

# Validation of a New Self-Report Measure of Parental Attributions

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Attributional theory and empirical evidence suggest that a tendency to make stable, global self-causal attributions for undesirable events is associated with negative outcomes. However, existing self-report measures of parental attributions do not account for the possibility that dysfunctional parent-causal attributions for child misbehavior might be important predictors of poor family functioning. To address these concerns, the authors developed and tested a new measure of both parent-causal and child-responsible attributions for child misbehavior in a sample of 453 community couples. Structural validity, convergent validity, discriminant validity, internal consistency, and temporal stability of the new measure were examined. As expected, confirmatory factor analysis resulted in 2 factors, Child-Responsible (9 items) and Parent-Causal (7 items); the final model was cross-validated in a holdout sample. The final scale demonstrated adequate internal consistency ( $\alpha$ s = .81–.90), test-retest reliability ( $r$ s = .55–.76), and convergent and discriminant validity. Dysfunctional parent-causal and child-responsible attributions significantly predicted parental emotional problems, ineffective discipline, parent-child physical aggression, and low parenting satisfaction. Associations with parent-child aggression and parenting satisfaction were generally larger than with partner aggression and relationship satisfaction.

**Keywords:** attributions, parenting, mothers, fathers, measurement

Over the past 30 years, a sizeable body of research has accumulated examining parents' commonsense causal explanations, or "attributions," for child behavior; much of this research has focused on explicating the correlates and consequences of relatively stable differences in individual parents' explanatory processes—their "attributional styles" (Bugental, Johnston, New, & Silvester, 1998). Parents' attributional styles have been linked to a host of family functioning variables (see Bugental & Johnston, 2000; Miller, 1995, for reviews). Dysfunctional styles have been identified, for example, that are associated with child behavior problems (e.g., Johnston, Chen, & Ohan, 2006; Nix et al., 1999); discipline strategies that are authoritarian, harsh, or coercive (e.g., Smith & O'Leary, 1995; Wilson, Gardner, Burton, & Leung, 2007); lax or permissive discipline (e.g., Leung & Slep, 2006); and physical child abuse (e.g., Bugental & Happaney, 2004). Early research connecting parental attributions with family functioning was entirely cross-sectional and correlational in nature; however, a few

longitudinal studies (e.g., Nix et al., 1999; Snyder, Cramer, Afrank, & Patterson, 2005) and one true experiment (Slep & O'Leary, 1998) have since been conducted that suggest causal connections between parental attributional style, inept parenting, and child problem behavior. With mounting evidence that parental attributions may play a key role in problematic parenting and child behavior problems, intervention components targeting attributional style are being designed and added to parenting programs, although with mixed results to date (e.g., Bugental et al., 2002; Sanders et al., 2004; Wilson & White, 2006).

As parental attributional style continues to receive increased theoretical, empirical, and clinical attention, it becomes important to ensure that the ways in which parents' attributions are conceptualized and measured map onto relevant theories within the basic and applied attribution literature. In the current study, we examined the reliability and validity of a new self-report measure of parental attributions, one designed to reflect those attributional properties which attributional theory and empirical evidence would predict to be most important, namely child-responsible and parent-causal attributions.

## Attribution Theory: Causal and Responsibility Attributions

Roughly 50 years ago, Fritz Heider (1958) theorized that to better understand, predict, and respond to their environment, people tend to formulate naive causal explanations, or attributions, for the events that they perceive to occur. Heider held that attribution processes are not entirely random or idiosyncratic but, rather, are lawful and predictable. Regarding interpersonal attributions (i.e., attributions for another's behavior) in particular, he proposed that these are not based solely on the behavior itself; rather, "a person reacts to what he thinks the other person is perceiving, feeling, and

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thinking, in addition to what the other person may be doing" (p. 1). Heider's theory posited, furthermore, that an interpersonal attribution can be affected not only by perceived characteristics of the other person (e.g., whether or not the other intended a given event to occur) but by characteristics of the attributor (e.g., whether the attributor likes or dislikes the other person) and/or of the event itself (e.g., whether it benefits or harms the attributor).

In the decades since Heider's (1958) seminal theoretical work was published, literally thousands of scholarly works have explored the realm of attributions in a variety of directions. Many theorists and researchers (e.g., Jones & Davis, 1965; Kelley, 1967) have focused their efforts on the antecedents of attributions—that is, factors that lead to variation in attributional explanations. However, others have concerned themselves with the potential consequences of attributional variation (see Kelley & Michela, 1980). This latter track has largely consisted of attempts to specify the general dimensions along which attributions could be characterized and to identify those most predictive of desirable and/or undesirable consequences. The dimensions that have been identified can be broadly defined as indicative of *causality* or *responsibility*.

*Causal attributions* are explanations for the occurrence of an event (Bradbury & Fincham, 1990). One of the most influential theories involving causal attributions is Abramson, Seligman, and Teasdale's (1978) attributional analysis of learned helplessness. Abramson et al. (1978) were interested in the effects of self-directed causal attributions for negative life events and identified the dimensions of locus (internal–external), stability (stable–unstable), and globality (global–specific) as critically important. Specifically, they posited that those individuals whose self-causal attributions for negative events tend to be internal, stable, and global are likely to experience reduced self-esteem, helplessness, and ultimately, depression (Abramson et al., 1978; Seligman, Abramson, Semmel, & von Baeyer, 1979). Such associations between attributional style and depression have been well documented empirically (see Sweeney, Anderson, & Bailey, 1986).

*Responsibility attributions*, on the other hand, do not explain why an event occurred; rather, they concern an individual's *accountability* for having caused the event; relevant dimensions include voluntariness, intent, and the negativity or hostility of intent (Bradbury & Fincham, 1990; Shaver, 1985; Weiner, 1995). Responsibility attributions have been theorized to predict anger and, in turn, conflict and retaliatory actions (Weiner, 1995). It should be noted that a judgment of someone's intent presupposes that the individual has already been labeled a cause of the event; that is, an attribution of responsibility presupposes an attribution of cause, which ordering has been termed the "entailment" model (Bradbury & Fincham, 1990). Evidence from the marital attribution literature strongly supports the distinction between causal and responsibility attributions (e.g., Fincham & Bradbury, 1992); indeed, in a well-designed longitudinal study of marital attributions and conflict (Davey, Fincham, Beach, & Brody, 2001), it was found that (a) a two-factor model distinguishing causal (locus, stability, globality) from responsibility (intentionality, selfish vs. unselfish motivation, blame) attributions provided a significantly better fit to the data than a single-factor model, and (b) responsibility attributions fully mediated the association between causal attributions and conflict, suggesting that when considering one's

partner, attributions of responsibility may be more important than attributions of cause.

