to conclude guilt-evoking circumstances (e.g., forgiveness) compared to adolescents whose mothers did not have a history of depression. The needs of parents with depression are likely to be developmentally inappropriate and therefore difficult for children to meet. If a parent is less likely to express understanding when a child fails to meet certain needs or expectations, they may further perpetuate the risk or pervasion of role confusion by provoking feelings of guilt from the child, negatively reinforcing them to try harder in future attempts.

Family cohesion is another construct warranting further attention. Olson et al. (1983) define family cohesion as the emotional bond that family members have with one another, often exhibited by interfamilial processes such as boundary setting and decision-making. Cross-sectional work on family cohesion has highlighted how families affected by parental mental illness exhibit less cohesion and fewer opportunities for youth to express themselves (Van Loon et al., 2014). Families marked by lower rates of cohesion may be more susceptible to role confusion, as it may allow for individual members of a family, such as a parent with depression, to exhaust a majority of the available resources within a family. The shift from collective support (e.g., family members mutually supporting one another) to individual support (e.g., one member utilizing a majority of the available family resources or receiving support with limited reciprocation to others) may promote the development of role confusion by prioritizing a parent’s needs over that of a child and decreasing interfamilial resources that might otherwise assist the child in having their needs met by an alternative source (e.g.,

siblings, extended family). Given the limited number of studies examining family processes as contributing factors to the development of role confusion, more empirical investigations are needed, especially to improve our conceptualizations of the above associations in the context of parental depression.

Informed by family systems theory, the current study aimed to extend previous literature by evaluating the longitudinal process by which parental depressive symptoms influence the development of youth role confusion through positive (e.g., positive parenting practices and family cohesion) and negative (e.g., interparental conflict and guilt induction) aspects of family functioning. This research reports on secondary analyses of data corresponding to a control arm of another study (Compas et al., 2011). Although there is more evidence supporting an association between withdrawn parenting behaviors and role confusion, we evaluated positive parenting as it encompasses child-focused behaviors that are not archetypal of role confusion and warranted further examination. We hypothesized that higher parent depressive symptom severity would predict increases in role confusion through higher levels of interparental conflict and parental guilt induction, and lower levels of positive parenting practices (e.g., warmth, quality time) and family-level cohesiveness (e.g., decision-making, emotional support). Our decision to evaluate parents with a history of depression allowed us to test our hypotheses in a sample with higher levels of depressive symptoms than that typically seen in non-clinical samples.

Methods

Participants

One hundred and eighty families were recruited from communities in Burlington, Vermont and Nashville, Tennessee. Of these families, half were randomized to participate in a randomized controlled trial of a Family-Group Cognitive-Behavioral (FGCB) intervention and the other half to a written information condition for comparison. All families had at least one caregiver with a history of Major Depressive Disorder (MDD) and one child in the target age range of 9–15. Through the 12-month follow-up, 85.6% of the families were retained in the study (82% of families assigned to the intervention and 89% assigned to the comparison group), as defined by the provision of data for at least one follow-up data collection point. For the purposes of the current study, all families included in the analyses were members of the control group. This decision allowed researchers to examine prospective associations without the influence of the FGCB intervention, which has been shown to be effective (Compas et al., 2009; Compas et al., 2011). The majority of parents ($M_{\text{age}}=42$) in the comparison group were female (90%) and married (63.3%), and almost half (46.6%) had a 4-year degree or higher. The racial and ethnic composition of the sample was 83.3% White, 12.2% Black or African American, 1.1% Asian, 1.1% Latinx or Hispanic, 1.1% American Indian or Alaska Native, and 1.1% mixed race. According to 2000 US Census data, this composition was representative of the two regions of recruitment. In families where more than one child participated in the study, one child per family was randomly selected for inclusion in the analyses ($M_{\text{age}}=11.51$, 51.1% female, 75.6% White).

Procedure

Families were recruited via advertisements (e.g., flyers, newspapers, radio announcements) and referrals from providers at each of the two sites. Families were determined to be eligible to participate in the present study after both a phone screen and in-person visit. Inclusion criteria for parents included having a history of MDD during the lifetime of the selected child. Parents were excluded from the study if they had a history of Bipolar I Disorder, Schizophrenia, or Schizoaffective Disorder as determined by the Structured Clinical Interview for the DSM-IV (First et al., 1997). In addition, children of participating parents had to meet the following inclusion criteria: 1.) between the ages of 9–15 years old, 2.) no current diagnosis of MDD, Conduct Disorder, or Substance Use Disorders, and 3.) no lifetime diagnosis of Bipolar I Disorder, Schizophrenia, Autism Spectrum Disorders, or intellectual disability. The last two criteria were determined by the Schedule for Affective Disorders and Schizophrenia for School-Age Children-Present and Lifetime Version (Kaufman et al., 1997). In the case that a child met the diagnostic criteria for current MDD, families were deferred enrollment, provided referrals, and rescreened at 2-month intervals. Families included in the current analyses were only provided youth and parent psychoeducation packets on depression by mail. For additional information on the two conditions, see Compas et al., 2009 and 2011.

Measures

Parental depressive symptoms were assessed at baseline, family processes at baseline and the 6-month follow-up, and emotional role confusion at baseline and the 12-month follow-up.

Demographic information.—Parents provided demographic information on themselves (e.g., age, gender, race/ethnicity, education) and their families (e.g., household income). Children also provided demographic information (e.g., age, gender).

Parental depressive symptoms.—Target parents completed the Beck Depression Inventory (BDI-II; Beck et al., 1996). The BDI-II is a 21-item self-report measure that assesses depressive symptoms, such as sadness, loss of pleasure, and suicidal thoughts or wishes. Parents respond to each item according to how they have felt in the past two weeks using a 4-point Likert scale ranging from 0 to 3. Clinical interpretation guidelines for the measure suggest that scores of 0–13 indicate minimal depression, 14–19 mild depression, 20–28 moderate depression, and 29–63 severe depression. The BDI-II had excellent internal consistency at baseline ($\alpha = 0.93$).

Interparental conflict.—The Children's Perception of Interparental Conflict's (CPIC; Grych et al., 1992) intensity subscale is a 7-item self-report measure of interparental conflict. The subscale assesses properties of the perceived conflict by providing children with statements, such as "When my parents have an argument they say mean things to each other." Children were asked to indicate whether each statement was generally true, sort of true, or false with higher scores reflecting more conflict. The CPIC is the most widely used measure of youth-reported interparental conflict (Nigg et al. 2009). When parents were divorced or separated, families were retained due to evidence suggesting that interparental

conflict often continues following separation or divorce (e.g., Emery & Dillon, 1994). The CPIC demonstrated adequate internal consistency (baseline $\alpha = 0.81$; 6m $\alpha = 0.80$).

