Does Parenting Explain the Link Between Cumulative SES Risk and Child Problems in the Context of Parental Depression?

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Abstract

The accumulation of socioeconomic stressors, such as being a single parent and having a limited income, is associated with childhood maladjustment and prospective poor health. Evidence suggests both positive and negative parenting strategies (e.g., warmth and praise; criticism and neglect) may account for the relationship between socioeconomic adversity and child outcomes. However, despite the common co-occurrence of parental depression and socioeconomic stress, models of cumulative socioeconomic risk and parenting have yet to be tested in parents who are also coping with depression. In a sample of children whose parents have a history of depression, this study extends findings from a previous report (i.e., Sullivan et al. in J Fam Psychol 33:883–893, 2019) to test whether behavioral observations of parenting account for the association between a cumulative risk index of socioeconomic stress and child psychological problems in the same sample of 179 children (M_{age} = 11.46 years, SD_{age} = 2.00) of parents with depression. Both positive and negative parenting accounted for the relationship between socioeconomic risk and both child- and parent-reported externalizing problems, whereas no evidence emerged for parenting accounting for the relation between cumulative risk and internalizing problems. This study highlights the central role socioeconomic stress plays in child maladjustment among parents coping with depression, as well as how parenting may be a critical mechanism linking socioeconomic stress and child externalizing problems.

Keywords

Cumulative SES risk; Parent depression; Child internalizing; Child externalizing; Parenting

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Recent surges in income inequality put the major public health concern of childhood poverty at the forefront of political debate. In the US, over *15 million* children—one in five—live

at or below the federal poverty line, increasing their risk of negative outcomes, such as psychological disease, chronic illness, and early death [1, 2]. Further, the accumulation of risk factors, including those specific to socioeconomic status (SES) such as low income and single parenthood, is associated with increased levels of child internalizing and externalizing problems [3, 4]. In addition to the burdens associated with low SES, many families must also cope with the cross-contextual risk factor of parental depression. In a previous study (i.e., [3]), we found that cumulative SES risk, a construct in which we summed risk factors particular to social class and resource possession (e.g., single parenthood, low income), was related to childhood internalizing problems, particularly for girls, in a sample of parents with a history of depression. This finding held even after accounting for levels of parent depressive symptoms. In the current study, we investigate *why* cumulative SES risk was related to childhood problems in the same sample of 179 children (mean age = 11.46 years) of parents with depression. Specifically, we sought to examine whether parenting behaviors may explain the association between increases in poverty-related risk and child behavioral problems in a sample of parents with a history of depression.

Cumulative SES Risk, Parental Depression, and Parenting Practices

Research asserts a strong relationship between having inadequate access to financial (e.g., living below the poverty line) and social (e.g., failing to complete high school) resources and disruptions in parenting quality. In their *Family Stress Model*, Conger and Conger [5] argue that the stress of coping with these limitations translates to disrupted parenting, including using fewer positive parenting strategies (e.g., decreased warmth, sensitivity, and responsiveness) and more negative parenting strategies (e.g., neglect and increased criticism), resulting in childhood maladjustment. For example, a single parent living near poverty who was unable to finish high school may be more likely to endorse elevated stress levels and subsequently yell in response to their child misbehaving relative to a caregiver in a family without these stressors. Importantly, parenting quality is closely tied to the development and maintenance of childhood externalizing (e.g., disruptive behaviors [6]) and internalizing (e.g., anxiety [7], depression [8]) behaviors. As such, parenting difficulties among those living in poverty may link economic stress and child well-being.

Despite its strong theoretical and empirical basis, the Family Stress Model has some important limitations. Notably, it considers low SES out of the context of theoretically-relevant co-occurring challenges. Depression is closely intertwined with both socioeconomic [9] and parenting [10] challenges. Parental depression often co-occurs in high-stress environments, and it is another strong predictor of disrupted parenting and poor child outcomes [10–12]. Further, meta-analytic evidence indicates that concurrent poverty and maternal depression are related to worse child outcomes when compared to maternal depression alone [10], and parenting practices may explain the relationship between maternal depression and child well-being [13]. Accordingly, children growing up with the cross-contextual risk factors of low SES *and* parental depression are likely at more elevated risk of deleterious outcomes relative to children coping with stress in only one of these contexts.

Recent work highlights a poor understanding of the co-occurrence of low SES and parental depression. Specifically, research on parental depression often statistically removes the variability attributed to SES, rather than testing the relationship between SES-related stress and child outcomes [14]. Further, the Family Stress Model suggests that parents coping with economic stress are more likely to experience psychological distress, such as depressive symptoms, disrupting parenting and, in turn, child well-being [15]. Accordingly, research analyzing the role SES plays in child well-being in samples of parents with depression is necessary to effectively triage intervention efforts to support optimal child development. We thus analyzed our research questions in a sample of children (mean age = 11.46) who have a parent with a history of depression.

