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Coparenting and children's disruptive behavior: interacting processes for parenting sense of

competence

#### Abstract

Parenting sense of competence (PSOC) is a critical aspect of parental adjustment that may be undermined by children's disruptive behavior. Inter-parental relationships have been shown to shape how parents react and respond to their children's characteristics, but little is known about the role of parenting teamwork, known as 'coparenting'. We examined mothers' and fathers' perceptions of children's disruptive behavior and the quality of coparenting, as well as their interaction in association with PSOC. Mothers and fathers from 108 'intact' families participating in the Twins, Family and Behavior (TFaB) Study reported on their children's disruptive behavior, coparenting and PSOC via postal questionnaire ( $M_{child age} = 6$  years,  $SD_{child age} = 6.12$  months). Dyadic multilevel analyses revealed that higher levels of children's disruptive behavior related to lower levels of parents' PSOC and perceptions of higherquality coparenting were associated with higher PSOC. Notably, and as hypothesized, there was a significant interaction between coparenting and children's disruptive behavior such that perceptions of high quality coparenting buffered PSOC from its negative association with children's disruptive behavior. High quality coparenting is an important aspect of family functioning that may protect the PSOC of parents dealing with high levels of children's disruptive behavior.

Keywords: Coparenting, parenting sense of competence, child disruptive behavior

Bandura's (1977) self-efficacy theory suggests that an individual's perceived ability to achieve a desired outcome through their actions will motivate their efforts, and promote their persistence. The extent to which such cognitions are applicable to the parenting role is now supported by a large literature (e.g., Jones & Prinz, 2005). Parenting sense of competence (PSOC) refers to mothers' and fathers' evaluations of themselves as parents, and is commonly conceptualized as perceived self-efficacy in parenting, the pleasure or motivation derived from parenting, and feelings of satisfaction with the role (Johnston & Mash, 1989). A considerable literature suggests that PSOC is associated with family functioning (van Eldik, Prinzie, Deković, & de Haan, 2017), yet little is known about its mechanistic underpinnings. Here, we focus on potential interactive processes between child and family dynamics.

One construct considered to be a key context for PSOC is the quality of coparenting. Coparenting is a multifaceted construct, conceptualized as including parents' shared childrearing values and division of labor, as well as their support, or undermining and criticism of each other (Feinberg, 2002). As such, coparenting may inform PSOC, serving as an important source of feedback regarding the parenting role (e.g., Latham, Mark, & Oliver, 2017). Indeed, associations between coparenting and PSOC have been evidenced in early infancy (Pinto, Figueiredo, Pinheiro, & Canário, 2016; Solmeyer & Feinberg, 2011), in childhood (Merrifield & Gamble, 2013), and over time (Feinberg, Jones, Kan, & Goslin, 2010).

Predicated on proposals of the coparenting context as a potential moderator of associations between 'risk' and 'parent adjustment' – with high quality coparenting working as a buffer (Feinberg, 2003) – we were interested in interactions between child behavioral characteristics and coparenting for PSOC. Children's behavioral characteristics have been shown to be associated with PSOC, including infant temperament (Ponomartchouk & Bouchard, 2015) and disruptive behavior in older children (Salari, Wells, & Sarkadi, 2014), reducing PSOC over time (Slagt, Deković, de Haan, van den Akker, & Prinzie, 2012).

However, to our knowledge, only one study has considered such potential moderating effects. Reporting a significant interaction between parents' perceptions of coparent undermining and infant negative temperament, Solmeyer and Feinberg (2011) found that negative infant temperament was associated with lower levels of maternal and paternal PSOC when coparent undermining was low, but not when it was high. The direction of this effect was not anticipated. Expecting the proposed buffering effect, the authors are cautious in their interpretation of the finding rather as a 'swamping effect'. They posit that, in families with high levels of coparent undermining, parents' self-efficacy may be swamped such that it is less sensitive to infant temperament. These authors urge further research. The transition to parenthood is a key period for the new coparenting team, as is demonstrated well by the swamping effect seen by Solmeyer and Feinberg (2011). Importantly, however, middle childhood is rife with developmental change, and, in turn, the nature of the already existing coparenting relationship needs to adjust as children age (McHale & Irace, 2011). As such, potential changes in the role of coparenting for complex family dynamics are of interest here.

