This study investigated the social cognitive abilities, social adjustment, and self-esteem of maltreated preschoolers and those at risk for abuse. Subjects were 12 maltreated children, 22 children at risk for abuse, and 22 control children. Children completed the Social Problem Solving Test--Revised, a test of Attributed Intentions and Aggressive Response Bias, and the Pictorial Scale of Perceived Competence in Preschoolers (PSPCP). Parents completed the Achenbach Child Behavior Checklist (CBCL). Analysis revealed that abused children were significantly more negative in their attributions about a peer's intentions, and were more aggressive in their response bias than at-risk and control group children. Abused children also had higher aggression and peer rejection scores on the CBCL than at-risk or control children. Abused and at-risk children were less flexible in solving friendship stories, and generated fewer relevant solutions than control children, although these differences were not significant. Significant intercorrelations were found between children's self-ratings on the PSPCP and social problem solving, and social adjustment measures. (MM)
Social Cognitive Skills, Social Adjustment and Perceived Competence in Maltreated Preschoolers

Rebecca M. Stoddart
Saint Mary's College
Notre Dame, IN 46556

Paper presented at the biennial meeting of the Society for Research in Child Development,

Please address correspondence to Rebecca Stoddart, 84 Madeleva Hall, Saint Mary's College,
Notre Dame, IN 46556.
Abstract

This study investigates the social cognitive abilities, social adjustment and self-esteem of maltreated preschoolers and those at-risk for abuse. One goal was to determine whether their abilities would differ significantly from those of a control group matched for socioeconomic status. A second goal was to examine the relationship between children's self-esteem, social problem-solving abilities, and social adjustment.

Twelve maltreated children, 22 children at risk for abuse, and 22 control children were tested using the following measures:

2. A test of Attributed Intentions and Aggressive Response Bias.

MANOVAs revealed that abused children were significantly more negative in their attributions about a peer's intentions, and more aggressive in their response bias than at-risk and control group children. Abused children also had higher aggression and peer rejection scores on the CBCL than at-risk or control children.

Abused and at-risk children were less flexible in solving friendship stories, and generated fewer relevant solutions than control children, although these differences were not significant.

Abused children had significantly higher peer rejection scores on the CBCL than at-risk or control children.

Significant intercorrelations were found between children's self-ratings on the PSPCP and social problem solving, and social adjustment measures.
Researchers have identified a number of social cognitive and social skill deficits in abused children of elementary-school age: poor peer relationships and aggressiveness (Burgess & Conger, 1978; George & Main, 1979; Downey & Walker, 1989), negative attributions about peers' intentions and aggressive response biases (Dodge & Frame, 1982; Downey & Walker, 1989), and lower or exaggerated self-competence (Vondra, Barnett & Cicchetti, 1989). Other researchers, however, have found few differences between abused and well-matched control group children (both groups of children showed high rates of aggression and low social competence) whose families experienced distress, but were not physically abusive or neglectful (Elmer, 1977; Wolfe & Mosk, 1983). Furthermore, few researchers have examined younger, preschool-aged abused children's social cognitive abilities, and those that have tested group differences between abused vs. non-abused children on several measures but did not examine the relationship between these abilities and social adjustment (e.g., Hoffman-Plotkin & Twentyman, 1984).

The purpose of this study was to examine the social cognitive abilities and perceived competence of abused preschoolers and those at-risk for abuse (those for whom abuse or neglect is suspected but unsubstantiated and/or those having siblings who have been abused.) A second purpose was to examine the interrelationships among preschoolers' self-esteem, social problem-solving ability and social adjustment.

Subjects

Subjects were twelve abused children (5 girls and 7 boys, mean ages 5 yr., 4 mo.), 22 children at-risk for abuse (9 girls and 13 boys, mean ages 5 yr.), and 22 control children (14 girls and 8 boys, mean ages 4 yr. 8 mo.). Abused children were in therapy and attended a daycare run by the agency (Child Abuse and Neglect Coordinating Organization - CANCO) at which they received therapy. At-risk and control children attended the CANCO daycare or a second daycare.
Both daycares serve low-income families who qualify for subsidized daycare under federal poverty guidelines.

**Social Cognitive Measures**

The following measures were administered to individual children in the study after the measures were pilot-tested with children from another daycare, and procedures were standardized. An 80% reliability level among testers was achieved before data collection began.

1. **Rubin's Social Problem Solving Test-Revised (SPST, Rubin, 1988)** - The SPST poses eight stories with pictures that depict problems between two children in sharing toys and starting friendships. Children are queried for solutions to the problems. Three measures were used: Total number of relevant solutions; Flexibility in solutions; Flexibility in friendship stories.

2. **A modified version of Dodge's test of attribution and aggressive response bias (Stoddart, Koehler & Tusing, 1992)**. Children were presented with four "pretend" stories about a peer's ambiguous behavior toward them. Attributions about the peer's intentions and their response bias to the events were each scored on a 4-pt. scale ranging from 0 (benevolent attribution/response) to 3 (hostile intent/aggressive retaliation); average scores were used.

3. **The Pictorial Scale of Perceived Competence in Preschoolers (PSPCP; Harter & Pike, 1984)**. This 24-item scale measures two constructs, perceived competence and perceived social acceptance, with two subscales within each: Physical and cognitive competence, and maternal and peer acceptance. Children's average self-rating score on each subscale was used.