Complicating matters, assessing SES is challenging. A strong theoretical basis supports operationalizing SES with a cumulative risk scale (where one dichotomizes and sums the absence and presence of risk factors, such as being a single parent or having limited financial resources), positing that youth who cope with a singular socioeconomic stressor fare better relative to children coping with multiple socioeconomic stressors [16, 17]. This approach allows researchers to test questions regarding the variability in socioeconomic factors and how this variability relates to childhood outcomes. Indeed, some research suggests that increased cumulative socioeconomic risk is related to harmful parenting practices (e.g., child maltreatment [18]). Accordingly, it may be that the variability in SES-related risk is related to variability in parenting practices, such that increased levels of cumulative SES risk factors relate to *decreases* in positive and *increases* in negative parenting practices. Notably, models of the relationship between parenting and SES conceptualized from a cumulative risk framework have yet to be tested in caregivers with depression.

Does Parenting Explain the Connection Between Cumulative SES Risk and Child Internalizing and Externalizing Problems?

Evidence suggests parenting strategies (e.g., parental warmth and praise; criticism and neglect) may account for the relationship between cumulative SES risk and child problems [15, 19]. Indeed, Conger and Conger [15] posited that disruptions in parenting may be a *mechanism* explaining poor child well-being among families coping with economic stress, a notion long supported by seminal developmental literature [20]. In their early work, Conger and colleagues [21] demonstrated that increased stress due to economic pressure translated to parental irritability and familial tension in a sample of 12 year-old youth. This stress then permeated the parent-child dyad, increasing disruptive behavior patterns and perpetuating the development of externalizing problems [21]. Recent data also support this model. For example, in a rural sample of primarily White families, Neppl et al. [22] found that economic pressure, evaluated when children were 2 years-old, related to observations of parenting evaluated during early childhood (including harsh and positive characteristics), which, in turn, predicted child externalizing behavior, assessed between the ages of six and ten. Further research including longitudinal and experimental designs in babies, toddlers, and young children [23, 24], as well as a study examining a multigenerational sample of grandparents, parents, and children approximately 12 years old [25], support the indirect

path through parenting linking socioeconomic stress and child behavior problems. Taken together, both seminal and current data support Conger and Conger's [15] model.

Whereas theory indicates parenting is an important component in the context of both disruptive (i.e., externalizing) and anxious/depressive (i.e., internalizing) behaviors, the role of parenting in the development of disruptive behaviors is much better understood [26]. Further, empirical evidence from Conger and colleagues' [15] study revealed that disrupted parenting better accounted for the relation between economic pressure and externalizing ($R^2 = 0.19$) relative to internalizing ($R^2 = 0.08$) behaviors. Finally, recent meta-analytic work indicates disrupted parenting is a stronger mediator of externalizing problems relative to internalizing problems in the context of parental depression [13]. Thus, relative to the relation between cumulative risk and internalizing problems, it may be the case that parenting strategies better explain the relation between cumulative risk and externalizing behaviors in a sample of parents with depression.

Assessment of Parenting Practices: Importance of Observations

Assessing the constructs of parenting and SES in the context of high levels of parent depression necessitates the use of observational data. Studies evaluating whether parenting functions as a mechanism of child misbehavior often rely on caregiver reports [27], which only weakly associate with observational data [28]. This weak association is particularly marked among at-risk populations, such as parents dealing with depression or income-related stress [27]. Using trained observers of parent-child interactions is the gold-standard measure of parenting quality. It carries many advantages over parent-reported data (e.g., reducing reporter bias, improving reliability, and drawing from standardized rating criteria [29, 30]). As such, given the purpose of this study is to examine the relationship between SES stressors and child well-being in the context of parental depression, it is important to use observational data to validly assess parenting behaviors.

Current Study

In our previous study, we found that cumulative SES risk was related to child internalizing and externalizing problems, particularly for girls [3]. This finding was still present even after controlling for observations of parent depression. What was left unclear, however, was *why* cumulative SES risk related to child problems. Extending our previous research [3] and using the same sample of children of parents with depression, this study tests whether observations of parenting practices explain the link between socioeconomic stress (measured using a cumulative risk index) and child internalizing and externalizing problems. As evidence suggests parenting plays a different role in the development and course of child internalizing versus externalizing problems [26], we hypothesized that observed parenting practices would better explain the relationship between cumulative SES risk and child externalizing problems than socioeconomic adversity and child internalizing problems. The current study uses observational data of parenting practices, parent and child reports of behavior problems, and a structural analytic framework to test our hypotheses. Importantly, we evaluate these hypotheses in a sample of children growing up with a parent who has a history of Major Depressive Disorder (MDD) during their child's lifetime.

