

Children's Empathy and Role Taking: Child and Parental
Factors, and Relations to Prosocial Behavior

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Abstract

The present investigation addresses three issues: 1) the relations between children's emotional empathy and theoretically relevant factors such as role taking, imaginative skills and ego resiliency; 2) the extent to which empathy and role taking are related to reports of children's prosocial behaviors at home and school; and 3) the relation of children's emotional empathy to parents' own empathy and parents' perceptions of child empathy. Results for 51 6-year-olds indicated that children's empathy and role taking were related, and that both were associated with imaginative thinking. Role taking was also associated with ego resiliency. Children's empathy was positively associated with reported prosocial behavior in the family, whereas role taking was associated with reported prosocial behavior at school. Although children's emotional empathy was associated with parental perceptions of the child as empathic, it was not related to parents' own empathy. Factors contributing to empathy and prosocial behaviors are discussed in light of possible application to home- and school-based programs.

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Introduction

Empathy, role taking and prosocial behaviors have long been thought to be related, but their functional context remains unclear. The present study examines three basic issues that arise from this.

The first issue is how children's empathy (defined as emotional responses concordant with the emotional experiences of others) relates to other child factors, specifically, cognitive role taking, imagination, and ego resiliency. Role taking has been theoretically linked with empathy because role taking increases one's cognitive understanding of others' feelings, and thereby increases the likelihood of an emotional response that is resonant with others. Imaginal skills may be important in this process, facilitating both empathy and role taking. Imaginal skills, empathy and role taking, all involve in part the ability to flexibly consider fresh points of view (Hoffman, 1982; Stotland, 1969). Role taking is also expected to be associated with ego resiliency. The construct of ego resiliency assesses flexible, adaptive behavior across broad social and behavioral domains (Block & Block, 1980). Such adaptive behavior is facilitated by understanding others' feelings and points of view. Moreover, ego resilient children, whose own emotional needs are met, should be more likely to take account of others' thoughts and feelings.

The second issue concerns the associations between children's empathy and

role taking and reports of children's prosocial behaviors in family and school contexts. Although empathy is thought to encourage prosocial responses, relations between empathy, role taking, and prosocial behaviors may vary by context. Compliance, for example, may be an important aspect of prosocial behavior for parents, while cooperation with peers might be more salient in school contexts.

The third issue is whether children's empathy is related to familial factors such as parents' empathy and parents' perceptions of their children as empathic and prosocial in the family context. The affirmation of such relations has important developmental implications for those concerned with socialization and the relations between empathy and prosocial behaviors. Although the present study does not examine specific socialization techniques, parents' perceptions of children as empathic and prosocial are examined as important socializers in their own right (Mead 1934; Sigel, McGillicuddy-DeLisi & Johnson, 1980).

Empathy, role taking, and related child factors

Role taking. The theoretical link between empathy and role taking (the cognitive understanding of another's point of view, whether focussed on another's thoughts or feelings) is of long standing. Some have maintained that role taking is a prerequisite to empathy (Feshbach, 1978); others, that it is an important but not necessary mediator of empathy (Hoffman, 1975; Strayer, 1987). Although role taking and empathy have been found to relate significantly when measured with the same stimulus content (Feshbach & Roe, 1968), the present study is among the few examining the relation of these variables when they are independently assessed

(Iannotti & Pierrehumbert, 1985; Strayer, 1980). In addition, it appears to be the first to use Bryant's (1982) empathy measure in this context. If, as expected, role taking and emotional empathy comprise two separate but related aspects of the empathy construct, shared as well as unique variance should be demonstrated by their correlations with each other and with other relevant variables such as imagination skills.

Imaginative processes have been proposed to account, in part, for the operation of both empathy and role taking by providing more direct personal feedback of another's experiences (Hoffman, 1982; Stotland, 1969). The theoretical expectation that imaginative transposition of one's self to another's situation might enhance empathy is evident in Bryant's (1982) empathy index. This measure contains items assessing imaginative involvement with symbolic content (stories and films), and it also requires that children remember or imagine situations and their reactions in them.