Guilt induction.—Children completed the Maladaptive Guilt Inventory (MGI; Donatelli et al., 2007). The 22-item measure assessed children’s perceptions of parental guilt induction (e.g., “My [mom/dad] makes me feel my problems are minor compared to [her/his] problems” and “I feel guilty because my [mom/dad] always reminds me of favors or sacrifices [she/he] has made for me”). Children provided responses to each statement using a response range of 1 (not at all true) to 7 (very true) indicating how typical each behavior is of the target parent. Higher scores are indicative of higher levels of parental use of guilt induction. Based on a prior exploratory factor analysis using a portion of the current sample, the MGI is conceptualized here as a single factor comprised of 12 items (see Donatelli et al., 2007 and Rakow et al., 2009, 2011). The MGI demonstrated adequate internal consistency (baseline $\alpha = 0.88$; 6m $\alpha = 0.93$).

Positive parenting behaviors.—The Iowa Family Interaction Rating Scales (IFIRS; Melby et al., 1998) were used to code two 15-minute videotapes of interactions between the target parent and child. The first interaction involved a discussion about a positive activity they enjoyed doing together in the past couple of months (e.g., family vacation), while the second interaction involved a discussion about a stressful time for the family when the target parent was depressed, down, or irritable (e.g., bad day at work). Using a 9-point scale (1 indicating that a behavior was not present and 9 indicating a behavior was frequently present), the IFIRS measures behavioral and emotional characteristics at the individual and dyadic (e.g., parent-child) levels. In determining the score for each code, the frequency and intensity of behavior, as well as the contextual and affective nature of the behavior, are considered. All interactions were double-coded by two independent observers and coders met to establish consensus on any discrepant codes (i.e., codes that were rated greater than two points apart or greater on the 9-point scale). Inter-rater reliability prior to consensus coding for the IFIRS composite codes, as indexed by an average ICC, was 0.73 across both tasks. The validity of the IFIRS system has been established using correlational and confirmatory factor analyses (Alderfer et al. 2008; Melby and Conger 2001). Additional details on coding and training procedures are described in Compas et al., 2010.

Following procedures used previously with the IFIRS codes (e.g., Lim et al. 2008; Melby et al. 1998), scores were averaged across the two 15-minute interactions for each code and then a composite code was created, with higher scores reflecting higher demonstrations of positive parenting behaviors. The positive parenting composite included the following codes: warmth (i.e., the degree to which the parent expresses liking, appreciation, praise, care, concern, or support for the child); child-centered behaviors (i.e., parent displays an awareness of the child’s needs, moods, interests, and capabilities); positive reinforcement (i.e., the extent to which the parent responds positively to the child’s “appropriate” behavior or behavior that meets specific parental standards); quality time (i.e., the extent of the parent’s regular involvement with the child in settings that promote opportunities for conversation, companionship, and mutual enjoyment); listener responsiveness (i.e., parent behaviors that validate and indicate attentiveness to the child); and monitoring (i.e., the

extent of the parent's specific knowledge and information concerning the child's life and daily activities). The alpha for the positive parenting composite was 0.81 and 0.85 at baseline and the 6-month follow up, respectively.

Family cohesion.—The General Functioning subscale of the McMaster Family Assessment Device (FAD; Epstein et al., 1983) was used to assess family cohesion. Parents completed the 12-item subscale by indicating how much they agreed or disagreed with given statements in relation to their family's typical functioning. Statements captured multiple aspects of cohesion, including decision-making (e.g., "We are able to make decisions about how to solve problems"), emotional support (e.g., "In time of crisis we can turn to each other for support"), and expressiveness (e.g., "We cannot talk to each other about sadness we feel"). Higher scores on this measure indicated higher levels of general dysfunction in the family system. The internal consistency for the FAD was adequate (baseline $\alpha = 0.86$; 6m $\alpha = 0.89$).

Parent-child role confusion.—Children completed the Parentification Questionnaire-Youth (PQ-Y; Jurkovic, 1995). The PQ-Y is a 20-item self-report measure adapted from the Parentification Questionnaire (PQ; Sessions & Jurkovic, 1986) and assesses youths' subjective experiences of emotional (e.g., "I feel there's enough problems at home so I don't want to cause more" and "It seems that people in my family bring me their problems") and instrumental (e.g., "I often do extra housework to help my parents" and "I often have to do other family members' chores") caregiving. Children are asked to indicate each statement as either true or false in relation to their general experiences in their family. Higher scores on the PQ-Y are indicative of higher role confusion in the parent-child subsystem. Adequate reliability and validity have been reported for the overall PQ-Y (e.g., Champion, 2009).

Although the original PQ-Y emotional and instrumental subscales each have 10 items, a reliability analysis highlighted several items in both subscales that were poorly correlated with the others. To improve internal consistency, these items were dropped from subsequent analyses. The final version of the emotional subscale was comprised of 8 of the original 10 items. The final version of the instrumental subscale was comprised of only 3 of the original 10 items: "I often have to do other family members' chores," "I'm often asked to do more than my share of the work in my family," "I feel I'm asked too often to take care of some other family member." Due to the limited number of items remaining in the instrumental subscale, we decided to omit instrumental role confusion from the analyses, choosing instead to only evaluate the associations in the model as they related to emotional role confusion. The alphas for the final emotional subscale were 0.73 and 0.81 at baseline and the 12-month follow up, respectively.

Data Analytic Plan

To test the proposed hypotheses, a longitudinal path analysis was conducted to evaluate prospective associations in a multiple mediator model in which interparental conflict, guilt induction, positive parenting behaviors, and family cohesion were observed as possible mediators of the relation between parental depressive symptoms and role confusion. Single mediator models with each variable were also examined to strengthen confidence

in the observed associations. Mediators and outcome variables were accounted for at baseline to strengthen interpretations from the analyses, which were conducted using the *Lavaan* (LAtent VArIable ANalysis) package in R (Rosseel, 2012). Potential violations to the assumptions of regression (e.g., normality, homoscedasticity) were addressed using maximum likelihood estimation with robust standard errors and bias-corrected 95% confidence intervals based on 5,000 bootstrapped samples. The following fit statistics were employed to evaluate model fit: Chi-square, χ^2 : $p > .05$ excellent, Comparative Fit Index (CFI; $> .90$ acceptable, $> .95$ excellent), Root Mean Square Error of Approximation (RMSEA; $< .08$ acceptable, $< .05$ excellent) and the Standardized Root Mean Square Residual (SRMR; $< .08$ acceptable, $< .05$ excellent) (Hu & Bentler, 1999). The mechanism of missingness was treated as missing completely at random, Little's MCAR test was non-significant, $\chi^2 = 215$ (233), $p = .795$, and full information maximum likelihood estimation techniques were used for inclusion of all available data.