Method

Participants

This study is a secondary analysis of baseline data from a previous study of a prevention intervention program of 242 children from 180 different families (see Compas et al. [31]). For this study, in families with multiple children, one child was randomly selected for study analyses, resulting in a sample of 180 children (49.4 % females; $M_{age} = 11.46$; $SD = 2.00$) whose parents had a history of depression. Families were recruited from the Burlington, Vermont and Nashville, Tennessee areas. Mothers typically completed study procedures (88.9 %; $M_{age} = 41.96$), and a notable minority (i.e., 31.7 %) of the sample had college degrees. Most children were White; however, 25.6 % of the sample identified as a racial minority. US Census 2000 data indicate the sample was representative of the regions from which it was drawn.

Procedure

All study procedures received Institutional Review Board approval. Families were recruited using flyers, newspaper and radio advertisements, and referrals from physicians. To determine eligibility, parents were first telephone screened and then interviewed in person. Parents with past or current MDD during the lifetime of their child(ren) met inclusion criteria. Based on the Structured Clinical Interview for DSM-IV [32], parents were excluded if they had a history of Bipolar I Disorder, Schizophrenia, or Schizoaffective Disorder (see Compas et al. [33], for additional detail). Youth ages 9 to 15 years old were eligible if they were free of lifetime diagnoses of Autism Spectrum Disorders, Intellectual Disorder, Bipolar I Disorder, and Schizophrenia, and if they did not meet criteria for current MDD, Conduct Disorder or Alcohol/Substance Use Disorders (see Compas et al. [33], for training of individuals who conducted diagnostic interviews and reliability in the current project), as determined by the Schedule for Affective Disorders and Schizophrenia for School-Age Children- Present and Lifetime Version [34]. Eligible families then participated in the baseline assessment, during which the data used in this project were collected.

Measures

Demographic Information—Parents and youth provided demographic information about themselves (e.g., age and education) and their families (e.g., household income).

Cumulative Socioeconomic Status Risk—We dichotomized and summed measures of family income (i.e., below $25,000 per year = 1), household use of public assistance (i.e., no = 0; yes = 1), education (i.e., high school degree or less = 1), single-parent status (i.e., no = 0; yes = 1), and teen parent status (i.e., at the time of the child's birth, the parent was more than 20 years old = 0; less than 20 years old = 1) to create a five-point cumulative SES risk scale. We generated a continuous proportion scale, dividing the number of endorsed risks by the number of total possible risks for which each participant had data, to accommodate the 16.11 % and 1.11 % of parents who were missing data on one or two, respectively, SES measures. Scores could range from 0 to 1.0, and a score of 0.2 approximates endorsing one risk factor. Refer to Beach et al. [35] and Brody et al. [17] for other examples of the operationalization of SES using a cumulative risk framework.

Observed Parenting—We used a global coding system, the Iowa Family Interaction Rating Scales (IFIRS) [36, 37], to code two 15-min parent-child interactions featuring a recent pleasant (e.g., going on a family vacation) and stressful (e.g., mother had a bad day at work) activity. Coders used a nine-point scale reflecting the frequency and intensity of the behavior, as well as the affective nature of the behavior. A score of one indicated the behavior or affect was absent, and a nine indicated the behavior or affect was frequent and intensely expressed during the interaction. Coders attended weekly training meetings to prevent coder drift. Independent coders double-coded videotaped interactions for individual and dyad-level behavioral and emotional characteristics and then met to establish consensus on codes greater than two points apart. Interrater reliability prior to consensus coding was 0.73 across both the discussion of the pleasant activity as well as the difficult time. For details on the comprehensive coder training program, refer to Compas et al. [38].

We created latent factors of positive and negative parenting interactions using similar indicators from previously established composites [39]. To assess positive parenting, we used six behavioral codes ($\alpha = 0.81$): (1) warmth (e.g., parental support for the child); (2) child-centered behaviors (e.g., parental displays of awareness of the child's needs); (3) positive reinforcement (i.e., parental responsiveness to their child's appropriate behavior); (4) quality time (e.g., parental promotion of opportunities for mutual enjoyment); (5) listener responsiveness (e.g., parental behaviors validating the child); and (6) child monitoring (e.g., parental expressions indicating specific knowledge concerning the child's life). To assess negative parenting, we used four behavioral codes ($\alpha = 0.70$): (1) neglect/distancing (e.g., parental attempts to minimize interactions with child); (2) sadness (e.g., parental expressions of emotional distress/depression); (3) hostility (e.g., parental anger/criticism directed toward the child); and (4) the inverse of positive mood (e.g., displaying [low levels] of happiness and optimism). Following procedures used previously with the IFIRS codes [36, 37], we averaged scores for the six positive parenting and four negative parenting behavioral codes across the two 15-minute interactions. The validity of the IFIRS system as a whole, as well as the indicators of positive parenting, has been well-established [36, 37, 40, 41].

