Published in final edited form as:

J Youth Adolesc. 2016 October ; 45(10): 1973–1995. doi:10.1007/s10964-016-0524-0.

Congruence of Parents' and Children's Perceptions of Parenting: A Meta-analysis

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Abstract

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. We conducted 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. The meta-analyses included 85 studies with 476 effect sizes of the degree of agreement and discrepancy in parent-child reports of three parenting behaviors: acceptance, psychological control, and behavioral control assessed with one of the most widely-used measures of parenting – the *Children's Report of Parent Behavior Inventory* (CRPBI). Mother-child and father-child dyads exhibited significant but modest levels of agreement (*r*) across parenting constructs. The amount and direction of discrepancy (Hedges' *g*) varied by the parenting construct and parents' sex. Overall, parents' reports were more favorable than their children's report about the parents' behaviors. Significant associations were found between the magnitude of agreement/discrepancy and children's age, race, clinical status, and family intactness. Moderators differed by parenting construct, parents' sex, and type of effect size. Implications of these findings for researchers and clinicians are discussed and highlight the need for further research about the meaning of parent-child incongruence, its relation to children's psychopathology, and interventions for reducing it.

Keywords

Parenting behavior; Parent-child agreement and Discrepancy

Introduction

Over the past 50 years, research examining the extent of congruence between parents' and children's reports about parent' behaviors has yielded inconsistent findings, likely due to heterogeneity in the parenting constructs, methods, and sample characteristics (De Los Reyes, 2011). An important meta-analysis of parent-child agreement regarding children's

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behavioral and emotional problems was published by Achenbach, McConaughy, and Howell in 1987 and recently updated by De Los Reyes and colleagues (2015). To date, however, no similar systematic review of parent-child agreement and discrepancy[1] about *parenting* has been done. The current review addressed this gap by conducting a meta-analysis of parent-child congruence on one of the most widely-used measures of parenting, the Children's Report of Parent Behavior Inventory (CRPBI; Schaefer, 1965), and by exploring factors associated with variability in levels of congruence across samples. We also note parallels between patterns of parent-child congruence in reports of parenting and those reported in meta-analyses of parent-child concordance about children's emotional and behavioral symptoms.

Incongruence between Parents' and Children's Reports

Although historically viewed as a methodological nuisance (e.g., Jessop, 1981; Turk & Bell, 1972), incongruence between parents' and children's reports is now widely acknowledged as being more than mere measurement error. Indeed, discrepancies may be meaningful, internally consistent, and stable over time (De Los Reyes, 2011). Significant parent-child discrepancies are common even when parallel measures are used, and when the individual reports are reliable and valid (Laird & De Los Reyes, 2013).

Incongruence between parents' and children's reports of parenting and other family functioning constructs highlights the "multiple subjective realities that exist in family relationships" (Conway, 2011; p. 41). Differing perceptions may reflect difficulties in the parent-child relationship such as conflict or communication problems (Guion, Mrug, & Windle, 2009), and tend to be associated with negative outcomes in children, such as internalizing and externalizing symptoms (De Los Reyes, Goodman, Kliewer, & Reid-Quinones, 2008; Guion et al., 2009). Interestingly, sometimes divergent parent-child perceptions may reflect an adolescent's healthy increase in autonomy and separation from the family unit (Carlson, Cooper, & Spradling, 1991; Ohannessian, 2000). Empirical studies reveal that conclusions based on parents' reports are quite different from those derived from children's reports on parallel measures (De Los Reyes, 2013). Therefore, it is important to not only acknowledge the presence of parent-child incongruence, but also to explore the reasons for it, what it signifies, and how best to deal with it when encountered (De Los Reyes, 2013).

Next, we review conceptual models that have guided the study of inter-reporter congruence in the field of developmental psychopathology. We then summarize findings regarding parent-child congruence and associated factors from past meta-analyses of parent-child agreement about *children's mental health*, and from individual studies of parent-child discrepancies about *parenting*.

Conceptual models for understanding parent-child congruence—Three conceptual models have guided research about parent-child congruence (Laird & De Los

[1]Consistent with the literature, throughout this review the term "congruence" refers broadly to the relation between parents' and children's reports; "agreement" or "correspondence" refers to the Pearson correlation between parents' and children's reports; "discrepancy" refers to the mean difference between parents' and children's reports.

Reyes, 2013). The first model focuses on the association between inter-reporter congruence and contextual factors (e.g., settings in which the behaviors occur). One reason for parent-child discordance is that some of children's behaviors happen when the parent is not present. This model has been mainly confined to studies of inter-informant congruence in reports about children's psychopathology.

Contextual differences are less relevant when assessing informant congruence about parenting, because by definition, parenting takes place when both parties are in the same place. Parents' and children's reports about parents' behaviors have been found to differ, however, when the settings about which their ratings refer are not the same (see De Los Reyes et al., 2013, for an experimental test of this). Thus, contextual factors also may be related to parent-child congruence about parenting behaviors.

The second model focuses on informant characteristics as determinants of inter-reporter congruence. A third model focuses on inter-reporter congruence as a predictor of children's psychosocial adjustment. The present meta-analysis examined informant characteristics and children's functioning as potential moderators of parent-child congruence.

Parent-child agreement about children's mental health—Achenbach and colleagues (1987) conducted the first meta-analysis of parent-child agreement (indexed by Pearson correlations) about children's emotional and behavior problems as reported in 119 studies that included a range of questionnaires about children's mental health; they found that overall agreement between parents and children was $r = .25$. When subgroups of effect sizes were compared, parent-child agreement was significantly greater for samples that included younger children (6–11 years; $r = .51$) as compared to older children (12–19 years; $r = .41$), and when they were reporting about the child's "under-controlled" (i.e., externalizing) problems ($r = .41$) as compared to "over-controlled" (i.e., internalizing) problems ($r = .32$). No significant differences were found in degree of agreement as a function of children's sex, parents' sex, or children's clinical status.

In a recent meta-analysis of 341 studies, De Los Reyes and colleagues (2015) replicated the finding of low-to-moderate parent-child correspondence about children's mental health symptoms ($r = .28$), and the extent of agreement was, again, moderated by type of problems being rated. Correlations for parent-child reports of externalizing problems ($r = .32$) were significantly higher than for internalizing problems ($r = .26$), presumably due to parents being better able to observe behaviors associated with externalizing as compared to internalizing problems. In contrast to Achenbach et al. (1987), De Los Reyes and colleagues (2015) did not find an association between children's age and parent-child agreement.

Parent-child discrepancies about parenting—When discrepancies between parents' and children's reports about parenting have been found, they have tended to be in the direction of children reporting less favorably about their parents' behaviors than their parents report about themselves. This has been found across a range of parenting constructs and is thought to reflect parents' tendency to give socially desirable responses (e.g., Bögels & Van Melick, 2004; Fung & Lau, 2010). Some studies have found that the amount of parent-child discrepancy about parenting varied by the type of parenting construct being assessed.

Specifically, there is greater congruence for more directly observable, concrete behaviors as compared to less observable, more subjective constructs (Taber, 2010). For example, using the Cornell Parent Behavior Inventory (Devereux, Bronfenbrenner, & Rodgers, 1969), Gaylord and colleagues (2003) found no significant difference between parents' and children's reports about the more observable constructs of covert control and punitive discipline, whereas parents reported significantly higher levels of the less evident construct – social support. This is consistent with meta-analyses that have found that agreement was significantly higher for ratings of more easily observable, externalizing problems as compared to internalizing problems for both parent-child (Achenbach et al., 1987; De Los Reyes et al., 2015) and mother-father dyads (Duhig, Renk, Epstein, & Phares, 2000).

Informant characteristics: Demographic factors found to be related to the magnitude of parent-child discrepancies about parenting behaviors include children's sex, age, and race, parents' sex, and marital status. For example, mother-son reports of autonomy-promoting behaviors were more discrepant than mother-daughter reports (Sher-Censor et al., 2011), and older as compared to younger children had smaller discrepancies from their parents on a range of parenting variables (e.g., Lanz et al., 2001). Absolute discrepancies in reports of harsh discipline have been shown to be greater for African American as compared to White parent-child dyads (Guion, Mrug, & Windle, 2009). Parents' sex has been found to have a complex pattern of relations to parent-child congruence that varies by sex of the child and parenting construct (e.g., Carlson et al., 1991). Finally, absolute discrepancies in reports of relationship quality have been greater for parent-child dyads from divorced as compared to non-divorced families (Pelton & Forehand, 2001). Of note, however, whereas some studies have found associations between a given informant characteristic and the extent of parent-child discrepancy, other studies have not found such patterns. It is difficult to draw definitive conclusions about which factors are truly associated with informant discrepancies, because of the wide range of parenting constructs assessed and the different types of discrepancy scores used.

Children's psychosocial functioning: Parent-child reporting discrepancies have been positively associated with both internalizing (e.g., De Los Reyes et al., 2008; Gaylord et al., 2003) and externalizing symptoms in children (e.g., Borelli, Luthar, & Suchman, 2010; De Los Reyes et al., 2010). Interestingly, some studies have reported a curvilinear relation between parent-child discrepancies and children's adjustment such that both a lack of discrepancy and too much discrepancy were related to greater problems in the children (e.g., Feinberg, Howe, Reiss, & Hetherington, 2000). Most investigations have only examined the concurrent relation between discrepancy and children's adjustment, although some studies have found a prospective relation (e.g., De Los Reyes et al., 2010; Guion et al., 2009; Pelton & Forehand, 2001). Finally, moderators of the association between discrepant perceptions of parenting and children's psychopathology include parents' sex (e.g., Gaylord et al., 2003; McCauley Ohannessian, 2000), children's sex (e.g., Carlson et al., 1991; Feinberg et al., 2000), and the parenting construct studied (e.g., Gaylord et al., 2003). Thus, considerable evidence exists of a relation between parent-child discrepancy about parenting behavior and children's adjustment, although the direction of this relation often is unclear.