Relatively few studies of coparenting or of PSOC have included both mothers and fathers, limiting parent comparisons. Fathers' parenting has been shown to be particularly sensitive to environmental contexts (Cummings, Merrilees, & George, 2010); furthermore, mothers may influence fathers' parenting role through 'maternal gatekeeping' (Schoppe-Sullivan, Brown, Cannon, Mangelsdorf, & Sokolowski, 2008). Together, these literatures suggest that, compared to mothers, fathers' perceptions of the quality of coparenting may be especially important for their PSOC (Dickie, 1987).

In a UK sample, we investigated mothers' and fathers' perceptions of children's disruptive behavior, perceptions of the quality of coparenting, and their interaction in association with maternal and paternal PSOC. We sought to extend the literature in two main ways: First, we built on the limited research exploring the interaction between coparenting

and children's behavior for maternal and paternal PSOC by extending the focus to middle childhood. Second, for the first time, we examined these research questions using a sample of mothers and fathers of twins. Parents of twins may be especially vulnerable to lower levels of PSOC, since they have been shown to experience greater parenting stress (Olivennes, Golombok, Ramogida, Rust, & Team, 2005; Lutz et al., 2012), to report feelings of frustration, guilt and inadequacy with the parenting role (Goshen-Gottstein, 1980; Leonard & Denton, 2006), and significantly less self-efficacy (Boivin et al., 2005) than parents of nontwins. Moreover, with parenting tasks and responsibilities compounded for twin families (Damato, Anthony, & Maloni, 2009), the role of both parents here may be particularly important (Lytton, 1980). Based on previous research, we expected higher levels of children's disruptive behavior to be associated with lower levels of PSOC, and perceptions of high quality coparenting to be associated with higher levels of PSOC. Since child disruptive behavior is a dominant force for PSOC, and coparenting is also commonly associated, we anticipated that they would each independently predict PSOC despite their association with each other. In line with the stress-buffering hypothesis (Cohen & Wills, 1985), we also anticipated parents' perceptions of high quality coparenting to provide a context in which they can successfully maintain their PSOC in spite of children's high levels of disruptive behavior.

#### Method

### **Sample and Procedure**

The sampling frame for the current study was the Twins, Family and Behavior (TFaB) study, a longitudinal study of families with twins born in England and Wales in 2009-2010. From 153 'intact' co-resident TFaB families, 108 were included in the current analyses as both mother and father were active participants (95.3% married). Forty-five families had monozygotic (MZ) twin pairs and 59 families had dizygotic (DZ) twin pairs (4 twin pairs

zygosity unclassified); twin zygosity was determined using maternal reports shown to be more than 95+% accurate when compared to DNA testing (Price et al., 2000). These families did not differ from the total 'intact' families for mother-reported child disruptive behavior ( t(150)=0.87, p=.388) but mothers did report higher household income (t(57.32)=-2.08, p=.042) and education (t(149)=-2.15, p=.033).

Our subsample was well-educated, with 73.58% of mothers and 52.87% of fathers holding an undergraduate degree qualification or higher, compared to a national average of 33.9% of women and 33.3% of men of comparable age range (Office for National Statistics, 2014). Our families categorized their total household income, endorsing the full range of categories (<£5,000 to >£100,000) with an average income given in the '£40,000 to £49,000' category. This compares favorably to the average UK household income of £44,330 (Office for National Statistics, 2011).

For the current analyses, we utilized maternal and paternal measures of PSOC, child disruptive behavior and the quality of coparenting collected via postal questionnaire ( $M_{child age}$ = 6 years,  $SD_{child age}$  = 6.12 months). The project was approved by NHS Health Research Authority, National Research Ethics Service (NRES) committee and the University of Sussex Science & Technology Cross-schools Research Ethics Committee (CREC).

#### Measures

All measures were asked of mothers and fathers separately.

