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Contextualizing Children’s Caregiving Responses to Interparental Conflict: Advancing Assessment of Parentification

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Abstract

Parentification is a parent-child dynamic in which children assume caregiving responsibilities while parents fail to support and reciprocate children’s roles. There is a gap between empirical research, which typically operationalizes parentification as the occurrence of children’s caregiving behaviors, and theory, which emphasizes consideration of the family context in which children engage in caregiving as well as adjustment. The present study (N=235) considered multiple operationalizations of the construct by assessing kindergarten-aged children’s caregiving reactions to interparental conflict in a standardized paradigm and additionally contextualizing caregiving reactions within family context and child adjustment over time through mixture modeling approaches. Although 88% of children endorsed caregiving, contextualizing caregiving resulted in lower estimates of this phenomenon (conservatively, 30%). Moreover, contextualizing children’s caregiving at the family level (i.e., within parent-child relationships) proved most informative in identifying between-family differences in within-family experiences of parentification. Despite identifying a pattern of parentification at the family level (high children’s caregiving reactions in conjunction with *poor* parental caregiving competence and *poor* autonomy support), children’s adjustment (externalizing, internalizing, prosocial behavior) remained in the normative range of functioning over two years, potentially suggesting child resilience to this family risk context. As such, these findings demonstrate an advancement in measuring parentification by contextualizing young children’s caregiving within parent-child relationships.

Keywords

Parentification; Interparental Conflict; Family Processes; Family Systems; Mixture Modeling

Parentification is a parent-child dynamic in which children assume adult-like caregiving responsibilities while parents fail to reciprocate appropriate caregiving and restrict children’s developing autonomy (Jurkovic, 1997). Parentification is further defined by children’s

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adjustment difficulty because children's unsupported roles interfere with salient tasks of development, including developing the self as a unique individual separate from the family (Kerig, 2005). As such, the occurrence of children's caregiving behaviors alone should not define parentification; however, review of the parentification literature highlights the dearth of literature contextualizing children's caregiving roles at the family level (parent-child relationships) and the individual level (child adjustment) (Nuttall & Valentino, 2017). This literature gap is notable because theory argues children's caregiving may be normative experiences or may be indicative of an adaptive response to family stress when children's caregiving is reciprocated and supported by families and not detrimental to adjustment (Boszormenyi-Nagy & Spark 1973; Jurkovic, 1997). Indeed, caregiving behaviors among early school-age children are commonly observed in normative family stress contexts such as interparental conflict (Cummings, Zahn-Waxler, & Radke-Yarrow, 1984; Davies, Coe, Martin, Sturge-Apple, & Cummings, 2015; Leon & Rudy, 2005). As such, it is important not to pathologize children's caregiving behaviors as indicative of parentification without examining the broader context in which these roles occur. However, much of the parentification literature operationalizes parentification as children's caregiving or includes the family context along with caregiving in a single observed variable (Macfie, Brumariu, & Lyons-Ruth, 2015), preventing examination of heterogeneity in profiles of children's caregiving, parent-child relationships, and adjustment. To address this gap in the literature while advancing assessment and conceptualization of parentification in school-age children, we assessed kindergartner's caregiving in response to set of standardized interparental conflict vignettes and then applied mixture modeling approaches to contextualize caregiving within 1) the family level: children's perceptions of maternal/paternal caregiving competence, maternal/paternal autonomy support, and 2) the child level: two-year adjustment trajectories across multiple facets of adjustment (internalizing, externalizing, and prosocial behaviors). Interparental conflict was selected as a stress paradigm for assessing caregiving because it is a normative family stressor (McCoy, George, Cummings, & Davies, 2013) noted to elicit children's caregiving behaviors during the early school-age years. For example, developmental studies suggest that although toddlers may engage in caregiving in response to interparental conflict, these behaviors significantly increase by the transition to school to become a common response (Cummings et al., 1984).

Contextualizing Children's Caregiving Within Parent-Child Relationships

We examined children's perceptions of maternal and paternal caregiving competence and maternal and paternal reports of parental autonomy support in order to contextualize children's caregiving within parent-child relationships. Seminal (Jurkovic, 1997) and recent (Macfie et al., 2015; Nuttall & Valentino, 2017) theoretical models conceptualize parentification within a family systems framework. Within this framework, children's caregiving is expected to be indicative of parentification when it occurs as a familial response to stress characterized by a parental failure to reciprocate children's caregiving and to support children's autonomy (Jurkovic, 1997). As such, parentification may contrast with children's caregiving responses to family stress in which children's roles are supported and reciprocated by parents. This distinction suggests heterogeneity in profiles of children's caregiving within family context, which has not yet been explored.

Maintaining a sense of security in the family system is a central, salient goal for children (Cummings & Davies, 2010). When parents are the source of familial stress, such as in the case of interparental conflict, children may not be able to rely on caregivers to provide scaffolding to cope with this stress (e.g., Davies, Sturge-Apple, Cicchetti, & Cummings, 2008). As such, parentification can be considered a child regulatory process for maintaining emotional security in threatening family contexts. Kerig (2005) argued that children become engaged in adult-like caregiving roles through two inter-related processes characterized by children's perceptions of caregiver incompetence to provide support for children and parental restriction of children's autonomy. First, under conditions of increased familial stress children may voluntarily assume responsibility for parental needs without parental encouragement (Cummings & Schermerhorn, 2003). Parents who abdicate their role or accept children's elevation to a parental role likely display poor caregiving competence (Kerig, 2005). Second, children may engage in caregiving roles following parental demands that children fulfill the emotional needs of parents at the expense of providing autonomy support for children (Kerig, 2005). When parents appear childlike and demand that children fulfill parental needs, such acts restrict the children's autonomy and reflect psychological control (Barber, 1996). Such parents are likely incapable of supporting children's roles in the family system, negatively impacting children's perceptions of parents as competent caregivers. As such, intrusive parenting that restricts autonomy is a key component of parentification (Kerig, 2005). For example, in adolescence youth reports of caregiving behaviors are associated with poor autonomy granting from mothers and fathers (Peris, Goeke-Morey, Cummings, & Emery, 2008). As such, examination of parentification requires broader assessment of parenting in addition to children's engagement in caregiving. Therefore, we contextualized children's caregiving behaviors in the broader family context of children's perceptions of parental caregiving competence and parental autonomy support versus restriction.