The studies mentioned above include a wide range of parenting constructs and ways to measure discrepancy. The majority of published studies of parent-child discrepancies about parenting have used difference scores as predictors or outcomes in regression analyses to investigate factors associated with degree of discrepancy. In recent years, Laird and colleagues (Laird & De Los Reyes, 2013; Laird & Weems, 2011) have identified several serious statistical issues that arise when using difference scores in regression models, which may result in invalid results. Laird and Weems (2011) recommended using polynomial regression instead to answer questions about which variables are associated with parent-child discrepancies, and warned that findings based on difference scores should be interpreted with caution.

Children's Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965)

The current meta-analysis focused on studies that used the Children's Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965) or the related Psychological Control Scale (Barber, 1996) to assess parents' and children's perceptions about the parents' behaviors. We focused exclusively on these measures of parenting because, as suggested in the Operations Triad Model (De Los Reyes, Thomas, Goodman, & Kundey, 2013), when determining whether informant discrepancies are related to other variables, methodological factors should be ruled out as an explanation. Limiting the present meta-analysis to only studies that used the CRPBI or PCS minimized the likelihood that extraneous methodological factors would account for the associations between moderators and parent-child congruence. This approach is consistent with recent empirical work by Rescorla and colleagues (2013, 2014) investigating parent-child agreement about children's psychopathology, using data exclusively from the Child Behavior Checklist, Youth Self-Report, and Teacher's Report Form of the Achenbach System of Empirically Based Assessment (Achenbach, 2009).

The original CRPBI (Schaefer, 1965) covered 26 parenting "concepts" (e.g., extreme autonomy, lax discipline, child-centeredness), measured by 10 items each, which loaded onto three higher order dimensions: acceptance versus rejection (Acceptance), firm versus lax control (Behavioral Control), and psychological autonomy versus psychological control (Psychological Control). *Acceptance* measures the parent's emotional connectedness, warmth, care and affection toward the child, and includes items such as: My mother "Tells me how much she loves me," and "Gives me a lot of care and attention." *Behavioral Control* measures the extent to which the parent consistently enforces compliance by making rules and following through with consequences; example items are: My mother "Sees to it that I know exactly what I may or may not do," and "Sticks to a rule instead of allowing a lot of exceptions." *Psychological Control* measures the extent to which the parent controls the child through indirect, intrusive psychological methods such as inducing guilt, instilling anxiety, and withdrawing love; example items are: My mother "Is always telling me how I should behave," and "Feels hurt when I don't follow his/her advice." Children indicated whether each item was "like" or "not like" the identified parent. Over the years, the CRPBI has been adapted in several ways, including creating a parallel version for parents to complete about themselves, reducing the number of items and scales, and increasing the number of Likert response options. There have been several revisions (e.g., Burger &

Armentrout, 1971; Schludermann & Schludermann, 1970, 1988), all of which have maintained the same three parenting dimensions as the original measure.

Barber (1996) created an eight-item Psychological Control Scale (PCS) using the 10-item psychological control versus autonomy dimension of the CRPBI-30 (Schludermann & Schludermann, 1988). Barber created the PCS to represent a unidimensional psychological control construct with more behavioral specificity than the items on the full CRPBI scale. Because the PCS was derived directly from the CRPBI, studies that used this measure were included in the current meta-analysis.

Each of the three dimensions of the CRPBI has been found to relate to important outcomes in children. For example, parental acceptance is associated positively with children's social and academic competence, self-disclosure, and self-esteem (Gray & Steinberg, 1999; Putnick et al., 2008; Soenens, Vansteenkiste, Luyckx, & Goossens, 2006), and negatively with externalizing behaviors, drug use, and negative peer orientation (Bogenschneider, Wu, Raffaelli, & Tsay, 1998, Kandel & Andrews, 1987). Lower levels of behavioral control (i.e. permissiveness) are associated with greater drug use and misconduct, and lower academic achievement (Dornbusch, Ritter, Leiderman, & Fraleigh, 1987; Lamborn, Mounts, Steinberg, & Dornbusch, 1991). Greater psychological control is associated with lower self-competence and greater depression (Dallaire et al., 2006; Lamborn et al., 1991). The relation of these three parenting constructs to a wide range of salient outcomes in children underscores the importance of obtaining as accurate a measure of these parenting behaviors as possible and identifying factors associated with divergent reports by parents and children.

The Present Study

The main goals of the current meta-analysis were (1) to determine overall effect sizes for mother-child and father-child agreement (i.e. correlations) and discrepancy (i.e. mean differences) on each of the three domains measured by the CRPBI: Acceptance, Behavioral Control, and Psychological Control, and (2) to examine potential moderators (children's age, clinical status, race, family intactness) of the degree of parent-child congruence in perceived parenting. Moderators were chosen based on their use in prior meta-analyses of parent-child congruence about children's mental health, or in individual studies of parent-child congruence about parenting.

Hypotheses

Overall effect sizes—Regarding parent-child discrepancies, we hypothesized that parents would report significantly more favorably than their children about the parents' behaviors across all three parenting constructs, as this pattern has been reported in studies that have used a variety of parenting measures (e.g., Bögels & Van Melick, 2004; Fung & Lau, 2010). Regarding parent-child agreement, we hypothesized that there would be a significant small-to-moderate correlation between parents' and children's reports across all three parenting constructs. This hypothesis is consistent with the level of correlations found in meta-analyses of children's mental health symptoms (e.g., De Los Reyes et al., 2015) and individual studies of parent-child agreement on other measures of parenting (e.g., Karen Bogenschneider & Pallock, 2008; Gaylord et al., 2003).

Parenting construct—Past studies have tended to find greater congruence between parents' and children's reports when the constructs being assessed were more observable (e.g., Achenbach et al., 1987). Within each of the three broad parenting subscales of the CRPBI, items reflect both observable and non-observable behaviors. For example, two items contained on the CRPBI *Acceptance* subscale are: "Believes in showing her love for me" (not directly observable) and "Smiles at me very often" (directly observable). Therefore, we did not have specific hypotheses regarding the extent of parent-child congruence for each of the three subscales as a function of the observability of the constructs as measured by the CRPBI.

Parent sex—Based on the extant literature on parenting, we did not expect to find differences between mother-child versus father-child congruence on any of the parenting constructs. This is also consistent with prior meta-analyses about congruence in reports of children's mental health symptoms, which have shown that parents' sex did not moderate parent-child congruence in reports of children's internalizing and externalizing symptoms (Achenbach et al., 1987).

Moderators—Hypotheses for moderator analyses were informed by findings from past studies, although these studies often involved different parenting constructs than those measured by the CRPBI. We expected that congruence would be lower (i.e. smaller correlations, greater mean differences) for samples comprised of younger as compared to older children (e.g., Lanz et al., 2001), clinical samples as compared to non-clinical or mixed samples (e.g., Gaylord et al., 2003; Juang, Syed, & Takagi, 2007; Tein, Roosa, & Michaels, 1994), predominantly non-intact as compared to predominantly intact family families (e.g., Pelton & Forehand, 2001), and predominantly African American/Hispanic samples as compared to samples comprised predominantly of other races (Guion et al., 2009).

Methods

Study Eligibility

Peer-reviewed journal articles and dissertations were eligible for inclusion in the meta-analysis if they were published in English and at least one subscale of the CRPBI or the PCS was administered to children and one or both of their parents. From this point forward, the term CRPBI will be used to refer to both the CRPBI and the PCS.

Information Sources

Electronic databases (e.g., ProQuest, PSYCinfo, Pubmed, Science Direct) were searched for eligible articles between 1965 and January 2016. Key search terms were: CRPBI, Child* Report* of Parent* Behavior* Inventory (the asterisk indicates that any suffix is acceptable; e.g., a search term of "parent*" would return results that included the word "parent," "parents," or "parental"), PCS, and Psychological Control Scale. Publications that detailed the creation of the CRPBI and PCS, such as Schaefer, 1965, Barber, 1996, Schludermann & Schludermann, 1988, were forward searched and all articles that cited them were screened. These searches yielded a total of 2801 items, which was reduced to 1976 items after removing duplicates.

Coding Procedures

We performed a preliminary screening of the titles and abstracts that were identified by the database searches, and screened out articles that were clearly ineligible (e.g., review articles with no data). At this stage, screening of articles was very conservative; an article was removed only if it was non-English, non-empirical (e.g., review, classified ad), or not from a social sciences-related field (e.g., searches for the acronym PCS returned titles that were clearly from chemistry-related fields). Full texts were obtained for all potentially eligible articles. If an article did not provide sufficient detail to calculate an effect size (*r* or Hedges' *g*) and this information was not available in another article about the same study sample, we contacted the primary author of the article (N=44) to request this information; 13 (29.5%) provided the requested data; the remaining 31 articles were not included in the analyses.

Eligible studies were double coded by the first author and a research assistant using a coding instrument that included child, parent, and family demographic characteristics, source descriptors, and effect size data. The research assistant coders were unaware of the aims and hypotheses of the review. All discrepancies between coders were resolved through consensus.

