

RUNNING HEAD: Parental Depression and Reported and Observed Parenting

Relations among Parental Depression, Parents' and Children's Reports about Parenting, and  
Observed Parenting Behaviors

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### Abstract

Parental depression is associated with a range of difficulties in parenting behaviors such as low levels of warmth and low positive involvement and high levels of criticism and control. The literature has shown, however, that reports of parenting behaviors vary by informant. The current study examined congruence on parent and child reports of parental warmth and psychological control, the association between parents' and children's reports of parenting and observational ratings of parent-child interactions, the extent to which parents' depression moderated these associations. The sample consisted of 243 parent-child dyads. All parents had a history of a depressive disorder during their child's life. Children were ages 9 to 15 ( $Mean_{age} = 11.12$ ;  $SD = 2.38$ ; 53% female) (parents'  $Mean_{age} = 42.78$ ,  $SD = 6.41$ ; 90% female). Parents and children's depressive symptoms were assessed with self-report measures (Patient Health Questionnaire, and the Center for Epidemiological Studies of Depression, respectively). Parents and children completed a measure of parenting behaviors using the Child Report of Parent Behavior Inventory (CRPBI), which measured parental warmth and psychological control. Parents and youth also participated in a ten-minute laboratory interaction task during which they discussed an emotion-arousing situation. Findings indicated that higher levels of parental depression were significantly associated with fewer positive behaviors but not more negative behaviors during a brief laboratory interaction with their child. Parents' and children's reports of parental warmth and psychological control were significantly correlated with each other. The association between parent-reported psychological control and observed parent angry coercion was strongest at higher levels of depressive symptoms in parents. Children's reports about parenting were significantly associated with observers' ratings of parenting, thus providing further evidence of the validity of each method of assessing parenting behaviors.

## Introduction

Parental depression is a significant risk factor for psychopathology in children and adolescents (Goodman, 2020; Goodman et al., 2011). Impaired and disrupted parenting is one important mechanism in the intergenerational transmission of risk from depressed parents to their children (Goodman et al., 2011; Hammen et al., 2004). Indeed, parenting problems in individuals with depression have been associated with childhood psychological and medical illness (e.g., Chen et al., 2000; Darling & Steinberg, 1993; Lansford et al., 2018).

Depression in parents consistently has been associated with a range of impairments in parenting behaviors including withdrawal, low responsiveness and lack of involvement, intrusiveness (Cohn et al., 1986; Field et al., 1990), flat and negative emotional expressions to children (e.g., Cohn, Campbell, Matias, & Hopkins, 1990), low positive expressions (e.g., Feng, Shaw, Skuban, & Lane, 2007); and ineffective, harsh, inconsistent, manipulative, and indulgent discipline (Leung & Slep, 2006; Lovejoy et al., 2000). Such deficits reflect an incompatibility between the requirements of effective parenting and the experience of depressive symptoms (i.e., sadness, loss of interest, low energy, poor concentration, low self-worth, problems with appetite or sleep, and suicidal thoughts (e.g., Goodman 2020; Lovejoy et al., 2000). The first aim of the current study was to replicate the finding of a significant correlation between parental depression and parenting as measured by parent- and child-report and observer ratings.

The second goal of this study was to address a question about measurement of parenting. Parents and children often report different perspectives about parents' behaviors. Such lack of congruence is important because it may reflect problems in their relationship and may be associated with children's maladjustment. A systematic, quantitative review of parent-child agreement and discrepancy about parenting behaviors, and potential moderators (e.g., children's

age, race, clinical status, family intactness) of the extent of mother-child and father-child congruence. Korelitz and Garber (2016) conducted a meta-analysis of 85 studies with 476 effect sizes of the degree of agreement and discrepancy in parent-child reports of two parenting behaviors – warmth/acceptance and psychological control assessed with one of the most widely-used measures of parenting – the *Children's Report of Parent Behavior Inventory* (CRPBI). Parent-child dyads exhibited significant but modest levels of agreement across parenting constructs. The current study further examined parent-child agreement about the two primary parenting constructs from the CRPBI.