**Parenting sense of competence** was measured using the 16-item Parenting Sense of Competence Scale (Gibaud-Wallston & Wandersmann, 1978 cited in Johnston & Mash, 1989). Example items include 'I honestly believe I have all the skills necessary to be a good mother/father to my child' and 'Being a parent is manageable, and any problems are easily solved.' Responses were given on a 6-point scale (*strongly agree* (coded 1) to *strongly disagree* (6)). Positive items were reversed, and responses averaged, such that a higher score

indicated higher PSOC (mothers  $\alpha = .82$ ; fathers  $\alpha = .83$ ). The PSOC scale has been validated in a normative sample of parents with school-age children (Johnston & Mash, 1989).

**Child disruptive behavior** was measured using the Intensity scale of the 36-item Eyberg Child Behavior Inventory (ECBI; Eyberg & Pincus, 1999). Example items include, 'acts defiant when asked to do something' and 'destroys toys and other objects'. For each child, mothers and fathers reported the frequency of each behavior on a 7-point scale (*never* (1) to *always* (7)) and responses were averaged to create a mean Intensity score (mothers  $\alpha$  = .93; fathers  $\alpha$  = .94) for each child. The ECBI has demonstrated high reliability and validity across age and SES (Eyberg, Colvin, & Adams, 1999).

**Coparenting.** Perceptions of the quality of coparenting were assessed using 12 items from the Brief Measure of Coparenting (Feinberg, Brown, & Kan, 2012). Sample items include 'My partner undermines my parenting of [child]', and 'My partner and I have different ideas about how to raise [child]', to cover six core coparenting constructs (support, undermining, agreement, closeness, endorsement and division of labor). Note that two items from the original measure, 'How often in a typical week do you argue about your relationship or marital issues unrelated to [child] in the child's presence?' and 'How often in a typical week does one or both of you say cruel or hurtful things to each other in front of [child]?' were not included because of their strong association with marital rather than coparenting constructs. Responses were given on a 7-point scale (*disagree strongly* (1) to *agree strongly* (7)). Negative items were reversed, and responses averaged, such that a higher mean score reflected higher quality coparenting. This was calculated for mothers ( $\alpha = .83$ ) and for fathers ( $\alpha = .80$ ). The Brief Measure of Coparenting has shown good internal reliability, construct and convergent validity (Feinberg et al., 2012).

### **Analytic Strategy**

We used a dyadic multilevel generalized estimating equation (GEE) framework to

account for the nested nature of these family data and to test a series of models. In line with the aims of the study, separate variables to reflect mothers' and fathers' perceptions of the overall level of child disruptive behavior were created by calculating averages across the twins for mother- and father-reports (within twin-pair r = .84 for mother-report and r = .80for father-report). Since there were no mean level differences between MZ and DZ twins (mother-report: t(102) = -.19, p=.853; father-report: t(100) = -1.29, p=.202), zygosity was not included in the model. A dummy variable indicating parent gender was created to identify mother- and father-reports of all variables. All variables were standardized. The first model tested for main effects of parent gender, coparenting and child disruptive behavior on PSOC. The second model additionally included the Coparenting x Child Disruptive Behavior interaction. We then included interactions with parent gender (Child Disruptive Behavior x Parent Gender, Coparenting x Parent Gender, and a three-way interaction term: Child Disruptive Behavior x Coparenting x Parent Gender) to test whether these effects were different for mothers and fathers. These interactions did not reach statistical significance and were therefore not included in the final model. SPSS Version 22 was used with robust Full Maximum Likelihood estimation which is robust to missing data and non-normality.

#### Results

Table 1 presents descriptive statistics and correlations for all study variables. Paired *t*-tests revealed no mean level differences in mothers' and fathers' reports of PSOC (t(103)= 1.26, p=.212), child disruptive behavior (t(105)=-1.42, p=.158) or coparenting (t(105)= -0.64, p=.527). Correlations between all measures are also shown in Table 1.

### --Insert Table 1 about here--

Table 2 presents the results of the dyadic multilevel analyses. Accounting for parent gender, Model 1 revealed significant main effects of child disruptive behavior and coparenting on PSOC, explaining 23.7% of the variance. In line with the simple correlations,

parents who reported their children to have higher levels of disruptive behavior reported lower PSOC, and parents who perceived the quality of their coparenting to be high reported higher levels of PSOC. In addition to these main effects, the interaction between perceptions of child disruptive behavior and coparenting was also significantly associated with PSOC (Model 2) and explained an additional 3.5% of the variance.