Sensitivity analyses.—Although not included in the conceptual model, the effects of child gender, marital status, parent education, parent age, and family income were examined in sensitivity analyses, with each covariate evaluated separately to preserve unique associations that might otherwise have been lost due to the high covariances between the variables. These demographic variables were chosen based on prior research indicating the importance of taking family income and parent education into account when examining parenting behaviors and youth psychopathology (Akee et al., 2010; Davis-Kean, 2005). If paths in the structural model remained significant with the inclusion of these covariates, the impact of the covariates on the associations observed in the model was interpreted as non-significant. Lastly, to strengthen confidence in the longitudinal associations between the mediators and role confusion, we explored models with each mechanism at baseline predicting role confusion at 12-months controlling for baseline parent depressive symptoms.

Results

Preliminary Analyses

See Table 1 for variable means, standard deviations, and correlations. Of note, parental depressive symptoms at baseline were negatively correlated with positive parenting practices at baseline but not the 6-month time point, and positively correlated with emotional role confusion at baseline but not the 12-month time point. Interparental conflict, guilt induction, positive parenting practices, and family cohesion were largely correlated with one another at both the baseline and 6-month timepoints. Role confusion at baseline was significantly correlated with interparental conflict, guilt induction, positive parenting practices, and family cohesion at baseline as well as the 12-month time point, with the exception of positive parenting practices. Next, of the four single mediator models conducted, only the model with interparental conflict produced significant findings such that more severe parental depressive symptoms at baseline predicted higher levels of conflict at 6 months, $b = .06$, 95% CI [.01, .11], $p = .03$, which in turn predicted higher levels of emotional role confusion at 12 months, $b = .06$, 95% CI [.02, .10], $p = .002$. The three models with each of the other mediators (i.e., parental guilt induction, positive parenting practices, family cohesion) revealed no significant associations.

Main Model

The overall multiple mediator model demonstrated excellent fit, $\chi^2(20, N = 90) = 19.15$, $p = 0.51$, RMSEA = .00, 90% CI [.00, .08], CFI = 1.00, SRMR = .06. The first of the observed pathways examined whether interparental conflict mediated the relation between parental depressive symptoms and both types of role confusion (see Table 2 for effect sizes for all variables and pathways). The effect of parental depressive symptoms on interparental conflict was found to be significant such that more severe symptomology at baseline was associated with higher levels of conflict at 6 months. The effect of interparental conflict on emotional role confusion was also significant with higher levels of conflict at 6 months associated with increased reports of role confusion at 12 months. The indirect effect of parental depressive symptoms on emotional role confusion through interparental conflict was significant, $b = .004$, 95% CI [.000, .009], $\beta = .064$, $p = .05$. To confirm the association between interparental conflict and role confusion, an additional model was examined that explored this association from baseline to the 12-month follow-up after accounting for baseline role confusion and parental depressive symptoms. The longitudinal association was confirmed, $\beta = .208$, $p = .045$, such that higher baseline levels of interparental conflict forecasted increasing levels of emotional role confusion a year later.

The second pathway examined guilt induction as a mediator of the relation between parental depressive symptoms and role confusion. Parental depressive symptoms did not have a significant effect on the use of guilt induction. However, parental guilt induction did emerge as a significant predictor of emotional role confusion with higher levels of guilt induction at 6 months associated with increased reports of role confusion at 12 months. To confirm the association between guilt induction and role confusion, an additional model was examined that explored this association from baseline to the 12-month follow-up after accounting for baseline role confusion and parental depressive symptoms. The longitudinal association was again confirmed, $\beta = .465$, $p = .001$, such that higher baseline levels of parental guilt induction forecasted increasing levels of emotional role confusion a year later.

The third pathway observed whether positive parenting practices mediated the relation between parental depressive symptoms and role confusion. The effect of parental depressive symptoms on positive parenting practices was also not significant. Interestingly, positive parenting was a significant predictor of emotional role confusion such that higher levels of positive parenting at 6 months were associated with increased reports of emotional role confusion at 12 months. To confirm the association between observed positive parenting and role confusion, an additional model was examined that explored this association from baseline to the 12-month follow up after accounting for baseline role confusion and parental depressive symptoms. Unlike previous confirmatory analyses, the 1-year longitudinal association was not significant, $\beta = .089$, $p = .400$.

The last pathway examined whether family cohesion mediated the relation between parental depressive symptoms and role confusion. Parental depressive symptoms did not have an effect on family cohesion which, in turn, did not have a significant effect on role confusion. Further, this null effect was confirmed in the 1-year longitudinal model. Finally, the direct effect of parental depressive symptoms on emotional role confusion was found to be not significant.

Sensitivity Analyses

Following primary analyses, sensitivity analyses were run to test the differential impact of child gender, marital status, parent education, parent age, and family income on the model. None of the variables observed in the sensitivity models emerged as significant predictors of the outcome variables. The primary associations in the hypothesized model also remained the same after the inclusion of the above covariates. Thus, it was concluded that the demographic and socioeconomic covariates did not meaningfully alter longitudinal associations in the study.

Discussion

The current study evaluated how family processes (e.g., interparental conflict, guilt induction, positive parenting practices, and family cohesion) contributed to the development of parent-child emotional role confusion in families with a history of parental depression. Based on previous literature, we hypothesized that higher current parent depressive symptom severity would predict increases in role confusion through higher levels of interparental conflict and parental guilt induction, and lower levels of positive parenting practices and family-level cohesiveness. Of these processes, interparental conflict emerged as the only construct to mediate the relation between parental depressive symptoms and later role confusion. Overall, however, findings suggest that both parenting behaviors and coparenting relationship quality may play important roles in the development of role confusion.

The first half of the model examined the effect of parental depressive symptoms on each of the potential mediators. Of the four constructs observed, higher severity of parent depressive symptoms at baseline was only significantly associated with interparental conflict at 6 months. Although consistent with literature highlighting how parental depressive symptoms affect the parent-coparent subsystem (e.g., Rehman et al., 2008; Schudlich et al., 2004), this finding is inconsistent with previous work showing the impact parental depression symptoms can have on parent-child interactions. For example, parents with depression have been found to use fewer positive parenting practices (Forehand et al., 2012; Parent et al., 2010) and greater guilt induction with their children (Rakow et al., 2011). Moreover, findings from the current study suggest that parental depressive symptoms do not have a direct influence on the development of role confusion. Previous research has examined role confusion in families affected by parental depression; however, much of this work has been cross-sectional, qualitative, or has examined how role confusion contributes to the development of youth psychopathology (e.g., Macfie et al., 2015; Van Loon et al., 2017; Prussien et al., 2018). As such, less is known regarding the mechanisms that underlie the development of role confusion in this context.