Associations with role taking arise because both role taking and imaginative thinking require cognitive decentering. Both require the ability to generate and think flexibly about different points of view, rather than focussing exclusively upon one viewpoint.

Personality factors. Empathy has been considered to reflect personality or dispositional factors (Bryant, 1982; Mehrabian & Epstein, 1972), and is thought to be most likely when one's own affective needs are satisfied (Hoffman, 1975; Strayer, 1980). In addition, it seems plausible that understanding and responding to the emotional needs of others is most likely in children who are adaptive and flexible in their reactions to interpersonal events and stresses, that is, in children who are ego

resilient (Block & Block, 1980). Empirical longitudinal findings indicate that affectively secure children (those who show secure attachments) tend to be ego resilient and responsive to the distress of others as they grow older (Waters, Wippman, & Sroufe, 1979). Given these connections, we expected that both empathy and role taking would relate positively to ego resiliency in our sample.

Prosocial behaviors

Role taking and empathy are thought to contribute to prosocial behaviors because empathic awareness seems incompatible with initiating hostile, antisocial behaviors, while both empathy and role taking should facilitate conflict resolution and cooperative, helpful interactions (Hoffman, 1975; Mussen & Eisenberg-Berg, 1977; Staub, 1978). Studies have in fact found negative relations between empathy and aggression (Bryant, 1982; Feshbach, 1978), whereas the relation of empathy to prosocial behaviors has been either positive or null, with no findings contrary to expectation (Barnett, 1982; Eisenberg & Miller, 1987; Underwood & Moore, 1982).

The present study, in contrast to most studies of prosocial behaviors (which have used experimental tasks of helping, sharing, or cooperation), focussed on reports of children's prosocial behaviors across family and school contexts. Although perceptions of children's prosocial behaviors are not equivalent to direct measures of such behaviors, the appraisals of significant others (parents and teachers) may have important consequences for facilitating children's prosocial socialization (Mead, 1934).

Parental factors

Although many researchers expect children's and parents' empathy to be related due to predispositions and/or socialization, results of studies which have examined this issue are equivocal. This seems due in part to the use of different measures to assess adults' and children's empathy (Barnett, King, Howard & Dino, 1980; Feshbach, 1978). In the present study, relations of children's and parents' emotional empathy were examined using comparable self report questionnaires developed for adults by Mehrabian and Epstein (1972) and for children by Bryant (1982).

Significant relations between mothers' or fathers' empathy and children's prosocial behaviors would also encourage further examination of whether empathic versus nonempathic parents engage in different child rearing practices that have consequences for children's positive behaviors to others. Such relations might differ for mothers and fathers.

In order to examine these three basic issues, children were assessed during their first year of full-day formal schooling. This situation was selected for several reasons. It included the youngest age to which Bryant's (1982) empathy index has been applied. It is also an age at which family influences are still prominent, compared to peer influences or the school itself. Furthermore, the first year of academic schooling marks a transition for many children to full-day institutional care. Attendant adaptive and academic demands present a meaningful context for the assessment of children's ego resiliency. In addition, at this time two important sources of information, parents and teachers, become available for the assessment of

children's prosocial behaviors.

Method

Subjects. Anglo-Canadian participants were recruited by local media announcements. Informed consent was obtained. Data collection occurred in two phases: initially, 18 6-year-olds were given role taking and imagination questionnaires and tasks. In order to extend the sample and to include the empathy questionnaire, an additional 33 children were recruited. In all, 51 children (24 females, 27 males) were interviewed; their mean age was 80 months (range = 72 to 85). Fifty mothers (mean age = 32 years), all of whom identified themselves as principal child caretakers, participated, as did 39 fathers (mean age = 34). *Post hoc* analyses using BMDP AM (Frane, 1983) indicated that families for whom some data were missing did not differ on other variables from families for whom complete data sets were obtained. All parents had completed high school, most had attended or completed university, and were employed in skilled labor, business, or professions.

Procedures. Child measures were administered individually across two sessions, held at the university. Each session lasted approximately 40 minutes. After a brief familiarization period with a female interviewer, questionnaires were read aloud to children. Order of tasks was randomized.