## Measurement of Parental Attributional Style

Among extant assessment instruments designed to measure parental attributional style, quite a bit of variety exists in terms of targeting causal and/or responsibility attributions (for reviews, see Bugental et al., 1998; Miller, 1995). Several measures (e.g., the Parental Style Attribution Questionnaire; Sobol, Ashbourne, Earn, & Cunningham, 1989) focus exclusively on child-causal attributions (e.g., internal vs. external to the child, stability, globality, and/or controllability), whereas others (e.g., the Parental Locus of Control Scale; Campis, Lyman, & Prentice-Dunn, 1986) assess parents' sense of their own abilities to control or affect their children's behavior. Uniquely, Bugental's Parent Attribution Test (Bugental, 2004; Bugental, Blue, & Cruzcosa, 1989) conceptualizes attributional style as a dyadic construct—that is, the relative amount of control over the negative event that is attributed to the child, versus the amount of control attributed to the self. Still other measures (e.g., the Mother–Adolescent Attribution Questionnaire; Grace, Kelley, & McCain, 1993) include both child-causal and child-responsible (e.g., intentionality, selfish vs. unselfish motivation, blameworthiness vs. praiseworthiness) dimensions but do not distinguish between them. Perhaps because of the above-mentioned developments in the marital attribution literature, many recent measures, including the Parenting Possibilities Questionnaire (Nix et al., 1999), the Parent's Attributions for Child's Behavior Measure (Sanders et al., 2004), and Snyder et al.'s (2005) structured interview for Parent Social Information Processing, assess only child-responsible attributions.

In the theoretical entailment model proposed by Bradbury and Fincham (1990), causal and responsibility attributions are distinct, and responsibility attributions presuppose that an attribution of cause has already occurred. Although the entailment model was initially outlined within the marital attribution context, its logic applies equally well to parental attributions. Furthermore, the association between (a) child-centered responsibility attributions that are higher in voluntariness and negative intent and (b) family dysfunction (e.g., harsh, overreactive parenting practices) is one of the most robust findings in the parental attribution literature (e.g., Dix, Ruble, Grusec, & Nixon, 1986; Nix et al., 1999; Slep & O'Leary, 1998; Snyder et al., 2005). In terms of the child locus, therefore, the recent shift in the parental attribution field away from causal and toward considering the dysfunctionality of responsibility attributions appears theoretically sound.

However, this does not mean that causal dimensions (e.g., stability, globality) of all attributions are irrelevant in the parent–child context. Rather, it is quite reasonable to expect that (a) parents sometimes attribute child misbehavior to the parents' own characteristics and/or behavior, and (b) certain properties of *self-causal* parental attributions are relevant to parental functioning. Specifically, as discussed above, the reformulated theory of learned helplessness posits that individuals whose self-causal attributions for negative events are dysfunctional (i.e., stable and global) are more likely to experience depression (Abramson et al., 1978; Seligman, Abramson, Semmel, & von Baeyer, 1979). Such associations between attributional style and depression have been well supported empirically (see Sweeney, Anderson, & Bailey,

1986). Maternal depression, in turn, has well-established links with reduced levels of family functioning (see Burke, 2003; Goodman & Gotlib, 1999), including increased maternal anger, irritability, and use of inept discipline strategies (Gelfand & Teti, 1990; Leung & Slep, 2006; Lovejoy, Graczyk, O'Hare, & Neuman, 2000; Shay & Knutson, 2008). Furthermore, there is some evidence that parents' dysfunctional self-causal attributions for child misbehavior may contribute to these associations (e.g., Donovan & Leavitt, 1989; Donovan, Leavitt, & Walsh, 1990; White & Barrowclough, 1998). Some attributional coding systems now include parent-causal attributions (e.g., Slep, 1997; Snarr, 2009); however, the vast preponderance of research on parental attributional style uses self-report questionnaires (Bugental et al., 1998), and extant self-report measures were not designed to tap the stability and globality of parent-locus attributions and, thus, appear insufficient to fully test their potential predictive power. Locus-of-control measures (e.g., Bugental, 2004; Campis et al., 1986; Koeske & Koeske, 1992) assess only controllability, not stability or globality, and the only existing self-report measure that assesses the internality, stability, and globality of parent-locus causes (Donovan & Leavitt, 1989) was developed and is only appropriate for use with parents of infants. Furthermore, none of these also measure child-responsibility attributions.

### Overview of the Present Study

The purpose of this study was to develop and evaluate the reliability and validity of a new self-report measure designed to assess the degree of dysfunction in parental attributional style in terms of both child-responsible and parent-causal attributions for their own children's misbehavior. The goal was to capture a broader range of attributional qualities than included in any existing measure, using items reflecting those attributional properties that attributional theory and past empirical evidence would predict to be most important. Furthermore, as relatively little is known about fathers' attributions or the measurement thereof, we considered it important for our sample to consist of both mothers and fathers. Specifically, items assessed for (a) attributions to stable, global parental traits (i.e., hypothetically dysfunctional parent-causal attributions), as well as (b) attributions to willful and/or hostile intent on the part of the target child (i.e., hypothetically dysfunctional child-responsible attributions). Other types of parental attributions were not assessed in the current study.

We first examined the structure of the scale; given its theoretical derivations, we expected a consistent two-factor structure. However, it should be noted that although child-responsible and parent-causal attributions are theoretically distinct, they are not mutually exclusive. It has been consistently found that harsh and lax parenting practices demonstrate moderate-to-strong, positive correlations (e.g., Arnold, O'Leary, Wolff, & Acker, 1993; Rhoades & O'Leary, 2007; Smith & O'Leary, 1995); similarly, we allowed and expected the child-responsible and parent-causal factors of the new measure to correlate. Using the supported factor structure, we then examined reliability (via internal consistency and temporal stability) and validity.

We had several specific validity hypotheses, as follow:

1. Parental attributions should be distinct from other parenting-related cognitions (e.g., overly rigid expecta-

tions for child behavior, attitudes toward parent-child aggression).

2. Depressive symptoms and anger should positively relate to dysfunctional parental attributions.
3. Dysfunctional attributions should be positively associated with child behavior problems and negatively associated with satisfaction with the parent-child relationship.
4. Dysfunctional attributions should predict problematic discipline styles (i.e., overreactive and lax parenting, as well as parent-child aggression).