Pearson correlations between the parent- and child-reported scores, as well as mean parent and mean child scores were collected for each available CRPBI parenting construct. Pearson correlations describe the degree to which parents' and children's ratings covary (i.e., occupy the same rank order in their respective groups) in a given sample, whereas mean differences describe the degree to which parents' and children's ratings are equal (Achenbach, 2011; Feinberg, Howe, Reiss, & Hetherington, 2000). This allowed us to conduct separate analyses of the relation of moderators of interest to level of agreement (correlations) and directional discrepancy (mean differences) for each parenting construct. When longitudinal studies reported parent-child means and/or correlations for multiple time points, only baseline data were used. When multiple articles reported on the same or overlapping study samples, the one with the largest sample and the most complete data was included.

Parenting constructs were grouped by the CRPBI dimensions: acceptance vs. rejection (Acceptance), firm vs. lax control (Behavioral Control), or psychological control vs. autonomy (Psychological Control). When an article reported more than one subscale for a particular dimension (e.g., responsiveness and child-centeredness), the mean or correlation data were combined to create one average effect size. Mean difference data were coded so all scales within each dimension were in the same direction. For example, mean differences for rejection were reverse-coded before combining them with mean differences from the positively-labeled scales on the acceptance-rejection dimension. Higher scores on the dimensions indicated more acceptance (favorable), more firm control (favorable), and more psychological control (unfavorable).

Moderators

To explore variability across studies in congruence between parents' and children's reports about parenting, several potential moderators were examined including children's age, race, clinical status, and family intactness (see Table 1). For children's clinical status, effect sizes

were divided into those in which all children in the sample were identified as having high levels of emotional or behavioral symptoms or were being brought for mental health treatment (clinical sample), or drawn from community samples, or the study included both a clinical and non-clinical sample but the CRPBI data were not presented separately (nonclinical sample). For race, effect sizes were divided into those in which the children of the sample were (a) predominantly (≥80%) African American or Hispanic, or (b) not predominantly African American or Hispanic. Family "intact" status was defined as families in which the child lived with two biological or adoptive parents. "Non-intact" was defined as any other family structure. Effect sizes were divided into those in which the sample was composed of (a) predominantly (≥80%) intact families; (b) predominantly (≥80%) non-intact families; and (c) neither predominantly intact nor non-intact families (referred to here as "mixed").

Several potentially important variables were not tested as moderators due to lack of available data. Children's sex was not investigated as a moderator of congruence because nearly all effect sizes were for samples of approximately equal proportions of male and female children, and studies rarely reported parent-child correlations or means separately for the dyads that included boys versus girls. It also was not possible to investigate socio-economic status (SES) as a potential moderator because SES-related characteristics were reported inconsistently across study samples. Moreover, the majority of effect sizes were based on relatively socioeconomically diverse samples, with very few effect sizes fitting into a "predominantly low SES" group. Finally, another potential moderator of interest is parental psychopathology. Again, too few effect sizes were available to create a "clinical" group of parents based on either diagnoses or scores on dimensional measures of psychiatric symptoms. Therefore, parental psychopathology was not tested as a moderator.

Statistical Procedures

Twelve separate meta-analyses were conducted (see Figure 1): 3 parenting constructs (Acceptance, Behavioral Control, Psychological Control) × 2 indices of congruence (correlations, mean differences) × 2 parent sex (mother, father). Mean effect sizes were calculated with random effects models for studies reporting a correlation between a mother or father and child (r), and for studies reporting means for both a mother or father and child (Hedges' g). Analyses were conducted using Comprehensive Meta-Analysis, Version 3 (Borenstein, Hedges, Higgins, & Rothstein, 2005).

The number of independent effect sizes describing parent-child agreement and discrepancy about parenting behaviors varied with the dyad type (mother-child vs. father-child), the parenting construct (acceptance vs. behavioral control vs. psychological control), and the moderator variable being tested. Studies ranged from reporting parent-child correlations or means for both dyad types and all three parenting constructs to only reporting a correlation or means for one dyad type and one parenting construct. In many of the studies that reported mother-child *and* father-child correlations or means, the same children were included in mother-child and father-child dyads (i.e., each child participated in the study with one mother and one father). Due to the lack of independence among effect sizes for Acceptance, Behavioral Control, and Psychological Control, and between mother-child and father-child

effect sizes, mother-child and father-child analyses were conducted separately rather than using parents' sex or parenting construct as moderators.

To calculate Hedges' *g* (discrepancies), the parent sample mean was subtracted from the child sample mean; hence, negative effect sizes indicated that the parents reported higher levels of that behavior on average than the children reported. We also conducted analyses of absolute discrepancy (i.e., the absolute value of Hedge's *g*) scores in cases where the directional discrepancy was not significantly different from zero. This allowed for the investigation of whether, across studies, parents and children did not exhibit significant reporting discrepancies or, alternatively, whether their reports did differ significantly but a lack of consistency regarding who reported higher than whom caused the mean directional difference to be zero.

Categorical model testing was used to determine the homogeneity of our sample studies. When evidence for significant heterogeneity in the effect sizes was found, moderator analyses were conducted to examine whether those potential factors might account for a portion of the variability. Categorical moderator variables included were: children's race, clinical status, and family intactness. Meta-regression was used to examine the relation of children's age (continuous variable) to parent-child reporting patterns. The moderator variables and their categories are shown in Table 1. Mixed effects models were used for all moderator analyses.

Multiple effect sizes per study were included when they described two non-overlapping (i.e. mutually exclusive) subgroups that differed on a variable relevant for the moderator analyses. A separate set of categorical moderator and meta-regression analyses was conducted for each of the 12 meta-analysis groupings. Statistical outcomes for homogeneity (Q_W) and between category differences (Q_B) are reported. Significant differences between categories were explored using post-hoc tests.

Results

Study Sample

Of the 1,976 unique articles identified by keyword searches, 44 (2.2%) were excluded because they were not written in English, 165 (8.4%) were excluded because they were not empirical studies from a social sciences field, and 18 (1.0%) dissertations were excluded because they were not available from the dissertation author. Of the remaining 1,749 full-text articles screened, the following were excluded: 610 (34.9%) did not administer the CRPBI as part of their study; 823 (47.1%) administered the CRPBI to the children only; 125 (7.1%) administered the CRPBI to the parents only. Of the 191 remaining eligible articles, the following were excluded: 66 (34.6%) of the samples overlapped with another eligible study; 9 (4.7%) only reported data for "parent-child" dyads rather than for mother-child and father-child dyads separately; in 31 (16.2%), the data presented were not sufficient to calculate an effect size and the data could not be obtained from the author. Thus, 85 (44.5%) articles were included in the final sample for this meta-analysis. Summaries of these studies are provided in Supplemental Tables 1 and 2.

Parent-Child Correspondence in Ratings of Parenting Behaviors

Mean effect sizes (*r*)—Results of the computations of mean weighted *r* effect sizes for children's and parent's ratings of Acceptance, Behavioral Control, and Psychological Control are presented in Table 2. The mean weighted *r* effect sizes ranged from .23 to .28 for mothers and .23 to .29 for fathers, indicating moderately low correspondence between parents' and children's reports of parenting behaviors across the three parenting constructs, for both mother-child and father-child dyads. Forest plots are presented for Acceptance, Behavioral Control, and Psychological Control for mother-child *r* effect sizes in Supplemental Figures 1, 2, and 3, respectively, and for father-child *r* effect sizes in Supplemental Figures 4, 5, and 6, respectively.

Comparison of *r* effect sizes with Fisher's *r*-to-*z* transformation showed no significant differences between mother-child and father-child dyads within Acceptance, Behavioral Control, or Psychological Control Domains. Mother-child dyads showed significantly greater agreement for both Acceptance ($r = .28$) and Psychological Control ($r = .27$) as compared to Behavioral Control ($r = .23$), Fisher's $z = 2.96$ ($p = .003$) and 2.29 ($p = .02$), respectively. Though a similar pattern was seen for father-child dyads, none of the cross-construct comparisons were significantly different due to relatively smaller sample sizes for father-child dyads.

Correspondence (*r*) for Acceptance—Overall models for correspondence about parental acceptance were examined to determine the homogeneity of effect sizes in the samples. Neither mother-child effect sizes, Q_T ($df = 42$) = 126.52, $p < .001$, nor father-child effect sizes, Q_T ($df = 20$) = 59.49, $p < .001$, were homogenous. Child age was significantly related to the amount of agreement between mothers and children such that older children agreed more with their mothers' reports about acceptance as compared to younger children (see Table 3 and Supplemental Figure 7). Children's age was not significantly related to the amount of father-child agreement about the fathers' acceptance.

For between-class effects, there was a significant difference in degree of mother-child correspondence in reports of maternal acceptance between clinical and non-clinical samples (see Table 4). Mother-child correspondence was higher, on average, for samples with dyads that included non-clinical (e.g., community) children. A similar pattern was noted for clinical vs. non-clinical father-child dyads, although the mean correlations were not significantly different.

Between-class effects revealed a significant difference in degree of correspondence about paternal acceptance between children and their fathers across race categories (see Table 4). The mean father-child correlation was significantly lower for the "predominantly African American/Hispanic" group than the "not predominantly African American/Hispanic" group. A similar pattern was noted for mother-child dyads, although the mean correlations were not significantly different. Finally, between-class effects revealed no significant differences in mean effect sizes for parental acceptance across family intactness categories for either mother-child or father-child dyads

Correspondence (r) for Behavioral Control—Overall models for correspondence about parental behavioral control were examined to determine the homogeneity of effect sizes. Neither mother-child, Q_T (df = 27) = 65.63, p < .001, nor father-child effect sizes (at a trend level), Q_T (df = 11) = 19.14, p=.059, were homogenous. Regression analyses showed that children's age was significantly related to the amount of mother-child correspondence, such that older children agreed more with their mothers' reports about behavioral control than did younger children (see Table 3 and Supplemental Figure 8). Children's age was not related to the amount of father-child correspondence on reports of behavioral control. Between-class effects revealed no significant differences in mean effects across children's clinical status for either mother-child or father-child dyads.