Another measurement issue concerns the extent to which self-report and observational ratings of parents' behaviors are measuring the same aspects of parenting. That is, how well do parents' and children's reports about parental warmth and psychological control based on years of contact with each other correspond to objective observers of a brief, laboratory-based interaction? Thus, we will test the extent of concurrent validity of the self-report and observer ratings.

Finally, correspondence between parents' and children's reports about parenting can vary as a function of characteristics of the parent or child such as age, gender, race/ethnicity, and current level of depressive symptoms. The current study focused on the latter in particular. In a study similar to the current investigation, Parent, Compas and colleagues (2013) tested whether parents' and adolescents' depressive symptoms moderated the associations between adolescent or parent report and observations of parenting. Their sample included 180 participants (89% female) who participated in the earlier prevention trial by Compas and colleagues (2011). Similar to the current study, parents and adolescents reported on parenting skills and depressive symptoms, and parenting was independently observed subsequently in the same session. Parent

et al. (2013) found that higher levels of parents' depressive symptoms were associated with a stronger relation between self-reported and observed negative parenting. Expanding upon this earlier investigation, the current study examined the direct and interactive associations among parental depressive symptoms, youth depressive symptoms, and the parenting behaviors as reported by parents and youth and observed ratings of parenting during a stressful laboratory interaction. We focused on the parenting behaviors of (a) warmth and responsiveness and (b) angry and controlling. We examined these associations at the baseline assessment of a large sample of parents enrolled in a randomized trial to prevent depression in the offspring of parents with a mood disorder history based on the earlier trial by Compas et al. (2011). In that randomized controlled trial (RCT), Compas and colleagues targeting parenting in families with a history of depression in parents and showed that a preventive intervention on positive parenting behaviors partially mediated the effects of the intervention on lower internalizing and externalizing symptoms in adolescents (Compas et al., 2011).

The current study had the following aims: (a) to replicate the finding that depression in parents is associated with problematic parenting, (b) examine the correspondence between parents' and children's reports about parenting, (c) explore the association between self-reported and observed parenting, and (d) explore whether these relations varied as a function of the level of current parent and teen depressive symptoms. Specifically, we hypothesized that parents endorsing more current depression symptoms would exhibit lower warmth and more controlling behaviors.

## **Method**

### **Participants**

Participants included 243 parent-child dyads (parents' mean age = 42.78, SD = 6.41; 90%

female). Children were between 9 to 15 years old (mean age = 11.12; SD = 2.38; 53% female). Parents' level of education included completion of high school (5.3%), some college (30.8%), college degree (26.6%), graduate education (4.7%), and graduate degree (32.5%). The marital statuses of the parents were 64.9% married or cohabitating, 20.2% no longer married (e.g., divorced, widowed), and 14.9% never married. Annual family income ranged from under \$15,000 to over \$150,000 and the median income was in the \$75,000 to \$89,999 range.

### **Procedure**

Participants were recruited for a larger study testing the efficacy of a family depression prevention intervention. All data used in the current study were collected during the baseline assessment and prior to randomization into the intervention trial. The institutional review boards (IRB) at both sites approved the study protocol. Families were recruited through a variety of sources including a computerized database, a university medical center listserv, letters to community physicians, letters to local schools, and advertisements in newspapers, radio, local television, and social media websites. Families were eligible if the parent met criteria for a major depressive episode (MDE), persistent depressive disorder (PDD), or depressive disorder not otherwise specified (DD-NOS) within the child's lifetime. The following parental diagnoses or characteristics were excluded from the sample: (a) bipolar I disorder, schizophrenia; (b) current alcohol/substance use disorder; (c) active suicidal ideation (e.g., with plan and intent); and (d) endorsement of any self-injurious behavior in the past year. Children also had no history of bipolar I disorder, schizophrenia, autism spectrum disorder, or intellectual disability; and did not currently meet for a depressive disorder, conduct disorder, or alcohol/substance use disorder.

After completing an initial phone interview, eligible families were invited into the laboratory to participate in a baseline assessment, including a 10-minute parent-child videotaped

interaction tasks described below. All families were compensated for participating.