In contextualizing children's caregiving at the family level it is important to consider the parenting of both mothers and fathers as their parenting may differ. Much of the parentification literature has focused on mother-child roles, with few studies examining processes with fathers (Nuttall & Valentino, 2017). However, including both parents in a broader systems perspective of the family provides a more complete understanding of parentification processes (e.g., Cox & Paley, 1997). For example, parental warmth from one parent may protect children from the risk associated with engaging in adult-like caregiving (Etkin, Koss, Cummings, & Davies, 2014). Therefore, the present study considered children's perceptions of parental caregiving competence and parental autonomy support in both mother-child and father-child relationships rather than assessing a single parent-child dyad within the family system or aggregating across parents.

In order to advance the literature on parentification, we used a patterns-based or person-centered methodological approach (e.g., Masyn, 2013). In applying a patterns-based approach, we sought to disaggregate children's caregiving behaviors and family contextual variables in order to obtain more precise measurements of each and to allow for heterogeneity in children's caregiving, parental caregiving competence, and parental autonomy support versus. Prior studies have coded observations of behaviors representing the parentification construct in a single variable assessed at the parent level (e.g., "turning

to the child for caregiving at the expense of providing the child with parental guidance,” Jacobvitz, Hazen, Curran, & Hitchens, 2004), child level (e.g., “[child] tries to impose restrictions or punishments when parents or sibling are perceived to have neglected a felt responsibility,” Johnston, Gonzalez, & Campbell, 1987), or dyadic (parent-child) level (e.g., “it is unclear who the child is and who the parent is throughout the session,” Macfie, Houts, McElwain, & Cox, 2005). Thus, examining children’s caregiving and parenting as separate variables and applying a patterns-based approach allows for heterogeneity in family context to emerge (i.e., distinguishing a pattern of caregiving that is unsupported and unreciprocated from a pattern of caregiving that is supported and reciprocated). Moreover, assessing children’s caregiving and parenting as separate manifest indicators of parentification improves validity by utilizing multiple measures (e.g., children’s caregiving and parenting assessed in separate paradigms) and multiple reporters (e.g., children and both parents). To assess children’s engagement in caregiving we used a laboratory-based interparental conflict task in order to standardize the stress exposure across children. It is important to hold the stressor itself constant because families differ in their responses to stress (Cummings & Davies, 2010). Finally, we utilized a normative, middle class sample rather than a sample of children experiencing higher levels of stress in their family in order to disentangle parentification from extreme parental incompetence (e.g., maltreating parents).

Contextualizing Children’s Caregiving Within Child Adjustment

We examined children’s concurrent and prospective adjustment (externalizing, internalizing, and prosocial behavior) in order to further contextualize early school-age children’s caregiving within adjustment. Children’s poor socioemotional adjustment is central to the concept of parentification (Jurkovic, 1997). The extant literature assessing parentification at the family level identifies associations with young children’s poor adjustment, including: increased externalizing and internalizing symptoms and disruptions in social interactions with peers. Parentification in observed interactions with mothers and fathers during toddlerhood was associated with teacher reports of externalizing symptoms and difficulty maintaining appropriate peer relationships in kindergarten (Macfie et al., 2005) and with internalizing symptoms at age seven (Jacobvitz et al., 2004). Parentification at the time of a divorce (age 4–12) was associated with concurrent withdrawn behavior and withdrawn behavior two years after divorce (Johnston et al., 1987). Among children between the ages of 4 and 8, parentification was associated with teacher ratings of fewer prosocial behaviors (Leon, Wallace, & Rudy, 2007).

Our methodological approach builds on the existing variable-based literature by implementing a patterns-based approach that considers children’s concurrent and prospective adjustment to identify a pattern constituting parentification. Traditional variable-based models of parentification assume that the association between children’s caregiving and adjustment is the same across families, which obscures potential differential adjustment in the context of children’s caregiving that is unreciprocated and unsupported at the family level and children’s caregiving that is reciprocated and supported at the family level. We assessed children’s adjustment concurrent with caregiving and parenting as well as prospectively with repeated assessments over time because early maladaptation

may contribute to future maladaptation (e.g., Cicchetti, 1993). Alternately, if children's caregiving behaviors are supported and reciprocated and not characterized by concurrent maladjustment, it is essential to verify that maladjustment does not emerge later in development (e.g., Hetherington, 1999). Thus, examining children's adjustment trajectories may be useful for identifying parentification.

Hypotheses

Based on parentification theory (Jurkovic, 1997), we hypothesized the identification of a parentification pattern characterized by early school-age children's caregiving behaviors in conjunction with poor parental competence, parental restriction of autonomy (control), and children's poor adjustment over time and across multiple domains of socioemotional adjustment. We expected that such a parentification pattern would be qualitatively different from a potential pattern of children's caregiving behaviors accompanied by caregiving competence and appropriate parental autonomy support (indicating reciprocation of caregiving), and sustained children's competence, as such a pattern is theorized to represent an adaptive and secure familial response to interparental conflict (Jurkovic, 1997). Given that interparental conflict is a normative familial stressor and that we assessed a community (non-clinical) sample, we expected a large low-risk, non-parentification class in which children would report few caregiving reactions, high parental caregiving competence, appropriate autonomy support, and children's competence in contrast to the parentification class. Finally, because parentification is not simply poor parenting (Shaffer & Egeland, 2011), we also hypothesized that a class might emerge that was characterized by poor parenting (poor parental caregiving competence and poor parental autonomy support) but not accompanied by child caregiving responses.

In examining our hypothesized profile of parentification, we evaluated frequencies of parentification when operationalized as caregiving responses alone (ignoring context), as caregiving contextualized at the family level only and as caregiving contextualized at both the family level and the individual level (as hypothesized above). Because parentification has often been evaluated as a predictor of adjustment outcomes in the literature rather than included in the operationalization of parentification as conceptualized by theory, we alternatively considered child adjustment as an outcome of caregiving contextualized at the family level rather than definitional to the construct of parentification, which allowed us to further explore potential differences across these various conceptualizations of parentification.