Parent Depressive Symptoms—We assessed levels of parent depressive symptoms using the Beck Depression Inventory-II (BDI-II [42]), which is a 21-item, self-report measure with a four-point scale ranging from zero to three. The BDI-II has demonstrated adequate internal consistency and validity in distinguishing the severity of current MDD ($\alpha = 0.94$ in this sample) [42, 43].

Child Internalizing and Externalizing Problems—Parents completed the Child Behavior Checklist (CBCL), and children completed the parallel Youth Self Report (YSR) [44]. These measures included 118 items assessing a wide range of child problem behaviors that parents and children rate as not true (0), somewhat or sometimes true (1), or very true (2). The CBCL and YSR each have substantial reliability and validity data [45]. We used the subscales representing internalizing (e.g., depressive/withdrawn and anxious behaviors) and externalizing (e.g., rule-breaking and aggressive behaviors) problems. Alpha coefficients demonstrated adequate internal consistency for internalizing (CBCL: 0.85; YSR: 0.91) and externalizing (CBCL: 0.84; YSR: 0.84) problems.

Results

Data Analytic Plan

We conducted analyses using *Mplus* version 8.1 [46]. Positive parenting indicators were missing 6.1 % of data, and child internalizing and externalizing problem indicators were missing 2.2 % of data. Only one participant endorsed all five cumulative SES risks, and visual inspection of their data revealed marked deviations from the overall sample patterns. As such, we elected to conservatively drop this participant, resulting in a sample size of 179. To account for the small percentage of missing data as well as skew, we used *Mplus's* maximum likelihood-robust (MLR) estimator with full information maximum likelihood (FIML) estimation. On average, families endorsed experiencing one cumulative SES risk stressor (Table 1), paralleling previous cumulative risk research [47]. On average, low to moderate levels of negative parenting behaviors characterized the videotaped interactions. Positive parenting indicators were more variable, with parents, on average, displaying minimal levels of child monitoring and positive reinforcement, low levels of quality time, and moderate levels warmth, listener responsiveness, and child-centered behaviors. A more detailed discussion of the cumulative risk scale is presented in Sullivan et al. [3].

Positive Parenting

Using Hu and Bentler's [48] recommendations, we evaluated the fit of a structural equation model testing the indirect path from cumulative SES risk through positive parenting to parent and child-reported internalizing and externalizing problems, controlling for parent depressive symptoms, child age, and child gender. For parent-reported outcomes, the model demonstrated adequate fit (RMSEA = 0.065, 90 % CI [0.047, 0.083], CFI = 0.927, SRMR = 0.058). For child-reported outcomes, model demonstrated moderate fit (RMSEA = 0.055, 90 % CI [0.034, 0.074], CFI = 0.953, SRMR = 0.058). All indicators loaded significantly onto their respective factors (see Fig. 1). Child internalizing and externalizing problems were correlated. Parent depressive symptoms correlated positively with cumulative SES risk (see Fig. 1).

As shown in Fig. 1, across reporters, the indirect path between cumulative SES risk and child externalizing through positive parenting was significant (parent report: $\beta = 0.10$, $p = .01$; child report: $\beta = 0.07$, $p = .03$). As expected, the paths from cumulative SES risk to positive parenting and from positive parenting to externalizing problems were in the negative direction. In contrast, the indirect path for both reporters between cumulative SES risk and child internalizing problems through positive parenting was nonsignificant. However, increased levels of cumulative SES risk were directly associated with increased levels of parent-reported internalizing problems (see Fig. 1a).[1] Taken together, results offered support for study hypotheses, indicating that cumulative SES risk was indirectly related to externalizing, but not internalizing, problems through lower displays of positive parenting strategies.

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[1] A direct path from cumulative SES risk to child reported internalizing approaching conventional levels of statistical significance also emerged in a model of positive parenting ($p = .06$).

Negative Parenting

Paralleling the procedure used for positive parenting models, we evaluated two more structural equation models, assessing whether cumulative SES risk was related to parent and child-reported problems indirectly through negative parenting. Two sets of two indicators loading onto the negative parenting latent construct were correlated to improve model fit (i.e., hostility and sadness, and sadness and neglecting/distancing, see Fig. 2). The model of parent-reported outcomes demonstrated adequate fit (RMSEA = 0.071, 90% CI [0.049, 0.092], CFI = 0.910, SRMR = 0.054), and the model of child-reported outcomes demonstrated moderate fit (RMSEA = 0.053, 90% CI [0.027, 0.077], CFI = 0.957, SRMR = 0.048). All indicators loaded significantly onto their respective factors (see Fig. 2). Child internalizing and externalizing problems, as well as parent depressive symptoms and cumulative SES risk, were modestly correlated (see Fig. 2).

As shown in Fig. 2, across reporters, the indirect path between cumulative SES risk and child externalizing through negative parenting was significant (parent report: $\beta = 0.14$, $p = .01$; child report: $\beta = 0.16$, $p < .001$). As expected, the paths from cumulative SES risk to negative parenting and from negative parenting to externalizing were in the positive direction. The indirect path between cumulative SES risk and child internalizing problems through negative parenting was nonsignificant.[2] Taken together, results offered support for study hypotheses, indicating that cumulative SES risk was indirectly associated with externalizing, but not internalizing, problems through higher displays of negative parenting practices.

