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Mothers' and Fathers' Negative Responsibility Attributions and Perceptions of Children's Problem Behavior

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Abstract

Parents' negative responsibility attributions about their child's misbehavior are related to a perception that the child has more behavior problems. The current study used a dyadic framework to explore how mothers' and fathers' attributions relate to their own perceptions and to their partner's perceptions of the child's externalizing problems. Participants included 102 couples interviewed when children were 7 years old. Results confirmed that mothers reported more externalizing behavior problems in their children than did fathers, and fathers of boys reported more child behavior problems than fathers of girls. Dyadic analyses suggested that parents' negative responsibility attributions of the child's behavior were associated with greater perceptions of child externalizing problems on behalf of parents and their partners.

Keywords

Parental attributions; children's problem behavior; dyadic data analysis

Attributions, or interpretations of behavior, provide individuals with a way to make sense of their environments (Heider, 1958). With the ever-changing demands of parenting, parental attributions of children's behavior are commonly utilized to interpret and understand children's actions in a broad range of situations. These beliefs are important to understand as they have been shown to be associated with parents' responses to their children (Daggett, O'Brien, Zanolli, & Peyton, 2000), children's beliefs about themselves (Azar, Siegel, & Cote, 1993), and children's subsequent behavior (Nix et al., 1999; Slep & O'Leary, 1998).

The constructivist perspective on parental beliefs suggests that individuals create a belief system through their personal experiences (McGillicuddy-DeLisi & Sigel, 1995). Parents' experience being parented, along with the amount and quality of their experience with children influence the interpretations and responses parents have to children's behavior (Bugental & Shennum, 1984). Many parents develop an attribution style that preserves a

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positive view of their child, describing misbehaviors as situation-specific and outside the child's control (Dix, 1991; Gretaarsson & Gelfand, 1988). The opposite view, that misbehaviors are controllable, intentional, and stable characterizes a negative attribution style (Bugental, Blue, & Lewis, 1990; Dix, 1991; Larrance & Twentyman, 1983; MacKinnon-Lewis, Lamb, Arbuckle, Baradaran, & Volling, 1992).

Negative attributions regarding individuals' responsibility or accountability for their behaviors may be particularly relevant to the parenting context. Responsibility attributions have been shown to be more directly related to behavioral responses compared to attributions of the cause or reason behind others' behavior (Bradbury & Fincham, 1990; Fincham, 1994; Graham & Hoehn, 1995; VanOostrum & Horvath, 1997; Willis & Foster, 1990). Additionally, responsibility attributions are more likely to be associated with emotional arousal, conflict, and anger (Weiner, 1985). Parenting is an emotional experience (Dix, 1990), and the belief that children misbehave intentionally with a selfish motivation to annoy the parent is likely to increase parents' emotional arousal and color parents' perceptions of the child's behavior.

One commonly-studied example of the link between attributions and perceptions of child behavior in the parenting context is the correlation among parents' negative attributions and children's normative behavior problems. In one study, mothers who reported negative attributions regarding their school-aged child's misbehavior were also more likely to report that their child displayed more conduct problems (Baden & Howe, 1992). An experimental manipulation of maternal responsibility attributions for her child's misbehavior concluded that when experimenters changed the attribution provided to mothers, the mothers' affect, her behavior, and the child's affect significantly changed (Slep & O'Leary, 1998), suggesting that mothers' and children's emotions are somewhat dependent on maternal attributions. Bugental and Shennum (1984) suggest that this association is not limited to parents and their own children. The authors found that even when mothers with negative attribution styles interacted with children they did not know, they tended to behave in ways that enhanced negative interactions and noncompliance.

Parent Cognitions

The current study examines parents' subjective perceptions of problem behavior as a reflection of their cognitive processes. The idea that parental cognitions color how parents view situations with their children is well-established. A negative cognitive framework is commonly regarded as a condition that causes parents to have an overall negative outlook on life and interpret situations and interactions with others as adverse (Bouhuys, Geerts, & Mersch, 1997; Gollan, Pane, McCloskey, & Coccaro, 2008; Matt, Vázquez, & Campbell, 1992). A negative framework has been related to more negative perceptions of children's behavior problems and to the extent to which mothers' and fathers' perceptions are in agreement with their partner (Johnston, 1991). Negative attributions create a similar bias toward overly perceiving negativity in others' behavior. Mothers who were told that their child misbehaved voluntarily in a manipulated experiment reported feeling angrier and more reactive than mothers who were told their child was not to blame for misbehaving (Slep & O'Leary, 1998).