Parents were asked to complete their questionnaires individually at home and to return them in separate postage-paid envelopes. The 45 teachers who participated were given questionnaires after they had known children at least six months.

Empathy

Children's empathy was measured using Bryant's (1982) 22-item questionnaire, with a +2 to -2 response format. Response choices were visually aided by two circles of increasing size on either the "yes, like me" or the "no, not like me" sides of the paper. All children understood the procedure, as indicated by their responses to trial items such as "I like ice cream" and "I don't like soap in my eyes".

Parents' empathy was measured using Mehrabian and Epstein's (1972) 33-item scale, from which Bryant's (1982) was derived. Both measures assess extent of agreement to items reflecting emotional responsiveness, empathy, and sympathy, e.g., "Even when I don't know why someone is laughing, I laugh, too"; "I get upset when I see a boy/girl getting hurt".

Parents' perceptions of children's empathy were assessed by an item from the California Child Q-Set (Block & Block, 1969), "shows a recognition of others' feelings: empathic". This Q-set consisted of 100 cards; on each was a descriptive statement which parents rank-ordered into nine categories ranging from "most descriptive" to "least descriptive" of their child. Because Q-sets provided by mothers and fathers were concordant (median $r = .60$, $p < .001$) they were averaged, a procedure recommended by Block in order to enhance stability and accuracy of scores.

Role taking and related child factors

Role taking. The Urberg and Docherty (1976) series as amended by Gove and Keating (1979) contained picture-story sets which required children to distinguish information accessible to story persons from the child's own information. Children labeled a story person's affect (score = 1) and provided reasons for this affect that

were consistent with story and/or pictorial cues (score = 2).

Imagination was assessed by two child measures and by teacher reports. The first child measure was a structured task to assess goal-directed imaginative-creative skills. This task (Torrance, 1974) required children to name as many uses as they could for a chair, then for a button. Two other items similarly requested children to name all the things possibly represented by two visual patterns. Children were encouraged with up to three probes ("Is there anything else?") to state as many answers as possible. Blind scoring was done by two judges who obtained 100% agreement on all nonrepetitive and plausible responses, entered as a total score.

The second child measure was a self-report inventory assessing unstructured fantasy rumination and pretend play. Children reported these activities by answering "no", "a little" (= 1), or "a lot" (= 2) to 45 questions comprising the Imaginal Processes Inventory, which yields scales with replicated reliabilities and factor structure (Rosenfeld, 1979).

Teachers' perceptions of children's imagination was assessed by the Classroom Behavior Inventory (Schaefer & Edgerton, 1978), which has 10 scales based on 5-point ratings of 42 items. For data reduction, four composite scales (correlating from .68 to .97 with original scales) were derived by factor analysis, and two were selected as most relevant to the present study. One of these composite scales, Creative-Imaginative (Cronbach's $\alpha = .89$), assessed children's imaginative and independent thinking. It contained such items as "uses materials in imaginative ways", "thinks up interesting things to do", "tries to figure things out on his/her own", and "says

interesting and original things".

Ego resilience. A summary personality descriptor, Ego Resiliency, was obtained from the California Child Q-Set, described earlier. Scores for Ego Resiliency were based on 58 items placed in the top or bottom thirds of a criterion sorting for this construct developed by Block & Block (1969). Items assessing empathy and prosocial behavior were excluded so that they could be assessed separately.

Verbal ability. Standardized scores from the Peabody Picture Vocabulary Test (Dunn, 1982) were included because we considered verbal skill as intrinsic to social and personal information processing and as a probable factor in responses to verbal measures used.

Prosocial behaviors

Prosocial behaviors in the home were assessed by parents using the California Child Q-Set, described above. A scale labeled Prosocial (5 items; Cronbach's $\alpha = .93$) was derived from Blocks' "empathic relatedness" factor. It contained such items as "is helpful and cooperative" and "tends to give, lend and share". The item assessing empathy, described earlier, was not included in this scale.