## Measures

*Parental Depression.* Parents' current depressive symptoms were assessed using the 9-item depression module of the Patient Health Questionnaire (PHQ-9; Kroenke et al., 2001). The PHQ-9 is comprised of the nine DSM-IV criteria for depressive disorders. Using a 4-point scale (0 = "not at all," 1 = "several days," 2 = "more than half the days," and 3 = "nearly every day"). Parents reported how often they experienced each depressive symptom over the past two weeks. The PHQ-9 has good reliability and validity (Kroenke et al., 2001). In the present sample, the PHQ-9 had a Cronbach's  $\alpha = .84$

*Adolescent Depression.* Youth self-reported depression during the previous week using the Center for Epidemiological Studies- Depression Scale (CES-D; Radloff, 1977), a self-report measure of the frequency of 20 depressive symptoms over the past week that uses a 4-point Likert scale. Response options range from 0 (not at all) to 3 (most or almost all the time). Scores range from 0 to 60, with higher scores indicating greater levels of depressive symptoms.

*Children's Report of Parental Behavior Inventory (CRPBI).* The Children's Report of Parental Behavior Inventory (CRPBI) is a 24-item measure rated on a three-point scale, which assesses children's perceptions of their parents' child-rearing behavior. The CRPBI is composed of three separate subscales: the Acceptance versus Rejection scale, the Autonomy versus Psychological Control scale, and the Firm versus Lax control scale. The present study uses the Acceptance versus Rejection scale to measure children's perceptions of parental warmth (with higher scores indicating more appreciation) and the Autonomy versus Psychological Control scale to measure children's perception of the extent to which the parent engages in controlling behaviors with higher scores indicating more psychologically controlling.

*Observations of Parenting.* A global coding system (Iowa Family Interaction Rating Scales [IFIRS]; Melby et al., 1998) was used to code a videotaped 10-minute parent-child conversations. Dyads were instructed to discuss a recent stressful family event selected from a list of prompted questions that were written to elicit a negative affect (e.g., When mom/dad is sad, down, irritable, or grouchy what usually happens?). The IFIRS system measures behavioral and emotional characteristics at both the individual and dyadic level. Each behavioral code is rated on a 9-point scale, ranging from 1 (*not characteristic at all*) to 9 (*mainly characteristic*). Coders are instructed to consider both the frequency and intensity of behavior as well as the contextual and affective nature of the behavior. Two independent raters coded each interaction and met to establish consensus on any discrepant ratings (i.e., codes rated greater than one point apart). The validity of the IFIRS system has been established with correlational and exploratory and confirmatory factor analyses (Alderfer et al., 2007; Melby & Conger, 2001; Murphy et al., 2018).

Although the IFIRS coding system uses a wide range of emotional and behavioral codes, the current study focused on nine specific codes that were selected to assess two subtypes of parenting – warm parenting and controlling parenting. Similar to procedures used previously with the IFIRS codes (e.g., Compas et al., 2010; Vreeland et al., 2019). The positive parenting included codes for positive mood, warmth (i.e., the degree to which the parent expresses care, concern, and encouragement or support toward the child), listener responsiveness (i.e., parent behaviors that validate and indicate attentiveness to the child), communication (i.e., the degree to which the parent promotes exchange of information) and child-centered behaviors (i.e., parent displays an awareness of the child’s needs, moods, interests, and capabilities).

The negative parenting included codes for hostility (i.e., the extent to which hostile,

angry, critical, disapproving, rejecting, or contemptuous behavior is directed toward the child), angry coercion (i.e., control attempts that include hostile, threatening, contemptuous, or blaming behavior), guilty coercion (i.e., the extent to which the parent attempts to change or control the child's behavior by means of contingent complaints, whining, or manipulation), and lecture/moralize (i.e. telling the child how to think, feel, etc. in a way that assumes the parent has superior wisdom). Internal consistency for positive parenting ( $\alpha = .89$ ) and negative parenting were adequate ( $\alpha = .73$ ).

### Results

Table 1 presents the means and standard deviations of the children's and parents' age, gender, depressive symptoms, reports of parental warmth and psychological control, and the observer's ratings of parents' behaviors. Children's age negatively correlated with children's reports of parental warmth ( $r = -.176$ ,  $p = .007$ ) and with observed parental warmth ( $r = -.133$ ,  $p = .041$ ), such that younger age was associated with high parental warmth as reported by children and observer ratings. Being female correlated significantly with high levels of depressive symptoms ( $r = .133$ ,  $p = .04$ ).