The fact that we did not observe a significant direct relation between parent depressive symptoms and role confusion suggests that interfamilial factors (i.e., interparental conflict, guilt induction) may be more salient to the development of emotional role confusion. In other words, it may be the disruptions to the family system caused by parental depression as well as the way in which family members respond to these disruptions that sets the stage for the development of emotional role confusion over time. In addition, the lack of significant relations observed between parental depressive symptoms and the mediating constructs (i.e.,

guilt induction, positive parenting, family cohesion) may be indicative of our sample's demographics, as the lack of diversity and higher educational attainment could have resulted in our sample having greater resources (e.g., extended family support, monetary funds) to draw upon in times of need, such as the onset of depressive episodes. If so, parents may have felt less overwhelmed by caregiving responsibilities which may have, in turn, buffered negative impacts to their interactions with their children (i.e., decreased positive parenting or family cohesion, increased guilt induction). Alternatively, given that the non-significant findings were observed for the constructs representing parent-child interactions, it may be the case that the severity of the caregiver's depressive symptoms — while still elevated — were not severe enough to result in exacerbation or impairments to the parent-child relationship.

An important contribution of the current study is the finding that interparental conflict was the only family-related construct that mediated the relation between parental depressive symptoms and emotional role confusion. This finding is in line with what we expected to observe based on previous literature and family systems theory. For example, parentified youth have been shown to be more likely to intervene in interparental conflict (Peris et al., 2008). Borchet and colleagues (2017) speculated that youths' increased engagement in interparental conflict might be due to parentified children having greater concern for parent well-being or the presence of stronger coalitions within these family systems. This speculation is consistent with the family systems concept of triangulation, which in this case refers to the involvement of a child in parental conflict (Bowen, 1978; Minuchin, 1974). Research has shown that triangulation is more likely to occur in families marked by frequent and intense interparental conflict (Fosco & Grych, 2010), suggesting a spillover effect from the parent-coparent to parent-child subsystems. Congruent with speculations by Borchet and colleagues (2017), spillover may be more likely to occur if the involved child has established a stronger relationship with or feels more responsible for a particular parent — dynamics characteristic of emotional role confusion.

The fact that parental depression predicted dysfunction in the coparenting relationship but not the parent-child relationship is noteworthy. This finding suggests that, while the disruptions caused by parental depression may not be as impactful to parent-child interactions, its impact on the coparenting relationship could be important to understanding how emotional role confusion develops within the parent-child relationship. For example, the indirect relation observed may reflect that a loss of perceived support from a coparent or decrease in the quality of the parent-coparent relationship may result in the depressed parent relying instead on the child for support. It is possible this shift in support seeking could result in a strengthened parent-child coalition as suggested by Borchet and colleagues (2017) and consequently increase the likelihood of triangulation. If so, the spillover from the parent-coparent to parent-child subsystem could compound the child's risk of later psychopathology. Importantly, the *p* value of this indirect effect was .05 and thus should be interpreted with caution.

Next, guilt induction was significantly related to the short- and long-term development of emotional role confusion. The positive relation between parental guilt induction and emotional role confusion is in line with what one might expect given that both constructs

are representative of internal experiences. Depending on family circumstances, children may feel pressured to conform to a version of themselves that fits parental expectations and helps bring stability to their disrupted family system; however, by minimizing their own needs to prioritize those of their parents, these children compromise their own development (Goldner et al., 2016). While the study of parental psychological control, including guilt induction, is relatively new, existing evidence has highlighted how these tactics can be predictive of later internalizing problems among children (e.g., El-Sheikh et al., 2010; McKee et al., 2014; Rakow et al., 2011). Further, children whose parents utilize higher rates of psychological control may be more likely to exhibit stronger loyalty to the controlling parent (Soenens & Vansteenkiste, 2009), which may, in turn, strengthen coalitions and contribute to dysfunction in other areas of family functioning or interaction (e.g., triangulation during conflict). Lastly, the non-significant association between parental depressive symptoms and guilt induction observed in the current study is inconsistent with previous research in this area (e.g., Donatelli et al., 2007; McKee et al., 2014). As such, it is important for investigations to not discredit its inclusion in future models.

The current study also found that higher observations of positive parenting practices at the 6-month timepoint were related to higher ratings of emotional role confusion at the 12-month follow-up. Given previous literature highlighting withdrawn parenting practices as a significant predictor of later role confusion, we expected the reverse to be true, such that lower observations of positive parenting were related to role confusion. Retrospective reports from young adults who had grown up with a depressed parent suggest that it may be difficult for children to recognize and fully understand their family circumstances in the moment (Van Parys et al., 2015). As such, children may be more willing to provide emotional support to their parents if they perceive their parents as being supportive and warm, and especially so if they are unable to recognize the potential consequences of their assistance at the time. Further, children whose parents engage in greater positive parenting practices may be less likely to contemplate whether the support is mutual or if what is expected of them is unfair, and thus may be more likely to gain a sense of purpose from their contributions. Unfortunately, the limited literature in this area is mixed (e.g., Peris et al., 2008; Tompkins et al., 2007). However, when a 1-year lagged model tested the robustness of this positive association, we found that observed positive parenting no longer forecast emotional role confusion, calling into question whether positive parenting is a long-term risk factor for increased role confusion. Alternatively, this discrepancy may have also been due to the study's use of an observational task to measure positive parenting practices. It is possible that other methods of assessment (e.g., self-report measures) either in place of or in conjunction with observational data may have yielded more consistent results. Regardless, future research evaluating the impact of parenting practices on role confusion should explore both short- and long-term impacts to gain a better understanding of whether positive parenting practices protect against or compound the development of role confusion.

Lastly, family cohesion did not emerge as a significant predictor of emotional role confusion. Although family cohesion is often an implied construct in most studies evaluating role confusion, there is a deficiency in the number of studies that have objectively measured cohesion. A study examining role confusion in a sample of Israeli adolescents found role confusion to be more prevalent in families with parents who had close relationships with

their children, but who also respected and encouraged their children's growth as individuals (Walsh et al., 2006). In addition, Borchet and colleagues (2016) found that the higher a family was rated in cohesiveness, the more likely adolescents were to perceive role confusion as beneficial. If there is, in fact, a positive relation between family cohesion and role confusion, it may be due to the child having more family support or resources to draw upon during times of difficulty as well as a greater sense of purpose and contribution to the family as a result of his or her increased role. Although the current study did not produce support for these findings, it is possible this was due to differences in the measurement of family cohesion. An alternative explanation could be the contextual differences across samples, as parental depression presents unique challenges to family systems which may not have been experienced by those observed in the two studies mentioned above.