Understanding how cognitions, such as negative responsibility attributions, relate to parent perceptions of problem behavior is important considering the field's heavy reliance on parent-report measures in research. The parent-report Child Behavior Checklist (CBCL; Achenbach, 1991) has been widely used within the United States and across 24 societies around the world (Rescorla et al., 2011) to operationalize children's externalizing behavior problems. Discrepancies in CBCL reports between family members have been found to be

common and predicted by individual and family functioning (De Los Reyes & Kazdin, 2006). Researchers can better understand reasons behind certain viewpoints or account for factors influencing their research results when they are aware of how the reporter interprets the child's behavior and the effect negative attributions may have on parents' perceptions.

Influence of the Partner

Aside from relating to one's own perceptions, parents' cognitions are also likely related to their spouse's perceptions. Close dyadic relationships, such as a marriage, are characterized by the mutual exchange of cognitions, emotions, and behaviors (Campbell & Kashy, 2002); therefore, a parent's attributions and perceptions are best understood in the context of his or her interdependent partner. Unfortunately, little research on parent attributions has included fathers, and the results are mixed as to whether mothers and fathers typically differ in their attributions for their children's misbehavior. For example, Mills and Rubin (1990) found no attribution differences between parents in their study of preschool-aged children, whereas Chen, Seipp, and Johnston (2008) found that mothers made more negative attributions for their school-aged children's inattentive and impulsive behavior than fathers. Findings on parents' perceptions of children's problem behavior are also complex, as a moderate-to-high correspondence has been found between mothers' and fathers' reports of externalizing behavior on the CBCL (Duhig, Renk, Epstein, & Phares, 2000), with mothers reporting a higher severity level in symptoms than fathers (Schroeder, Hood, & Hughes, 2010).

Although we are interested in examining mean differences in mothers' and fathers' attributions and perceptions, the primary goal of the current study concerns how mothers' and fathers' beliefs are associated with one another. We are interested in whether one parent's attributions are related to the other parent's perceptions, or what have been termed *crossover effects*. Crossover effects, in addition to *spillover effects* that occur when a parent's attributions relate to his or her own perceptions, are commonly found in research on the family system (e.g., Erel & Burman, 1995; Nelson, O'Brien, Blankson, Calkins, & Keane, 2009). The examination of spillover and crossover effects for mothers' and fathers' negative responsibility attributions and perceptions of children's problem behavior has not been explored previously, but considering reported links between attributions and perceptions (Slep & O'Leary, 1998) and the likelihood that interdependent partners will influence each other's cognitions (Campbell & Kashy, 2002), both spillover and crossover effects are probable. Spillover and crossover effects are important to understand, as the relevance of a partner's negative perceptions are rarely investigated or accounted for in studies utilizing parent reports of child behavior.

Child Sex

A final goal of the current study is to examine child sex. Sex is a salient child characteristic that is known to affect a child's role in the family and interactions with parents (Maccoby, 2003). A number of studies have shown that parents make different attributions for boys' versus girls' behavior (e.g., Maniadaki, Sonuga-Barke, & Kakouros, 2005; Parsons, Adler, & Kaczala, 1982; Yee & Eccles, 1988). One study found that parents believe that the cause of girls' misbehavior is more dispositional than boys' (Gretarsson & Gelfand, 1988), and another found that parents perceived boys' misbehavior to be more intentional than girls' (Maniadaki et al., 2005). Similarly, parents' perceptions of children's externalizing behavior have also been shown to differ for boys and girls, with parents typically reporting more externalizing symptoms among boys (Baillargeon et al., 2007; Rescorla et al., 2007).

The Current Study

In the current study, we explored mothers' and fathers' negative responsibility attributions for their school-aged child's minor misbehaviors and their perceptions of the child's externalizing behavior. We examined whether parents' negative responsibility attributions were associated with their own perceptions, and their partner's perceptions, of externalizing behavior while also exploring the effects of parent sex, child sex, and the interaction between the two. Although this research question has not been examined previously, past findings lead us to predict that (a) mothers will make more negative responsibility attributions and perceive more externalizing problems than fathers, (b) both parents will make more negative responsibility attributions and perceive more externalizing problems for boys than girls, (c) mothers' and fathers' attributions will relate to each other's perceptions, and (d) for both parents, negative responsibility attributions will be associated with more negative perceptions of problem behavior. No specific hypotheses were made regarding whether spillover or crossover effects will depend on parent sex or child sex, or if three-way interactions between parent sex, child sex, and parent attributions will emerge in predicting parents' perceptions of problem behavior.