### --Insert Table 2 about here--

To best illustrate this interaction we plotted simple slopes of the association between children's disruptive behavior and PSOC at low (-1 *SD*), mean, and high (+1 *SD*) levels of coparenting (Fig.1). The inverse relationship between child disruptive behavior and PSOC weakened as the quality of coparenting increased (-1 *SD*: b = -.59, t = -7.24, p < .001; mean: b = -.40, t = -5.76, p < .001; +1 *SD*: b = -.21, t = -2.17, p = .031). We interpret these results to suggest that parents' perceptions of high quality coparenting buffer their PSOC from children's disruptive behavior.

--Insert Figure 1 about here-

#### Discussion

The main aim of the current study was to use a UK twin sample to explore mothers' and fathers' perceptions of children's disruptive behavior, coparenting, and their interaction in association with PSOC. Our results indicated that: perceptions of higher levels of children's disruptive behavior were associated with lower levels of PSOC; perceptions of higher quality coparenting were linked with higher levels of PSOC; and high quality coparenting buffered parents' PSOC from children's disruptive behavior. We found no evidence that the pattern of associations differed for mothers and fathers. We discuss our results in the context of existing literature, noting limitations and future research directions.

Consistent with our hypothesis and existing research (Johnston & Mash, 1989; Salari et al., 2014), parents' report of higher levels of children's disruptive behavior were

concurrently associated with their lower PSOC. That is, when children displayed disruptive behavior mothers and fathers reported feeling, for example, less able to manage the challenges of parenting and derived less positive affect from the parenting role. In this way, parents may struggle to maintain a high level of PSOC in the face of high levels of disruptive behavior from their children (Ardelt & Eccles, 2001). Accounting for such child behaviors, perceptions of coparenting were also associated with PSOC. The association was such that parents who perceived higher quality coparenting also reported higher PSOC, consistent with previous research (Feinberg et al., 2010; Merrifield & Gamble, 2013). That is, parents who, for example, reported being supported and not undermined by their coparent, reported parenting as manageable and felt equipped with the skills to be a good parent.

Our study was the first to explore the interactive effects of mothers' and fathers' perceptions of coparenting and child disruptive behavior in association with their PSOC. Consistent with our expectations, parents' perceptions of high quality coparenting buffered their PSOC from their children's disruptive behavior. High levels of children's disruptive behavior may threaten parent's PSOC, but we posit that perceiving that their coparent supports them, shares their child rearing values and makes them feel like a good parent provides a context in which parents are able to successfully maintain their PSOC despite their children's behavior. Note that, whilst we have conceptualized the quality of coparenting to be the moderator, it is plausible that children's disruptive behavior moderates the association between parent's perception of coparenting and PSOC. This interpretation would be in-line with the research indicating that support matters most to subpopulations where stress is relatively high (Turner & Turner, 1999).

Notably, the direction of effects we found are not consistent with those reported by Solmeyer and Feinberg (2011) – although in-line with that hypothesized by these authors and our own rationale. The buffering effect we report is congruent with both social support

(Cohen & Willis, 1985) and coparenting (Feinberg, 2003) theories, which posit that close emotional support – here provided by high quality coparenting – will enhance PSOC, counterbalancing the threat posed by children's disruptive behavior. Moreover, our finding is consistent with existing research that demonstrates associations between difficult child temperament and lower quality parenting (and coparenting) to be stronger in the context of another family risk such as low socioeconomic status and poor marital quality (Paulussen-Hoogeboom et al., 2007; Schoppe-Sullivan, Mangelsdorf, Brown, & Sokolowski, 2007). The difference between our buffering effect and the 'swamping' effect reported by Solmeyer and Feinberg (2011) may be best understood to be due to the changing nature of coparenting from infancy to middle childhood. However, this difference may also be explained by the measure of coparenting used (coparent undermining versus global quality of coparenting). Further research exploring the current question across a range of child ages using detailed measures of coparenting to enable exploration of separate subscales is therefore needed.