4. **Child Behavior Checklist (CBCL; Achenbach, 1979)** - Mothers rated their child's adjustment. Three measures were used: Aggression scale, peer rejection, and the standardized externalizing behavior score.

**Results**

MANOVAs with a between-subject variable of risk status (1-3), with age as a covariate
were conducted on variables grouped as follows:

1. **Social problem solving** - total relevance (scores of 0-24 possible), flexibility (scores of 0-48 possible), friendship flexibility (scores of 0-18 possible). Results of the MANOVA and univariate tests were not significant. Control children generated more relevant solutions than abused or at-risk children, and showed greater flexibility on friendship stories than abused children. See means in Table below.

<table>
<thead>
<tr>
<th></th>
<th>Abused</th>
<th>At-Risk</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relevance</td>
<td>13.67</td>
<td>15.28</td>
<td>15.97</td>
</tr>
<tr>
<td>Friend/Flex</td>
<td>3.88</td>
<td>3.43</td>
<td>5.07</td>
</tr>
</tbody>
</table>

2. **Attribution and Response Bias.** Average scores of 0-3 possible on both measures. The MANOVA was significant, $F(4,96) = 2.44, p < .05$. As predicted, abused and at-risk children were more hostile in their attributions about peers' intentions than control (Means and sd) = 1.8 (.65), 1.9 (.65) and 1.24 (.58), respectively. Results differed, however, for aggressive response bias, in that abused children were significantly more aggressive in their bias than either at-risk or control children (Means and sd) = 2.05 (.72), 1.61 (.63) and 1.54 (.68) respectively.

3. **Perceived Competence and Acceptance-PSPCP.** Average scores of 1-4 on each of the 4 subscales: Cognitive competence and physical competence, and peer acceptance and maternal acceptance. The MANOVA was not significant. The univariate test for Maternal Acceptance was significant, $p < .05$. Abused children rated themselves lower in maternal acceptance than at-risk or control children.

4. **Child Behavior Checklist- CBCL.** peer rejection and the aggression scale. The MANOVA was significant, $F(4,88) = 2.82, p < .03$ as was the univariate test for peer rejection,
Abused children had higher peer rejection scores than at-risk or control group children (mean scores out of a possible 0-3 score: 2.5 (sd=2.9); .79 (sd=.85) and .63 (sd=1.06), respectively.) Given that the standard deviations for all groups exceed the means, however, these results should be interpreted with caution.

**Intercorrelations**

Of particular interest were the intercorrelations between perceived self-competence and acceptance and the other measures, as no prior research has examined these relationships. Children's self-ratings on physical competence were significantly correlated with the social problem solving scores of number of relevant solutions and flexibility on friendship problems ($r = .37$ and $.34, p < .01$), and with total flexibility ($r = .35, p < .05$).

A significant negative correlation was found between children's self-rating of maternal acceptance and risk status ($r = -.23, p < .05$; abused coded as 3, at-risk as 2, control as 1). Finally, children's self-ratings on maternal acceptance were significantly negatively correlated with the CBCL peer rejection scale score ($r = -.26, p < .05$).

Regression analyses were conducted to test the ability of the children's risk status to predict adjustment on the CBCL aggression scale, with social cognitive measures entered as covariates. Risk status was more predictive than the social cognitive variables, with the exception of aggressive response bias (CBCL aggression and Response Bias, $r = .39, p < .01$).

**Discussion**

This study is the first to demonstrate a social cognitive bias in preschool-aged abused children, and the first to examine the social cognitive abilities of children at-risk for abuse. The findings that abused and at-risk children show a negative attribution bias, with abused children also showing an aggressive response bias, are consistent with studies of older aggressive and abused children (Dodge & Frame; Downey & Walker, 1989).
The weaker effects for the problem-solving and perceived competence measures may have been due to the differences in age between the groups (the abused children were 8 mo. older, on average, than the control group). For example, age was significantly correlated with two of the SPST measures and two perceived competence measures. Alternatively, the fact that the abused children were all in treatment, some for as long as three years, and attending a therapeutic daycare program may have ameliorated the negative effects of abuse on social problem-solving. This possibility will be examined in further analyses.

The intercorrelations between self-concept, social problem solving and social adjustment are intriguing. The positive correlation between physical competence and social problem solving may be due to developmental abilities that underly both; this interpretation is consistent with the positive correlation found between these variables and age. The negative correlation between mother's ratings of their children's peer rejection and children's perceived maternal acceptance may suggest that children's negative perception of their relationship with their mother and ensuing feeling of rejection is acted out in their relationship with their peers. This interpretation is consistent with the relationship found between abuse status and children's perceived maternal acceptance. Both findings warrant further study of the relationship between perceived self-competence and acceptance and children's social adjustment.

Finally, we must point out that many children in our control group had high (clinical/borderline) CBCL externalizing scores, and low social problem solving scores. This population of poor preschool children shared many problems similar to those of the at-risk and abused children, with the exception of documented abuse and/or neglect. The aggressiveness of children associated with dysfunctional families, poverty and punitive parenting and daycare practices may blur our ability to detect effects associated with isolated instances of abuse. As a result, we may continue to find equivocal results across studies regarding the effects of limited
experiences of physical abuse on aggressiveness and poor social competence over and above the
effects of living in impoverished and punitive households.
References