#### *Associations of Parents' and Children's Reports of Depressive Symptoms with Reports and Observations of Parent Behaviors*

Higher levels of child-reported depressive symptoms correlated significantly with lower parental warmth and higher parental psychological control by child report (see Table 2). In contrast, parents' depressive symptoms did not correlate significantly with either parents' or children's reports of parents' warmth or psychological control.

Parents' depressive symptoms correlated significantly with several observed parenting behaviors including higher parental sadness ( $r = .193$ ,  $p = .003$ ), lower positive mood ( $r = -.236$ ,  $p$

= .000), less consistent discipline ( $r = -.134, p = .04$ ), lower quality time ( $r = -.140, p = .033$ ), lower child monitoring ( $r = -.153, p = .02$ ), and lower child centeredness ( $r = -.145, p = .027$ ). Children's depressive symptoms did not correlate significantly with any observed parenting variables.

#### *Associations between Parents' and Children's reports of Parenting Behaviors*

Children's reports of parental warmth correlated significantly and positively with parents' reports of parental warmth ( $r = .366, p = .000$ ) and correlated negatively with parents' report of psychological control ( $r = -.184, p = .006$ ). Children's reports of parental psychological control correlated significantly and positively with parents' reports of psychological control ( $r = .214, p = .002$ ) and correlated negatively with parent reports of parental warmth ( $r = -.253, p = .001$ ). Children's reports of parental warmth and parental psychological control were negatively correlated ( $r = -.366, p = .000$ ). Parents' reports of parental warmth correlated negatively with parents' reports of psychological control ( $r = -.218, p = .001$ ). These bivariate correlations are reported in Table 2.

We also conducted a series of regression analyses to test whether the extent of parent-child agreement about either parental warmth or psychological control varied by either the level of the parents' or the children's depressive symptoms. In these analyses, we tested whether the interaction between depressive symptoms (either parents' or children's) and one informant's report (e.g., child report of parenting) predicted the other informants' (parents' report) of the same parent behavior. Results indicated that none of these interactions were significant.

#### *Associations of Parents' and Children's Reports and Observed Ratings of Parenting*

*Parental Warmth.* Results of the bivariate correlations (see Table 3) showed that both child- and parent-reported warmth positively and significantly correlated with observed warmth, positive mood, child centered, and quality time. Similarly, child- and parent-reported warmth

were significantly, negatively correlated with observed parent angry coercion, hostility, intrusiveness, and guilty coercion, and with disciplinary behaviors of harshness, indulgent permissiveness, and lecture moralizing.

*Parental Psychological Control.* Bivariate correlations of child- and parent-reported psychological control were significant and positive with observed parent angry coercion, hostility, intrusiveness, and guilty coercion, and with the disciplinary behaviors of harshness and lecture moralize. Observed parent indulgent permissiveness correlated with children's but not parents' report of psychological control. Children's and parents' reports of high psychological control correlated significantly and negatively with observed parent warmth, positive mood, child centeredness, and listener responsiveness. Observed quality time was not correlated with either child or parent-reported psychological control.

*Parental Depression as a Moderator of the Relation between Children's Reports and Observational Ratings of Parenting Behaviors.*

Table 4 presents the results of the regression analysis testing whether the relation between parent-reported psychological control and observed angry coercion varied by level of parents' depressive symptoms. See Figure 1 for a visual display of this interaction. The association between parent-reported psychological control and observed parental angry coercion was strongest at higher levels of depressive symptoms as compared to lower levels of depression. We did not find, however, that the relation between child- or parent-reported warmth and observed parental warmth varied by level of parental depression.

## **Discussion**

Several interesting findings emerged from the current study. First, higher levels of depression in parents were significantly associated with several observed parenting behaviors

including higher parental sadness, lower positive mood, lower child centeredness, lower quality time, less consistent discipline, and lower child monitoring. Whereas higher levels of self-reported depressive symptoms were linked with fewer positive behaviors (e.g., child centeredness, quality time) during a discussion of a negative situation with their child, higher levels of parental depression were not significantly associated with more negative parent behaviors (e.g., harsh discipline, angry coercion). These results are partially consistent with other studies that have reported that depressed parents show less positive behaviors, although not consistent with studies revealing parental depression associated with more negative behaviors when interacting with their children (e.g., Lovejoy et al., 2000). It is possible that a 10-minute interaction in a laboratory setting might not have been long enough or conflictual enough to generate more negative behaviors by parents. Interestingly, children's report of their depressive symptoms did not correlate significantly with any observed parenting variables.