Method

Data for the present study were drawn from a longitudinal, prospective study designed to assess the impact of interparental conflict on child development. Families were recruited from two demographically similar cities in the Midwest and in the Northeast under institutional review board approvals. Eligibility criteria included that the couple had been living together for at least three years, had a child enrolled in kindergarten, and could complete questionnaires in English. Data for the present study were collected when children were in kindergarten (wave 1), first grade (wave 2), and second grade (wave 3).

Participants

The sample for the present study includes 235 families. Forty-five percent of the children were female. Ethnicity was as follows: 70.50% Caucasian, 14.5% African American, 13.6% Multiracial, and 1.7% Hispanic. At wave 1, children ranged in age from 4.99 to 8.43 years ($M = 6.00$, $SD = 0.48$), at wave 2 children ranged in age from 5.34 to 8.72 years ($M = 6.97$, $SD = 0.50$), and at wave 3 children ranged in age from 6.23 to 9.22 years ($M = 7.99$, $SD = 0.53$). The majority of couples were married (98.7%), and the majority of parents were biological parents of participating children (94.9% of mothers and 87.6% of fathers). At Wave 1, mothers ranged in age from 22 to 51 ($M = 35.02$; $SD = 5.60$ years), and fathers ranged in age from 22 to 52 ($M = 36.84$, $SD = 6.15$). Family income was under \$29,000 for 19.2% of families, \$29,000–75,000 for 59.7% of families, and over \$75,000 for 20.8% of families. The study retention rate was 92%.

Measures

Children's Caregiving Reactions to Interparental Conflict.—At wave 1 children watched standardized, recorded conflict vignettes between actors portraying parents (Davies, Forman, Rasi, & Stevens, 2002). Vignettes varied in terms of anger intensity, conflict resolution, and content (i.e., whether or not the conflict is about the target child). Children watched one of two sets of tapes portraying the same conflict types in order vary the specific content of the scripts to increase generalizability of the findings. Tape administration was randomized and each videotape followed a similar ordering of themes and properties of interparental conflict portrayed by the same actors. Following vignettes, children were asked, “What would you have done?” and presented picture cards reflecting behavioral response options: play, walk away, huddle, watch, help with tasks, mediate, comfort, and yell. Children were then asked, “Tell me what is happening in the picture” to clarify understanding. The present study utilized data from the three vignettes portraying destructive conflicts (an unresolved conflict, an escalating conflict, and a child rearing conflict) because constructive conflicts are not expected to elicit child caregiving reactions. Children's endorsements of a caregiving response (help, mediate, comfort) were coded dichotomously. Children's responses were summed across vignettes (e.g., Davies et al., 2002) to form a single index of child caregiving reactions to interparental conflict (possible range: 0–3).

Children's Representations of Caregiver Competence.—Maternal and paternal caregiving competence at Wave 1 was assessed using the MacArthur Story Stem Battery (MSSB; Bretherton, Oppenheim, Buschsbaum, Emde, & The MacArthur Narrative Group, 1990), a narrative story-stem task for assessing child representations of family relationships. The revised MSSB was adapted to include stories depicting interparental conflicts of varying intensities (see Schermerhorn, Cummings, & Davies, 2005 for story stem scripts). To be consistent with the vignettes task, the present study utilized data from the destructive conflicts: a mild conflict regarding a lost set of keys and an intense conflict regarding a messy kitchen. An examiner presented story stems using family action figure dolls of a mother, a father, and a child consistent with the child's gender and ethnicity. The examiner began each story and asked the child to use the figures to complete the story. Verbal prompts such as “Does anything else happen?”, “What is Dad doing?”, “What's going to happen?”

and “Who cleaned up the dishes?” were used to encourage children to elaborate on and clarify their stories as needed.

Children’s representations of caregiver competence were coded to assess the degree to which the child portrays caregivers as competent at protecting and supporting the child and family (Davies & Winter, 2003). Caregiver competence was coded separately for each parent on a five-point scale (1–5). High scores reflect children’s portrayals of the caregiver as a source of support and protection to the child and the family while low scores reflect children’s portrayals of the caregiver as vulnerable and unable to serve as a source of support or protection or as an effective manager of stress. Data were coded by four trained coders who achieved reliability on 20% of the sample. Inter-rater reliabilities across the four coders for each of the two destructive stories were .90 and .93 for mother’s competence and .86 and .93 for father’s competence. Consistent with prior work using the present coding scheme (e.g., Davies, Sturge-Apple, Winter, Cummings, & Farrell, 2006), codes across the stories were summed to create total scores of children’s representations of maternal and of paternal caregiving competence.

Parental Psychological Autonomy Support versus Restriction.—At Wave 1, mothers and fathers completed the parent version of the Child Report of Parenting Behavior Inventory (PV-CRPBI; Margolies & Weintraub, 1977). Mothers and fathers completed the 15-item psychological autonomy versus psychological control dimensional scale, reporting on both their own parenting and the parenting of their partner (Schwartz, Barton-Henry, & Pruzinsky, 1985). Questions were answered 1–5 on a Likert scale. Internal consistency was $\alpha = .84$ across all reports. Scored on a continuum, low scores are indicative of psychological autonomy whereas high scores are indicative of psychological control, that is, parenting that controls child behaviors and does not permit the child to develop as an individual apart from the parent and the parent’s needs (Schaefer, 1965). The scores for mother’s and father’s behaviors were obtained by averaging self-report and partner-report data.

Child Externalizing and Internalizing Symptoms.—Mothers and fathers completed the internalizing and externalizing scales of the Child Behavior Checklist (CBCL; Achenbach, 1991). CBCL data were collected when children were in kindergarten, first grade, and second grade. Internal consistencies ranged from $\alpha = .87$ to $.90$ for externalizing and from $\alpha = .84$ to $.88$ for internalizing. Mother and father reports were correlated at each wave for externalizing (wave 1: $r = .62, p < .001$; wave 2: $r = .65, p < .001$; wave 3: $r = .51, p < .001$) and internalizing (wave 1: $r = .47, p < .001$; wave 2: $r = .42, p < .001$; wave 3: $r = .36, p < .001$) symptoms. Consistent with prior work (e.g., Johnston et al., 1987), parent reports were averaged to create a single score for internalizing symptoms and a single score for externalizing symptoms at each wave.