In addition, it was critical to evaluate the degree of overlap between attributions for undesirable child behavior (as assessed by the new measure) and attributions for undesirable partner behavior. There is considerable overlap in risk factors for negative outcomes in the parenting and partner relationship domains (Slep & O'Leary, 2001), and parents tend to make similar attributions for marital and child events (Fincham & Grych, 1991). To test whether the new measure was assessing an attributional style specific to the parent-child relationship, rather than a general style used to explain the behavior of family members, we compared the performance of parental versus partner attributions in predicting relationship satisfaction and aggression within each domain. It was hypothesized that parental attributions would be more strongly associated with parent-child than with partner relationship outcomes, and vice versa.

### Method

#### Participants

Participants in the present study were 453 couples recruited for a larger study of family conflict and coping (see O'Leary, Slep, & O'Leary, 2007; Slep & O'Leary, 2007). For purposes of generalizability, participants were recruited from within Suffolk County, New York, by means of random digit dialing. Eligibility required that a couple (a) be either married or cohabiting, (b) have coparented a 3- to 7-year-old biological child of at least one couple member for at least the past year, and (c) be able to participate in English. More than 229,000 telephone calls were made, resulting in the identification of almost 2,000 eligible families. The final sample was reasonably representative of the local population, as evidenced by comparisons of the sample to recent U. S. Census Data for Suffolk County, as well as to recruited families who were eligible to participate but did not do so ( $N = 1,362$ ; for more details, see Slep, Heyman, Williams, Van Dyke, & O'Leary, 2006). In the final sample, 94.5% of couples had been married for an average of 9.6 years ( $SD = 4.4$ ), the median family income was \$74,500 ( $SD = \$43,099$ ), and the mean age of target children (48.1% male) was 5.44 years ( $SD = 1.47$ ). On average, mothers were 35.1 years old ( $SD = 5.0$ ) and had 14.3 years of education ( $SD = 2.3$ ), whereas fathers were 37.3 years old ( $SD = 6.0$ ) and had 14.2 years of education ( $SD = 2.3$ ). Ethnic representation in the sample was as follows: White (non-Hispanic), 80.6%; Hispanic, 8.6%; Black, 6.2%; Asian, 2.0%; other, 2.5%. Roughly 18% ( $n = 75$  mothers, 86 fathers) of participants placed their target child in at least the borderline clinical range ( $t$  score  $\geq 60$ ) on the Externalizing Behavior Problems scale of the Child Behavior



Checklist (Achenbach, 1991). Also, almost 13% ( $n = 58$ ) of the families in this sample reported at least one act of severe parent-child aggression in the past year (see Slep & O'Leary, 2005, for details).

One mother and one father did not complete the measure being developed and were omitted from current analyses. Two mothers and six fathers each provided the exact same response (e.g., "occasionally true") for all 30 items (including the distractor items); their responses were considered invalid, and they were likewise omitted. Among the remaining participants, there were few missing data. For mothers, there were two missing values on family income and one missing value each on education level, Beck Depression Inventory score, and Rigidity. For fathers, there were three missing values on Beck Depression Inventory score, two on family income, and one on years of education.

### Procedure

The study protocol was approved by the university Institutional Review Board. Couples received \$250 for coming to the laboratory for two 3-hr sessions. After providing informed consent, couples engaged in a variety of activities, including separation into private rooms to complete an extensive questionnaire battery. Procedures were established and followed that rendered all data anonymous following participation. As part of a secondary study, a representative subset of participants ( $n = 45$  mothers and 46 fathers) returned to the laboratory after an average of 5.6 months; test-retest data for new measures were collected during this additional assessment. Families received \$50 for participating in the follow-up assessment.

### Measures

*Child-responsible and parent-causal attributions.* The Parent Cognition Scale (see Appendix) is a 30-item self-report measure designed to assess the degree to which parents endorse dysfunctional child-responsible and parent-causal attributions for child misbehavior. Respondents are asked to think about a target child's misbehavior over the past 2 months and to rate various possible causes for their child's misbehavior on a 6-point Likert scale that ranges from 1 (*always true*) to 6 (*never true*); when scoring, each item is reverse scored so that higher scores indicate greater endorsement. All items were taken from actual parent attributions recorded during the course of a previous study (Slep & O'Leary, 1998). Slep and O'Leary (1998) had mothers of toddler and preschool aged children interact with their children in a standard lab assessment designed to elicit child misbehavior and potentially problematic discipline. After the interaction, mothers watched video-recorded playbacks of two episodes of their children's misbehavior. Mothers' attributions were assessed with a thought-listing procedure and a direct probe asking why the child misbehaved or what caused the misbehavior. Mothers' written responses were coded by trained coders for (a) whether they were attributions; (b) locus (i.e., child, mother, or neither); and (c) stability, globality, voluntariness, intent, and negativity of intent on 6-point scales. Items for the Parent Cognition Scale were selected from actual attributions that mothers offered that were coded as having a locus in the parent and being high on stability and globality or having a locus in the child and being high on voluntariness, intent,

and negativity of intent. Ten items attributed child misbehavior to factors under the child's control, child willful intent to misbehave, and/or child desire to have a negative effect on the parent (e.g., "My child is headstrong," "My child tries to get my goat or push my buttons"). An additional 10 items attributed the child's misbehavior to stable, global, trait-like characteristics of the respondent (e.g., "I'm not patient," "I can't control my child"). The remaining 10 items, not used in scoring, attributed the child's misbehavior to uncontrollable and/or unintentional child-focused factors (e.g., "My child is in a stage"), or to unstable, specific, and situational parent factors (e.g., "I was tired at the time"). These items were intended as distractor items to help lessen possible response sets.

*Depressive symptoms.* The Beck Depression Inventory (2nd ed.; Beck, Steer, & Brown, 1996) is a 21-item self-report measure that assesses the existence and severity of depressive symptoms as listed in the *Diagnostic and Statistical Manual of Mental Disorders* (4th Edition; *DSM-IV*; American Psychiatric Association, 1994). For the current sample, Cronbach's alphas for mothers and fathers were .91 and .86, respectively.

*Anger expression.* The State-Trait Anger Expression Inventory (Spielberger, 1988) was designed to measure two fundamental aspects of anger: anger experience and anger expression. It is widely used and has been well validated (see Eckhardt, Norlander, & Deffenbacher, 2004). The three eight-item subscales relevant to anger expression are Anger-In (AX/In; measures the frequency with which the respondent holds in or suppresses anger), Anger-Out (AX/Out; measures the frequency with which the respondent expresses anger), and Anger Control (AX/Con; measures the degree to which the respondent attempts to control his or her expression of anger). The test-retest stability of these subscales ranges from .64 to .86 (Jacobs, Latham, & Brown, 1988); internal consistency coefficients for mothers and fathers in the current sample were, respectively, .65 and .72 for AX/In, .66 and .72 for AX/Out, and .84 and .82 for AX/Con. For current purposes, the overall Anger Expression Index (AX) was computed ( $AX = AX/In + AX/Out - AX/Con + 16$ ).