Second, parents and children showed low to moderate agreement in their reports about the parents' behaviors. Reports by parents and child about both parental warmth and psychological control were significant. These results were consistent with the meta-analysis of parent-child concordance on the Children's Report of Parent Behavior Inventory and the Parent Behavior Inventory (Korelitz & Garber, 2016). Moreover, the extent of parent-child agreement did not vary by level of either parents' or children's depressive symptoms.

Third, there was low to moderate convergence between the measure of parenting as reported by parents and by children and several of the observed parenting behaviors. Both child- and parent-reported warmth were significantly correlated with observed warmth, positive mood, child centered, and quality time. Parent- and child-reported warmth also correlated significantly but negatively with observed parent angry coercion, hostility, intrusiveness, and guilty coercion,

and with disciplinary behaviors of harshness, indulgent permissiveness, and lecture moralizing.

Parents' and children's reports of parental psychological control were significantly associated with greater observed parent angry coercion, hostility, intrusiveness, and guilty coercion, harshness, and lecture moralize. High psychological control reported by parents and children also correlated significantly and negatively with observed parent warmth, positive mood, child centeredness, and listener responsiveness. In general, the strength of the correlations between the self-report measure of parenting (CRPBI) and observer ratings were greater for child-report, although we did not conduct a statistical test to see if these differences were significant.

Finally, following the work of Parent et al. (2013), we tested whether the relation between self-reported and observed parenting varied by parents' level of depressive symptoms. To reduce the number of tests, we only tested this interaction in two regression analyses: one examined the relation between parent-reported warmth and observed warmth, and the second analysis tested the link between parent-reported psychological control and angry coercion. Results indicated that the association between parent-reported and observed warmth did not vary by level of parental depression.

We did find, however, that the relation between parent-reported psychological control and observed angry coercion was moderated by parental depression. Among parents with high psychological control, those with high levels of depression had higher observed angry coercion. Among parents with lower psychological control, there was no difference in the association with angry coercion as a function of parental depression. Thus, as shown in Figure 1, parents who reported both high psychological control and high levels of depression were observed to be high on attempt to be controlling as indicated by hostile, threatening, contemptuous, or blaming

behaviors – angry coercion, which is close to the essence of the construct of psychological control as measured on the CRPBI. These results are consistent with the finding by Parent et al. (2013) that for parents, higher levels of depressive symptoms were associated with higher congruence with observed parenting.

Strengths of the current study included a relatively large sample and the use of an intensive observation system for rating parent behaviors. Limitations of the study also should be noted because they provide directions for future research. First, the study design was cross-sectional and all data were collected at the same time point. Future studies should examine convergence between parents' and children's report about parenting and their association with observed parent behaviors over time using a longitudinal design.

Another limitation was that we did not conduct the analyses accounting for cases of more than one child per family. Thus, the observed associations between parents' and children's reports could have been due to including parents' reports twice. Although the congruence of parents' report was assessed to each child separately, it is possible that siblings were more similar to each other and therefore more or less convergent with their parent.

Finally, although the sample included fathers as well as mothers, there were not enough rather to allow for comparisons with mothers. Future studies should examine whether parent-child agreement about parenting differs for mothers versus fathers, or as a function of the gender of both the parent and child. Similarly, the extent to which congruence between self-reported and observed parenting behaviors varies by parent gender also should be explored.

In summary, the present study provided further evidence that higher levels of parental depression were significantly associated with fewer positive parent behaviors during a brief laboratory-based interaction with their child. The level of congruence between parents' and

children's reports about parental warmth and psychological control was low to moderate, which is consistent with the extant literature using the CRPBI (Korelitz & Garber, 2016). Finally, the correspondence between parent- and child-reports and observers' ratings of parenting behaviors showed low to moderate agreement, thereby providing further evidence of the concurrent validity of these measures and methods for assessing positive and negative parenting behaviors.