Prosocial Behavior.—Mothers and fathers completed the Child Behavior Scale (CBS; Ladd & Profilet, 1996) when children were in kindergarten, first grade, and second grade. The CBS assesses children’s prosocial behavior with the 7-item prosocial scale. Items are rated on a 1–3 Likert scale. Internal consistencies were $\alpha = .78$ for mother reports and $\alpha = .82$ for father reports. Mother and father reports were correlated at each wave (wave 1: $r =$

.31, $p < .001$; wave 2: $r = .36$, $p < .05$; wave 3: $r = .38$, $p < .001$) and averaged to create a single score.

Interparental Conflict.—Mothers and fathers completed the O’Leary-Porter Scale (Porter & O’Leary, 1980) when children were in kindergarten. The O’Leary-Porter Scale consists of 10 items assessing children’s exposure to interparental hostility and has demonstrated good internal consistency and concurrent validity. In the present sample, internal consistencies were $\alpha = .80$ for mother reports and $\alpha = .78$ for father reports. Mother and father reports were correlated ($r = .60$, $p < .001$) and averaged. Interparental conflict was included as a covariate of class because 1) children’s caregiving was assessed in an interparental conflict paradigm, and 2) interparental conflict is a familial variable expected to elicit child caregiving yet children’s caregiving may occur in the absence of interparental stress (e.g., Boszormenyi-Nagy & Krasner, 1973).

Analytic Strategy

The analytic strategy of the present study involved a model building approach. This approach allowed us to: 1) report frequencies of parentification when operationalized as children’s caregiving responses alone, as caregiving contextualized at the family level (parental competence and autonomy support versus control) and as caregiving contextualized at both the family level and the individual level (children’s adjustment); and 2) reduce the number of models fit during mixture modeling to reduce capitalizing on chance. Children’s caregiving was first contextualized at the family level through a preliminary latent class analysis with continuous indicators, which is also called latent profile analysis (LPA) (Masyn, 2013), to identify clusters of families that qualitatively differ in terms of children’s caregiving behaviors, parental competence, and parental autonomy support. Second, children’s caregiving was additionally contextualized at the individual level (children’s adjustment); latent growth curve models were incorporated into the final LPA solution in the growth mixture model (GMM) framework, such that latent class membership was indicated by children’s caregiving, the family-level (parental caregiving competence and autonomy support), and by child adjustment over time. Lastly, and in contrast to the prior model, we also fit models in which adjustment was predicted by latent class membership rather than an influencer of class membership.

All data were modeled in Mplus (version 7.31; Muthén & Muthén, 2015) using full information maximum likelihood estimation with missing data. Missing data rates for each variable are reflected in valid sample sizes reported in Table 1. In all models, we controlled for interparental conflict. Finite mixture models were initially run with 200 random starts with the 20 best starting values completely iterated to determine the maximum log likelihood; the number of random starts was increased as necessary to achieve replication of the best loglikelihood value. Final models were then re-run with 2,000 random starts in order to confirm replication of the best loglikelihood. The optimal number of classes was determined using the Bayesian information criterion (BIC; Schwartz, 1978) for comparing non-nested models because simulation studies demonstrate the utility of the BIC over other metrics when determining the appropriate number of latent classes (Nylund, Asparouhov, & Muthén, 2007). As recommended by Muthén (2003), substantive interpretations of class

solutions were also considered. We began with more constrained models and attempted to lessen constraints to fit more complex models. Increasing numbers of classes were fit within each model specification until the BIC stopped decreasing or until models failed to converge.

Results

Preliminary Data Analysis

The majority of children (88%) endorsed a caregiving response in one or more interparental conflict vignettes (comfort: 37%, help: 31%, mediate: 63%). Descriptive data and correlations are presented in Table 1. Observed sample correlations between maternal and paternal caregiving competence and between maternal and paternal control were high ($r = .80$ or greater); therefore, these covariances were allowed to be non-zero in subsequent mixture models in order to avoid over-estimating the number of classes in the population (Asparouhov & Muthén, 2015). As such, all models are most accurately described as LPA or LCA models with continuous indicators and residual covariances, henceforward referred to as LPA.

Contextualizing by Parent-Child Relationships: Latent Profile Analysis

The preliminary LPA contained the five continuous indicator variables (children's caregiving, maternal and paternal competence, maternal and paternal control) and the interparental conflict covariate. Models with class-specific variances were compared to models with class invariant variances. Models in which two covariances between indicator variables were estimated and the remainder fixed to zero (Models 1–4) were compared to models in which covariances between all indicator variables were estimated (Models 5–6). Models with class-specific covariances were compared to models with class-invariant covariances. Further model descriptions and parameterizations are presented with results in Table 2.

The final selected model was the two-class model solution for Model 2, a stringent model estimating five class-specific means, two class-specific covariances, and five class-invariant variances. Classification quality was good, with class probabilities for the most likely membership above 0.80 for all classes. Full parameter estimates for the selected model are presented in Table 4. As hypothesized, results suggest a parentification latent class ($n = 70$) in which the highest child caregiving response scores occurred in a family context in which maternal and paternal control was also observed to be the highest in the sample and maternal and paternal caregiving competence were lower. The second latent class ($n = 165$) was characterized by lower child caregiving levels, higher observed levels of maternal and paternal caregiving competence, and lower maternal and paternal control, which is consistent with expectations of a non-parentification, no-risk class. The covariance between maternal and paternal parenting was lower in the parentification class than in the non-parentification class. The interparental conflict covariate influenced the resolution of the class solution, with interparental conflict associated with greater likelihood of membership in the parentification class rather than the non-parentification class ($b = 0.21$, $s.e. = 0.06$, $p < .01$).