*Child externalizing behavior.* The Child Behavior Checklist (Achenbach, 1991) is a widely used and well-validated parent-report measure that assesses child psychological difficulties and behavior problems over the past 6 months. Different forms of the measure are used with different age ranges. Only the broadband Externalizing Problems scale was used in the present study; because of the relatively wide age range targeted in our sample, we scaled raw scores to age- and gender-based peer norms. The scale had excellent reliability for mothers ( $\alpha = .94$  for those with 3-year-olds and .91 for those with 4- to 7-year-olds) and fathers ( $\alpha = .95$  for those with 3-year-olds and .91 for those with 4- to 7-year-olds).

*Overreactivity and laxness.* The Parenting Scale (Arnold et al., 1993) is a 30-item self-report measure of parental discipline strategies. For the current study, we used two Parenting Scale factor scores, Overreactivity and Laxness, which have been described and validated in multiple recent studies (Reitman et al., 2001; Rhoades & O'Leary, 2007). High scores on the five Overreactivity items reflect negative or angry emotional reactions to the child, whereas high scores on the five Laxness items reflect lax or permissive parenting. In the current sample, Cronbach's alphas for Overreactivity and Laxness were, respectively, .67 and .74 for mothers and .66 and .69 for fathers. Although likely due to the

short scale lengths (Spearman-Brown-corrected alphas specifying 10-item factors ranged from .80 to .85), these moderate internal consistencies may have attenuated any associations found between these variables and other variables of interest (Schmitt, 1996).

**Parent-child physical aggression.** The Parent-Child Conflict Tactics Scale (Straus, Hamby, Finkelhor, Moore, & Runyan, 1998) is a widely used 22-item self-report inventory that assesses the frequency of parental conflict resolution and discipline behaviors in the past 12 months. Only the Physical Aggression scale was used in the current study; it consists of 13 items that reflect corporal punishment (e.g., "spanked on bottom with bare hand") as well as severe physical aggression (e.g., "burned or scalded on purpose"). We scored the scale by averaging the ordinal (0–6) scores from the relevant items (Straus, 1990). As expected given the low frequencies of several items that are part of the scale (e.g., having burned a child on purpose does not necessarily predict that a parent will also have choked the child), internal consistency was relatively low (Cronbach's alpha for Physical Aggression was, respectively, .57 for mothers, and .58 for fathers); these statistics are comparable to those reported by the scale's authors (Straus et al., 1998).

**Rigidity.** The Child Abuse Potential Inventory (Milner & Wimberley, 1980) is a 160-item self-report measure designed to differentiate parents who abuse children from parents who do not. The Rigidity subscale, which was used in the current study, assesses parents' overly inflexible expectations about how their children should behave. For the current study, the response format was changed from ratings of *true* or *false* to a 5-point Likert scale that ranged from 1 (*strongly agree*) to 5 (*strongly disagree*) to capture a range of parents' variability on rigid expectations. Items were reverse-scored so that higher scores indicated more rigid parental expectations. For the current sample, Cronbach's alphas for mothers and fathers were .84 and .83, respectively.

**Parenting satisfaction.** The Satisfaction with the Parent-Child Relationship factor of the Parenting Satisfaction Scale (Guidubaldi & Clemenishaw, 1985, 1989) contains 15 items. For the current study, we modified all items to refer to the target child only, rather than all children in the family. The scale had adequate internal consistency in the present sample ( $\alpha = .82$  for mothers, .81 for fathers), and scores were negatively associated with parent aggression toward the reference child (Slep & O'Leary, 2007).

**Attitudes toward parent-child physical aggression.** This 12-item measure assesses parents' attitudes about acts of physical aggression toward children. For each of six acts of aggression (such as spanking or slapping), the scale asks whether the respondent believes that the act is justified and whether the act will solve the problem. Cronbach's alphas for mothers and fathers were .79 and .80, respectively.

**Partner-responsible and parent-causal attributions.** The Partner Cognition Scale (Snarr & Slep, 2009) is a self-report measure that was derived from the Parent Cognition Scale and is designed to assess the degree to which the respondent endorses dysfunctional attributions for undesirable behavior on the part of the respondent's romantic partner (e.g., "disagree with me," "lose his/her temper," "start an argument"). We adapted the items for the Partner Cognition Scale directly from the Parent Cognition Scale to facilitate comparisons between these measures; we altered or changed items only to the extent necessary to make them appropriate for partner relationships. This measure comprises two factors, Partner-Responsible (eight items) and Self-Causal (nine

items); Partner-Responsible items attribute undesirable partner behavior to factors under the partner's control, partner willful intent to be unpleasant, and/or partner desire to have a negative effect on the respondent, whereas the Self-Causal items attribute negative partner behavior to stable, global, trait-like characteristics of the respondent (e.g., "I'm unable to be a good husband/wife"). Factor analyses support the intended structure, scale reliability is acceptable (Snarr & Slep, 2009), and scores significantly associate with relevant outcome variables (e.g., relationship satisfaction, partner aggression; O'Leary et al., 2007; Snarr & Slep, 2009). In the current sample, Cronbach's alphas for mothers and fathers were, respectively, .91 and .92 on Partner-Responsible and .87 and .88 on Self-Causal.

**Partner physical aggression.** Physical aggression toward one's partner was assessed using the Physical Aggression scale of the revised Conflict Tactics Scales (Straus, Hamby, Boney-McCoy, & Sugarman, 1996), a widely used measure with excellent psychometric properties. The Physical Aggression scale comprises 12 items reflecting acts that range from mild (e.g., "twisted your partner's arm or hair") to severe (e.g., "used a knife or gun on your partner"); the score is computed by averaging the ordinal (0–6) item scores (Straus, 1990). Cronbach's alphas in the current sample were .77 for mothers and .80 for fathers.

**Relationship satisfaction.** Relationship satisfaction was measured with the 32-item Dyadic Adjustment Scale (Spanier, 1976); higher scores signify more satisfaction with the respondent's marital or other romantic relationship. The internal consistency of this scale was high in the present sample ( $\alpha = .94$  for mothers, .93 for fathers).