## References

- Alderfer, M. A., Fiese, B. H., Gold, J. I., Cutuli, J. J., Holmbeck, G. N., Goldbeck, L., Patterson, J. (2008). Evidence-based assessment in pediatric psychology: Family measures. *Journal of Pediatric Psychology*, 33, 1046–1061. <http://dx.doi.org/10.1093/jpepsy/jsm083>.
- Chen, X., Liu, M., & Li, D. (2000). Parental warmth, control, and indulgence and their relations to adjustment in Chinese children: a longitudinal study. *Journal of Family Psychology*, 14(3), 401.
- Cohn, J. F., Matias, R., Tronick, E. Z., Connell, D., & Lyons-Ruth, K. (1986). Face-to-face interactions of depressed mothers and their infants. *New Directions for Child Development*, 34, 31-45. doi: <http://dx.doi.org.proxy.library.vanderbilt.edu/10.1002/cd.23219863405>
- Cohn, J. F., Campbell, S. B., Matias, R., & Hopkins, J. (1990). Face-to-face interactions of postpartum depressed and nondepressed mother-infant pairs at 2 months. *Developmental Psychology*, 26(1), 15-23. doi: <http://dx.doi.org.proxy.library.vanderbilt.edu/10.1037/0012-1649.26.1.15>
- Compas, B. E., Champion, J. E., Forehand, R., Cole, D. A., Reeslund, K. L., Fear, J., . . . Roberts, L. (2010). Coping and parenting: Mediators of 12-month outcomes of a family group cognitive-behavioral preventive intervention with families of depressed parents. *Journal of Consulting and Clinical Psychology*, 78, 623–634. <http://dx.doi.org/10.1037/a0020459>
- Compas, B. E., Keller, G., & Forehand, R. (2011). Prevention of depression in families of depressed parents. In T. Strauman, P. R. Costanzo, & J. Garber (Eds.), *Prevention of depression in adolescent girls: A multidisciplinary approach* (pp. 318–339). New York:

Guilford.

- Darling, N., & Steinberg, L. (1993). Parenting style as context: An integrative model. *Psychological bulletin*, *113*(3), 487.
- Feng, X., Shaw, D. S., Skuban, E. M., & Lane, T. (2007). Emotional exchange in mother-child dyads: Stability, mutual influence, and associations with maternal depression and child problem behavior. *Journal of Family Psychology*, *21*(4), 714-725. doi: <http://dx.doi.org.proxy.library.vanderbilt.edu/10.1037/0893-3200.21.4.714>
- Field, T., Healy, B. T., Goldstein, S., & Guthertz, M. (1990). Behavior-state matching and synchrony in mother-infant interactions of nondepressed versus depressed dyads. *Developmental Psychology*, *26*(1), 7-14. doi: <http://dx.doi.org.proxy.library.vanderbilt.edu/10.1037/0012-1649.26.1.7>
- Goodman, S. H., Simon, H. F. M., Shamblaw, A. L., & Kim, C. Y. (2020). "Parenting as a mediator of associations between depression in mothers and children's functioning: A systematic review and meta-analysis": Correction. *Clinical Child and Family Psychology Review*, *23*(4), 461. doi: <http://dx.doi.org.proxy.library.vanderbilt.edu/10.1007/s10567-020-00325-1>
- Goodman, S. H., Rouse, M. H., Connell, A. M., Broth, M. R., Hall, C. M., & Heyward, D. (2011). Maternal depression and child psychopathology: a meta-analytic review. *Clinical Child and Family Psychology Review*, *14*, 1–27. doi:10.1007/s10567-010-0080-1.
- Hammen, C., Shih, J. H., & Brennan, P. A. (2004). Intergenerational transmission of depression: Test of an interpersonal stress model in a community sample. *Journal of Consulting and Clinical Psychology*, *72*(3), 511-522. doi: <http://dx.doi.org.proxy.library.vanderbilt.edu/10.1037/0022-006X.72.3.511>