While interparental conflict may be particularly salient in the context of parental depression, our findings related to guilt induction and positive parenting demonstrate that the quality of parent-child interactions is also important to the development of emotional role confusion. It is easy to recognize why parental guilt induction would facilitate the development of emotional role confusion, as it inherently entails manipulation to ensure a child's compliance to a parent's request. While our finding related to positive parenting was surprising, it may be that the use of positive parenting practices reinforces a child's willingness to meet their parent's expectations, consequently furthering their entrenchment in the parent-child role confusion dynamic. Relatedly, it is important to note that the four mediating constructs were largely correlated with one another at baseline and the 6-month follow up, which may lend further support to the importance of the overall family environment. Taken together, such findings paint a broader picture of the family's general functioning and may be helpful to consider when reflecting on why such interactions may lead to the development of role confusion under some circumstances and not others, as well as why role confusion may lead to maladaptive outcomes for some children but adaptive or neutral outcomes for others.

The current study has several limitations that are important for researchers to consider in future investigations. First, the study was subject to the inherent limitations of secondary data analyses — most notably in regard to the size and generalizability of the sample (e.g., parent sex, race, ethnicity). Second, the assessment of parental depressive symptoms was from a single assessment and not specific to expression of symptoms within the family. Future research will benefit from repeated (e.g., EMA) and passive (e.g., voice recordings) assessment of parental depressive symptoms specifically expressed during dyadic, triadic, and family-wide interactions. Lastly, given the challenges we faced with the instrumental subscale, we were only able to evaluate the mediators in relation to emotional role confusion. More work is needed to ascertain if similar relations might exist for instrumental role confusion. Despite these limitations, the study benefited from its longitudinal design, which strengthens our interpretations of current findings, and from the collection of data from multiple sources (i.e., child- and parent-reports, observations). Further, much of the research on role confusion has relied on retrospective reports, making our examination of role confusion in a sample of children a strength. In addition, research suggests that rates of role confusion increase with the number of risk factors reported within a family system (Williams, 2015). As such, the examination of multiple aspects of family functioning is

another strength of the study as it allowed a more comprehensive picture to be illustrated in the context of families affected by parental psychopathology.

Findings of the current study highlight the importance of considering the broader context of a family system in the treatment of parental psychopathology. Parental depression can have a pervasive and long-lasting impact on the lives of children, which interpersonal and environmental processes can further exacerbate (Hammen et al., 2012; Murray et al., 2011; Silberg et al., 2010). One such process is the important but understudied construct of parent-child role confusion. Our findings contribute to this growing body of literature by examining the complex interplay of various aspects of family functioning and the emotional role confusion these constructs evoke in children. Interparental conflict, parental guilt induction, and parenting practices emerged in the current study as important aspects to consider when evaluating the risk of role confusion. However, as outcomes of role confusion may be dependent on the unique context of each family system, it is important that research continue to consider broader family dynamics and general functioning in future examinations of role confusion.

Acknowledgments

Funding Source: This work was supported by the National Institute of Mental Health under Grants R01MH069940 and R01MH069928.

References

- Abraham KM, & Stein CH (2013). When mom has a mental illness: Role reversal and psychosocial adjustment among emerging adults. *Journal of Clinical Psychology*, 69(6), 600–615. [PubMed: 23382067]
- Achenbach TM, & Rescorla LA (2001). *Manual for ASEBA schoolage forms and profiles*. Burlington, VT: University of Vermont, Research Center for Children, Youth, and Families.
- Akee RK, Copeland WE, Keeler G, Angold A, & Costello EJ (2010). Parents' incomes and children's outcomes: A quasi-experiment using transfer payments from casino profits. *American Economic Journal: Applied Economics*, 2(1), 86–115. [PubMed: 20582231]
- Alderfer MA, Fiese BH, Gold JI, Cutuli JJ, Holmbeck GN, Goldbeck L, Chambers CT, Abad M, Spetter D, & Patterson J (2008). Evidence-based assessment in pediatric psychology: Family measures. *Journal of Pediatric Psychology*, 33(9), 1046–1061. 10.1093/jpepsy/jsm083 [PubMed: 17905801]
- Beck AT, Steer RA, & Brown GK (1996). *Manual for the Beck Depression Inventory—II*. San Antonio, TX: Psychological Corporation.
- Borchet J, & Lewandowska-Walter A (2017). Parentification – its direction and perceived benefits in terms of connections with late adolescents' emotional regulation in the situation of marital conflict. *Current Issues in Personality Psychology*, 2(2), 113–122.
- Borchet J, Lewandowska-Walter A, & Rostowska T (2016). Parentification in late adolescence and selected features of the family system. *Health Psychology Report*, 4(2), 116–127.
- Bowen M (1978). *Family therapy in clinical practice*. New York: Jason Aronson.
- Champion JE (2009). *Caretaking behaviors in adolescent children of depressed parents* (Doctoral dissertation). Vanderbilt University
- Champion JE, Jaser SS, Reeslund KL, Simmons L, Potts JE, Shears AR, & Compas BE (2009). Caretaking behaviors by adolescent children of mothers with and without a history of depression. *Journal of Family Psychology*, 23(2), 156–166. [PubMed: 19364210]
- Compas BE, Forehand R, Keller G, Champion JE, Rakow A, Reeslund KL, McKee L, Fear JM, Colletti CJ, Hardcastle E, & Merchant MJ (2009). Randomized controlled trial of a