Sensitivity Analyses

As we used cross-sectional data to infer mediation, we conducted a series of nested model tests using Satorra-Bentler scaled chi-square statistics. Across reporters and parenting constructs, fixing the path between cumulative SES risk and externalizing problems did *not* result in a poorer fitting model (all χ^2_{diff} statistics associated with ps > 0.20), whereas restricting paths between cumulative SES risk and parenting as well as parenting and externalizing problems resulted in significantly poorer fit (all χ^2_{diff} statistics associated with ps 0.01). Taken together, these findings provide evidence favoring an indirect association between cumulative SES risk and externalizing problems through parenting practices.

Results from fixing the direct association between cumulative SES risk and internalizing problems were inconsistent. In models including positive parenting, restricting the path between parenting and internalizing did *not* result in poorer fitting models (all χ^2_{diff} statistics associated with ps 0.30), whereas restricting the path between cumulative SES risk and internalizing resulted in a poorer fitting model when parents reported child internalizing ($\chi^2_{diff}[3] = 6.72$, $p = .01$) and a marginally poorer model when children reported their own internalizing $\chi^2_{diff}[3] = 3.35$, $p = .07$). These results suggest that

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[2] Whereas the paths from cumulative SES risk to negative parenting and negative parenting to child-reported internalizing problems were statistically significant, the indirect path from cumulative SES risk to child-reported internalizing problems through negative parenting approached ($p = .06$) but did not reach conventional levels of statistical significance.

there may be an association between cumulative SES risk and child internalizing problems; however, it is unlikely that this relation operates through positive parenting.

In the model including negative parenting and child-reported problems, whereas fixing the association between cumulative SES risk and internalizing failed to significantly change model fit (χ^2_{diff}[3] = 1.43, p = .23), fixing the link between negative parenting and child-reported internalizing did result in a poorer fitting model (χ^2_{diff}[3] = 4.17, p = .04). These results suggest the construct of negative parenting may be related to child-reported internalizing problems. In the model including negative parenting and parent-reported problems, fixing the path between cumulative SES risk and internalizing resulted in a poorer fitting model, approaching conventional levels of statistical significance (χ^2_{diff}[3] = 3.34, p = .07), whereas fixing the path between negative parenting and parent-reported internalizing failed to change model fit (χ^2_{diff}[3] = 1.41, p = .23). Drawing across models including negative parenting and child internalizing problems, it appears that, when parents reported internalizing problems, cumulative SES risk is more closely related to child internalizing. When children report their own problems, negative parenting appears to better explain variability in child internalizing.

Discussion

The purpose of this study was to investigate whether observed parenting accounted for the relationship between cumulative SES risk and child psychological problems in families where a parent has a history of depression. Based on the differential role parenting plays in child externalizing and internalizing problems [26], we hypothesized parenting would be more strongly related to externalizing problems. Supporting study hypotheses, parenting accounted for the relationship between cumulative SES risk and both child-and parent-reported externalizing problems. However, insufficient evidence was found for cumulative SES risk operating through parenting to child- or parent-reported internalizing problems. These results suggest that, as economic stressors increase, so might the importance of parenting in relation to child externalizing problems.

Although evidence suggests parenting is an important component in the development and maintenance of both childhood internalizing and externalizing behaviors [6–8], the role of parenting in the development of externalizing behaviors is much better supported and understood [26]. For example, empirical evidence from Conger and colleagues' [15] study indicated that disrupted parenting accounted for more than twice as much variance in externalizing than internalizing behaviors. This evidence aligns with our findings, in which parenting accounted for the relationship between cumulative SES risk and child externalizing, but not internalizing, problems across reporters and parenting constructs.

In line with the Family Stress Model [15], results suggested that increasing levels of cumulative SES risk were associated with increases in positive and decreases in negative parenting, which then related to child externalizing problems. These findings are reminiscent of literature proposing parenting as a mechanism of change in behavioral parent training interventions for externalizing pathology [49]. In line with Coercion Theory [50], it may be the case that children use externalizing behaviors to elicit attention from their

parents. Parents with elevated depression and stress levels may be more likely to respond ineffectively (i.e., negative reinforcement) or inconsistently [51], thereby reinforcing child misbehavior. Alternatively, in families where parent-child dyads can engage in more positive interactions (e.g., families experiencing less financial stress), children may engage in less attention-seeking behaviors and thus exhibit fewer externalizing behaviors. Further, parents in lower-income families may be preoccupied with other tasks, such as working multiple jobs and coping with the stress pertaining to finances, and thus have less time to engage in relationship-building activities with their children. In such circumstances, children may learn that "acting out" garners attention, even among busy, stressed parents coping with depressive symptoms. Our findings provide evidence favoring extending models of family stress to include parents coping with depression.