Between-class effects were significantly different in degree of mother-child correspondence about maternal behavioral control across race categories (see Table 4). Mean mother-child agreement was significantly greater for the "not predominantly African American/Hispanic" category than for the "predominantly African American/Hispanic" category. We were unable to assess whether the same pattern held for father-child correspondence about behavioral control because no effect sizes were available for African American/Hispanic fathers.

Between-class testing showed a significant difference in mother-child correspondence as a function of family intactness (see Table 4). Post-hoc analyses showed that mean agreement was greater for the predominantly intact category as compared to the mixed (z = 2.6, p < .01) and predominantly non-intact categories (z = 3.18, p < .001); these two groups were not significantly different. Because no effect sizes were available for fathers from non-intact families, we could not assess father-child correspondence about behavioral control as a function of family intactness.

Correspondence for Psychological Control—Overall models for correspondence about parental psychological control to determine the homogeneity of effect sizes indicated that mother-child effect sizes, Q_T (df = 36) = 77.27, p < .001, and father-child effect sizes, Q_T (df = 20) = 54.90, p < .001, were not homogenous. Children's age was significantly related to the amount of mother-child and father-child correspondence, such that older children agreed more with their mothers' and fathers' reports about psychological control than did younger children (see Table 3 and Supplemental Figures 9 and 10). No significant differences were found in mean correspondence in reports of psychological control across different categories of children's clinical status, or across different categories of race or intactness for either mother-child or father-child dyads (see Table 4).

Discrepancies between Mothers' and Children's Ratings of Maternal Parenting Behaviors

Mean effect sizes (g)—Results of the computation of the mean weighted g effect sizes for mothers' and children's ratings of maternal acceptance, behavioral control, and psychological control are shown in Table 5. Overall, children reported significantly lower levels of maternal acceptance (g = −.21, 95% CI: −.34 to −.07) and significantly higher levels of maternal psychological control (g = .54, 95% CI: .38 to .70) as compared to their mother's report. No significant difference was found between mean mothers' and children's reports of maternal behavioral control. Thus, the pattern of directional discrepancy varied by

construct for mother-child dyads. Forest plots for mother-child Hedges' *g* effect sizes are presented for Acceptance, Behavioral Control, and Psychological Control in Supplemental Figures 11, 12, and 13, respectively.

To investigate whether the lack of significant directional Hedges' *g* for mother-child reports of behavioral control was due to mothers and children's ratings being truly "congruent," absolute discrepancies were analyzed. There was a significant absolute discrepancy ($g = .43$, 95% CI: .34 to .53) between mothers' and children's ratings of behavioral control indicating that mothers' and children's reports differed significantly; there was not a consistent pattern of one informant over-reporting relative to the other, however (see Supplemental Figure 12).

There were no significant differences between mother-child and father-child dyads in the amount of discrepancy in reports of Acceptance or Behavioral Control. For reports about Psychological Control, mother-child dyads exhibited significantly greater discrepancy than did father-child dyads. Table 5 shows the non-overlapping confidence intervals for both directional and absolute Hedges' *g*s.

Moderators of discrepancies in mother-child ratings—Overall models of mother-child discrepancies were examined to determine the homogeneity of effect sizes in each sample. The effect sizes within each parenting construct grouping were not found to be homogenous: Acceptance: Q_T ($df = 46$) = 894.05, $p < .001$, Behavioral Control: Q_T ($df = 35$) = 636.54, $p < .001$, Psychological Control: Q_T ($df = 42$) = 1074.02, $p < .001$.

Regression analyses showed a significant effect of mean age on discrepancies in reports of maternal Acceptance (see Table 6 and Supplemental Figure 14) and Psychological Control (Supplemental Figure 15). Post-hoc categorical testing for reports of maternal Acceptance revealed no overall discrepancy for samples with mean age ≤ 11 years ($g = -.01$, $p = .92$), a small negative effect size for samples with mean ages 11–14 years ($g = -.28$, $p = .01$), and a medium negative effect size for samples with mean age ≥ 14 years ($g = -.50$, $p < .001$). Although the overall directional discrepancy was not significant for the youngest age group, 8 of 18 effect sizes showed a significant discrepancy in report. The positive and negative effect sizes within this group, however, canceled each other out, leaving the overall discrepancy not significantly different from zero. In contrast, for the middle and oldest age groups, the majority of Hedges' *g*'s were negative, indicating that these children tended to report less acceptance than their mothers, or were not significantly different from zero.

Post-hoc categorical testing for reports of Psychological Control revealed significant positive effect sizes for all three age groups (≤11 years: $g = .91$, $p < .001$; 11–14 years: $g = .27$, $p = .05$; ≥ 14 years: $g = .40$, $p = .01$) indicating that children of all ages tended to report higher levels of psychological control than did their mothers, although the two older groups' reports were less discrepant from their mothers' reports than were the youngest group's reports. Children's age was not significantly related to the amount of mother-child directional discrepancy in reports of maternal behavioral control.

Between-class effects revealed no significant differences in mean effect sizes across clinical status categories or race for mother-child reports of any of the three parenting constructs (see

Table 7). Analyses of the association between family intactness and discrepancy in mother-child reports of behavioral control yielded a nonsignificant trend such that mother-child dyads in the intact and mixed groups did not exhibit significant discrepancies in their reports, whereas within the non-intact group, children reported lower levels of behavioral control than did their mothers (see Table 7).

Discrepancies between Fathers' and Children's Ratings of Paternal Parenting Behaviors

Mean effect sizes (*g*)—Results of the computation of the mean weighted g effect sizes for fathers' and children's ratings of paternal acceptance, behavioral control, and psychological control are shown in Table 5. Overall, children's ratings of their fathers' levels of acceptance were significantly lower than their fathers' ratings ($g = -.25$, 95% CI: −.40 to −.09). There were no significant differences between children's and fathers' reports of paternal behavioral control or psychological control. Thus, the pattern of directional discrepancy varied by construct for father-child dyads. Forest plots for father-child g effect sizes are presented for Acceptance, Behavioral Control, and Psychological Control in Supplemental Figures 16, 17, and 18, respectively.

To determine whether father-child reports of behavioral control and psychological control can be considered to be "congruent," absolute discrepancies were analyzed. Absolute discrepancy between fathers' and children's ratings of behavioral control ($g = .37$, 95% CI: .21 to .52), and psychological control ($g = .28$, 95% CI: .19 to .36) was significant; that is, fathers' and children's reports differed, but there was not a consistent pattern of one informant over-reporting relative to the other. No significant differences were found in the magnitude of absolute father-child discrepancy across constructs.

Moderators of Discrepancies in Father-Child Ratings—Overall models of fathers' and children's directional mean ratings of paternal acceptance were examined to determine the homogeneity of effect sizes in each sample. Results showed that the effect sizes within each of the parenting construct groupings were not homogenous: Acceptance: Q_T ($df = 22$) = 227.33, $p < .001$, Behavioral Control: Q_T ($df = 15$) = 158.32, p < .001, Psychological Control: Q_T ($df = 21$) = 174.21, $p < .001$.

Regression analyses showed a significant effect of age on directional discrepancies in reports of paternal acceptance (see Table 6 and Supplemental Figure 19) and psychological control (Supplemental Figure 20), but not paternal behavioral control. Post-hoc categorical testing for reports of acceptance showed that, on average, younger children did not differ from their fathers in reports of acceptance (≤11 years: $g = -.11$, $p = .32$; 11–14 years: $g = -.05$, $p = .69$), whereas the oldest children reported significantly lower levels of acceptance than their fathers reported (≥14 years: $g = -.50$, $p < .001$). A closer examination of the individual effect sizes within each age group showed that for the youngest age group, 5 out of 7 effect sizes revealed significant reporting discrepancies. Because some were in the positive direction and others were in the negative direction, the effects canceled each other out, and the overall effect size revealed no discrepancy in this group. In the 11 to 14 year old group, only 2 of 7 effect sizes indicated a significant discrepancy. Therefore, in this age group, the

nonsignificant overall effect size likely accurately indicates that fathers and children tended not to differ in their reports of paternal acceptance.

Post-hoc categorical testing of reports of psychological control showed that, on average, younger children reported more psychological control than their fathers (≤11 years: $g = .27$, $p = .003$); children's reports did not differ significantly from their fathers' reports in the two older children's groups (11–14 years: $g = -.23$, $p = .10$; ≥ 14 years: $g = -.03$, $p = .80$). Further examination of these two groups revealed that the for the 11 to 14 year old group, 2 of the 5 effect sizes indicated a significant discrepancy. In the 14+ year old group, 3 of the 7 effect sizes indicated a significant discrepancy.

Between-class effects revealed no significant differences in mean effect sizes across race or clinical status categories for father-child reports of any of the three parenting constructs (see Table 8). A significant association was found between family intactness and directional discrepancy in father-child reports of psychological control: father-child dyads in the intact group exhibited no significant discrepancy in their reports, whereas children in the mixed intactness group reported significantly greater psychological control than did their fathers. Interpretation of this finding is limited, however, due to the lack of effect sizes in the non-intact category.

Discussion

Lack of congruence between parents' and children's reports about children's emotional and behavioral problems is common; meta-analyses indicate that parent-child agreement about children's symptoms tends to be low to moderate (Achenbach et al., 1987; De Los Reyes et al., 2015). The present meta-analysis extended this previous literature by investigating parent-child congruence with regard to another important domain – parenting behavior. Our systematic, quantitative review, included 85 studies of parents' and children's reports on one of the most widely-used measures of parenting – the Children's Report of Parental Behavior Inventory (CRPBI; Schaefer, 1965). Separate meta-analyses were conducted for each parenting construct (Acceptance, Behavioral Control, and Psychological Control), dyad type (mother-child, father-child), and effect size (r, Hedges' g), which allowed us to examine whether parent-child congruence varied depending on the type of parenting behavior, sex of the parent, and the way "congruence" was measured.