- family cognitive-behavioral preventive intervention for children of depressed parents. *Journal of Consulting and Clinical Psychology*, 77(6), 1007–1020. [PubMed: 19968378]
- Compas BE, Champion JE, Forehand R, Cole DA, Reesland KL, Fear J, Hardcastle EJ, Keller G, Rakow A, Garai E, Merchant MJ, & Roberts L (2010). Coping and parenting: Mediators of 12-month outcomes of a family group cognitive-behavioral preventive intervention with families of depressed parents. *Journal of Consulting and Clinical Psychology*, 78(5), 623–634. [PubMed: 20873898]
- Compas BE, Forehand R, Thigpen JC, Keller G, Hardcastle EJ, Cole DA, Potts J, Watson KH, Rakow A, Colletti C, & Reeslund K (2011). Family group cognitive-behavioral preventive intervention for families of depressed parents: 18- and 24-month outcomes. *Journal of Consulting and Clinical Psychology*, 79(4), 488–499. [PubMed: 21707137]
- Cox B, & Paley C (1997). Families as systems. *Annual Review of Psychology*, 48, 243–267.
- Davis-Kean PE (2005). The influence of parent education and family income on child achievement: The indirect role of parental expectations and the home environment. *Journal of Family Psychology*, 19(2), 294–304. [PubMed: 15982107]
- Donatelli JL, Bybee JA, & Buka SL (2007). What do mothers make adolescents feel guilty about? Incidents, reactions, and relation to depression. *Journal of Child and Family Studies*, 16(6), 859–875.
- Du Rocher Schudlich TD, Papp LM, & Cummings EM (2004). Relations of husbands' and wives' dysphoria to marital conflict resolution strategies. *Journal of Family Psychology*, 18(1), 171. [PubMed: 14992619]
- El-Sheikh M, Hinnant JB, Kelly RJ, & Erath S (2010). Maternal psychological control and child internalizing symptoms: Vulnerability and protective factors across bioregulatory and ecological domains. *Journal of Child Psychology and Psychiatry*, 51(2), 188–198. [PubMed: 19703095]
- Emery RE, & Dillon P (1994). Conceptualizing the divorce process: Renegotiating boundaries of intimacy and power in the divorced family system. *Family Relations*, 43(4), 374–379.
- Epstein NB, Baldwin LM, & Bishop DS (1983). The McMaster Family Assessment Device. *Journal of Marital and Family Therapy*, 9(2), 171–180.
- Erel O, & Burman B (1995). Interrelatedness of marital relations and parent-child relations: A meta-analytic review. *Psychological Bulletin*, 118(1), 108–132. [PubMed: 7644602]
- First MB, Spitzer RL, Gibbon M, & Williams JB (1997). User's guide for the structured clinical interview for DSM-IV axis I disorders SCID-I: Clinician version.
- Forehand R, Champion-Thigpen J, Parent J, Hardcastle EJ, Bettis A, & Compas B (2012). The role of parent depressive symptoms in positive and negative parenting in a preventive intervention. *Journal of Family Psychology*, 26(4), 532–541. [PubMed: 22612463]
- Fosco GM, & Grych JH (2010). Adolescent triangulation into parental conflicts: Longitudinal implications for appraisals and adolescent-parent relations. *Journal of Marriage and Family*, 72(2), 254–266.
- Goldner L, Abir A, & Sachar SC (2016). How do I look? Parent-adolescent psychological boundary dissolution and adolescents' true-self behavior as manifested in their self-drawings. *The Arts in Psychotherapy*, 47, 31–40.
- Goodman SH (2020). Intergenerational transmission of depression. *Annual Review of Clinical Psychology*, 16, 213–238.
- Goodman SH, Rouse MH, Connell AM, Broth MR, Hall CM, & Heyward D (2011). Maternal depression and child psychopathology: A meta-analytic review. *Clinical Child and Family Psychology Review*, 14(1), 1–27. [PubMed: 21052833]
- Gotlib IH, Goodman SH, & Humphreys KL (2020). Studying the intergenerational transmission of risk for depression: Current status and future directions. *Current Directions in Psychological Science*, 29(2), 174–179. [PubMed: 33758474]
- Grych JH, Seid M, & Fincham FD (1992). Assessing marital conflict from the child's perspective: The Children's Perception of Interparental Conflict Scale. *Child Development*, 63(3), 558–572. [PubMed: 1600822]

- Hammen C, Hazel NA, Brennan PA, & Najman J (2012). Intergenerational transmission and continuity of stress and depression: Depressed women and their offspring in 20 years of follow-up. *Psychological Medicine*, 42(5), 931–942. [PubMed: 22018414]
- Hankin BL (2006). Adolescent depression: Description, causes, and interventions. *Epilepsy and Behavior*, 8(1), 102–114. [PubMed: 16356779]
- Hanington L, Heron J, Stein A, & Ramchandani P (2012). Parental depression and child outcomes— is marital conflict the missing link? *Child: Care, Health and Development*, 38(4), 520–529. [PubMed: 21771000]
- Hasin DS, Sarvet AL, Meyers JL, Saha TD, Ruan WJ, Stohl M, & Grant BF (2018). Epidemiology of adult DSM-5 major depressive disorder and its specifiers in the United States. *JAMA Psychiatry*, 75(4), 336–346. [PubMed: 29450462]
- Hooper LM (2007). Expanding the discussion regarding parentification and its varied outcomes: Implications for mental health research and practice. *Journal of Mental Health Counseling*, 29(4), 322–337.
- Hooper LM, Moore HM, & Smith AK (2014). Parentification in military families: Overlapping constructs and theoretical explorations in family, clinical, and military psychology. *Children and Youth Services Review*, 39, 123–134.
- Hooper LM, & Wallace SA (2010). Evaluating the parentification questionnaire: Psychometric properties and psychopathology correlates. *Contemporary Family Therapy*, 32(1), 52–68.
- Hu LT, & Bentler PM (1999). Cutoff criteria for fit indexes in covariance structure analysis: Conventional criteria versus new alternatives. *Structural equation modeling: a multidisciplinary journal*, 6(1), 1–55.
- Jankowski PJ, Hooper LM, Sandage SJ, & Hannah NJ (2013). Parentification and mental health symptoms: Mediator effects of perceived unfairness and differentiation of self. *Journal of Family Therapy*, 35(1), 43–65.
- Jurkovic GJ (1995). The parentification questionnaire—Youth. Available from Gregory J. Jurkovic, Department of Psychology, Georgia State University, University Plaza, Atlanta, GA 30303.
- Kaufman J, Birmaher B, Brent D, Rao UMA, Flynn C, Moreci P, Williamson D, & Ryan N (1997). Schedule for affective disorders and schizophrenia for school-age children- present and lifetime version (K-SADS-PL): Initial reliability and validity data. *Journal of the American Academy of Child & Adolescent Psychiatry*, 36(7), 980–988. [PubMed: 9204677]
- Khafi TY, Yates TM, & Luthar SS (2014). Ethnic differences in the developmental significance of parentification. *Family Process*, 53(2), 267–287. [PubMed: 24684188]
- Kuperminc GP, Jurkovic GJ, & Casey S (2009). Relation of filial responsibility to the personal and social adjustment of Latino adolescents from immigrant families. *Journal of Family Psychology*, 23(1), 14–22. [PubMed: 19203155]
- Lovejoy MC, Graczyk PA, O'Hare E, & Neuman G (2000). Maternal depression and parenting behavior: A meta-analytic review. *Clinical Psychology Review*, 20(5), 561–592. [PubMed: 10860167]
- Macfie J, Brumariu LE, & Lyons-Ruth K (2015). Parent-child role-confusion: A critical review of an emerging concept. *Developmental Review*, 36, 34–57.
- McKee LG, Parent J, Forehand R, Rakow A, Watson KH, Dunbar JP, Reising MM, Hardcastle E, & Compas BE (2014). Reducing youth internalizing symptoms: Effects of a family-based preventive intervention on parental guilt induction and youth cognitive style. *Development and Psychopathology*, 26, 319–332. [PubMed: 24438999]
- Melby J, Conger R, Book R, Rueter M, Lucy L, Repinski D, & Scaramella L (1998). The Iowa Family Interaction Rating Scales. Unpublished Manuscript, Institute for Social and Behavioral Research (5th Ed.). Ames: Iowa State University.
- Melby NJ, & Conger RD (2001). The Iowa family interaction rating scales: Instrument summary. In Kerig PK & Lindahl KM (Eds.), *Family observational coding systems: Resources for systemic research* (pp. 33–58). Lawrence Erlbaum Associates, Inc.
- Minuchin S (1974). *Families and family therapy*. Cambridge, MA: Harvard University Press.