Contextualizing by Child Adjustment: The Complete Growth Mixture Model

Growth mixture modeling (GMM) is a finite mixture extension of latent growth curve modeling that allows for heterogeneity in change patterns, such that differences in longitudinal change can be described within latent classes (McLachlan & Peel, 2000). Children's adjustment for each facet of adjustment (externalizing, internalizing, and prosocial behavior) was incorporated with the model selected in the preliminary LPA into a GMM framework. As such, the latent class variable was indicated by both the family-level indicators and by children's adjustment over time along with children's caregiving in accordance with our hypotheses and parentification theory. We attempted to lessen constraints to fit more complex models in which GMM parameters (intercept and slope variances and covariance, basis coefficients) were class-specific. Full GMM results are presented in Table 3 by adjustment outcomes. Full parameter estimates for the selected models for each adjustment outcome are then presented in Table 4 alongside estimates from the model selected in the preliminary LPA. Comparison of the two-class model solutions obtained in the preliminary LPA and in the GMM for each adjustment outcome revealed shifts in the class solutions across adjustment outcomes.

Externalizing Symptoms.—The class-specific means model was selected. Additionally estimating basis coefficients resulted in minimal improvement in BIC. Classification quality was good, with class probabilities for the most likely membership of 0.82 for the non-parentification class ($n = 109$) and 0.88 for the parentification class ($n = 126$). The parentification class was characterized by a greater initial level of symptoms in kindergarten than in the non-parentification class. Both classes displayed decreases in externalizing between kindergarten and second grade though, the parentification class decreased more rapidly than the non-parentification class. Interparental conflict was associated with greater likelihood of membership in the destructive parentification class ($b = 0.19$, $s.e. = 0.05$, $p < .001$).

Internalizing Symptoms.—The class-specific means model was selected. Additional estimation of basis coefficients resulted in minimal improvements in BIC. Classification quality was good, with class probabilities for the most likely membership of 0.82 for the non-parentification class ($n = 131$) and 0.87 in the parentification class ($n = 104$). The parentification class was characterized by a greater initial level of symptoms in kindergarten than in the non-parentification class. Both classes displayed increases in internalizing between kindergarten and second grade, though the parentification class increased more rapidly than the non-parentification class. Interparental conflict was associated with greater likelihood of membership in the parentification class ($b = 0.19$, $s.e. = 0.08$, $p < .05$).

Prosocial Behavior.—The class-specific latent basis model with class-specific variances and covariances was selected. Classification quality was good, with class probabilities for the most likely membership of 0.85 in the non-parentification class ($n = 111$) and 0.91 in the parentification class ($n = 124$). The parentification class was characterized by decreases in prosocial behavior, with 54% of the decline occurring between waves 1 and 2. In contrast, the non-parentification class displayed increases in prosocial behavior over time characterized as a sharp increase in prosocial behavior between kindergarten and first

grade with prosocial behaviors then remaining stable into second grade. Estimation of class-specific intercept and slope variances and their covariance identified qualitatively larger variances in the non-parentification class than in the parentification class. Interparental conflict was associated with greater likelihood of membership in the parentification class ($b = 0.12$, $s.e. = 0.07$, $p < .01$).

Adjustment as an Outcome

We also fit GMMs in which adjustment was predicted by latent class membership rather than an influencer of class membership. We used a manual 3-step approach with saved BCH weights from the Preliminary LPA presented above to test latent distal outcomes (latent growth curve models) (Asparouhov & Muthen, 2014). Results are presented in Table 4 below the presentation of the models in which adjustment was included in the class solution. For the internalizing model, a simplified covariance structure was fit due to nonconvergence issues. Significant differences emerged for externalizing, such that levels were higher at kindergarten for the parentification class, and for prosocial behavior, such that changes in prosocial behavior were significantly different for the parentification class and decreasing rather than increasing.

Discussion

Guided by theoretical models of parentification emphasizing a family systems approach (e.g., Jurkovic, 1997; Macfie et al., 2015; Nuttall & Valentino, 2017), this study contextualized children's caregiving responses to the family stressor of interparental conflict in conjunction with: 1) the broader parenting context in which they occur (parental caregiving competence and autonomy support) and, 2) children's concurrent and prospective adjustment (internalizing, externalizing, and social competence) to identify a subset of the sample experiencing parentification. We used a rigorous method that assessed children's engagement in caregiving in a laboratory-based interparental conflict task to standardize the stress exposure across children within a normative family stress context. Further, we assessed children's caregiving and parenting in separate paradigms and across multiple reporters to improve the validity of our assessments for understanding differences in family contexts. As such, the present study makes important contributions to conceptualization of parentification and the assessment and measurement of parentification during the early school-age years, a developmental period with few extant measures for assessing parentification relative to other developmental periods (Macfie et al., 2015) despite the salience of caregiving during this period (Cummings et al., 1984; Leon & Rudy, 2005). Consistent with parentification theory and our hypotheses, results identified a parentification pattern qualitatively different from non-parentification. Families in the parentification class experienced more interparental conflict than families in the non-parentification class, indicating that increased family stress does indeed elicit parentification.

Notably, the majority of children (88%) endorsed a caregiving reaction (e.g., help, mediate, comfort) to one or more interparental conflict vignettes. Consistent with the interparental conflict literature (Cummings et al., 1984; Davies et al., 2015; Leon & Rudy, 2005), such a finding quantifies child caregiving reactions to familial stress as quite common, even in the

context of normative family stress, and provides support for models of child development emphasizing children's agentic behavior in the family system (Cummings & Schermerhorn, 2003). Importantly, consideration of these roles in conjunction with the broader context in which they are embedded, as suggested by parentification theory, reduced the rate of parentification observed compared to operationalizing parentification solely on the basis of child caregiving reactions. These results emphasize the importance of contextualizing children's caregiving roles in order to avoid overpathologization of children's caregiving as reflecting a familial pattern of parentification or child maladjustment.