Importantly, while higher quality coparenting may promote higher PSOC, on the flip side, one parent's support and endorsement of their coparent may be more likely if the other is – or, is perceived to be – competent in their parenting. Parents who lack competence may be particularly susceptible to their PSOC being further undermined by children's disruptive behavior since they may be less likely to have the support of their coparent to buffer this. We focus on the role of children's behavior, coparenting, and their interaction as salient factors for PSOC *in the here and now* because parents' evaluations of themselves are likely informed by the current feedback they receive from these sources. However, our study does not consider the temporal flow of the associations we discuss. Longitudinal studies would provide insight here. A single longitudinal study has reported child disruptive behavior to impact PSOC over time but not vice versa (Slagt et al., 2012), but the study did not examine interactive effects. We encourage further work to better understand these important questions.

The inclusion of fathers as well as mothers in our study contributes to the limited literature examining parent comparisons in this area. Our results revealed no parent differences at the mean level or in the pattern of associations between child disruptive behavior, coparenting and PSOC. While existing research has suggested that fathers may be especially vulnerable to environmental stressors (Cummings et al., 2010), our results suggest that mothers' and fathers' PSOC may be comparably vulnerable to their children's disruptive behavior and, importantly, that coparenting is a key buffer for them both. Of interest, finding similar patterns of effect for mothers and fathers is consistent with the Solmeyer and Feinberg (2011) infancy study, bolstering the idea of family mechanisms that remain internally consistent but that may change over time.

In light of the unique challenges associated with parenting twins, high quality coparenting may be particularly important for the maintenance of PSOC in such a population. Parents of twins experience lower PSOC than parents of non-twins (Boivin et al., 2005) and, considering the literature documenting associations between child disruptive behavior and lower PSOC, raising twins who display high levels of disruptive behavior may pose an even greater threat to parents' PSOC. However, our finding that high quality coparenting may play a protective function for PSOC in the face of children's disruptive behavior is an important contribution to the PSOC and coparenting literatures, and we have no rationale for these interactive processes to look different in non-twin families.

### **Limitations and Conclusions**

Although the current study has many strengths, including the understudied research question, the use of mother and father reports, the dyadic multilevel approach, and the use of a twin sample, we note some limitations. Our sample comprised well-educated, intact families with twins headed by a mother and father who both elected to participate in the study, such that caution is warranted in generalizing our results. The PSOC and coparenting

literatures are scant for twin families; we thus urge scholars to examine the questions to hand in other twin samples. Further, despite our dyadic multilevel analytic approach, which maximizes the statistical power afforded by our sample, our power to detect interactions with parent gender may have been limited. We encourage replication of our findings within economically diverse families, including families with twins, non-twins and single children.

Our findings highlight the interconnectivity of complex family processes. As such, the potential clinical implications of the current work are that practitioners and interventions concerned with promoting PSOC – such an integral part of parental adjustment for both mothers and fathers – should pay due attention to the quality of coparenting as an important family context.

#### References

- Ardelt, M., & Eccles, J. S. (2001). Effects of mothers' parental efficacy beliefs and promotive parenting strategies on inner-city youth. *Journal of Family Issues*, 22, 944–972.
- Bandura, A. (1977). Self-efficacy: toward a unifying theory of behavioral change. *Psychological Review*, 84, 191-215.
- Boivin, M., Pérusse, D., Dionne, G., Saysset, V., Zoccolillo, M., Tarabulsy, G. M., Tremblay, N., & Tremblay, R. E. (2005). The genetic-environmental etiology of parents' perceptions and self-assessed behaviours toward their 5-month-old infants in a large twin and singleton sample. *Journal of Child Psychology and Psychiatry*, 46, 612–630.
- Cohen, S., & Wills, T. A. (1985). Stress, social support, and the buffering hypothesis. *Psychological Bulletin*, 98, 310–357.
- Cummings, E. M., Merrilees, C. E., & George, M. W. (2010). Fathers, Marriages, and
  Families. In M. E. Lamb (Ed.), *The Role of the Father in Child Development* (pp. 154–176). Hoboken, NJ: John Wiley & Sons.
- Damato, E. G., Anthony, M. K., & Maloni, J. A. (2009). Correlates of negative and positive mood state in mothers of twins. *Journal of Pediatric Nursing*, *24*, 369-377.
- Dickie, J. R. (1987). Interrelationships within the mother-father-infant triad. In P. Berman &
  F. Pedersen (Eds.), *Men's transition to parenthood: Longitudinal studies of early family experience* (pp. 113–143). Hillsdale, NJ: Erlbaum.
- Eyberg, S. M., Colvin, A., & Adams, C. D. (1999). Eyberg Child Behavior Inventory and Sutter-Eyberg School Inventory: Professional manual. Odessa, FL: Psychological Assessment Resources.