In models testing the potential indirect role of observed positive parenting practices, cumulative SES risk was directly associated with internalizing problems at conventional levels of statistical significance for parent-reported problems and approaching conventional levels of significance for child-reported problems. In models including negative parenting practices, the association between cumulative SES risk and internalizing problems was absent. These findings suggest that variables other than parenting may account for the cumulative SES risk → internalizing problems relationship, and the reporter matters. For instance, a complementary model suggests that children's internalization of poverty-related stress explains the development of childhood behavior problems, in particular internalizing problems, in the context of socioeconomic stress [52]. As such, high-quality caregiving may be insufficient in mitigating the influence of such environmental risks, whereas a mechanism such as youth coping may better account for the relationship between cumulative SES risk and child internalizing problems. Alternatively, the signal for the relationship between cumulative SES risk and child internalizing problems may be better captured in a larger sample featuring a broader age range of children. The average age of onset for externalizing disorders is generally younger than that of internalizing disorders [53]. Given the average age of children in this sample (11.46 years), it may be the case that internalizing problems are better identified among older adolescents. Finally, it is important to consider the assessment literature: children are stronger reporters of their internal states relative to parents [54], lending more credibility to models in which children reported on their internalizing problems.

Findings must be considered in the context of several limitations. First, the cross-sectional design of this study limits claims of causality and directionality. Whereas we theorized that cumulative SES risk predicts child behavior problems, it may be the case that child behavior problems tax family resources. Additionally, as this report constitutes a secondary analysis of baseline data, study exclusions from the initial project carry over into this study, including the exclusion of caregivers and children with some psychiatric diagnoses. As such, these data likely underrepresent families with children or caregivers with pathology higher in severity. Secondly, per census data, whereas the racial makeup of this sample was representative of the geographic region from which this sample was recruited, parents of color made up a much smaller proportion of the study sample relative to White parents. Given the complex relationship between race, SES, and stress, further research testing this model in samples with more parents of color is necessary. Third, model fit for SEMs

with parent-reported outcomes indicated RMSEA and CFI values slightly inconsistent with conventional guidelines (e.g., Hu & Bentler [48]). We included these models in our report as the rigor multi-informant outcomes conferred outweighed the limitation. Finally, our original analyses [3] included gender as a moderator; however, including gender as a moderator within the context of a mediation model requires a larger sample size, and future research should consider the influence gender might have on models of socioeconomic stress, parenting, and child well-being.

Despite these limitations, this study was methodologically rigorous in several ways. One, it was multi-informant, and models were largely consistent across parent- and child-report. Two, the use of observational data increases the validity of the findings, particularly in families where cumulative SES risk or depressive symptoms were high, given research suggesting that parents coping with these characteristics are less reliable with other forms of reporting [27].

Findings from this study shed light on several future research avenues. Importantly, scientists must examine this model in a broader age range of children including both younger children, who may be even more vulnerable to the deleterious effects of maladjustment [55], and older children, who may be more vulnerable to the development of internalizing symptoms [53]. Further, whereas this study stresses the import of parenting, the role of other broader systems and policies must be considered. Decreasing the wealth gap and improving access to resources among underserved communities may also buffer the stress and, consequently, parenting difficulties families face. In conclusion, findings from this study highlight the central role socioeconomic stress plays in child maladjustment when a parent has a history of depression, and they point to parenting as a potential resource that clinicians can leverage to reduce externalizing problems and improve the trajectories of youth growing up in these contexts.

Summary

The accumulation of socioeconomic stressors is associated with childhood psychological and physical problems. Further, evidence suggests both positive and negative parenting strategies (e.g., warmth and praise; criticism and neglect) may account for the relationship between socioeconomic adversity and child outcomes, with models of family functioning indicating that increases in socioeconomic stress relate to problematic parenting practices. Parents coping with socioeconomic stress are also often coping with comorbid depression. However, despite this frequent co-occurrence, studies of parental depression and child well-being frequently statistically eliminate the variability associated with SES. In a sample of children whose parents have a history of depression, this study extends findings from a previous report (i.e., [3]) to test whether behavioral observations of positive and negative parenting account for the association between a cumulative risk index of socioeconomic stress and child psychological externalizing and internalizing problems in the same sample of 179 children of parents with depression. We found that both positive and negative parenting accounted for the relationship between socioeconomic risk and both child- and parent-reported externalizing problems, whereas no evidence emerged for parenting accounting for the relation between cumulative risk and internalizing problems. This study

highlights the central role socioeconomic stress plays in child maladjustment and provides support for generalizing models of family stress to families in which a parent has a history of depression. Further, results emphasize the importance of parenting as a mechanism linking socioeconomic stress and child externalizing problems, even among parents coping with depression.