- Mrazek DA, Hornberger JC, Altar CA, & Degtiar I (2014). A review of the clinical, economic, and societal burden of treatment-resistant depression: 1996–2013. *Psychiatric Services*, 65(8), 977–987. [PubMed: 24789696]
- Murray L, Arteche A, Fearon P, Halligan S, Goodyer I, & Cooper P (2011). Maternal postnatal depression and the development of depression in offspring up to 16 years of age. *Journal of the American Academy of Child and Adolescent Psychiatry*, 50(5), 460–470. [PubMed: 21515195]
- Nigg JT, Nikolas M, Miller T, Burt SA, Klump KL, & von Eye A (2009). Factor structure of the Children's Perception of Interparental Conflict Scale for studies of youths with externalizing behavior problems. *Psychological Assessment*, 21(3), 450–456. [PubMed: 19719356]
- Olson DH, Russell CS, & Sprenkle DH (1983). Circumplex model of marital and family systems: VI. Theoretical update. *Family Process*, 22(1), 69–83. [PubMed: 6840263]
- Parent J, Garai E, Forehand R, Roland E, Potts J, Haker K, Champion J, & Compas B (2010). Parent mindfulness and child outcome: The roles of parent depressive symptoms and parenting. *Mindfulness*, 1(4), 254–264.
- Peris TS, Goeke-Morey MC, Cummings EM, & Emery RE (2008). Marital conflict and support seeking by parents in adolescence: Empirical support for the parentification construct. *Journal of Family Psychology*, 22(4), 633–642. [PubMed: 18729677]
- Prussien KV, Murphy LK, Gerhardt CA, Vannatta K, Bemis H, Desjardins L, Ferrante AC, Shultz EL, Keim MC, Cole DA & Compas BE (2018). Longitudinal associations among maternal depressive symptoms, child emotional caretaking, and anxious/depressed symptoms in pediatric cancer. *Journal of Family Psychology*, 32(8), 1087–1096. [PubMed: 30211572]
- Rakow A, Forehand R, Haker K, McKee L, Champion J, Potts J, Hardcastle E, Roberts L, & Compas B (2011). Use of parental guilt induction among depressed parents. *Journal of Family Psychology*, 25(1), 147–151. [PubMed: 21355654]
- Rakow A, Forehand R, McKee L, Coffelt N, Champion J, Fear J, & Compas B (2009). The relation of parental guilt induction to child internalizing problems when a caregiver has a history of depression. *Journal of Child and Family Studies*, 18(4), 367–377. [PubMed: 20090863]
- Rehman US, Gollan J, & Mortimer AR (2008). The marital context of depression: Research, limitations, and new directions. *Clinical Psychology Review*, 28(2), 179–198. [PubMed: 17573169]
- Rosseel Y (2012). Lavaan: An R package for structural equation modeling and more. Version 0.5–12 (BETA). *Journal of Statistical Software*, 48(2), 1–36.
- Sessions M, & Jurkovic GJ (1986). The Parentification Questionnaire. Available from Gregory J. Jurkovic, Department of Psychology, Georgia State University, University Plaza, Atlanta, GA 30303.
- Silberg JL, Maes H, & Eaves LJ (2010). Genetic and environmental influences on the transmission of parental depression to children's depression and conduct disturbance: An extended children of twins study. *Journal of Child Psychology and Psychiatry and Allied Disciplines*, 51(6), 734–744. [PubMed: 20163497]
- Soenens B, & Vansteenkiste M (2010). A theoretical upgrade of the concept of parental psychological control: Proposing new insights on the basis of self-determination theory. *Developmental Review*, 30(1), 74–99.
- Tedgård E, Råstam M, & Wirtberg I (2019). An upbringing with substance-abusing parents: Experiences of parentification and dysfunctional communication. *Nordic Studies on Alcohol and Drugs*. 36(3), 223–247.
- Tissot H, Favez N, Ghisletta P, Frascarolo F, & Despland JN (2017). A longitudinal study of parental depressive symptoms and coparenting in the first 18 months. *Family Process*, 56(2), 445–458. [PubMed: 27062426]
- Tompkins TL (2007). Parentification and maternal HIV infection: Beneficial role or pathological burden? *Journal of Child and Family Studies*, 16(1), 108–118.
- Van Loon LMA, Van de Ven MOM, Van Doesum KTM, Hosman CMH, & Witteman CLM (2017). Parentification, stress, and problem behavior of adolescents who have a parent with mental health problems. *Family Process*, 56(1), 141–153. [PubMed: 26208046]

- Author Manuscript
- Author Manuscript
- Author Manuscript
- Author Manuscript
- Van Loon LMA, Van de Ven MOM, Van Doesum KTM, Hosman CMH, & Witteman CLM, & Hosman CMH (2014). The relation between parental mental illness and adolescent mental health: The role of family factors. *Journal of Child and Family Studies*, 23, 1201–1214.
- Van Parys H, Bonnewyn A, Hooghe A, De Mol J, & Rober P (2015). Toward understanding the child's experience in the process of parentification: Young adults' reflections on growing up with a depressed parent. *Journal of Marital and Family Therapy*, 41(4), 522–536. [PubMed: 25047096]
- Van Parys H, & Rober P (2013). Trying to comfort the parent: A qualitative study of children dealing with parental depression. *Journal of Marital and Family Therapy*, 39(3), 330–345. [PubMed: 25059300]
- Vulliez-Coady L, Obsuth I, Torreiro-Casal M, Ellertsdottir L, & Lyons-Ruth K (2013). Maternal role confusion: Relations to maternal attachment and mother–child interaction from infancy to adolescence. *Infant Mental Health Journal*, 34(2), 117–131. [PubMed: 25544789]
- Walsh S, Shulman S, Bar-On Z, & Tsur A (2006). The role of parentification and family climate in adaptation among immigrant adolescents in Israel. *Journal of Research on Adolescence*, 16(2), 321–350.
- Weissman M (2005). Children at high and low risk for depression. *Archives of General Psychiatry*, 62, 29–36. [PubMed: 15630070]
- Williams K (2015). Risk and resilience in emerging adults with childhood parentification (Doctoral dissertation). Retrieved from: https://scholar.uwindsor.ca/etd/5677?utm_source=scholar.uwindsor.ca%2Fetd%2F5677&utm_medium=PDF&utm_campaign=PDFCoverPages
- Wilson S, & Durbin CE (2010). Effects of paternal depression on fathers' parenting behaviors: A meta-analytic review. *Clinical Psychology Review*, 30(2), 167–180. [PubMed: 19926376]

Table 1.