Method

Participants

The participants in this study were a subsample of children taking part in an ongoing longitudinal study of 447 families. Children and families were recruited through child day care centers, the County Health Department, and the local Women, Infants, and Children (WIC) program in the Southeastern region of the United States. Of the 293 children whose fathers actively participated in the study, 242 families (83%) participated at 7 years of age, when the data for the present study were collected. There were no significant differences between families who participated and those lost to attrition in terms of child sex, $\chi^2(1, N = 269) = .95, p = .33$, ethnicity, $\chi^2(3, N = 269) = 1.42, p = .70$, or socioeconomic status, $t(255) = .53, p = .60$.

Only two-parent families in which both parents reported on their attributions were included in the present analyses ($n = 102$ couples). Included families were more likely to be European American, $\chi^2(1, N = 293) = 11.92, p < .01$, and had a higher socioeconomic status, $t(278) = -3.70, p < .01$, than excluded families ($n = 191$). In the final sample, 48% of the children were female, 81% were European American, 13% were African American, and 6% were of multiple or other ethnicities. The median education level for mothers and fathers was a college degree; 9% of mothers and 10% of fathers were high school graduates, 49% of mothers and 41% of fathers had a college degree, and 20% of mothers and 15% of fathers held advanced degrees.

Procedure

When children were 7 years of age, they came to the study site for two visits, during which children participated in various tasks and mothers completed questionnaires and were observed in interaction with the children. At the completion of the second visit, mothers with partners living in the home were given a packet of questionnaires for the partner to complete. Questionnaire data from both mothers and fathers are used in this report.

Measures

Demographics—Mothers completed questionnaires to provide demographic information, such as child's sex and ethnicity, parent marital status, and income and education for each parent.

Negative attributions—Mothers and fathers reported on the negative responsibility attributions they make regarding their child's mild misbehaviors with the Attributional Style Measure for Parents (ASMP; O'Brien & Peyton, 2002). Parents were asked to think of two recent situations in which “*your child didn't do something you wanted done (such as picking up toys and clothes) even after you asked several times*”. Parents were then asked to indicate the extent to which they agreed on a 6-point scale with four statements regarding the child's intention and motivation in the situation (e.g., “*My child didn't do what I asked on purpose rather than unintentionally*”, and “*My child didn't do what I asked mainly just to annoy me*”). Negative responsibility attributions include beliefs that the child misbehaves on purpose with a selfish motivation, that the child intends to annoy the parent, and that the child should be punished for that behavior. Mean scores were used in analyses, with higher scores indicating more negative responsibility attributions. Internal reliability (Cronbach's alpha) was .82 for mothers and .77 for fathers.

Child behavior problems—Mothers and fathers reported on their perceptions of the child's behavior problems using the Child Behavior Checklist (CBCL; Achenbach, 1991). Parents responded to 113 items indicating how well a range of internalizing and externalizing behavioral problems describes the child currently or within the last six months (0 = *not true*, 1 = *somewhat or sometimes true*, 2 = *very true or often true*). The Cross-Informant Program for the CBCL/4-18, purchased from the Child Behavior Checklist, University Medical Education Associates, Inc., was used to score the raw data. A sum of the 35 items assessing the child's externalizing problems was used in the current analyses. Internal reliability (Cronbach's alpha) for the externalizing subscale was .87 for mothers and .80 for fathers.

Results

Preliminary Results

Descriptive information about mothers' and fathers' attributions and reports of problem behavior can be seen in Table 1, along with correlations among the study variables. Notably, all variables were correlated with the exception of maternal attributions with paternal perceptions of problem behavior. Children's externalizing problem behaviors were considered mild on average; although examination of the T-scores confirmed that 4 (4%) children according to mothers and 1 (1.1%) according to fathers were rated above clinically relevant levels. Parent education and child ethnicity and age in months were examined as possible covariates. None of these demographic factors was related to both attributions and externalizing problems; therefore, they were not included in analyses.