- Korelitz, K. E., & Garber, J. (2016). Congruence of parents' and children's perceptions of parenting: A Meta-Analysis. *Journal of Youth and Adolescence*, *45*(10), 1973–1995. <https://doi.org/10.1007/s10964-016-0524-0>
- Kroenke, Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9. *Journal of General Internal Medicine: JGIM.*, *16*(9), 606–613. <https://doi.org/10.1046/j.1525-1497.2001.016009606.x>
- Lansford, J. E., Godwin, J., Al-Hassan, S. M., Bacchini, D., Bornstein, M. H., Chang, L., Chen, B. B., Deater-Deckard, K., Di Giunta, L., Dodge, K. A., Malone, P. S., Oburu, P., Pastorelli, C., Skinner, A. T., Sorbring, E., Steinberg, L., Tapanya, S., Alampay, L. P., Uribe Tirado, L. M., & Zelli, A. (2018). Longitudinal associations between parenting and youth adjustment in twelve cultural groups: Cultural normativeness of parenting as a moderator. *Developmental psychology*, *54*(2), 362–377. <https://doi.org/10.1037/dev0000416>
- Leung, D. W., & Slep, A. M. S. (2006). Predicting inept discipline: the role of parental depressive symptoms, anger, and attributions. *Journal of Consulting and Clinical Psychology*, *74*, 524–534. doi:10.1037/0022-006X.74.3.524.
- Lovejoy, M. C., Graczyk, P. A., O'Hare, E., & Neuman, C. (2000). Maternal depression and parenting behavior: a meta-analytic review. *Clinical Psychology Review*, *20*, 561–592. doi:10.1016/S0272-7358(98)00100-7. Melbey & Conger 2001
- Melby, J. N., Conger, R. D., Book, R., Rueter, M., Lucy, L., Repinski, L., et al. (1998). The Iowa Family Interaction Rating Scales (5th ed.). Unpublished manuscript. Ames, Iowa: Institute for Social and Behavioral Research, Iowa State University.
- Murphy, L. K., Preacher, K. J., Rights, J. D., Rodriguez, E. M., Bemis, H., Desjardins, L.,

- Prussien, K., Winning, A. M., Gerhardt, C. A., Vannatta, K., & Compas, B. E. (2018). Maternal Communication in Childhood Cancer: Factor Analysis and Relation to Maternal Distress. *Journal of pediatric psychology, 43*(10), 1114–1127. <https://doi.org/10.1093/jpepsy/jsy054>
- Parent, J., Forehand, R., Dunbar, J. P., Watson, K. H., Reising, M. M., Seehuus, M., & Compas, B. E. (2013). Parent and adolescent reports of parenting when a parent has a history of depression: Associations with observations of parenting. *Journal of Abnormal Child Psychology, 42*(2), 173–183. <https://doi.org/10.1007/s10802-013-9777-1>
- Radloff, L. S. (1977). The CES-D scale: a self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385–401. doi:10.1177/014662167700100306.
- Vreeland, A., Bettis, A. H., Reising, M. M., Dunbar, J. P., Watson, K. H., Gruhn, M. A., & Compas, B. E. (2019). Coping and stress reactivity as moderators of maternal depressive symptoms and youth's internalizing and externalizing symptoms. *Journal of Youth and Adolescence, 48*(8), 1580-1591. doi: <http://dx.doi.org.proxy.library.vanderbilt.edu/10.1007/s10964-019-01033-y>

**Table 1.***Demographics, Depressive Symptoms, and Parenting Measures Means and Standard Deviations*

<b>Demographics</b>	<b>Mean</b>	<b>Standard Deviation</b>
Child age	11.120	2.381
Parent age	42.78	6.490
Child gender/sex (% female)	53%	--
Parent gender/sex (% female)	90%	--
<b>Depressive Symptoms</b>		
Parent-report of depressive symptoms (PHQ)	8.219	5.495
Child-report of depressive symptoms (CESD)	14.755	10.238
<b>Child Report of Parent Behavior Inventory (CRPBI)</b>		
Child-report of Parent Warmth	25.801	4.283
Child-report of Parent Psychological Control	17.065	3.452
Parent Report Warmth	26.461	3.775
Parent Report Psychological Control	14.810	3.324
<b>Observed Parenting (IFIRS)</b>		
Observed Parent Warmth	4.00	1.637
Observed Parent Positive Mood	3.32	1.193
Observed Parent Child Centered	4.55	1.516
Observed Parent Listener Responsiveness	5.37	1.454
Observed Parent Communication	5.63	1.318
Observed Parent Quality Time	1.76	1.147
Observed Parent Hostility	3.04	1.734
Observed Parent Angry Coercion	1.60	1.164
Observed Parent Guilty Coercion	1.65	1.184
Observed Parent Harsh Discipline	1.69	1.230
Observed Parent Intrusive	3.11	1.523
Observed Parent Indulgent Permissive	1.89	1.261
Observed Parent Lecture Moralize	2.29	1.514