In addition, consistent with previous research (Laird & De Los Reyes, 2013), we examined the association between parent-child congruence and two classes of moderators, informant characteristics (children's age, race, family intactness) and children's functioning (clinical status). Results indicated that the degree of parent-child congruence varied in meaningful ways; these findings can help guide future research on how to address discrepancies when they inevitably occur.

Agreement between Parents and Children in their Ratings of Parenting

The present review of over 400 effect sizes demonstrated that both mother-child and father-child dyads showed a similarly low level of agreement across all three parenting constructs. Three major points are noteworthy here. First, for the most part, parents and children

perceived parents' behaviors differently. The reasons for and implications of these different perspectives for both research and clinical practice need to be explored further. Second, these findings were true for all three parenting dimensions. That is, parents and children were no more likely to agree regarding positive (e.g., acceptance) than negative (e.g., psychological control) parenting behaviors. Third, the overall level of parent-child agreement did not appear to differ for mothers versus fathers.

The present finding of a low-to-moderate level of parent-child agreement is generally consistent with the effect sizes reported in meta-analyses of parent-child agreement regarding children's mental health symptoms (Achenbach et al., 1987; De Los Reyes et al., 2015). These previous meta-analyses showed that level of parent-child agreement differed as a function of the observability of the symptoms and behaviors being rated (i.e., externalizing versus internalizing). In the present meta-analysis, the general lack of differences in levels of parent-child agreement across the three CRPBI parenting dimensions (except for mother-child agreement being higher for Acceptance and Psychological Control than for Behavioral Control) similarly might have been due, in part, to the lack of clear differences in how observable were the parenting behaviors that characterized each construct.

Discrepancies between Parents' and Children's Reports about Parenting Behavior

When parent-child congruence was calculated with discrepancy scores, results varied by parenting construct and somewhat by dyad type (mother-child vs. father child). With regard to parental acceptance, analyses of discrepancies showed that both mothers and fathers reported higher levels of parental acceptance than their children reported about them. That is, parents saw themselves as showing more warmth and acceptance than their children perceived of their parents. The magnitude of these directional mean differences was similar for mother- and father-child dyads.

Regarding behavioral control, the directional mean differences for both mother-child and father-child reports were not significant, whereas the absolute mean differences were significantly different from zero. Thus, although parent-child reports of behavioral control were not, on average, congruent, no significant pattern emerged regarding whether one member of the dyad over-reported relative to the other.

For psychological control, discrepancies indicated that children reported higher levels as compared to their mothers, but not their fathers. Although no significant difference was found between fathers and children on directional means for psychological control, their reports were not necessarily congruent. Indeed, there was still a significant absolute difference between fathers' and children's mean reports of psychological control; the lack of significant directional mean differences for father-child dyads indicates that there was not a systematic tendency for one member of the dyad to over-report about paternal psychological control relative to the other.

The finding that children, on average, reported lower levels of acceptance than their mothers and fathers, and higher levels of psychological control than their mothers is consistent with past studies that have shown that parents tend to report more favorably than their children about parenting, parent-child relationships, and family functioning (e.g., McCauley

Ohannessian, 2000; Ross, Marrinan, Schattner, & Gullone, 1999; Sher-Censor et al., 2011). One possible explanation for why parents report more favorably is the "developmental stake" hypothesis (Bengston & Kuypers, 1971), which suggests that whereas adolescents have a developmental "stake" in achieving autonomy and minimizing emotional closeness with their parents (Bogenschneider & Pallock, 2008), parents are more invested in maintaining a bond and closeness with their children. As a result, parents and children each has a stake in appearing more or less, respectively, committed to their relationship with the other (Bengston & Kuypers, 1971).

Social desirability also may play a role in parents rating their behavior more favorably than their children (Giarrusso, Du, & Bengston, 2004; Morsbach & Prinz, 2006). Tein and colleagues (1994), however, argued against social desirability as an explanation for this pattern of reporting because they found that parents were willing to report openly about other sensitive topics (e.g., domestic abuse). Nevertheless, it is still possible that parents may share some difficult aspects of their lives, while still wanting to be considered to be a "good" parent.

Moderators of Parent-Child Congruence

Children's age—The most robust moderator across dyad type and constructs was children's age, such that there was a positive relation between children's mean age and parent-child agreement. For mother-child dyads, greater mean age was related to higher correspondence in reports of all three parenting constructs. For father-child dyads, age was related to correspondence for reports of psychological control. As the average age of the sample increased, the correspondence of parent-child ratings was greater. These results do not necessarily mean that children agree with their parents more as they get older, although longitudinal studies have shown that as children mature, parent-child correspondence increases regarding maternal overprotectiveness, maternal and paternal disciplinary control, and maternal behavioral control (Hommeyer, 2003; McElhaney, 2000).

Interestingly, a meta-analysis of parent-child agreement about children's behavior problems revealed the opposite developmental trend (i.e., a negative relation between mean age and parent-child correspondence; Achenbach et al., 1987). The difference between these two findings suggests that the positive relation between age and correspondence in ratings of parenting does not merely reflect a general developmental trend toward greater similarity between parents' and children's ratings across all types of constructs. Instead, as children mature, their views about parenting behaviors may become more similar to that of their parents, or they may become better able to take their parent's perspective, which may facilitate their growing more closely aligned in their perceptions of their parents' behaviors.

Does the greater congruence between parents and children in the older samples indicate an increase in the children's reporting "accuracy?" Although there is no "gold standard" against which to determine "accuracy" of reports about parenting, observers' ratings of parents' behaviors may be informative here. Studies have shown that starting from as young as preschool-age, children's reports are more highly correlated with observers' ratings than are parents' reports (Sessa, Steinberg, & Morris, 2001). Thus, the positive association between

children's age and parent-child agreement should not be interpreted as evidence that younger children are necessarily less "accurate" reporters about their parents' behaviors toward them.

Children's clinical status—For mother-child dyads, there was significantly higher correspondence regarding parental acceptance in non-clinical samples as compared to clinical samples. No significant associations were found between congruence and children's clinical status for the other parenting constructs or for father-child dyads. This may be due, in part, to the small number of clinical effect sizes ($n \leq 4$) and resultant low power. The association between mother-child congruence about parental acceptance in relation to children's clinical status is consistent with studies that have found links between children's adjustment and parent-child discrepancies on a variety of parenting and family functioning variables (e.g., De Los Reyes et al., 2010; Pelton & Forehand, 2001). Many of these previous studies, however, employed inadequate or inappropriate statistical techniques, such as using difference scores as the independent variable in regression equations (Laird & De Los Reyes, 2013). The present meta-analysis compared the magnitude of agreement and discrepancy between samples that could be categorized as either clinical or non-clinical.

Furthermore, the majority of past studies measured children's adjustment with questionnaires completed by parents or children. As parent-child discrepancy scores are created on the basis of parent-child reports, assessment of children's outcomes via parent or child questionnaires may be affected by single informant (i.e., mono-method) bias. Such method bias was less of a concern in the present meta-analysis, however, because most of the effect sizes for the "clinical" group were drawn from studies of children whose clinical classification was based on their receiving psychiatric services rather than from parent- or child-reports about children's symptoms. Future research should investigate whether patterns of congruence differ by type of children's psychopathology within a clinical sample. In the present meta-analyses, not enough effect sizes were available within the clinical group to be able to examine children's internalizing and externalizing disorders separately.

The present findings cannot address the question regarding what is direction of the association between parent-child perceptual differences about parenting and children's emotional and behavioral symptoms. That is, do parent-child discrepancies lead to children's psychopathology or does children's psychopathology produce discrepancies? Although some prospective studies have tried to examine the direction of this relation, most have used less adequate analytical techniques (e.g., regression equations with discrepancy scores as the independent variable). Future longitudinal research is needed to answer these questions using polynomial regression techniques as suggested by Laird and Weems (2011).

The current meta-analysis also did not address what accounts for the link between children's clinical status and parent-child discrepancies; that is, what mediates this association? Pelton and Forehand (2001) proposed that the perceptual differences may lead to an "environment of misunderstanding and frustration...[which] may set in motion poor parenting by the mother and/or rebellion by an adolescent, both of which can lead to difficulties in adolescent adjustment" (p. 12). For example, Juang and colleagues (2007) showed that level of family

conflict partially accounted for the cross-sectional relation between parent-child discrepancies in perceptions of parental control and children's depressive symptoms.

Alternatively, children's psychopathology may contribute to the incongruence between parents and children. Children with various kinds of psychological disorders have been found to have a negative bias in their social information processing, such that they may encode and/or interpret parents' behaviors differently than their parents or than other "healthy" children (Quiggle, Garber, Panak, & Dodge, 1992). Prospective studies are needed to determine the temporal relations and mechanism(s) through which parent-child perceptual differences are related to children's symptoms.

Race/Ethnicity—Father-child dyads exhibited greater correspondence regarding acceptance in "not predominantly African American/Hispanic" samples as compared to "predominantly African American/Hispanic" samples. A similar, although nonsignificant trend, was found for the association between race/ethnicity and correspondence of mother-child reports of behavioral control. It is possible, however, that SES rather than race/ethnicity accounted for these relations. Past studies have found greater discrepancies in parent-child perceptions about parenting and family variables for low SES as compared to middle or high SES families (e.g., Pelton et al., 2001). Moreover, some researchers have found that the association between informant congruence and SES disappeared when factors such as parental psychopathology and family stress were entered into the model (De Los Reyes & Kazdin, 2005). Thus, SES and possibly race/ethnicity per se may be less important for predicting degree of parent-child congruence than other factors associated with these variables.