Sex Differences

Paired samples *t*-tests showed that mothers reported significantly more externalizing problems than fathers, $t(97) = 4.29, p < .01$. There were no significant differences between mothers' and fathers' reports of attributions. Although mothers' reports of child externalizing problems did not differ for boys versus girls, fathers' reports did differ based on child sex, $t(96) = -2.02, p < .05$. Fathers of girls reported significantly fewer externalizing problems than fathers of boys. Neither mothers' nor fathers' negative responsibility attributions differed for boys versus girls.

Relations Between Attributions and Perceptions of Problem Behavior

The relations between parents' negative responsibility attributions and perceptions of their children's behavior problems were examined using a multilevel modeling approach, termed the Actor-Partner Interdependence Model (APIM; Kashy & Kenny, 2000) that accounts for

the interdependence in dyadic data. To examine moderation by parent and child sex, we entered two-way and three-way interaction terms in the model.

We examined how the reports of one partner related both to his or her own perceptions of problem behavior and to the perceptions of his or her spouse. Using the APIM, these relations are referred to as actor and partner effects. Actor effects occur when a parent's own attributions are associated with his or her perceptions of the child's behavior problems. Partner effects occur when one parent's attributions are associated with the other parent's perceptions of the child's behavior problems. We used the Mixed Model Analysis function in SPSS v.19 to run the models. Variables were centered prior to analyses.

We addressed whether parents' negative responsibility attributions were related to perceptions of the child's externalizing problem behavior. Results are shown in Table 2. We found a significant effect for parent sex; mothers reported more externalizing problems in their children than fathers reported. A significant actor effect for attributions indicated that both mothers and fathers who held more negative attributions regarding their child's misbehaviors reported that their children had more externalizing behavior problems. A significant partner effect indicated that mothers' and fathers' negative attributions were associated with their partner's perceptions of the child's behavior problems. There were no significant interactions between attributions and parent sex or child sex indicating that the actor and partner main effects applied to all parents and children, regardless of gender.

Discussion

In the current study, we used a dyadic approach to examine parent cognitions and the extent to which negative attributions in the family may affect how both parents view a child's behavior. Specifically, we explored how negative responsibility attributions, which refer to a negatively biased way of describing how responsible a child is for mild misbehavior, are associated with parents' perceptions of their child's externalizing behavior problems. The dyadic approach allowed us to test the relation between the parent's own attributions and those of his or her partner to perceptions of problem behaviors.

Our findings, using a dyadic analytic approach that allowed us to model the association between parents' interdependent cognitions and perceptions, provide evidence of spillover from parents' negative responsibility attributions to their own perceptions of the child's problem behavior. When children were 7 years old, both mothers and fathers who made more negative attributions also reported their children to have more externalizing problems. Negative attributions represent a bias that parents have in that they believe their child's everyday minor misbehaviors, such as interrupting or failing to clean up one's room, are selfish, intentional, and malicious acts that deserve punishment. Although some misbehavior may be intentional by age 7, a negative bias means that even accidents and unintentional acts are perceived by the parent to be deliberate and intended to annoy the parent. Our results indicate that parents who interpret a wide range of behaviors this negatively are also more likely to report higher frequency and intensity of children's externalizing problem behaviors. Cognitive psychologists refer to this as a *confirmation bias*, when an individual is cognizant only of information that confirms his or her existing beliefs and ignores contradicting information (Nickerson, 1998). Parents with a negative attribution bias are likely to interpret many commonplace situations as confirmation of their belief that their child behaves aggressively.

In addition to within-parent associations, we used the APIM approach to determine whether cognitions cross over to the partner's perceptions. We found that when parents made negative attributions, their partners also perceived their child to have more behavior

problems. This was the case for both mothers and fathers, a finding that is explained by previous work. Fathers have been shown to rely on mothers' perceptions of family relationships when reporting on their children (Parke, 2002), and mothers have been described as particularly in tune with the emotional functioning of their families (Erickson, 2005) and likely to ruminate about child problems (Hechler et al., 2011). Both parents seem to pay attention to and rely on information from their spouses when asked to estimate children's behavior. This finding has important implications for the many researchers and practitioners that rely on parents' reports to measure child behavior problems. Both mothers' and fathers' beliefs and interpretations about their children should be examined, as each parent appears to play a role in such reports.