## Results

Our first analytic objective was to determine the underlying factor structure of the Parent Cognition Scale. We began by randomly dividing the sample into a development subsample and a cross-validation subsample, with 226 couples in each. The two subsamples were then compared, separately by gender, on all demographic variables and other variables of interest; these *t* tests revealed no significant differences. The factor structure was determined by first applying confirmatory factor analytic techniques to the development sample, then testing the final model on the independent cross-validation sample. This multistep approach allowed model respecification to occur without concerns that such would result in a sample-specific model that would fail to replicate (see Cudeck & Browne, 1983; MacCallum, Roznowski, & Necowitz, 1992). In addition, we repeated the multigroup analyses of the final model 10,000 times to ensure that the random splits resulted in reliable solutions. Because of the nonindependence of couple data (i.e., both parents were reporting on the same target child; see Kenny, 1995), we performed separate analyses for each gender, with measurement invariance then tested across genders. All factor analyses were conducted using Mplus Version 5.0 (L. K. Muthén & Muthén, 1998–2007a).

### Confirmatory Factor Analyses

To examine the hypothesized factor structure, we conducted confirmatory factor analyses using the development sample data. Because of the asymmetric, ordered-categorical nature of the items, we used robust mean- and variance-adjusted weighted least

square (WLSMV) parameter estimation to compute and analyze the polychoric correlation matrix, as recommended by B. O. Muthén, du Toit, and Spisic (1997). Per the results of the only extant simulation study (Yu, 2002) of fit index performance and cutoffs for models involving WLSMV estimation and ordered-categorical outcomes, we used the Comparative Fit Index (CFI) to assess model fit. Given the current sample size, a conservative minimum CFI of .96 was necessary for a model to be considered a good fit. In all analyses, factors were free to correlate, but each item was constrained to load on a single factor. Factor variances were fixed at one, and factor loadings were not constrained.

The initial two-factor model in which the 10 Child-Responsible items loaded on one factor and the 10 Parent-Causal items loaded on the other factor was not a good fit for mothers,  $\chi^2(45, N = 225) = 290.98, p < .001$ , CFI = .88, or for fathers,  $\chi^2(49, N = 223) = 260.70, p < .001$ , CFI = .89. Inspection of the resulting factor loadings and modification indices suggested that one Child-Responsible item and three Parent-Causal items were performing poorly, in that they (a) were not loading highly on the intended factor, (b) were cross-loading on the wrong factor, and/or (c) had persistent, sizable residual covariances with items from the other factor. These items were therefore dropped from consideration for both genders, leaving 16 items for analysis. The modification indices also suggested that allowing specific pairs of item residuals to freely correlate would substantially improve model fit. From those recommended, we selected only those few item pairs (see Table 1) that seemed likely to have meaningful, reliable residual relationships, in that (a) the items in a given pair were loading on the same factor (i.e., no cross-factor residual correlations were allowed) and (b) there was noticeable similarity in item content. The modified model demonstrated good fit for both mothers,  $\chi^2(30, N = 225) = 69.73, p < .001$ , CFI = .98, and fathers,  $\chi^2(38, N = 223) = 89.46, p < .001$ , CFI = .97, and was tested with the cross-validation sample. (Note that the same model was tested for

both mothers and fathers; the degrees of freedom differed between genders only because we were using WLSMV estimation, which estimates the chi-square statistic and degrees of freedom, rather than calculating them in the normal way; see B. O. Muthén, 1998–2004.)

### Multigroup Analyses

The final CFA model was then compared across the development and cross-validation samples, within gender, via multigroup CFA. We first tested a configural invariance model, in which items were constrained to load on the same factors across groups, but all item thresholds and factor loadings were free to vary across groups; for the models to be identified, we fixed all item scale factors to one and all factor means to zero in both groups (L. K. Muthén & Muthén, 1998–2007b). The configural invariance model resulted in a good fit to the data for mothers,  $\chi^2(67, N = 225 \text{ development, } 225 \text{ validation}) = 217.56, p < .001$ , CFI = .96, and for fathers,  $\chi^2(73, N = 223 \text{ development, } 223 \text{ validation}) = 197.19, p < .001$ , CFI = .96. This demonstrated that the basic factor structure fit the data in both groups. The configural invariance model was then compared, using the Mplus DIFFTEST command (Asparouhov & Muthén, 2006), to a strong invariance model, which contained cross-group equality constraints on all factor loadings and item thresholds, as well as on the covariance between the two factors. As required by the model, scale factors were fixed to one in one group and free in the other, and factor means were fixed to zero in one group and free in the other (L. K. Muthén, 2004; L. K. Muthén & Muthén, 1998–2007b). The strong invariance model was not significantly different from the configural invariance model for mothers,  $\Delta\chi^2(21) = 18.44, ns$ , or for fathers,  $\Delta\chi^2(25) = 29.07, p > .05$ . This indicated that the imposed equality constraints did not significantly worsen the model, thus cross-validating the two-factor model in the validation sample.

Table 1  
Final Confirmatory Factor Analysis Results for the Parent Cognition Scale

Item	Mothers			Fathers		
	Loading	SE	Wald statistic	Loading	SE	Wald statistic
Factor 1: Child-Responsible Attributions						
2. My child won't listen.	.73	.03	21.54	.68	.04	18.73
5. My child thinks that he/she is the boss. <sup>a</sup>	.72	.03	22.18	.79	.03	26.12
8. My child is headstrong. <sup>a</sup>	.62	.04	16.94	.55	.04	13.97
11. My child wants what he/she wants when he/she wants it. <sup>a</sup>	.62	.03	19.24	.72	.03	21.36
14. My child purposely tries to get me angry. <sup>b</sup>	.75	.03	21.96	.76	.04	20.90
17. My child tries to get my goat or push my buttons. <sup>b</sup>	.77	.03	26.90	.77	.03	26.14
18. My child wants things his/her way. <sup>a</sup>	.67	.03	21.19	.71	.03	21.77
23. My child is very demanding. <sup>a,c</sup>	.73	.03	24.68	.69	.03	21.91
25. My child likes to see how far he/she can push me. <sup>b,c</sup>	.76	.03	23.71	.74	.03	21.44
Factor 2: Parent-Causal Attributions						
3. I'm not structured enough with my child. <sup>d</sup>	.67	.04	16.70	.74	.03	21.65
7. I don't give my child enough attention. <sup>c</sup>	.47	.04	10.95	.63	.04	16.26
9. It's hard for me to set limits. <sup>d</sup>	.71	.04	16.62	.74	.03	22.84
13. I handle my child in a non-confident way. <sup>f</sup>	.73	.04	21.10	.80	.04	22.49
16. I'm not patient. <sup>e,f</sup>	.53	.04	12.45	.78	.03	27.55
22. I'm not able to be clear.	.82	.03	24.71	.79	.04	22.74
27. I don't do the right thing.	.66	.04	19.01	.78	.03	25.48

Note. The residual variances of items that share a superscript were allowed to correlate in the final confirmatory factor analysis models.