It also is possible that lower parent-child agreement in the "predominantly African American/ Hispanic" samples may be related to cultural differences in parenting. Some studies have found that, on average, African American parents tend to be stricter and less warm than their European American counterparts (Julian, McKenry, & McKelvey, 1994; Richman & Mandara, 2013). Parents from different cultural backgrounds may vary in their socialization goals and cultural beliefs about children's obedience and respect for elders (Richman & Mandara, 2013), in part due to the long history of prejudice and discrimination African Americans have endured. For example, African American parents may try to raise their children to behave and cope in ways that facilitate their survival in the hostile, racist environment that they may regularly encounter (Julian et al., 1994). The complex social context in which these parents' behaviors are shaped may contribute to their perceiving their actions differently from their children, who may be less aware of the societal pressures they are likely to face.

Family intactness—Mother-child correspondence regarding behavioral control was higher in predominantly intact samples as compared to not predominantly intact samples. Furthermore, discrepancy analyses showed a nonsignificant trend for mothers in the non-intact group to report higher levels of behavioral control than their children reported; no such discrepancy was found in the other groups.

For father-child dyads, there was a significant relation between family intactness and discrepancy in reports of psychological control. Father-child dyads in the intact group did not exhibit significant discrepancy, whereas children in the mixed group reported significantly higher levels of psychological control than their fathers reported. Unfortunately, there were no effect sizes for the non-intact father-child category, so it was not possible to assess the reporting pattern of that group.

Few studies have directly addressed whether family intactness is related to perceptual differences about parenting. Pelton and Forehand (2001) found that mother-child absolute discrepancies in reports of parent-child relationship quality (measured by the Conflict Behavior Questionnaire; Prinz, Foster, Kent, & O'Leary, 1979) were greater in a sample of divorced mothers and their children as compared to a sample of intact families. Studies also have found a relation between family intactness and the magnitude of discrepancies in parent-child reports about children's internalizing and externalizing behavior (De Los Reyes & Kazdin, 2005). The present results extended this previous research to perceptual congruence about parenting behaviors, such that a significant association of family intactness with reports about parenting was found in both mother-child and father-child dyads. One reason for this relation may be that the stress associated with changes in family structure (e.g., divorce) affects the nature and quality of parent-child interactions (Pelton & Forehand, 2001).

Limitations

The present findings are subject to the limitations of all meta-analyses (see Rosenthal & DiMatteo, 2001). First, it is not possible to gather all data that ever existed on a topic. This is partly due to imperfect search tools and a tendency of journals to only publish significant findings. This "file drawer effect" may be less problematic for the present meta-analyses because the data extracted from the studies were rarely the primary focus of the investigation. Instead, the data used in these analyses were found in the correlation matrices and descriptive statistics tables included in articles that used the CRPBI. Because the specific aims of the articles reviewed here were almost never explicitly to explore inter-reporter congruence, the publication of the articles was not predicated on the level of congruence or incongruence of the parent-child reports; rather, these data were mostly incidental to the purpose of the publications.

Nevertheless, the issue of biased missing data is still a potential problem. Effect sizes could only be included when there was enough information to compute one (i.e., Pearson correlations between parents' and children's reports or data regarding parents' and children's means). It is possible that data were missing from studies in non-random ways. We requested data from authors and received responses from 13 of the 44 authors (29.5%) contacted.

Another limitation of the present meta-analysis was that we investigated the relation between parent-child congruence and each moderator separately rather than simultaneously testing multiple moderators in a single model. Rosenthal and DiMatteo (2001) argued, however, that a primary purpose of meta-analysis is to concentrate on single effects to "target specific questions and to distill the essential elements of a phenomenon under study"

(p. 67). This more focused approach then can be followed by more targeted longitudinal studies designed to further explore what the meta-analysis revealed.

In addition, it was not possible to assess all possible moderators. For example, there were not enough effect sizes available for predominantly male or predominantly female samples to test children's sex as a moderator; rather, nearly all effect sizes were from samples that were approximately 50% male, and the relevant data (e.g., correlations, means) were not presented separately by sex. Other potential moderators were not included here due to inconsistent reporting of these characteristics or too few available effect sizes. These variables included SES, parents' psychopathology, method of questionnaire administration (paper vs. computer-based vs. interviewer-administered), and social desirability traits. Even for moderators that were examined, the number of effect sizes for some categories (e.g., race, clinical, non-intact) was small, and therefore the analyses may have been underpowered.

Implications for Research and Clinical Practice

Taken together, the findings of this meta-analysis indicate that the level of parent-child congruence about parenting varies systematically by the dyad type (mother-child vs. father-child), the specific parenting construct, and the way in which the congruence was measured (correlations vs. mean differences). Thus, discordance between parents' and children's reports about parenting may be more than a methodological nuisance, and instead may represent meaningful information about the parent-child relationship.

The current results highlight the importance of considering ways to maximize the validity of ratings about parenting. In some cases, parents' reports may be affected by their desire to portray themselves in a favorable light. Therefore, methods that reduce such bias should be used, including enhanced item wording (e.g., items are preceded by supportive statements about behaviors that could be viewed as unfavorable), positive item phrasing, and reminding informants that another family member will be rating the same items (Morsbach & Prinz, 2006). It also may be helpful to replace vague quantifiers (e.g., somewhat, often) with more concrete response options, and to incorporate more in depth instructions/training about how to answer the questions (De Los Reyes, 2013).

To facilitate acquiring better data about parent-child congruence for future meta-analyses, it would be helpful if researchers would include parent-child correlations and means and standard deviations broken down by key demographic variables such as children's sex, race/ethnicity, clinical status, family structure, and parental psychopathology. Typically, only correlations or means are reported for the overall sample. The current meta-analysis largely relied upon studies that included samples composed primarily of the one characteristic of interest (e.g., a predominantly minority sample) in order to find effect sizes to go into each level of the moderator. This resulted in there being very few effect sizes for some levels of the moderator, and in some cases, not enough effect sizes to include that moderator variable at all.

In addition, dimensional moderator variables should be reported in a consistent manner so that information can be combined across studies. In particular, although information about

SES was included in many studies, it was presented in so many different forms that it was difficult to compare one sample to another. Perhaps, parents' education level, which is relatively easy to collect, could be used as a rough proxy for SES across studies.

Most importantly, how should researchers use parents' and children's ratings about parenting? Aggregating reports may obscure important information contributed by each respondent separately. Several alternatives are available for making use of both perspectives. For example, researchers can conduct analyses separately for each reporter and compare the results of the two models. As Tein et al. (1994) explained, "replicating tests of theoretical relationships within a study and finding similar results across reporters would provide strong arguments for the theory being tested without possibly compromising measurement integrity" (p. 352). One disadvantage of this approach, however, is that it is hard to interpret the results when the reporters' ratings relate differently to other variables in the model.

Another option is to include both the parents' and children's perspectives in the model simultaneously, which would allow one to determine which reporters' views account for more of the variability in the outcome, or how much one informant's ratings contribute above and beyond the other's ratings. If a researcher is only interested in one informant's point of view, or if it is not feasible to collect data from both parties, then it may not be necessary to collect data from both the parent and child. Rather, informants should be selected on the basis of the particular research question(s) being asked, while also acknowledging the potential limitations of having only one reporter's perspective.

How did the articles included in the present meta-analysis treat the multi-informant ratings in their statistical analyses? Out of the 85 studies included, 55% ran separate models for parent- and child-reported data, 18% included parents' and children's reports separately in the model, 15% created a composite of parents' and children's reports, 7% created a latent variable from parents' and children's reports, 2% used parents' reports only, and 2% used children's reports only. Of note, however, the studies on which these numbers are based are not representative of the full parenting literature (or even the CRPBI literature), given that they were specifically chosen because they presented means and/or correlations separately for parents' and children's reports. Some studies that administered the CRPBI to parents and children were excluded from the current meta-analysis because they used composites in their analyses and only reported the mean of the composite variable rather than the means for the separate parent and child reports. We excluded other studies because they administered the CRPBI to only the parents or only the children. The overall proportion of studies that administered the CRPBI to both parents and children but then reported results of only one informant, or presented only the parent-child composite variables is higher than the reported numbers indicate.

To make the most of the data being collected, polynomial regression models (Edwards, 1994) can be used to investigate the relation between reports about parenting and theoretically important outcomes (Laird & De Los Reyes, 2013). The polynomial regression approach allows us to explore complex (e.g., interactive, curvilinear) ways in which incongruence between parents' and children's views may be related to other variables of interest. Applying these types of models to studies of the relations between parent-child

congruence and outcomes that have been previously investigated with other statistical techniques is an important next step for studies of perceptual congruence.

Finally, the current findings have implications for the prevention and treatment of psychopathology in children. Although the direction of the relation between perceptual incongruence about parenting and children's adjustment has not yet been definitively determined, some studies have shown that discrepancies prospectively predicted adjustment difficulties (e.g., De Los Reyes et al., 2010; Guion et al., 2009; Pelton & Forehand, 2001). Producing greater congruence between parents' and children's perceptions may help to reduce the subsequent development of childhood problems. The current meta-analysis identified several factors associated with greater perceptual incongruence, including younger child age, African American or Hispanic race/ethnicity, and non-intact family status. Further study of the mechanisms underlying the increased vulnerability of these different groups is needed to guide interventions aimed at reducing risk.

