

# Assessing Parental Attributions for Success or Failure in Managing Deviant Child Behavior

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## INTRODUCTION

- Attention Deficit Hyperactivity Disorder (ADHD) is estimated to occur in 3% to 5% of school-aged children (American Psychiatric Association, 1994).
- Empirically supported treatments for ADHD include (1) behavior modification, (2) stimulant medication, and (3) the combination of behavior modification and medication (Pelham, Wheeler, & Chronis, 1998).
- Inherent in using these interventions is the reliance on parents (among other adult agents) to implement treatment.
- Given this, it is conceivable that parents' cognitions and attributions about themselves will influence the success of treatment (Hoza et al., 2000).
- There has been wide empirical support for the role of parent attributions as determinants of parenting responses to children (Bugental & Johnston, 2000; Miller, 1995).
- The focus of research has been based on a social-cognitive framework that views, among other things, attributions for one's own behavior as influential in predicting adaptiveness of functioning (Dweck, & Leggett, 1988).
- Research has shown that parents' attributions for their children's behavior relate both to parental emotional reactions to the behavior and to the parenting behaviors that follow misbehavior (Miller, 1995; Hoza et al., 2000).
- However, parents' attributions for their own success or failure in using behavior modification techniques with their children has received little attention and has important implications for treatment effectiveness and adherence.
- Sobol et al. (1989) found that mothers of ADHD children rated attributions for noncompliance as more external than fathers. Also, mothers of these children viewed noncompliant behavior as more stable than mothers of control children and had lower expectations of achieving future compliance from their children.
- Burrows-MacLean et al. (2003) showed parents reported less stressful parent child interactions and a greater feeling of parental efficacy on days when their children receive treatment (either behavioral or pharmacological).

## Methods

- The current study involves 87 participants in the 2002 and 2003 Summer Treatment Program (STP).
- The STP (Pelham, Greiner, & Gnagy, 1997; Pelham & Hoza, 1996) is a behavioral treatment program in which evidence-based treatments for ADHD are implemented across recreational and academic settings.
- Children in the STP were randomized to receive in counter balanced order high behavior modification (HBM), low behavior modification (LBM), or no behavior modification (NBM), each for three-week cycles.
- In addition to manipulating the level of behavior modification, medication was manipulated using a double-blind, placebo-controlled medication assessment (Pelham, 1993).
- Parents attended parent training classes throughout the summer and were taught behavior modification techniques to use in the evening that corresponded to the differing levels of behavior modification in the STP.
- In this investigation we focus on parents' use of a home based daily report card and their attributions for success or failure in managing their child's behavior.

## Measures

- One technique that is taught is the use of a home-based daily report card (DRC). Parents define individual problem behaviors in the home setting (e.g. bedtime routine, behavior with siblings, obeying adults).
- Parents reported home DRC percentage daily.
- Parents also rated daily on a likert scale how successful or successful they felt they were in getting their child to earn positive marks on their home DRC's (1, 2, 3 correspond to unsuccessful; 5, 6, 7 correspond to feeling successful)
- Parents also reported how much they agreed with statements of attributions for their success or failure. This ranged from 0 (not at all true) to 2 (very much true) Attributions included:
  - 1) The strategies that I used
  - 2) The medication that he/she received
  - 3) The combination of medication that he received and the strategies that I used
  - 4) It is easy/difficult to get my child to do these things
  - 5) I tried/didn't try hard to get him to do these things
  - 6) I was in a good/bad mood tonight
  - 7) I'm good/bad at getting my child to do these things
  - 8) My child has special abilities (intelligence) My child has a disability (ADHD)
  - 9) My child tried/didn't try hard to do these things

## Participants

-87 (77 boys, 10 girls) children and their parents  
-Mean age = 9.06 (Range = 5-12)  
-54% Caucasian  
-All met DSM-IV criteria for ADHD  
-Comorbid diagnoses: 78% comorbid CD or ODD  
-Mean family income = 56,321 (Range= 6,100-151,000)

Figure 1: Mean rating of success by medication condition

| DRUG       | Mean | N    | Std. Deviation |
|------------|------|------|----------------|
| placebo    | 4.88 | 1015 | 1.615          |
| lo med     | 5.38 | 991  | 1.330          |
| medium med | 5.51 | 1006 | 1.371          |
| hi med     | 5.63 | 752  | 1.311          |
| Total      | 5.33 | 3764 | 1.448          |

Note: 5=somewhat successful  
N=total number of days across subjects

Figure 2: Mean rating of success by behavior modification condition

| bmod condition | Mean | N    | Std. Deviation |
|----------------|------|------|----------------|
| no bmod        | 5.28 | 1222 | 1.489          |
| lo bmod        | 5.34 | 1267 | 1.415          |
| hi bmod        | 5.37 | 1275 | 1.438          |
| Total          | 5.33 | 3764 | 1.448          |

Note: 5=somewhat successful  
N=total number of days across subjects

Figure 3: Attributions given by parents why were successful in getting their child to earn positive marks on their home DRC

| Successful |                | strategie s | medication | combinatio n | easy | tried hard | good mood | I'm good at it | child's intelligence | child tried hard |
|------------|----------------|-------------|------------|--------------|------|------------|-----------|----------------|----------------------|------------------|
| 1          | Mean           | 1.58        | 1.42       | 1.61         | .86  | 1.29       | .78       | .96            | .94                  | 1.64             |
|            | Std. Deviation | .738        | 1.000      | .977         | .868 | .843       | .812      | .771           | .868                 | .964             |

Note: 1=somewhat true

## Results

- There were no significant effects found on ratings of how successful parents felt.
- As shown in Figure 1 and Figure 2 parents rated themselves as successful in getting their children to earn positive marks on their DRC's regardless of medication condition or behavior modification condition.
- In order to investigate whether parents were accurate in their assessment of their success in getting their children to earn positive marks on their DRC, a Mantel-Haenszel Common Odds Ratio Estimate was conducted. The estimate=8.114,  $p < .00$  was significant, indicating that parents were much more likely to indicate success when their children had a positive evening then when their children were unsuccessful.
- In order to investigate the measure of agreement between parents rating of success and actual success of the child a Kappa statistic was computed. The Kappa statistic=.285,  $p < .000$  and was significant.

## Discussion

- We hypothesized that when parents were in the high behavior modification condition (in which they could use more intensive behavior modification techniques, such as time out) they would report being more successful in getting their children to receive positive marks on their home DRC.
- It is possible that parents felt successful because they were continually learning effective strategies for dealing with their children. While parenting techniques were manipulated in the study we have no way of measuring what parents actually did in response to their children's negative behavior.
- Parents were largely accurate in their assessment of the child's performance on the home DRC but these results are difficult to interpret because of the restricted range of home DRC totals.
- This is partly due to the fact that if a child is not successful in earning DRC targets, the parents are instructed to modify the criteria to allow their child to see success because the DRC is part of the ongoing treatment.
- We report elsewhere (Burrows-MacLean et al., 2003) that the rates of negative behavior in the home setting were very low, leading to difficulty evaluating parent management techniques.
- Pelham et al. (2002) found that children attributed their own success to their effort and ability and attributed failure to task difficulty and medication and also did not display dysfunctional attributional styles.
- It is possible that parents view their child's behavior separate from their own parenting techniques.
- As shown in figure 3, parents in the current study on average felt that all of the successful attributions were somewhat true.
- The results of the current study suggest that parents do not see themselves as lacking in abilities, even when their children are not successful.
- There are potentially individual differences in how parents attribute success and failure, such as maternal depression, which will be examined in further analyses.

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