Specifically, when the familial context was included in the class solution (i.e., LPA), parentification constituted 30% of the sample. Including children's adjustment trajectories in the class solution (i.e., GMM) resulted in shifts in the class solution such that parentification constituted a larger proportion of the sample than considering parenting context alone (44 – 54%) but less than caregiving behaviors in isolation (88%). As such, including children's adjustment trajectories classified more children as parentified over considering only the family context. More children were identified as experiencing parentification through consideration of externalizing symptoms (54%) and prosocial behavior (53%) than through consideration of internalizing symptoms (44%), highlighting that not all facets of adjustment appear equally impacted. However, results regarding children's adjustment trajectories must be interpreted with caution because only minor differences emerged in mean level and slope parameter estimates for children's adjustment when adjustment was allowed to influence the class solution versus models in which adjustment was treated as an outcome. In the latter models, few significant differences in adjustment emerged across classes. As such, although we intended to contextualize children's caregiving at both the family and individual level in conceptualizing parentification, the family level (i.e., parent-child relationships) proved most informative in identifying children experiencing parentification. Given that parentification was a pattern experienced by about 30% the sample under our most conservative estimates, this study suggests that a familial pattern of parentification is a relatively common parent-child dynamic, even among families experiencing normative stress. This conclusion supports recent theoretical work emphasizing parentification as a relevant yet understudied family context construct (e.g., Macfie et al., 2015).

Importantly, there were few differences in adjustment across children categorized in the parentification class versus the non-parentification class. Regardless of whether or not adjustment was considered in the class solution, our parentification class appeared to display adjustment outcomes suggesting resilience despite an observed family parentification risk context. Across models, in the parentification class children's adjustment remained in the normative range of functioning, with relatively little change observed over time. Internalizing and externalizing means were in the normative range from kindergarten into second grade. Although there are no published norms for our measure of prosocial behavior, mean scores were in the mid-to-high range of possible scores, suggesting social competence. Therefore, although children in the parentification class displayed poorer adjustment relative to children in the non-parentification class, few significant differences emerged when adjustment was conceptualized as an outcome; results under all conceptualizations suggest that it is possible for children to display functioning in the normative range

while experiencing a familial pattern of parentification, further cautioning against the over-pathologization of children's caregiving.

With regards to mothers' and fathers' parenting, examination of class-specific mean estimates of maternal and paternal parenting consistently demonstrated a familial pattern or parentification in which mothers demonstrated poorer parenting (e.g., poorer caregiving competence and autonomy restriction) than fathers. Moreover, differences in maternal and paternal parenting are further reflected in estimates of class-specific covariances between maternal and paternal behaviors. Larger covariances in parental behavior were consistently found in the non-parentification class in comparison to the parentification class, suggesting less consistency in maternal and paternal parenting in the context of parentification than in the absence of parentification. These results extend prior findings noting greater children's caregiving in families in which mothers are experiencing more pathology than fathers (Kelley et al., 2007) and linking dissatisfaction in the interparental relationship with maternal attitudes that children should fulfill parental needs (Shaw et al., 2004). Results of the present study also bolster support for prior work implicating maternal parenting as a driving force in parentification (e.g., Hetherington, 1999; Maysless, Bartholomew, Henderson, & Trinke, 2004). However, findings do not suggest that parenting of fathers is superfluous to examinations of parentification; although paternal parenting was characterized by less risk relative to maternal parenting, paternal parenting was characterized by qualitatively greater risk in the context of parentification than in the context of non-parentification. Therefore, given that the majority of prior parentification work has focused solely on mother-child relationships (Nuttall & Valentino, 2017), the present study underscores the importance of examining both maternal and paternal parenting.

Limitations and Future Directions

By providing a lab-based interparental conflict vignette task to assess children's caregiving roles, we were able to observe variation in children's responses to stress while holding the stressor itself constant. Although we viewed standardizing the stress context a strength of this method, this method of assessing children's caregiving may have other limitations. For example, we did not directly assess children's actual caregiving responses. However, rates of children's caregiving responses to conflict vignettes in the present study are similar to prior work assessing children's involvement behavior in both community and clinical samples (Jenkins, Smith, & Graham, 1989; Jouriles, Rosenfield, McDonald, & Mueller, 2014).

Moreover, our assessment of children's caregiving did not specifically distinguish between emotional and instrumental parentification, a distinction sometimes made by parentification theory (e.g., Jurkovic, 1997) and empirical assessments later in development (e.g., Jurkovic, Thirkield, & Morrell, 2001). Interparental conflict is a family stress context with inherently emotional implications for children. Children's caregiving behavior in response to interparental conflict is likely a reflection of children's attempts to preserve emotional security (Cummings & Davies, 2010). Our assessment of parental autonomy support also focused on emotional autonomy (Barber, 1996). Therefore, our assessment of parentification may reflect a form of emotional parentification. However, it is possible that some children may have interpreted caregiving options such as "help" as instrumental

caregiving and our assessment of parental caregiving competence may have also been confounded by instrumental caregiving. Because emotional parentification is theorized to be particularly detrimental to children (Kerig, 2005), distinguishing between emotional and instrumental forms in future research may lead to differential associations with children's adjustment than those reported here. Emotional parentification has been assessed among preschool-age children using a mother-child emotional reminiscing task specifically intended to elicit discussion of child emotion (Nuttall, Speidel, & Valentino, 2019). Davies and colleagues (2015) used parent conflict discussions to observe children engaging in mediation. Therefore, laboratory family discussion paradigms may be useful for isolating these dimensions of parentification and a fruitful next direction for improving assessment of parentification among early school-age children.

A notable strength of our study is the inclusion of the parenting of both parents; this design allowed us to note differences in parenting between mothers and fathers in the context of destructive parentification. However, our assessment of children's caregiving reactions also did not distinguish between caregiving reactions directed at supporting the mother versus the father. Some empirical work notes that adult-like caregiving roles may occur with one parent but not the other (Jacobvitz & Bush, 1996) and, thus, our family-wide measurement of caregiving may have obscured potential differences in familial profiles of parentification when caregiving is directed towards one parent and not the other parent. Future work should seek to address this limitation. Moreover, the two-parent nature of the sample may also have provided children in the parentification class with sufficient supports for the buffering of more severe adjustment difficulties. For example, single parenthood and parental divorce are contexts in which negative associations between adult-like caregiving roles and maladjustment are frequently observed (e.g., Mayseless et al., 2004).