CRPBI = Child Report of Parent Behavior Inventory; PHQ = Patient Health Questionnaire;  
 CESD = Center for Epidemiologic Studies Depression; IFIRS = Iowa Family Interactions Rating Scales

**Table 2.***Correlations among parents' and children's reports about parenting warmth and psychological on the CRPBI*

	Parent Depression	Child Depression	Child Report Warmth	Child Report Psych Control	Parent Report Warmth	Parent Report Psych Control
Parent Depression (PHQ)	--					
Child Depression (CESD)	0.095	--				
Child Report of Parent Warmth	-0.098	-.205**	--			
Child Report of Parent Psych Control	-0.043	.201**	-.366***	--		
Parent Report Warmth	0.000	0.004	.366***	-.253***	--	
Parent Report Psych. Control	0.091	0.105	-.184**	.214**	-.218***	--

CRPBI = Child Report of Parent Behavior Inventory; PHQ = Patient Health Questionnaire; CESD = Center for Epidemiologic Studies Depression

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

**Table 3.**

*Correlations among parent and child reports about parenting (CRPBI) and observed parenting (IFIRS) during a stressful interaction*

<b>Observed Parenting Behaviors</b>	<b>Child Report of Parent Warmth</b>	<b>Child Report of Parent Psychol Control</b>	<b>Parent Report of Warmth</b>	<b>Parent Report of Psychol Control</b>
<b>Positive Parenting</b>				
Warmth	.291***	-.244***	.247***	-.224***
Positive Mood	.283**	-.169*	.250***	-.235***
Child Centered	.241***	-.237***	.178**	-.281***
Listener Responsiveness	.231***	-.330***	.223***	-.286***
Communication	.128	-.237***	.115	-.154*
Quality Time	.162*	-.117	.152*	-.050
<b>Negative Parenting</b>				
Parent Angry Coercion	-.248***	.241***	-.175**	.197**
Parent Hostility	-.279***	.379***	-.145*	.287***
Parent Intrusive	-.290***	.287***	-.248***	.227***
Guilty Coercion	-.248***	.297***	-.237***	.308***
<b>Discipline</b>				
Harsh Discipline	-.245***	.233***	-.133*	.136*
Indulgent Permissive	-.141*	.217***	-.183**	.105
Lecture Moralize	-.159*	.309***	-.173**	.232***

CRPBI = Child Report of Parent Behavior Inventory; IFIRS = Iowa Family Interactions Rating Scales

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$

**Table 4.**

*Regression analysis revealing a significant interaction of parent depression by parent report of psychological control predicting observed parental angry coercion*

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	0.578	0.348		1.662	0.098	-0.107	1.263
	Parent Depression (PHQ)	0.009	0.013	0.041	0.657	0.512	-0.017	0.035
	Parent Report of Psychological Control	0.064	0.022	0.179	2.849	0.005	0.020	0.108
2	(Constant)	1.279	0.479		2.670	0.008	0.336	2.222
	Parent Depression (PHQ)	-0.066	0.038	-0.317	-1.754	0.081	-0.141	0.008
	Parent Report of Psychological Control	0.013	0.033	0.036	0.390	0.697	-0.052	0.078
	<b>Parent Depression x Parent Psych Control</b>	0.005	0.003	0.418	<b>2.113</b>	<b>0.036</b>	0.000	0.011

Psych = Psychological; PHQ = Patient Health Questionnaire

**Figure 1**

*Parent depression moderated the relation between level of psychological control and observed parental angry coercion*