- Eyberg, S. M., & Pincus, D. (1999). Eyberg Child Behavior Inventory and Sutter-Eyberg Student Behavior Inventory-Revised: Professional manual. Odessa, FL: Psychological Assessment Resources.
- Feinberg, M. E. (2002). Coparenting and the transition to parenthood: A framework for prevention. *Clinical Child and Family Psychology Review*, 5, 173–195.
- Feinberg, M. E. (2003). The internal structure and ecological context of coparenting: A framework for research and intervention. *Parenting: Science and Practice*, *3*, 95–131.
- Feinberg, M. E., Brown, L. D., & Kan, M. L. (2012). A multi-domain self-report measure of coparenting. *Parenting*, 12, 1–21.
- Feinberg, M. E., Jones, D. E., Kan, M. L., & Goslin, M. C. (2010). Effects of family foundations on parents and children: 3.5 years after baseline. *Journal of Family Psychology*, 24, 532–542.
- Goshen-Gottstein, E. R. (1980). The mothering of twins, triplets and quadruplets. *Psychiatry*, *43*, 189–204.
- Johnston, C., & Mash, E. J. (1989). A measure of parenting satisfaction and efficacy. *Journal* of Clinical Child Psychology, 18, 167–175.
- Jones, T. L., & Prinz, R. J. (2005). Potential roles of parental self-efficacy in parent and child adjustment: A review. *Clinical Psychology Review*, *25*, 341-363.
- Latham, R. M., Mark, K. M., & Oliver, B. R. (2017). A harsh parenting team? Maternal reports of coparenting and coercive parenting interact in association with children's disruptive behaviour. *Journal of Child Psychology and Psychiatry*, 58, 603-611.
- Leonard, L. G., & Denton, J. (2006). Preparation for parenting multiple birth children. *Early Human Development*, 82, 371-378.

- Lutz, K. F., Burnson, C., Hane, A., Samuelson, A., Maleck, S., & Poehlmann, J. (2012).Parenting stress, social support, and mother-child interactions in families of multiple and singleton preterm toddlers. *Family Relations*, *61*, 642-656.
- Lytton, H. (1980). Parent-child interaction: The socialization process observed in twin and singleton families. New York: Plenum Press
- McHale, J. P., & Irace, K. (2011). Coparenting in diverse family systems. In J.P. McHale &
  K. M. Lindahl (Eds.), *Coparenting: A conceptual and clinical examination of family* systems (pp. 15-37). Washington, DC: American Psychological Association.
- Merrifield, K. A., & Gamble, W. C. (2013). Associations among marital qualities, supportive and undermining coparenting, and parenting self-efficacy testing spillover and stress-buffering processes. *Journal of Family Issues, 34*, 510–533.
- Office for National Statistics (2011). *The effects of taxes and benefits on household income*. London: Author.
- Office for National Statistics (2014). *Local area analysis of qualifications across England and Wales*. London: Author.
- Olivennes, F., Golombok, S., Ramogida, C., Rust, J., & Team, F.-U. (2005). Behavioral and cognitive development as well as family functioning of twins conceived by assisted reproduction: findings from a large population study. *Fertility and Sterility*, 84, 725– 733.
- Paulussen-Hoogeboom, M. C., Stams, G. J. J., Hermanns, J., & Peetsma, T. T. (2007). Child negative emotionality and parenting from infancy to preschool: A meta-analytic review. *Developmental Psychology*, 43, 438-453.