To confirm whether the random split into development versus validation subsamples was representative of the data, we repeated the final multigroup analyses 10,000 times using different random splits. To do so, we used SPSS 16.0 to generate the random splits and Mplus 5.0 to (a) analyze the strong invariance model in all 10,000 datasets and (b) compute the mean model fit across all the analyses. The results indicated that the model was invariant across groups and was a good fit for mothers (mean CFI = .98) and for fathers (mean CFI = .98).

### *Cross-Gender Invariance Testing*

Finally, we tested for measurement invariance between mothers and fathers. To avoid potential concerns related to the nonindependence of couple data (Kenny, 1995), we analyzed the configural and strong invariance models (see above) across gender. The entire sample was included; to properly account for nonindependence within couples, we included couple number in the model as a clustering variable. When cross-group equality constraints were imposed as described above, the strong invariance model fit was significantly worse than that of the configural invariance model,  $\text{DIFFTEST } \Delta\chi^2(24) = 41.47, p < .05$ . This suggests that although the same items load on the Parent-Causal and Child-Responsible factors for both mothers and fathers, the items' factor loadings differ by parent gender. Standardized factor loadings, standard errors, and Wald statistics from the final models for mothers and fathers are presented separately in Table 1. As expected, the two factors, although theoretically distinct, were significantly correlated for mothers ( $r = .56, N = 450, p < .001$ ) and fathers ( $r = .59, N = 446, p < .001$ ).

### *Internal Consistency*

Internal consistencies were examined for the Child-Responsible and Parent-Causal factor scores (see Table 1 for a list of the items included in each factor). Cronbach's alphas were adequate for both genders (for mothers, Child-Responsible  $\alpha = .90$ , Parent-Causal  $\alpha = .81$ ; for fathers, Child-Responsible  $\alpha = .88$ , Parent-Causal  $\alpha = .85$ ). Polychoric interitem correlation tables are available from Jeffery D. Snarr upon request. The mean interitem correlations for mothers were .56 for the Child-Responsible items and .45 for the Parent-Causal items; fathers' mean interitem correlations were .51 for the Child-Responsible items and .53 for the Parent-Causal items. Therefore, on the basis of the guidelines recommended by Clark and Watson (1995), the Parent Cognition Scale demonstrated adequate internal consistency in the present sample.

### *Test-Retest Reliability*

As part of a secondary study, the Parent Cognition Scale was readministered to a representative subset of the original sample after an average of 5.6 months (range = 1.6–11.3 months). The retest participants did not significantly differ from the remaining members of the sample on demographic factors or any other variables examined in this study. The factor scores demonstrated good test-retest reliability for both mothers ( $n = 45$ ) and fathers ( $n = 46$ ). Specifically, the test-retest reliability (Pearson's  $r$ ) of the Child-Responsible factor was .68 for mothers and .76 for fathers, and the reliability of the Parent-Causal factor was .76 for mothers

and .55 for fathers; results did not differ for retest participants whose second administration of the measure was prior to or after the median of the relatively broad retest time frame (range of  $r = .45-.83$ , all  $p < .05$ ).

### *Associations With Demographic Variables*

Mean scores on the Child-Responsible and Parent-Causal factors, respectively, were 2.88 ( $SD = .98$ ) and 2.28 ( $SD = .72$ ) for mothers and 2.71 ( $SD = .87$ ) and 2.24 ( $SD = .74$ ) for fathers. Child-Responsible attributions were more frequently reported than Parent-Causal attributions by both mothers,  $t(449) = 15.56, p < .001$ , and fathers,  $t(445) = 13.41, p < .001$ . However, mothers tended to report significantly more Child-Responsible attributions than did fathers,  $t(443) = 3.61, p < .001$ . Associations between demographic variables (i.e., parent and child ages, family income, ethnicity, marital status, and years of parent education) and the factor scores were examined. For mothers, no significant association linked any demographic variable with the factor scores. However, for fathers, higher Child-Responsible scores had a small but significant negative association with the child's age ( $r = -.13, p < .01$ ), and higher Parent-Causal scores were positively correlated with paternal education level ( $r = .12, p < .01$ ). As a result, and to facilitate the interpretation of results for fathers and mothers, all subsequent analyses for both fathers and mothers controlled for child age and years of parent education. We did so by regressing the factor scores onto child age and parent education and using the resulting residuals as the variables of study.

### *Construct Validity*

Construct validity of a new measure is optimally assessed via the multitrait, multimethod matrix procedure (Campbell & Fiske, 1959), in which correlations for multiple constructs—each measured multiple ways (e.g., self-report, behavioral observation, other-report)—are examined. If theoretically related constructs are highly correlated, whereas theoretically unrelated constructs are not highly correlated, then convergent and discriminant validity, respectively, have been demonstrated. Although a true multitrait, multimethod matrix was not possible in the current case, as only self-report measures of each construct were included in the parent study, we were still able to investigate some aspects of both convergent and discriminant validity. After controlling for relevant demographic variables, we examined correlations between the Parent Cognition Scale and those variables hypothesized to be associated with dysfunctional parental attributions (see Table 2). Results were similar for mothers and fathers. As hypothesized, Child-Responsible and Parent-Causal attribution scores were associated with higher levels of parent-child aggression, overreactive discipline, and lax parenting; only the correlation between fathers' Child-Responsible attributions and laxness failed to reach significance ( $r = .05, p = .32$ ). Both factors were positively associated with child externalizing behavior problems and poor parent emotional functioning (i.e., anger expression and depressive symptoms) and negatively associated with parenting satisfaction. As hypothesized, parental attributions, as measured by the Parent Cognition Scale, were distinct from other parenting cognitions (i.e., rigid expectations and attitudes toward parent aggression).