We specifically used a non-clinical sample in order to disentangle parentification from extreme parental incompetence (e.g., maltreating parents); however, children's caregiving scores in the parentification class were relatively low in comparison to the possible range of scores. Children's mean caregiving scores fell in the moderate range of possible scores. Given that interparental conflict is a normative familial stressor, higher levels of familial stress might be necessary to elicit higher levels of children's caregiving. Obtaining a parentification class scoring in the highest range of children's caregiving reactions may require sampling a familial stress context in which familial stress is at a more pathological level, for example, interparental conflict at the severity level of domestic violence is a context in which negative associations between adult-like caregiving roles and maladjustment has been observed (e.g., Fortin, Doucet, & Damant, 2011). When children engage in higher levels of caregiving, the risk to children's adjustment may also be greater than we observed and differentially influence modeling results.

Finally, as is always the case in finite mixture modeling, it will be important for future studies to replicate these results. In many cases, data did not have sufficient resolution to lessen constrained models to estimate class-specific variances. Although a sample size of 235 is typical for a large-scale, multi-site longitudinal study of child development, it is relatively small for finite mixture modeling. Maximum posterior probabilities were high suggesting that solutions provided a good description of sample data. In addition, it

will be informative to replicate these findings in a higher-risk sample given the relative low-risk nature of interparental conflict and our observations of normative child adjustment outcomes. Despite the limitations of the present study, the present study improves methods for assessing parentification among early school-age children and provides important initial empirical support for parentification theory's emphasis on parentification as not simply the occurrence of children's caregiving behaviors in response to familial stress but, rather, as children's caregiving behaviors embedded in the broader family context of response to stress.

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Table 1:

Means, Standard Deviations, and Correlations Among Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. CCG ₁	—														
2. MCGC ₁	-0.17 ^{**}	—													
3. PCGC ₁	-0.01	0.80 ^{**}	—												
4. MC ₁	0.01	-0.13	-0.14 [*]	—											
5. PC ₁	-0.03	-0.10	-0.15 [*]	0.83 ^{**}	—										
6. Ext ₁	0.07	-0.11	-0.08	0.25 ^{**}	0.16 [*]	—									
7. Ext ₂	0.12	-0.14 [*]	-0.11	0.26 ^{**}	0.17 ^{**}	0.78 ^{**}	—								
8. Ext ₃	0.16 [*]	-0.11	-0.11	0.23 ^{**}	0.14 [*]	0.73 ^{**}	0.81 ^{**}	—							
9. Int ₁	0.02	0.00	0.05	0.14 [*]	0.02	0.54 ^{**}	0.51 ^{**}	0.43 ^{**}	—						
10. Int ₂	0.01	0.02	0.03	0.10	0.01	0.44 ^{**}	0.63 ^{**}	0.47 ^{**}	0.74 ^{**}	—					
11. Int ₃	0.05	0.01	0.03	0.12	0.06	0.45 ^{**}	0.53 ^{**}	0.60 ^{**}	0.70 ^{**}	0.76 ^{**}	—				
12. Pro ₁	-0.05	0.07	0.03	-0.03	0.02	-0.30 ^{**}	-0.42 ^{**}	-0.35 ^{**}	-0.24 ^{**}	-0.27 ^{**}	-0.26 ^{**}	—			
13. Pro ₂	-0.10	0.10	0.07	-0.08	0.01	-0.41 ^{**}	-0.48 ^{**}	-0.51 ^{**}	-0.19 ^{**}	-0.23 ^{**}	-0.26 ^{**}	.621 ^{**}	—		
14. Pro ₃	-0.04	0.07	0.01	-0.09	0.02	-0.27 ^{**}	-0.41 ^{**}	-0.45 ^{**}	-0.23 ^{**}	-0.23 ^{**}	-0.25 ^{**}	.512 ^{**}	0.74 ^{**}	—	
15. Con ₁	0.00	-0.18 ^{**}	-0.15 [*]	0.18 ^{**}	0.04	0.18 ^{**}	0.19 ^{**}	0.11	0.16 [*]	0.15 [*]	0.13	-0.06	-0.13	-0.06	—
Valid N	233	229	229	235	235	235	224	215	235	224	215	235	225	213	235
Mean	1.54	5.82	5.86	43.73	40.15	51.08	50.72	50.31	52.08	52.21	53.34	18.33	18.60	18.51	11.96
SD	0.88	1.64	1.78	6.87	7.11	8.91	9.13	8.76	8.77	8.65	8.82	1.10	1.97	2.06	4.74
Minimum	0.00	2.00	2.00	30.00	24.50	32.00	32.00	32.00	33.00	34.00	34.00	12.00	11.00	11.00	2.50
Maximum	3.00	10.00	10.00	68.00	65.50	85.00	82.00	73.00	75.00	78.00	82.00	21.00	21.00	21.00	26.50

Note. CCG = child caregiving; MCGC = maternal caregiving competence; PCGC = paternal caregiving competence; MC = maternal control (vs. autonomy support); Ext = Externalizing; Int = Internalizing; Pro = Prosocial; Con = Interparental Conflict. Subscripts indicate study wave;

* p < .05,

** p < .01.

Table 2.

Results for Preliminary LPA Models

Model 1: Class-specific means with class-invariant variances, covariances between correlated indicators			Model 4: Class-specific means, variances and covariances between correlated indicators		
# of classes	2 classes	3 classes	4 classes	# of classes	3 classes
Parameters	19	26	33	Parameters	26
BIC	5083.113	5097.917	5122.462	BIC	5099.981
Class	C1: 89.79%	C1: 82.13%	C1: 73.62%	Class	C1: 66.81%
Proportions	C2: 10.21%	C2: 9.36%	C2: 9.36%	Proportions	C2: 33.19%
		C3: 8.51%	C3: 9.36%		C3: 4.26%
			C4: 7.66%		C4: 4.26%