- Pinto, T. M., Figueiredo, B., Pinheiro, L. L., & Canário, C. (2016). Fathers' parenting selfefficacy during the transition to parenthood. *Journal of Reproductive and Infant Psychology*, 34, 343–355.
- Price, T.S., Freeman, B., Craig, I., Petrill, S.A., Ebersole, L., & Plomin, R. (2000). Infant zygosity can be assigned by parental report questionnaire data. *Twin Research*, *3*, 129–133.
- Ponomartchouk, D., & Bouchard, G. (2015). New mothers' sense of competence: predictors and outcomes. *Journal of Child and Family Studies*, *24*, 1977–1986.
- Salari, R., Wells, M. B., & Sarkadi, A. (2014). Child behaviour problems, parenting behaviours and parental adjustment in mothers and fathers in Sweden. Scandinavian *Journal of Public Health*, 42, 547–553.
- Schoppe-Sullivan, S. J., Brown, G. L., Cannon, E. A., Mangelsdorf, S. C., & Sokolowski, M.
   S. (2008). Maternal gatekeeping, coparenting quality, and fathering behavior in families with infants. *Journal of Family Psychology*, 22, 389–398.
- Schoppe-Sullivan, S. J., Mangelsdorf, S. C., Brown, G. L., & Sokolowski, M. S. (2007).
   Goodness-of-fit in family context: Infant temperament, marital quality, and early coparenting behavior. *Infant Behavior and Development, 30*, 82-96.
- Slagt, M., Deković, M., de Haan, A. D., van den Akker, A. L., & Prinzie, P. (2012).
  Longitudinal associations between mothers' and fathers' sense of competence and children's externalizing problems: The mediating role of parenting. *Developmental Psychology*, 48, 1554–1562.
- Solmeyer, A. R., & Feinberg, M. E. (2011). Mother and father adjustment during early parenthood: The roles of infant temperament and coparenting relationship quality. *Infant Behavior and Development*, 34, 504–514.

- Turner, R. J., & Turner, J. B. (1999). Social integration and support. In C. S. Aneshensel & J.C. Phelan (EDs.), *Handbook of the sociology of mental health* (pp. 301–319). New York: Kluwer Academic / Plenum Publishers.
- van Eldik, W.M., Prinzie, P., Deković, M. & de Haan, A.D. (2017). Longitudinal associations between marital stress and externalizing behavior: Does parental sense of competence mediate processes? *Journal of Family Psychology*, *31*, 420-430.

# Table 1

# Descriptive Statistics and Correlations for all Study Variables

		Mean	SD	Min	Max	1	2	3	4	5	6
Moth	ner-reported:										
1.	Parenting sense of competence	4.36	0.63	2.75	5.56	1					
2.	Children's disruptive behavior	2.96	0.69	1.25	4.25	37***	1				
3.	Coparenting	5.87	0.86	3.04	7.00	.24*	27**	1			
Father-reported:											
4.	Parenting sense of competence	4.28	0.60	2.81	5.38	.19	27**	.26**	1		
5.	Children's disruptive behavior	3.04	0.75	1.22	4.88	37***	.59***	25*	52***	1	
6.	Coparenting	5.93	0.78	3.17	7.00	.13	19*	.45***	.41***	37***	1

 $\overline{Note. N = 106-108}$  mothers and 103-107 fathers. \*p < .05, \*\* p < .01, \*\*\* p < .001. Variable anchor ranges: Parenting sense of competence (PSOC)

= 1-6, Children's disruptive behavior = 1-7, Coparenting = 1-7. Higher values = higher scores on each of the constructs.

# Table 2

	Model 1	Model 2
	$\beta$ (SE)	$\beta$ (SE)
Children's disruptive behavior	-0.37*** (0.07)	-0.39*** (0.06)
Coparenting	0.21** (0.07)	0.18** (0.06)
Parent gender	0.00 (0.12)	0.02 (0.12)
Coparenting x Children's Disruptive Behavior		0.19*** (0.06)

## Dyadic Multilevel GEE Model Results Predicting Parenting Sense of Competence

*Note*. Model 1  $R^2 = 0.237$ ; Model 2  $R^2 = 0.272$ 



Figure 1. Simple slopes illustration of Coparenting x Children's Disruptive Behavior in association with parenting sense of competence (PSOC). Low = -1 *SD*, High = +1 *SD*