Table 2  
Bivariate Correlations Between the Parent Cognition Scale and Other Variables

Variable	N	Mothers			N	Fathers		
		Child-Responsible factor	Parent-Causal factor	Z		Child-Responsible factor	Parent-Causal factor	Z
Depressive symptoms	448	.30***	.34***	-1.02	442	.24***	.34***	-2.43*
Anger expression	449	.30***	.45***	-3.79***	445	.24***	.40***	-3.82***
Child externalizing behavior	449	.58***	.39***	5.14***	445	.56***	.37***	5.09***
Overreactivity	449	.40***	.50***	-2.64***	445	.31***	.44***	-3.22***
Laxness	449	.24***	.35***	-2.61**	445	.05	.20***	-3.71***
Parent-child physical aggression	449	.27***	.27***	-.02	445	.25***	.24***	.15
Parenting satisfaction	449	-.47***	-.46***	-.12	445	-.30***	-.33***	.78
Rigidity	448	.02	-.04	1.42	445	.05	.04	.25
Attitudes toward parent-child physical aggression	449	-.08	-.12**	1.00	445	-.10*	-.07	-.67
Partner-Responsible attributions	449	.25***	.16***	2.01*	444	.42***	.40***	.68
Self-Causal attributions	449	.33***	.45***	-2.89**	444	.43***	.57***	-3.92***

Note. A significant Z (Meng, Rosenthal, & Rubin, 1992) indicates that the correlation with one Parent Cognition Scale factor is significantly stronger (two-tailed) than the corresponding correlation, within gender, with the other factor.

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

As correlations with the two factors were virtually all in the same direction, we used Meng, Rosenthal, and Rubin's (1992) Z test for differences between overlapping correlation coefficients to assess, within gender, for differential operation of the two factors. As shown in Table 2, for both genders, correlations between (a) the Parent-Causal factor and (b) anger expression, overreactivity, and laxness were significantly larger than the corresponding correlations with the Child-Responsible factor. Child externalizing behavior problems were more strongly associated with Child-Responsible attributions than with Parent-Causal attributions.

To test whether the Parent Cognition Scale was assessing an attributional style specific to the parent-child relationship, rather than a general style used to explain the behavior of family members, we compared the performance of parental versus partner attributions in predicting relationship satisfaction and aggression within each domain. As expected, Parent Cognition Scale and

Partner Cognition Scale factor scores were significantly correlated (see Table 2). These correlations were stronger for fathers than for mothers; for both genders, the strongest correlation was between Parent-Causal and Self-Causal attributions. Furthermore, as shown in Table 3, almost all zero-order correlations between the Parent Cognition Scale and Partner Cognition Scale factor scores and the aggression and relationship satisfaction variables from both relationship domains were statistically significant. The only exceptions were the associations between (a) mothers' Partner-Responsible attributions and both parent-child aggression and parenting satisfaction, and (b) fathers' Child-Responsible attributions and partner physical aggression. For mothers, as hypothesized, the Parent Cognition Scale and Partner Cognition Scale factors were more strongly correlated with corresponding variables from the same domain than the other domain (Meng et al., 1992). However, for fathers, this was not universally true; fathers' Partner

Table 3  
Discriminant Validity of the Parent Cognition Scale: Parenting Versus Partner Correlates

Variable	Child-Responsible	Partner-Responsible	Parent-Causal	Self-Causal
Mothers (N = 449)				
Parent-child physical aggression	.26***	.07	.27***	.11*
Partner physical aggression	.14**	.36***	.16**	.25***
Z	-2.25*	5.16***	-1.91*	2.43**
Parenting satisfaction	-.46***	-.07	-.46***	-.26***
Relationship satisfaction	-.17***	-.61***	-.20***	-.64***
Z	5.46***	-10.19***	4.82***	-7.70***
Fathers (N = 445)				
Physical parent-child aggression	.26***	.18***	.25***	.21**
Physical partner aggression	.03	.23***	.10**	.21***
Z	-3.79***	.97	-2.62**	.12
Parenting satisfaction	-.30***	-.11*	-.34***	-.17***
Relationship satisfaction	-.20***	-.62***	-.31***	-.63***
Z	1.83*	-9.58***	.48	-8.70***

Note. All Z tests (Meng, Rosenthal, & Rubin, 1992) are one-tailed.

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



Cognition Scale scores did not predict partner aggression significantly more strongly than parent-child aggression, and their Parent-Causal attributions predicted parenting and relationship satisfaction equally well.

### Discussion

The objective of the current study was to develop and test a new self-report measure of parental attributional style that would reflect a broader range of potentially dysfunctional attributional qualities than included in any existing measure, using items reflecting those properties that attributional theory would predict to be most important in relating to problematic parenting. Virtually all existing measures ignore the possibility that (a) parents may attribute child behavior to their own behaviors, traits, or characteristics and (b) some patterns of parent-causal attribution for child behavior are likely to be dysfunctional. The Parent Cognition Scale differs from other self-report measures of parental attributions in that it specifically assesses for both dysfunctional child-responsible and dysfunctional parent-causal attributions for the recent misbehavior of respondents' own children.

The Parent Cognition Scale factors appeared to be fairly strong psychometrically, demonstrating very good internal consistencies, good test-retest reliability over a fairly long follow-up period, and promising convergent validity. As hypothesized, scores were associated with several variables relevant to parental functioning. These included overreactive and lax discipline, parent-child aggression, child behavior problems, anger expression, depressive symptoms, and parenting satisfaction. Furthermore, the Parent Cognition Scale factors demonstrated good discriminant validity overall—particularly for mothers—by predicting parent-child aggression and parenting satisfaction more strongly than partner aggression or relationship satisfaction. All in all, the Parent Cognition Scale shows considerable promise as a new, brief measure of parental attributional style that may prove useful in investigating social-cognitive models of parent-child relationships.

The two types of parental cognitions measured by the new scale, namely dysfunctional Child-Responsible and Parent-Causal attributions, are theoretically distinct; they involve different loci (i.e., child vs. parent) and different attributional dimensions (i.e., intentionality and hostility vs. stability and globality). These distinct constructs are not, however, mutually exclusive. Parents may attribute different misbehaviors to different causes, and a given incident or type of child misbehavior can be attributed to multiple causes. In fact, we hypothesized that these two types of attributions would be positively correlated. Although dysfunctional child-responsibility attributions map onto anger-provoking attributions and dysfunctional parent-causal attributions map onto depression-related attributions, maternal anger and depression are related (e.g., Shay & Knutson, 2008), thus suggesting an association between these types of attributions. Furthermore, the two types of dysfunctional discipline to which these types of attributions are hypothesized to relate, lax and harsh discipline (Leung & Slep, 2006), are moderately positively related (e.g., Arnold et al., 1993; Rhoades & O'Leary, 2007). That said, however, the correlations that were obtained for both mothers and fathers were stronger than expected. Because parent-causal attributions have, to date, been largely ignored in the literature, it is unclear at this point whether this finding was due to truly strong associations between the two

underlying constructs, to some characteristic of the current sample, or to some aspect of the Parent Cognition Scale itself.