Prosocial behaviors at school were assessed by teachers using the Classroom Behavior Inventory, described earlier. The composite scale Considerate (Cronbach's $\alpha = .91$) contained five positively loading items from Schaefer & Edgerton's (1978) "consideration" scale and an additional three negatively loading items from their "hostility" scale. Sample items included: "tries not to do or say anything that would hurt another" and (negatively loaded) "ridicules and mocks others without regard for

their feelings".

Results

Results will be reported for each of the three areas of interest: child variables related to empathy, relations with prosocial behavior, and empathy of parents and children. Findings will be described first for hierarchical stepwise regressions (age, sex, and Peabody scores, if significant, were entered before other variables). Because these analyses used only cases for which data were present for all variables, raw correlations for the entire sample will also be presented.

Empathy, role taking and related child factors

Findings confirmed the expected positive relations between children's empathy, role taking, and imaginative skills. As shown in Table 1, in stepwise multiple regression analyses the only significant predictor of assessed emotional empathy was role taking (accounting for 18% of the variance), while role taking was predicted by teacher reports of the child as creative and imaginative and parent reports of the child as empathic (45% of the variance, in total).

Insert Table 1 about here

These relations were also evident in the sample as a whole. Across all possible pairs, assessed empathy was significantly correlated with role taking, and both empathy and role taking were significantly associated with teacher reports of the child as creative and imaginative and with the structured imaginative thinking task (see

Table 2). (All correlations for self reported fantasy and pretend play were nonsignificant; this measure will not be discussed further.)

Insert Table 2 about here

As expected, children's ego resiliency was positively associated with role taking and with parental reports of the child as empathic. In contrast, however, it was not significantly related with emotional empathy.

Prosocial behaviors

Empathy and imagination were associated with prosocial behaviors, although in different contexts. In multiple regression analyses, prosocial behaviors at home were related positively to empathy (as assessed by parents) and negatively to maternal empathy. In contrast, teacher reports of prosocial behaviors were most strongly associated with reports of the child as creative and imaginative. See Table 1.

These trends are also evident in the sample as a whole. Assessed empathy as well as parents' reports of the child as empathic were related to prosocial behaviors at home. Prosocial behaviors at school were associated with the structured imaginative thinking task as well as with teacher reports of the child as creative. In addition, role taking was associated with prosocial behavior at school, although not at home. Ego resiliency, as expected, was related to prosocial behavior in both contexts, despite a somewhat restricted range for ego resiliency (scores varied from 5.3 to 7.4, out of a possible range of 1 to 9).

Associations between parental empathy and prosocial behavior varied according to gender and context. Mothers' empathy was negatively associated with children's prosocial behavior at home in the entire sample as well as the regression analysis. In contrast, fathers' empathy was positively associated with children's prosocial behavior at home (see Table 2; the difference is significant, $Z = 2.71$, $p < .007$, two-tailed). In addition, mothers' empathy was positively associated with children's considerate, prosocial behavior at school. (The difference between correlations for maternal empathy and prosocial behavior in these two contexts was significant, $Z = 3.10$, $p < .002$, two-tailed).

Child and Parent Empathy

In addition to the parental differences just described, mothers reported significantly higher levels of empathy than did fathers (mean for mothers = 46, for fathers, 22; $Z = 5.49$, $p < .0001$). However, as shown in Table 2, neither mothers' nor fathers' empathy was related to the empathy of daughters or sons, either as assessed by Bryant's measure or by the parents themselves. As expected, parental perceptions of children as empathic showed modest convergence with children's assessed empathy.

Discussion

Empathy, role taking, and related child factors

Role taking was positively related to both assessed empathy and parents' reports of children's empathy. These findings support theoretical expectations and add to the small number of previous studies which have examined the association of

empathy and role taking using independent measures.