In terms of clinical interventions, modest correspondence and significant discrepancies between parents' and children's perceptions indicate that it may not be enough for interventions to focus on teaching parenting skills. To maximize the impact of such interventions, an explicit focus on how the child perceives the parent's behaviors may be helpful. As a routine component of care, clinicians may want to assess the degree of incongruence in a parent-child dyad. When substantial differences in their views about parenting and their relationship are present, then reasons for these differences should be explored and resolved in treatment with the goal of promoting understanding and cohesion in the family. Pelton and Forehand (2001) outlined such an intervention, which involves the parent and child first explaining their individual perspectives to each other, discussing the differences, and then problem solving to find ways to reduce the inconsistencies in their views. Explicitly addressing perceptual discrepancies in the context of therapy may help parents and children gain insight into problems in their relationship and open lines of communication between them.

Conclusion

Lack of congruence between parents' and children's reports is a significant methodological and substantive concern that has long been observed in the developmental psychopathology literature (e.g., Yarrow, 1963). In recent years, researchers have called for more focused studies of informant agreement that lead to better understanding of the "origins and implications of informant discrepancies" (p. 13; Laird & De Los Reyes, 2013). The present review represents an important step toward that goal. We extended past meta-analytic work about parent-child congruence and associated factors (e.g., Achenbach et al., 1987; De Los Reyes et al., 2015) to the domain of parenting. In particular, using meta-analysis, we summarized reporting patterns of parents and children from 85 studies of a widely-used measure of parenting, the Children's Report of Parental Behavior Inventory (Schaefer, 1965). Correspondence between mother-child and father-child dyads was significant, though low to modest, across three important parenting constructs. We also found significant discrepancies between parent-child reports, although the magnitude and direction of these differences varied by dyad type (i.e., mother-child vs. father-child) and parenting dimension.

Additionally, several characteristics of the children and families (age, race, clinical status, intactness) were associated with the degree of parent-child congruence. These factors may explain inconsistencies in past findings and have implications for research and clinical practice. Important issues remain regarding the meaning of parent-child incongruence, its origins, contribution to the development of psychopathology in children, and interventions for reducing it.

Supplementary Material

Refer to Web version on PubMed Central for supplementary material.

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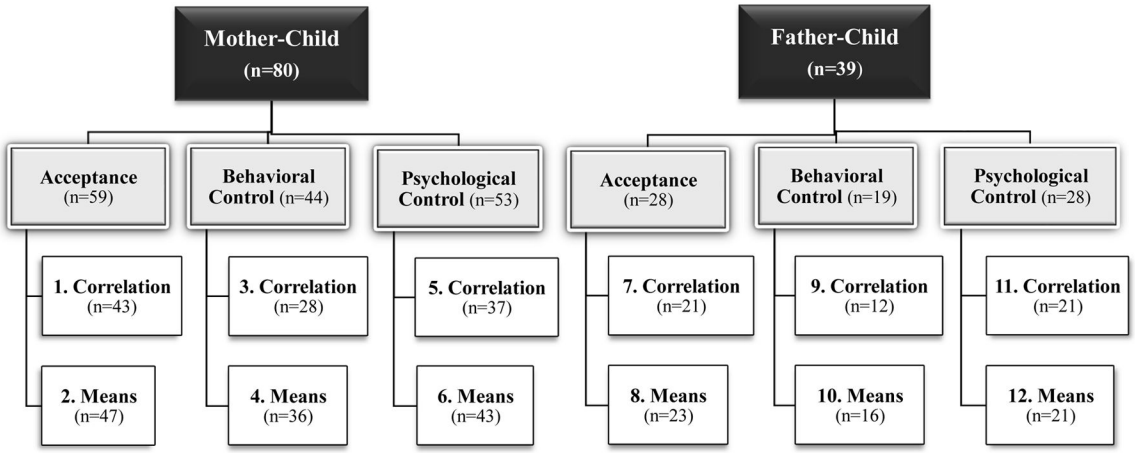

Figure 1.
Number of articles of each type included in the twelve meta-analyses

Table 1

Moderators and their categories

Moderator	Categories	
Age of Child	*Continuous*	
Clinical Status	**1**	Non-clinical sample
	2	Clinical sample
Race/Ethnicity	**1**	Not predominantly African American or Hispanic
	2	Predominantly (≥80%) African American or Hispanic
Intact Status of the Family	**1**	≥80% Intact
	2	≥80% Non-intact
	3	Mixed

Table 2

Parent and Child Correspondence (*r*) about Parenting (Acceptance, Behavioral Control, Psychological Control)

Parenting Construct ***Dyad Type***	**No. of Effect Sizes**	**Total *N***	**Mean Weighted *r* (CI)**	**Fisher's *z***	**Mean Child Age (SD)**	***t***
Acceptance						
Mother-Child	43	7851	.28*** (.24–.32)	−.48	12.47 (2.64)	1.16
Father-Child	21	2653	.29*** (.22–.36)		13.33 (3.08)	
Behavioral Control						
Mother-Child	28	4997	.23*** (.19–.28)	0	12.19 (2.63)	.98
Father-Child	12	842	.23*** (.13–.32)		13.13 (3.14)	
Psychological Control						
Mother-Child	37	6756	.27*** (.23–.31)	1.03	12.64 (3.21)	.54
Father-Child	21	3464	.25*** (.19–32)		13.14 (3.70)	

CI = Confidence Interval

* $p < .05$;

** $p < .01$;

*** $p < .001$

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Table 3

Meta-regression of mean age on *r* effect sizes of child age for Acceptance, Behavioral Control, and Psychological Control

Variable = Child age Category	Q_M	Q_R	Tau-squared	No. of Effect Sizes	Point Estimate	Confidence Interval for Point Estimate		*Z*
						Lower	Upper	
Acceptance								
Mother-Child	25.40***	39.17	.005	43				
Slope					.032	.019	.044	5.04***
Intercept					−.120	−.280	.040	−1.48
Father-Child	3.12	15.62	.010	21				
Slope					.018	−.002	.038	1.77
Intercept					.057	−.225	.338	.69
Behavioral Control								
Mother-Child	13.09***	25.75	.003	28				
Slope					.027	.012	.041	3.62***
Intercept					−.097	−.279	.016	−1.04
Father-Child	.74	9.31	.013	12				
Slope					.013	−.017	.043	.86
Intercept					.045	−.374	.463	.21
Psychological Control								
Mother-Child	13.66***	37.32	.003	37				
Slope					.019	.009	.030	3.70***
Intercept					.014	−.121	.149	.21
Father-Child	5.39*	21.91	.006	21				
Slope					.017	.003	.031	2.32*
Intercept					.020	−.176	.217	.20

Q_M = Model Sum of Squares; Q_R = Residual Sum of Squares

*$p < .05$;

** $p < .01$;

*** $p < .001$

Table 4

Tests of categorical models for r effect sizes: Acceptance, Behavioral Control, and Psychological Control

Variable and Category	Between Classes Effect (Q_B)	No. of Effect Sizes	*N*	Mean Weighted *r*	Confidence Interval for weighted *r*		Within Class (Q_W)
					Lower	Upper	
Acceptance							
Child Clinical Status							
Mother-Child	5.87*						
Non-clinical or mixed		41	7558	.29	.25	.33	120.44***
Clinical only		4	330	.09	−.07	.24	7.60
Father-Child	.31						
Non-clinical or mixed		19	2350	.30	.23	.37	57.92***
Clinical only		4	203	.24	.03	.43	5.87
Race/Ethnicity							
Mother-Child	2.14						
Not African-American/Hispanic		35	5885	.28	.24	.32	98.67***
African-American/Hispanic		5	1655	.20	.09	.30	11.51*
Father-Child	6.22*						
Not African-American/Hispanic		14	1644	.32	.26	.38	18.85
African-American/Hispanic		2	578	.13	−.02	.27	6.50*
Family Intactness							
Mother-Child	1.73						
Intact		12	1986	.28	.20	.35	27.01**
Non-intact		3	897	.23	.09	.37	.80
Mixed		15	1964	.32	.26	.39	42.61***
Father-Child	2.72						
Intact		11	1748	.26	.16	.35	44.41***
Non-intact		0	-	-	-	-	-
Mixed		6	517	.39	.26	.51	5.97
Behavioral Control							

Acceptance							
Variable and Category	**Between Classes Effect (Q_B)**	**No. of Effect Sizes**	***N***	**Mean Weighted *r***	**Confidence Interval for weighted *r***		**Within Class (Q_W)**
					Lower	**Upper**	
Variable and Category	**Between Classes Effect (Q_B)**	**No. of Effect Sizes**	***N***	**Mean Weighted *r***	**Confidence Interval for weighted *r***		**Within Class (Q_W)**
					Lower	Upper	
Child Clinical Status							
Mother-Child	.15						
Non-clinical or mixed		29	1754	.23	.18	.27	67.61***
Clinical only		3	216	.26	.09	.43	.08
Father-Child	.12						
Non-clinical or mixed		10	754	.22	.12	.32	16.96*
Clinical only		3	88	.26	.06	.45	2.13
Race/Ethnicity							
Mother-Child	3.90*						
Not African-American/Hispanic		19	3317	.26	.20	.21	47.67***
African-American/Hispanic		5	1248	.15	.05	.24	4.69
Father-Child	--						
Not African-American/Hispanic		8	582	.25	.14	.35	12.35
African-American/Hispanic		0	--	--	--	--	--
Family Intactness							
Mother-Child	6.78*						
Intact		8	1145	.30	.23	.37	10.76
Non-intact		2	778	.16	.03	.28	3.71
Mixed		10	866	.19	.12	.26	11.02
Father-Child	.14						
Intact		6	429	.20	.04	.35	14.42*
Non-intact		0	--	--	--	--	--
Mixed		3	95	.14	−.14	.40	2.11
Psychological Control							