Means, SDs, and correlations for model variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	
(1) Role Confusion 12m	M (SD)	0.20 (.79)	1													
(2) Conflict 6m		5.12 (3.75)	0.49**	1												
(3) Family Cohesion 6m		1.85 (.62)	0.56**	0.49**	1											
(4) Positive Parenting 6m		26.98 (5.64)	-0.14	-0.28*	-0.21	1										
(5) Guilt Induction 6m		52.48 (25.62)	0.55**	0.32*	0.67**	-0.30*	1									
(6) Parent Depression b		18.80 (11.20)	0.24	0.23	0.17	-0.20	0.18	1								
(7) Role Confusion b		0.13 (.64)	0.71**	0.56**	0.57**	-0.36**	0.58**	0.33**	1							
(8) Conflict b		5.70 (3.39)	0.45**	0.75**	0.34*	-0.17	0.29*	0.08	0.31**	1						
(9) Family Cohesion b		1.94 (.53)	0.63**	0.40**	0.53**	-0.30*	0.46**	0.18	0.60**	0.37**	1					
(10) Positive Parenting b		27.95 (5.04)	-0.25	-0.22	-0.21	0.73**	-0.31*	-0.24*	-0.13	-0.43**	1					
(11) Guilt Induction b		60.22 (24.87)	0.73**	0.33*	0.60**	-0.24	0.70**	0.24*	0.72**	0.30**	-0.34**	1				
(12) Parent Education		--	-0.13	-0.27*	-0.23	0.40**	-0.24*	-0.09	-0.24*	-0.14	0.44**	-0.22*	1			
(13) Marital Status		--	-0.00	0.19	-0.06	-0.31*	0.01	0.14	-0.07	0.22	-0.26*	-0.10	-0.22*	1		
(14) Child Sex		--	0.09	0.19	0.14	-0.03	0.21	0.02	-0.02	0.06	-0.09	-0.04	0.01	0.14	1	
(15) Parent Age		42 (7.6)	0.11	-0.01	0.14	0.26	0.17	-0.03	-0.02	-0.05	0.14	0.22*	-0.25*	0.03	1	
(16) Family Income		--	0.04	-0.08	0.06	0.07	0.16	-0.08	0.04	-0.04	-0.09	0.07	0.07	0.09	0.08	0.17

Note: 12m = 12-month follow-up, 6m = 6-month follow-up, b = baseline, conflict = interparental conflict

* p .05

** p .01.

Table 2.

Model coefficients

	β	b	95% CI	p
Direct Effects				
Interparental Conflict 6m – Role Confusion 12m	.33	.07	.04, .10	.000**
Guilt Induction 6m – Role Confusion 12m	.26	.01	.00, .02	.035*
Positive Parenting 6m – Role Confusion 12m	.25	.03	.00, .06	.026*
Family Cohesion 6m – Role Confusion 12m	-.00	-.00	-.27, .26	.975
Parental Depression b – Role Confusion 12m	.00	.00	-.01, .01	.956
Parental Depression b – Interparental Conflict 6m	.19	.06	.01, .11	.024*
Parental Depression b – Guilt Induction 6m	.08	.18	-.19, .54	.343
Parental Depression b – Positive Parenting 6m	-.04	-.02	-.10, .06	.630
Parental Depression b – Family Cohesion 6m	.12	.01	-.00, .02	.221
Stability Effects				
Role Confusion b – Role Confusion 12m	.51	.60	.32, .89	.000**
Interparental Conflict b – Interparental Conflict 6m	.70	.72	.59, .85	.000**
Guilt Induction b – Guilt Induction 6m	.63	.62	.39, .86	.000**
Positive Parenting b – Positive Parenting 6m	.72	.80	.58, 1.01	.000**
Family Cohesion b – Family Cohesion 6m	.50	.59	.29, .89	.000**
Covariances				
Interparental Conflict 6m – Guilt Induction 6m	.04	1.67	-10.12, 13.46	.781
Interparental Conflict 6m – Positive Parenting 6m	-.17	-1.51	-3.76, .73	.186
Interparental Conflict 6m – Family Cohesion 6m	.33	.40	.07, .74	.018*
Guilt Induction 6m – Positive Parenting 6m	-.14	-9.99	-26.83, 6.86	.245
Guilt Induction 6m – Family Cohesion 6m	.51	4.83	1.75, 7.92	.002**
Positive Parenting 6m – Family Cohesion 6m	-.14	-.27	-.73, .18	.244
Parental Depression b – Interparental Conflict b	.08	3.21	-5.65, 12.07	.477
Parental Depression b – Guilt Induction b	.23	63.16	8.15, 118.16	.024*
Parental Depression b – Positive Parenting b	-.27	-15.01	-26.46, -3.55	.010*
Parental Depression b – Family Cohesion b	.17	.97	-.36, 2.31	.153
Interparental Conflict b – Guilt Induction b	.33	27.73	8.30, 47.17	.005**
Interparental Conflict b – Positive Parenting b	-.17	-2.94	-6.75, .88	.131
Interparental Conflict b – Family Cohesion b	.38	.66	.20, 1.12	.005**
Guilt Induction b – Positive Parenting b	-.34	-42.58	-67.50, -17.70	.001**
Guilt Induction b – Family Cohesion b	.66	8.46	5.48, 11.44	.000**
Positive Parenting b – Family Cohesion b	-.43	-1.12	-1.70, -.54	.000**
Role Confusion b – Parental Depression b	.32	2.29	.76, 3.82	.003**
Role Confusion b – Interparental Conflict b	.30	.65	.16, 1.14	.009**

	β	b	95% CI	p
Role Confusion b – Guilt Induction b	.71	11.28	7.50, 15.06	.000**
Role Confusion b – Positive Parenting b	-.36	-1.16	-1.86, -.46	.001**
Role Confusion b – Family Cohesion b	.59	.19	.12, .27	.000**

Note: 12m = 12-month follow-up, 6m = 6-month follow-up, b = baseline

*
p .05

**
p .01.

Author Manuscript

Author Manuscript

Author Manuscript

Author Manuscript