Funding

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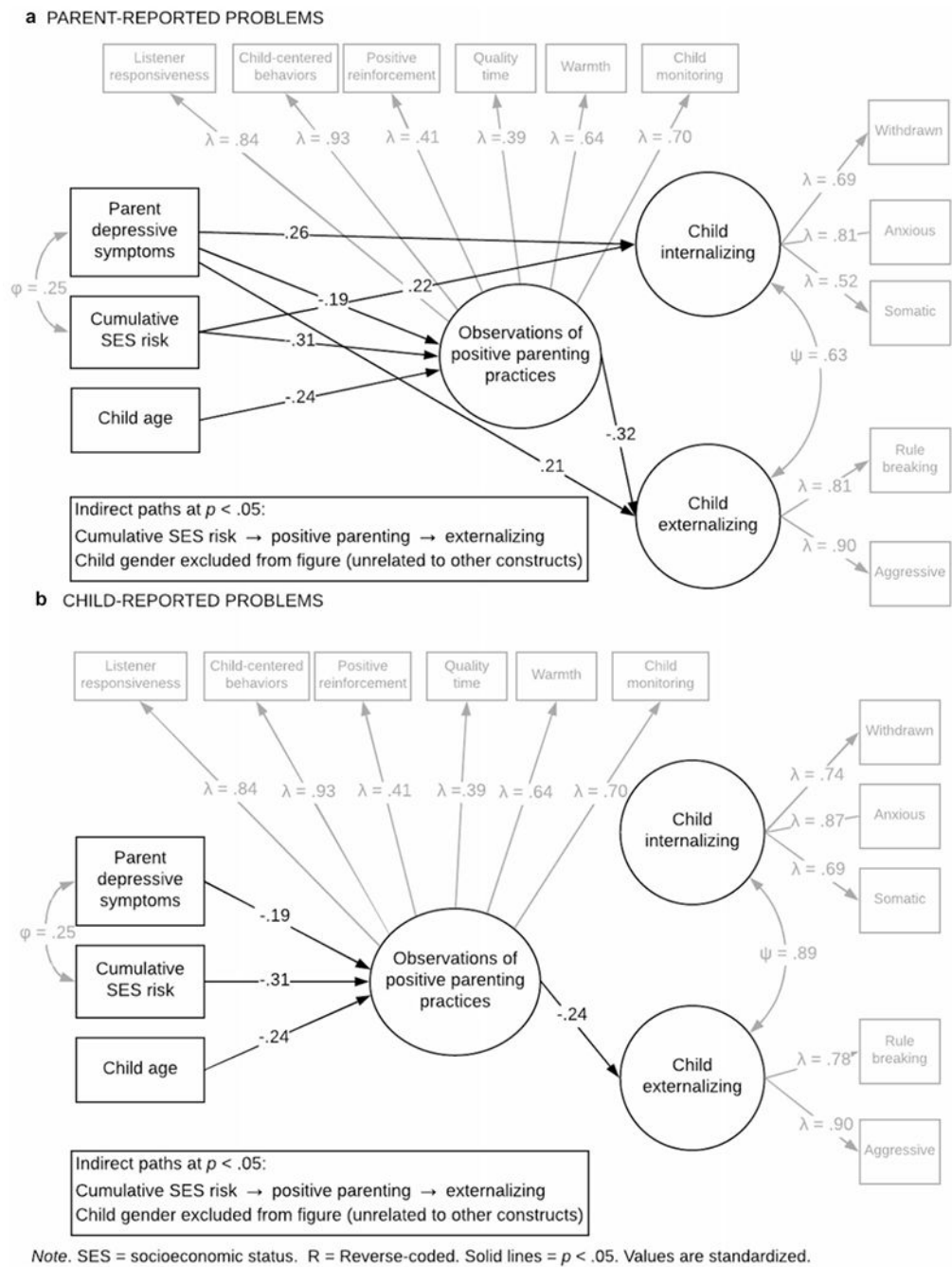
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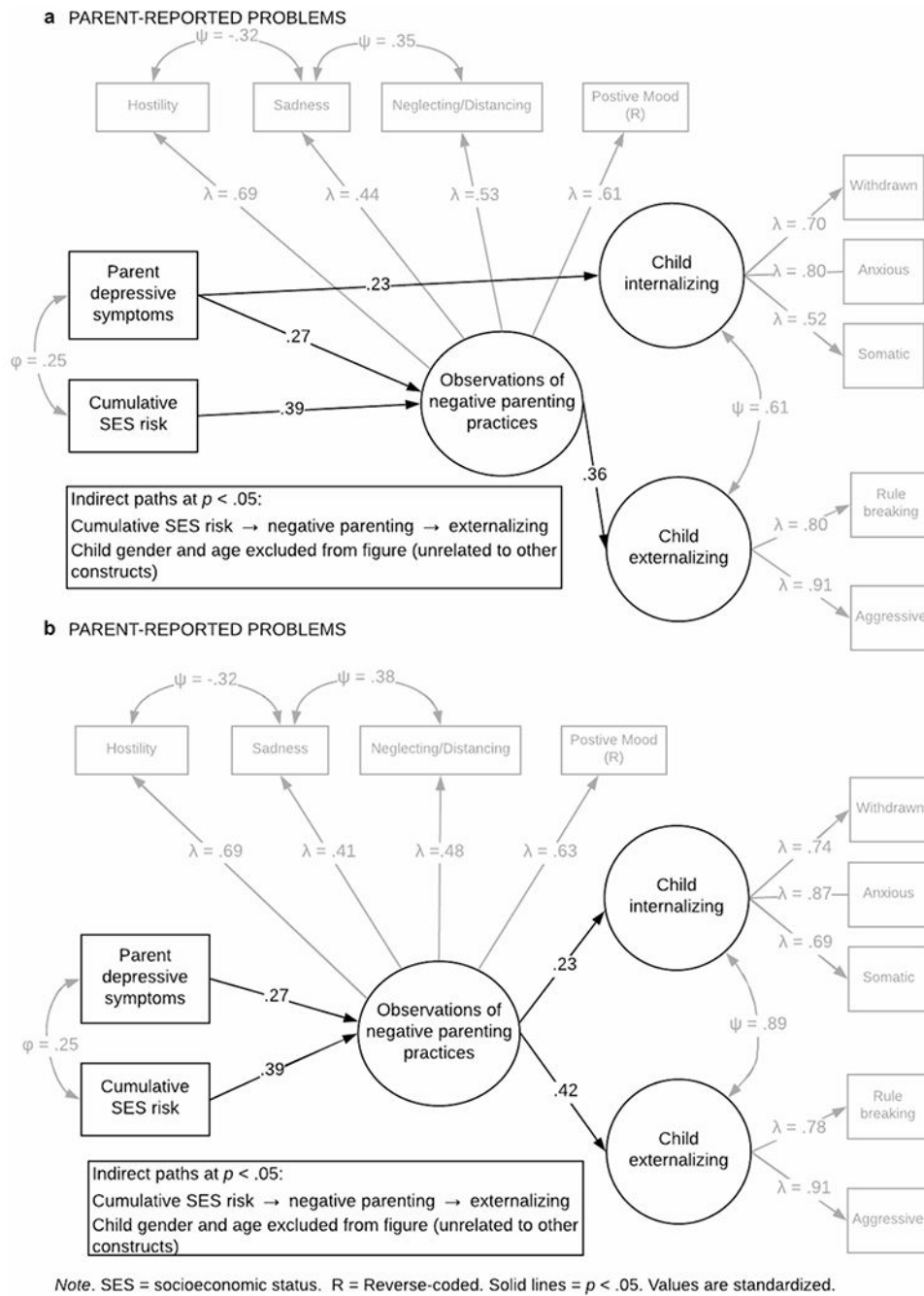
Fig. 1.
The indirect role of positive parenting on the relationship between cumulative SES risk and parent-reported (**a**) and child-reported (**b**) child internalizing and externalizing problems