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Acceptance							
Variable and Category	Between Classes Effect (Q_B)	No. of Effect Sizes	*N*	Mean Weighted *r*	Confidence Interval for weighted *r*		Within Class (Q_W)
					Lower	Upper	
Child Clinical Status							
Mother-Child	.35						
Non-clinical or mixed		35	6426	.27	.23	.30	75.28***
Clinical only		4	330	.22	.08	.36	5.39
Father-Child	.10						
Non-clinical or mixed		20	3376	.25	.19	.31	53.43***
Clinical only		3	88	.21	−.05	.44	1.40
Race/Ethnicity							
Mother-Child	.18						
Not African-American/Hispanic		26	4989	.26	.22	.30	61.48***
African-American/Hispanic		3	998	.23	.11	.35	2.83
Father-Child	.74						
Not African-American/Hispanic		16	2741	.26	.19	.33	49.05***
African-American/Hispanic		1	463	.15	−.10	.38	0.00
Family Intactness							
Mother-Child	1.42						
Intact		13	3032	.27	.20	.33	29.65**
Non-intact		1	100	.42	.17	.62	0
Mixed		13	1620	.28	.23	.33	33.23***
Father-Child	.36						
Intact		12	2702	.25	.17	.33	41.52***
Non-intact		0	0	--	--	--	--
Mixed		5	374	.30	.16	.44	9.58*

Variable and Category	Between Classes Effect (Q_B)	No. of Effect Sizes	*N*	Mean Weighted *r*	Confidence Interval for *r*		Within Class (Q_W)
					Lower	Upper	

Q_B = Between group heterogeneity; Q_W = Within group heterogeneity

*$p < .05$;

**$p < .01$;

***$p < .001$

Table 5

Parent and Child Discrepancies (Hedges' *g*) in Rating Parenting

Parenting Construct *Dyad Type*	No. of Effect Sizes	*N* Children/Parents	Directional	Absolute
			Mean Weighted *g* (CI)	Mean Weighted *g* (CI)
Acceptance				
Mother	47	7747/7273	−.21** (−.34 to −.07)	.47*** (.36 to .58)
Father	23	4241/3459	−.25** (−.40 to −.09)	.36*** (.24 to .47)
Behavioral Control				
Mother	36	5495/5423	−.02 (−.19 to .14)	.43*** (.34 to .53)
Father	16	1694/1506	.14 (−.10 to .38)	.37*** (.21 to .52)
Psychological Control				
Mother	43	7918/7435	.54*** (.38 to .70)	.64*** (.50 to .78)
Father	22	4387/3546	.07 (−.06 to .21)	.28*** (.19 to .36)

CI = Confidence Interval

* $p < .05$;

** $p < .01$;

*** $p < .001$

Table 6

Meta-regression of mean age on Hedges' g effect sizes for mothers and father

Mothers								
Variable and Category	**Q_M**	**Q_R**	**Tau-squared**	**No. of Effect Sizes**	**Point Estimate**	**Confidence Interval for Point Estimate**		**Z**
						Lower	**Upper**	
Age								
Acceptance	8.42**	135.34***	.18	47				
Slope					−.074	−.124	−.024	−2.90**
Intercept					.671	−.048	1.30	2.11*
Behavioral Control	.36	44.36	.23	36				
Slope					−.019	−.080	.042	−.60
Intercept					.165	−.567	.896	.66
Psychological Control	9.33**	139.97***	.28	43				
Slope					−.088	−.144	−.031	−3.06**
Intercept					1.646	.935	2.357	4.54***
Fathers								
Variable and Category	**Q_M**	**Q_R**	**Tau-squared**	**No. of Effect Sizes**	**Point Estimate**	**Confidence Interval for Point Estimate**		**Z**
						Lower	Upper	
Age								
Acceptance	9.29**	70.94***	.15	23				
Slope					−.085	−.139	−.030	−3.05**
Intercept					.743	−.016	1.47	2.00*
Behavioral Control	3.30	13.35	.38	16				
Slope					−.099	−.205	.008	−1.82
Intercept					1.42	.086	2.75	2.09*
Psychological Control	5.27*	27.57	.06	22				
Slope					−.042	−.078	−.006	−2.30*
Intercept					.613	.147	1.078	2.58**

Q_M = Model Sum of Squares; Q_R = Residual Sum of Squares

+ $p < .10$;

* $p < .05$;

** $p < .01$;

*** $p < .001$

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Table 7

Tests of categorical models for Hedges' g effect sizes: Mothers

Variable and Category	Between Classes Effect (Q_B)	No. of Effect Sizes	*N* Child/Parent	Mean Weighted *g*	Confidence Interval for Weighted *g*		Within Class (Q_W)
					Lower	Upper	
Child Clinical Status							
Acceptance	2.09						
Non-clinical or mixed		44	8842/8242	−.22**	−.36	−.07	550.16***
Clinical only		9	577/534	−.49**	−.83	−.15	364.24***
Behavioral Control	.79						
Non-clinical or mixed		33	4363/4296	−.01	−.18	.16	590.46***
Clinical only		5	262/247	−.25	−.74	.24	8.87
Psychological Control	.85						
Non-clinical or mixed		40	8187/7672	.53***	.36	.70	829.67***
Clinical only		9	584/541	.73***	.35	1.10	231.62***
Race/Ethnicity							
Acceptance	2.76						
Not African-American/Hispanic		37	6920/6348	−.25**	−.40	−.09	559.65***
African-American/Hispanic		10	2144/2144	−.04	−.26	.33	279.58***
Behavioral Control	.33						
Not African-American/Hispanic		24	3429/3350	.02	−.19	.23	511.87***
African-American/Hispanic		11	1810/1808	−.09	−.40	.22	88.08***
Psychological Control	.66						
Not African-American/Hispanic		36	7286/6799	.61***	.43	.79	948.03***
African-American/Hispanic		8	1459/1458	.43*	.02	.83	77.94***
Family Intactness							
Acceptance	2.37						
Intact		14	3004/2469	−.18	−.42	.05	153.07***
Non-intact		6	1030/1030	−.43*	−.81	−.04	11.36*
Mixed		14	2041/2021	−.07	−.31	.17	283.51***

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Variable and Category	Between Classes Effect (Q_B)	No. of Effect Sizes	*N* Child/Parent	Mean Weighted *g*	Confidence Interval for Weighted *g*		Within Class (Q_W)
					Lower	Upper	
Behavioral Control	5.18						
Intact		9	915/870	.15	−.14	.44	98.72***
Non-intact		5	810/810	−.41	−.83	−.01	2.86
Mixed		13	1480/1454	.10	−.14	.35	128.11***
Psychological Control	2.06						
Intact		16	3450/2995	.61***	.33	.90	545.50***
Non-intact		5	242/242	.24	−.33	.81	26.87***
Mixed		11	1456/1448	.35*	.01	.70	76.08***

Q_B = Between group heterogeneity; Q_W = Within group heterogeneity

+ p < .10;

* *p* < .05;

** *p* < .01;

*** *p* < .001

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Table 8

Tests of categorical models for Hedges' g effect sizes: Fathers

Variable and Category	Between Classes Effect (Q_B)	No. of Effect Sizes	Child/Parent *N*	Mean Weighted *g*	Confidence Interval for weighted g		Within Class (Q_W)
					Lower	Upper	
Child Clinical Status							
Acceptance	2.86						
Non-clinical or mixed		22	4103/3350	−.22**	−.38	−.06	221.68***
Clinical only		3	138/58	−.70*	−1.23	−.17	7.84*
Behavioral Control	1.86						
Non-clinical or mixed		15	1526/1427	.20	−.05	.44	150.43***
Clinical only		3	138/49	−.26	−.88	.35	1.51
Psychological Control	.79						
Non-clinical or mixed		21	4180/3468	.06	−.08	.19	170.36***
Clinical only		3	138/49	.28	−.19	.75	.78
Race/Ethnicity							
Acceptance	2.05						
Not African-American/ Hispanic		17	3336/2514	−.29***	−.45	−.13	142.30***
African-American/Hispanic		2	578/578	.06	−.39	.52	5.13*
Behavioral Control	.26						
Not African-American/Hispanic		12	1348/1180	.25*	.01	.48	87.27***
African-American/Hispanic		1	90/90	.03	−.78	.83	.00
Psychological Control	.17						
Not African-American/Hispanic		18	3668/2847	.09	−.07	.25	158.90***
African-American/Hispanic		1	463/463	−.05	−.68	.59	.00
Family Intactness							
Acceptance	.10						
Intact		15	3210/2603	−.22*	−.42	−.02	207.92**
Non-intact		0	--	--	--	--	--
Mixed		5	595/437	−.28	−.64	.07	5.41

Variable and Category	Between Classes Effect (Q_B)	No. of Effect Sizes	Child/Parent *N*	Mean Weighted *g*	Confidence Interval for weighted g		Within Class (Q_W)
					Lower	Upper	
Behavioral Control	.20						
Intact		9	811/757	.36***	.25	.46	78.68***
Non-intact		0	--	--	--	--	--
Mixed		3	180/123	.07	−.16	.30	3.11
Psychological Control	5.71*						
Intact		15	3542/2933	.03	−.10	.16	86.73***
Non-intact		0	--	--	--	--	--
Mixed		3	340/225	.46**	.13	.78	7.22*

Q_B = Between group heterogeneity; Q_W = Within group heterogeneity

+ $p < .10$

* $p < .05$

** $p < .01$

*** $p < .001$

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