Model 2: Class-specific means and covariances between correlated indicators and class-invariant variances			Model 5: Class-specific means with class-invariant variances, covariances between all indicators		
# of classes	2 classes	3 classes	4 classes	# of classes	3 classes
Parameters	21	30	39	Parameters	27
BIC	5081.717	5094.202	5118.927	BIC	5110.856
Class	C1: 70.21%	C1: 68.51%	C1: 61.62%	Class	C1: 64.26%
Proportions	C2: 29.79%	C2: 24.68%	C2: 28.07%	Proportions	C2: 35.75%
		C3: 6.81%	C3: 6.48%		C3: 8.94%
			C4: 3.83%		C4: 7.23%

Model 3: Class-specific means and variances, class-invariant covariances between correlated indicators			Model 6: Class-specific means, variances, class-invariant covariances between all indicators		
# of classes	2 classes	3 classes	4 classes	1 class	2 classes
Parameters	24	36	48	20	32
BIC	5093.073	5117.181	5163.308	BIC	5124.351
Class	C1: 69.97%	C1: 65.16%	C1: 49.97%	Class	C1: 74.89%
Proportions	C2: 30.04%	C2: 28.83%	C2: 28.42%	Proportions	C2: 25.11%
		C3: 6.02%	C3: 11.22%		C3: 3.40%
			C4: 10.38%		

Note 1: Each model additionally estimated k-1 parameters for class proportion and k-1 parameters for covariate effects

Note 2: Model selected as the final model is indicated in bold

Table 3:

Growth Mixture Modeling Results for the Complete Model

Complete Model with Child Externalizing				
Class-specific parameters	Means	Means, basis Coefficients	Means, variances	Means, variances, basis coefficients
# of parameters	29	31	32	34
BIC	9521.401	9518.656	Model did not converge to an interpretable solution	Model did not converge to an interpretable solution
Class	C1: 46.38%	C1: 46.81%		
Proportions	C2: 53.62%	C2: 53.19%		
Complete Model with Child Internalizing				
Class-specific parameters	Means	Means, basis Coefficients	Means, variances	Means, variances, basis coefficients
# of parameters	29	31	32	34
BIC	9575.654	9573.213	Model did not converge to an interpretable solution	Model did not converge to an interpretable solution
Class	C1: 55.75%	C1: 54.04%		
Proportions	C2: 44.26%	C2: 45.96%		
Complete Model with Child Prosocial Behavior				
Class-specific parameters	Means	Means, basis Coefficients	Means, variances	Means, variances, basis coefficients
# of parameters	29	31	32	34
BIC	7687.299	7687.386	Model did not converge to an interpretable solution	7660.760
Class	C1: 31.92%	C1: 37.02%		C1: 47.23%
Proportions	C2: 68.09%	C2: 62.98%		C2: 52.77%

Note 1: Each model additionally estimated all parameters estimated in the selected LCA model

Note 2: Model selected as the final model is indicated in bold

Table 4.

Results for All Final Models

Parameter	Preliminary LPA		GMM with Externalizing Behavior		GMM with Internalizing Behavior		GMM with Prosocial Behavior	
<i>Class (n) Means</i>	1 (165)	2 (70)	1 (109)	2 (126)	1 (131)	2(104)	1 (111)	2 (124)
CCG	1.46**	1.71**	1.34**	1.70**	1.40**	1.68**	1.37**	1.67**
MCGC	6.14**	5.20**	6.26**	5.48**	6.15**	5.49**	6.19**	5.52**
PCGC	6.14**	5.30**	6.17**	5.61**	6.10**	5.61**	6.13**	5.63**
MC	41.68**	47.88**	41.14**	45.81**	41.39**	46.20**	41.93**	45.23**
PC	39.30**	41.87**	39.48**	40.68**	39.50**	40.84**	40.12**	40.17**
Level	--	--	47.28**	54.06**	49.84**	54.16**	18.86**	17.86**
Slope	--	--	-0.25	-0.44	0.54	0.62	0.78**	-0.35
<i>Variances</i>								
CCG	0.76**	0.76**	0.74**	0.74**	0.75**	0.75**	0.75**	0.75**
MCGC	2.46**	2.46**	2.51**	2.51**	2.55**	2.55**	2.56**	2.56**
PCGC	3.01**	3.01**	3.09**	3.09**	3.11**	3.11**	3.10**	3.10**
MC	39.09**	39.09**	42.34**	42.34**	41.53**	41.53**	43.74**	43.74**
PC	49.47**	49.47**	50.15**	50.15**	50.42**	50.42**	51.14**	51.14**
Level	--	--	54.16**	54.16**	53.33**	53.33**	2.56**	3.21**
Slope	--	--	2.70 [†]	2.70 [†]	2.43	2.43	1.07	2.76**
<i>Covariances</i>								
Y ₂ , Y ₃	2.18**	2.08**	2.23**	2.22**	2.26**	2.23**	2.31**	2.09**
Y ₄ , Y ₅	41.11**	30.31**	44.74**	35.27**	44.10**	34.03**	45.58**	31.49**
Level, Slope	--	--	-2.15	-2.15	-2.32	-2.32	-1.62*	-0.82
<i>GMMs with Adjustment as an Outcome</i>								
<i>Class (n) Means</i>			1 (165)	2 (70)	1 (165)	2 (70)	1 (165)	2 (70)
Level			49.55**	54.07**	50.87**	54.10**	18.55**	18.05**
Slope			-0.16	-0.74	0.78*	0.14	0.26**	-0.35*
<i>Variances</i>								
Level			51.21**	79.63**	41.56**	100.36**	2.86**	2.89**
Slope			1.67	4.18	Fix @0	7.52**	0.24	0.69
<i>Covariance</i>								
Level, Slope			-1.43	1.86	Fix @0	-13.33*	-0.61**	0.17
<i>Differences</i>								
			<i>b</i>	<i>s.e.</i>	<i>b</i>	<i>s.e.</i>	<i>b</i>	<i>s.e.</i>
Level			4.53*	1.95	3.23	1.99	-0.50	0.41
Slope			-0.58	0.76	-0.64	0.78	-0.60**	0.23

Note: Class 1 = Non-parentification class, Class 2 = Parentification class; CCG = child caregiving; MCGC = maternal caregiving competence; PCGC = paternal caregiving competence; MC = maternal control (vs. autonomy support); PC = paternal control (vs. autonomy support);

**
p<.01,
*
p<.05,
+
p=.05

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