Our initial research questions also focused on parent and child sex, as prior research has found sex differences in attributions and reports of problem behavior. Contrary to our prediction, mothers and fathers did not differ in their negative responsibility attributions but instead held similar ideas regarding their child's intentions and motivations for minor misbehaviors. Most couples had parented together for at least 7 years making it is easy to see how mothers' and fathers' parenting beliefs would be similar to each other. Although we cannot test this in the current sample, it is of interest to investigate whether parents' attributions become more similar over extended periods of time, whether individuals choose partners with similar cognitions as their own, or a combination of the two. Mothers did report more externalizing problems than fathers reported. It is possible that mothers spend more time with children in more varied situations than fathers, particularly when children are still fairly young. It is also possible that mothers are more likely to serve as the contact for teachers and afterschool care providers than fathers, providing them with more information about the child's misbehaviors. This finding is consistent with previous research suggesting that mothers report more severe behavior problems than fathers (Schroeder et al., 2010).

Despite previous findings of child sex effects (Maniadaki et al., 2005), parents in the current study did not indicate that they held different attributions for boys versus girls. Both mothers and fathers believed their daughters were just as responsible for and intentional about their misbehaviors as sons. Mothers of girls also reported just as many child behavior problems as mothers of boys; however, fathers' reports were consistent with prior research that parents tend to report more externalizing behaviors for sons than daughters (Baillargeon et al., 2007).

It has been suggested that parents develop an attribution style that they use to make sense of their interactions with their children (Dix, 1991). This style is thought to have developed over time based, in part, on experiences in the family of origin (Bugental & Shennum, 1984; McGillicuddy-DeLisi & Sigel, 1995). However, we cannot decipher directionality in the current study. It is also possible that interactions with an aggressive child shape parents' attributions about that child's behavior. Parents who perceive their children to be more difficult to care for may believe that the child's misbehavior is intentional and purposeful (Dix & Grusec, 1985).

There are limitations of the current study. First, the study uses data from one period of time during middle childhood and may not apply to parents of preschool or adolescent children. Similarly, this cross-sectional study cannot make causal claims regarding the directionality of effects. Future research should incorporate longitudinal data to examine changes in perceptions over time. Second, the sample of ethnic minority families was too small ($n = 19$) to examine ethnic differences. This is an important direction for future research, as ethnic differences in parents' attributions about their children's problem behaviors have been documented (Jacobs et al., 2008). Finally, these associations likely vary for parents with

different family structures, such as single parents or parents living in extended family households. Whereas all family members are expected to influence one another's perceptions of the child's behavior, the extent of this influence can greatly vary depending on the amount of contact and closeness in the relationship.

This paper provides a unique look at the interdependent nature of mothers' and fathers' interpretations and perceptions of their child's misbehaviors. It is important to understand how a negative perception from either parent may be associated with parental views of the child, as parent-reported questionnaires are often used to measure children's behavior problems. Such an understanding can also increase the effectiveness of clinical treatments with distressed families, including cognitive therapy and re-framing. Moreover, negative perceptions can influence parents' health (Petrie, Jago, & Devcich, 2007) which has subsequent implications for child and family well-being. Future research should continue to explore contextual factors that explain parents' perceptions of their children's behaviors, and how responsibility attributions are related to parenting behaviors and the quality of parent-child relationships.

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Table 1
Descriptive Statistics and Correlations between Study Variables

Variable	M (SD)	Range	2	3	4
1. Attributions ^a , Mother	2.58 (.87)	1-4.38	.21*	.45**	.16
2. Attributions, Father	2.56 (.81)	1-4.63		.36**	.34**
3. Externalizing ^b , Mother	6.36 (5.30)	0-24			.46**
4. Externalizing, Father	4.30 (3.93)	0-20			

^a Note. Negative responsibility attributions.

^b Perceptions of children's externalizing behavior.

* $p < .05$.

** $p < .01$.

Table 2

Parents' Responsibility Attributions Predicting Perceptions of Child's Externalizing Problems.

Variable	Externalizing Problems	
	<i>b</i>	β
Parent Sex	-1.14	-.24**
Child Sex	.23	.05
Attributions Actor	1.90	.33**
Attributions Partner	1.11	.19**
Attributions Actor * Parent Sex	-.43	-.07
Attributions Partner * Parent Sex	-.68	-.12
Attributions Actor * Child Sex	.07	.01
Attributions Partner * Child Sex	-.50	-.09
Parent Sex * Child Sex	.40	.08
Attributions Actor * Parent Sex * Child Sex	.38	.07
Attributions Partner * Parent Sex * Child Sex	.09	.02
-2 Restricted Log Likelihood	1109.53	

**
 $p < .01$.