Furthermore, the hypothesized role of imaginal involvement in both empathy and role taking (Hoffman, 1982; Stotland, 1969) was in large part supported. Although the fantasy/pretend inventory was unrelated to either variable, zero-order correlations indicated that children's performance on an imaginative, divergent thinking task and teachers' assessments of their creative, imaginative thinking were both related to scores on emotional empathy and role taking. Regression analyses suggest that the link with imaginative processes is most robust for role taking. Thus it may be that focused, task-directed imagination (rather than general or playful fantasy ruminations) is the critical imaginative skill in role taking and empathy. These associations may be due to general cognitive decentration requirements shared by these tasks (e.g., consideration of information from multiple points of view), or, more specifically, by the vicarious participation in others' affect that imaginal processes may promote, thus contributing to both empathy and role taking of affective content. Given the "as if" perspective regarded as necessary for both empathy and role taking, further investigation seems warranted of the role of imaginal processes in their operation.

Ego resiliency correlated significantly with parents' assessments of children's empathy and children's role taking, but not with assessed empathy. This pattern could have been anticipated, given that Bryant's measure indexes emotionality more than the self-other accommodations thought to be operative in both empathy (Strayer, 1987) and ego resiliency. Emotionally aroused young children may not necessarily be

resilient or sufficiently competent to deal with their arousal. Thus although these findings support the interpretation that understanding others' feelings is most readily accomplished when ego levels are high, adaptive and flexible (Block & Block, 1980; Hoffman, 1975), they also raise questions concerning the role of emotional arousal in empathy and the relations between arousal and level of personality integration.

Prosocial behaviors

Prosocial behaviors at home were associated with children's empathy, especially as assessed by parents' reports, while prosocial behaviors at school were associated with imaginative skills and (to a lesser extent) role taking. Resourceful, adaptive behavior (ego resiliency) was correlated with prosocial behaviors in both contexts. This pattern may reflect somewhat different task demands in each context. If prosocial behavior at home includes compliance to parents' demands, empathy may be helpful in anticipating adult requests or in distinguishing directives that are given in earnest from those that are not. In school contexts, greater weight may be given to children's cooperative, friendly interactions with peers. These presumably are facilitated by the ability to think imaginatively and to take the point of view of others. In both contexts, however, children who are flexible, resourceful, and happy are more likely to be compliant and cooperative, and less likely to be disruptive or hostile. While these relations are evident in our sample of well-functioning children (ego resiliency scores were consistently high), they should be even clearer in a sample that includes children with low levels of ego functioning.

Differing context requirements may also in part explain why parent's and

teachers' assessments of children as prosocial were not significantly associated in this study. In addition, different measures and/or judges assess different aspects of interpersonal functioning, particularly regarding young children, for whom cross-situational inconsistency is fairly typical (Hartshorn & May, 1930).

Contrary to expectation, maternal empathy was negatively associated with parents' reports of children's prosocial behavior but positively associated with teachers' reports. Although this finding seems paradoxical, it may be that highly empathic mothers are more distressed by their children's failures to be kind or by their hostility or noncompliance, and so describe their children less favorably than they should. Such children may nevertheless strive to please, thus leading to a positive association between maternal empathy and prosocial behaviors at school. This argument, of course, would not hold for fathers, who are much less empathic than mothers. Thus fathers' empathy would be expected to correlate positively with children's prosocial behaviors in both home and school.

Bryant's (1982) validation of emotional empathy as negatively related to school aggressive behaviors was not extended by present findings to prosocial responsiveness in school, but rather to prosocial responsiveness in the family. One possible reason for this is that Bryant's index measures factors such as emotional involvement and expressiveness, which may be less well tolerated in school than in family contexts.

While the relations of empathy and role taking to prosocial behavior remain unclear, these findings confirm general relations already noted in the literature

(Eisenberg & Miller, 1987; Hoffman, 1975; Rushton, Brainerd, & Pressley, 1983; Underwood & Moore, 1982) and suggest differences due to different content domains as well as settings and respondents. Prima facie, the child measures of empathy used here are more affectively and behaviorally oriented than the role taking and imagination measures, which appear to assess more cognitively oriented skills. Thus, perhaps more attention needs to be given in future research to the relative importance of affective and cognitive factors. This distinction may be useful in assessing particular prosocial behaviors (e.g., cooperation may entail more cognition than does sympathy, which may entail more affect), and in understanding the appraisals of particular judges (parents, for example, may be more attentive to a particular child's affective reaction and motivation than are teachers). The distinction between affective and cognitive components may also be useful for training programs. For example, parents and home-based programs may be relatively more important for the affective components of empathy and role taking, with school-based programs potentially more helpful for the cognitive enhancement of empathy and related behaviors. We believe that such possibilities merit investigation.