Fig. 2.
The indirect role of negative parenting on the relationship between cumulative SES risk and parent-reported (**a**) and child-reported (**b**) child internalizing and externalizing problems

Table 1

Means and standard deviations of study variables

Variable	M *(SD)*
Cumulative SES Risk (possible range: 0–1.0)	0.23 *(0.26)*
Self-reported Parent Depression Levels (Beck Depression Inventory-II)	18.97 *(12.41)*
Observed Positive Parenting Indicators (possible range: 1–9)	
Listener responsiveness	6.02 *(1.14)*
Child-centered behaviors	5.93 *(1.13)*
Positive reinforcement	2.37 *(1.23)*
Quality time	3.32 *(0.81)*
Warmth	4.90 *(1.38)*
Child monitoring	1.31 *(0.97)*
Observed Negative Parenting Indicators (possible range: 1–9)	
Hostility	3.89 *(1.67)*
Sadness	4.93 *(1.24)*
Positive mood (reverse-scored)	5.06 *(1.03)*
Neglecting/distancing	2.88 *(1.38)*
Parent-reported Problems (Child Behavior Checklist raw scores)	
Internalizing	
Withdrawn	3.34 *(2.97)*
Anxious	5.97 *(4.19)*
Somatic	2.54 *(2.55)*
Externalizing	
Rule breaking	2.58 *(2.68)*
Aggressive	7.20 *(6.05)*
Child-reported Problems (Youth Self Report raw scores)	
Internalizing	
Withdrawn	3.69 *(2.93)*
Anxious	5.54 *(4.62)*
Somatic	4.37 *(3.49)*
Externalizing	
Rule breaking	2.87 *(2.59)*
Aggressive	6.57 *(4.82)*