It would be premature, however, to argue that the current results suggest that there is no statistically or practically meaningful reason to distinguish between dysfunctional child-responsible and parent-causal attributions. In particular, the pattern of correlations shown in Table 2 suggests that although the two attribution types generally predict the same outcomes, dysfunctional child-responsible attributions are more strongly associated with child behavior, whereas dysfunctional parent-causal attributions are more strongly associated with parent behavior. Further differences in prediction patterns are probable but were not assessed in the current investigation. For example, it may be that relatively dysfunctional child-responsible attributions increase the likelihood that parents of behavior-problem children will seek professional help for their children. On the other hand, dysfunctional parent-causal attributions—because of their association with helplessness and hopelessness—may lead to a decreased likelihood that parents will engage in parent training interventions. Dysfunctional child-responsible and parent-causal attributions may also be (a) differentially predictive of therapeutic behavioral change or (b) more or less amenable to change themselves. In any event, further research with the scale is necessary to determine whether the distinction between the two types of attributions is meaningful enough to maintain.

It should also be noted that although parental attributions, as measured by the Parent Cognition Scale, were significantly associated with parental discipline strategies and other variables as hypothesized, the effect sizes were generally in the moderate range. These effects may have been attenuated by the moderate internal consistencies of several of the criterion variables (see Schmitt, 1996); however, dysfunctional parental attributions represent only one of many variables that predict poor parental functioning. In future studies, it will be particularly important to investigate the associations between (a) dysfunctional parent-causal and child-responsible attributions and (b) parent and child behavior (via observation of parent-child interactions) to gain a more thorough understanding of how such attributions may contribute to problematic exchanges.

A primary strength of this study was the use of a large, generally representative community sample, which increases the potential generalizability of the results to other community samples. As could be expected in a community sample, a majority of participating families were functioning relatively well; however, a wide range of functioning was represented. Nevertheless, it will be important to empirically evaluate the validity of the Parent Cognition Scale in clearly clinical samples. Furthermore, although the current sample was representative of the local community, it comprised primarily White, married, relatively educated, middle-class participants living in families with two parent figures, and all target children were between 3 and 7 years old. It will be essential to determine whether the results we obtained generalize to samples with different demographic profiles (e.g., single parents living without partners, low-socioeconomic-status parents, non-White people, parents of toddlers or older children).

A further strength of the current study, however, was the inclusion of fathers, who are virtually absent in the existing parental attribution literature. On the whole, results for fathers were similar to those for mothers; however, there were some small but poten-

tially interesting gender-specific findings. For example, the Child-Responsible and Parent-Causal factors comprised the same items for mothers and fathers, but the items' factor loadings were not invariant across genders. Also, mothers' parental and partner attributions were consistently more strongly associated with physical aggression and satisfaction (a) within the same relationship than (b) within the other relationship. The power of fathers' attributions to predict aggression and relationship satisfaction, however, was somewhat less relationship-specific. This finding is consistent with the idea that parent-child and partner relationships may be more closely related for fathers than for mothers (e.g., Goeke-Morey & Cummings, 2007). The current results need to be replicated, but they do suggest that gender differences in the development and functioning of parental attributions may be important to study in future research.

Future research should also explore potential similarities and differences in the performance of the Parent Cognition Scale versus other measures of parental attributional style. There is some evidence that different attributional assessment tools and methods can yield unique information (e.g., Johnston et al., 2006; Johnston, Reynolds, Freeman, & Geller, 1998). In particular, it will be important to examine the degree of predictive overlap between the Parent Cognition Scale and open-ended methods of assessing parental attributions.

In conclusion, despite the limitations noted previously, our results suggest that dysfunctional parent-causal and child-responsible attributions can be assessed via self-report and that these attributions relate to parental discipline patterns and aggression, along with other relevant indicators of parental functioning. The Parent Cognition Scale appears to be a promising, brief self-report measure of parental attributional style with strong psychometric properties.

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## Appendix

### Parent Cognition Scale

**Instructions:** At one time or another, all children misbehave or do things that could be harmful, that are wrong, or that parents don't like. Examples include:

hitting someone	whining	not cleaning room	not doing homework
lying	refusing to go to bed	arguing back	taking things that aren't theirs
having a tantrum	cursing	coming home late	running into the street

Parents have many different ways of thinking about these types of problems, and may think differently about problems depending on their specific children.

Please rate how much you would agree, in general, that the following **reasons** for misbehavior are true for the **target child** and his/her behavior for the **past two months**:

	Always True	Frequently True	Sometimes True	Occasionally True	Rarely True	Never True
1. I was not as firm as I usually am.	1	2	3	4	5	6
2. My child won't listen.	1	2	3	4	5	6
3. I'm not structured enough with my child.	1	2	3	4	5	6
4. My child cannot understand the rules.	1	2	3	4	5	6
5. My child thinks that he/she is the boss.	1	2	3	4	5	6
6. I don't know how to handle my child.	1	2	3	4	5	6
7. I don't give my child enough attention.	1	2	3	4	5	6
8. My child is headstrong.	1	2	3	4	5	6
9. It's hard for me to set limits.	1	2	3	4	5	6
10. My child is in a stage.	1	2	3	4	5	6
11. My child wants what he/she wants when he/she wants it.	1	2	3	4	5	6
12. I was tired at the time.	1	2	3	4	5	6
13. I handle my child in a non-confident way.	1	2	3	4	5	6
14. My child purposely tries to get me angry.	1	2	3	4	5	6
15. My child feels like there is no time for him/her.	1	2	3	4	5	6
16. I'm not patient.	1	2	3	4	5	6
17. My child tries to get my goat or push my buttons.	1	2	3	4	5	6
18. My child wants things his/her way.	1	2	3	4	5	6
19. It's difficult for my child to do what I want.	1	2	3	4	5	6
20. I can't control my child.	1	2	3	4	5	6
21. I couldn't respond quickly enough at the time.	1	2	3	4	5	6
22. I'm not able to be clear.	1	2	3	4	5	6
23. My child is very demanding.	1	2	3	4	5	6
24. I handled things in an unusual way.	1	2	3	4	5	6
25. My child likes to see how far he/she can push me.	1	2	3	4	5	6
26. I was busy with something at the time.	1	2	3	4	5	6
27. I don't do the right thing.	1	2	3	4	5	6
28. My child tires easily.	1	2	3	4	5	6
29. I have a hard time really listening to my child.	1	2	3	4	5	6
30. My child refuses to do what I think he/she should do.	1	2	3	4	5	6

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