Child and Parent Empathy

Although related measures were used to assess the empathy of children and parents, the obtained correlations were nonsignificant and very small, both for the combined sample and for girls and boys considered separately. Together with the equivocal findings reviewed earlier, these results suggest that, contrary to expectation, parents' emotional empathy may not have an important direct influence on the

development of children's own reported empathy. The possibility remains, however, that parental empathy may be an important moderator of parenting factors that do influence children's empathy. In addition, given the likelihood that the questionnaires used in this study assess emotional expressiveness in addition to empathy per se (Mehrabian, personal communication), parents' and children's global scores may be differentially influenced by factors affecting each of these components. Because of these problems and possibilities, future research might utilize alternative methods of assessing empathy and should examine other areas of potential influence, such as parental responsiveness and discipline (Hoffman & Saltzstein, 1967).

Parental empathy was also unrelated to children's role taking. This may be due to the emotional, dispositional focus of the parent measure, in contrast to the cognitive focus of role taking. In addition, other socialization agents, such as peers, have been suggested to be more influential than parents in the development of role taking (Piaget, 1932/1983).

In conclusion, although some shared method and/or respondent variance likely contributed to present findings, these results nonetheless provide some clarity for basic issues and point in new directions. The relation between empathy and role taking was supported, and the importance of imagination for both was indicated, an importance that needs to be assessed in future research. Empathy was found to be important for prosocial behaviors at home, while the impact of parental empathy, particularly maternal empathy, on prosocial behaviors at home and school remains to be confirmed and clarified. Finally, the importance of cognitive factors (imagination

and role taking) for prosocial behaviors at school points to possible home-school differences that need to be understood when we assess factors that contribute to children's prosocial responses.

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Table 1. Multiple Regressions for Empathy, Role Taking, and Prosocial Behavior

Dependent Variable	Predictors [SRC]	Total R ²
Empathy (Bryant)	Role Taking [.42]	.18
Empathy (Q-Sort)	Empathy (Bryant) [.35]	.13
Role Taking	Creative-Imaginative [.54]	.31
	Empathy (Q-Sort) [.38]	.45
Prosocial (home)	Empathy (Q-Sort) [.58]	.38
	Maternal Empathy [-.34]	.50
Considerate (school)	Age [.26]	.10
	Creative-Imaginative [.51]	.35

Note. [SRC] = final Standard Regression Coefficient. Predictors are listed in the order entered (all F s > 4.0; age, sex, and PPVT scores were entered first, if significant).

Prosocial and Considerate were not used as predictors of empathy or role taking. N s varied from 27 (Role Taking; Bryant's empathy measure) to 43 (Considerate).

Table 2.

Correlations for Empathy, Role Taking, and Prosocial Behavior

	1	2	3	4	5
1. Empathy (Bryant)					
2. Empathy (Q-Sort)	.30**				
3. Role Taking	.35**	.23*			
4. Prosocial (home)	.28*	.48****	ns		
5. Considerate (school)	ns	ns	.25**	ns	
6. Age	.18	ns	ns	ns	.31**
7. Sex	.21	.22*	ns	.21	.21
8. PPVT	ns	.17	.26**	-.24*	.25*
9. Creative-Imaginative	.36**	ns	.57****	ns	.52****
10. Uses/Patterns	.32**	ns	.32**	ns	.29**
11. Ego Resilience	ns	.24**	.29**	.20*	.36***
12. Maternal Empathy	-.20	ns	ns	-.35**	.29**
14. Paternal Empathy	ns	ns	ns	.24*	ns

Note. Correlations with an absolute value less than .15 are not tabled.

* $p < .10$

** $p < .05$

*** $p < .01$

**** $p < .001$