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ABSTRACT

In this study of perspective taking and moral judgment 20 children (10 boys and 10 girls) at each age level between 4 and 10 years were given Peffer's Social Role-Taking Task, a spatial perspective-taking task and Damon's Test of Positive Justice. Investigated were: (1) the specific developmental sequences for role taking, spatial perspective-taking ability, and moral development; (2) the interrelationships among these three abilities at each of the ages; and (3) the impact of perspective (the child's point of view vs. someone else's) on the level of moral reasoning. Results indicate that each ability increased with age, although significant increases occurred only between certain successive ages. Similarly, a correlational analysis of the interrelationships among the abilities indicates that they are significantly positively related only at certain ages. There was evidence that perspective can have a significant impact on moral reasoning at certain ages. These results lend support to the contention that perspective taking mediates moral judgment, and strongly suggest that the nature of the relationship varies with age and seems most pronounced from ages 5 to 7.  
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Perspective Taking and Moral Judgment: A Developmental Analysis

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Abstract

Twenty children (10 boys and 10 girls) at each age between 4 and 10 years were given Feffer's (1970) Social Role-Taking Task, a spatial perspective taking task, and Damen's (1975) test of Positive Justice in order to investigate (a) the developmental sequence for each ability assessed, (b) the interrelationships among abilities at each age sampled, and (c) the impact of perspective (the child's point of view versus someone else's) on level of moral reasoning. Each ability increased with age, although significantly so only between certain successive ages. Significant positive correlations among the abilities emerged, but only at some age levels. Finally, perspective was found to have a significant impact on moral reasoning at ages 5, 7, and 9. In general, the results lend support to the view that perspective taking mediates moral judgment; the nature of this relationship varies with age and seems most pronounced from 5 to 7 years.

Perspective Taking and Moral Judgment: A Developmental Analysis

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The relationship between perspective taking and moral judgment has been conceptualized in two general ways. In one approach, both phenomena have been viewed as manifestations of a general decentering process. A number of researchers (Feffer, 1970; Selman, 1975; Shantz, 1975) have described the development of this decentering process: the young child progresses from an early egocentrism to the understanding that others may have different thoughts, feelings and perceptions (simple decentration) around age 6, to the consideration of different perspectives or points of view separately (sequential decentration) around age 8 or 9, and finally, to the simultaneous coordination of a number of different perspectives (simultaneous decentration) around age 10. This systematic decentration process is assumed to be a necessary precondition for a variety of cognitive, social and moral tasks (Piaget, 1967, 1970). For example, the egocentrism of a young child is reflected in his inability to make accurate inferences about the thoughts or feelings of others on perspective-taking tasks, as well as in his inability to consider the rights, responsibilities and intentions of others in moral situations.

A second view of the relationship is that perspective taking as a deeper and more basic form of reasoning, underlies and mediates the ability to make moral judgments (Selman, 1975). Kohlberg (1969) has asserted that principles of justice or moral principles are themselves essentially principles of role taking, involving the taking of perspectives of participants in the moral conflict situation. Moral development is viewed as a process of restructuring modes of role taking, with the fundamental social inputs stimulating moral

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development being conceived in terms of variations in the amount, kind and structure of role-taking opportunities. Within this framework, perspective taking is generally viewed as a necessary but not sufficient condition for moral reasoning (Selman & Damon, 1975).

Some empirical support for a relationship between perspective taking and moral judgment has emerged (Ambron & Irwin, 1975; Lee, 1971; Lerner, 1937; Moir, 1974; Rubin & Schneider, 1973; Selman, 1975; Stuart, 1967; Yussen, 1976). However, these studies have also yielded conflicting results concerning the nature and existence of the relationship at different ages, a problem that reflects to some extent the tendency of researchers to confine their investigations to relatively narrow age segments. In addition, research in the area has generally treated both perspective taking and moral judgment as unidimensional constructs, without a specification of the particular aspects of the constructs being assessed (Ambron & Irwin, 1975). For example, perspective taking may involve making inferences about another's thoughts, feelings, perceptions or intentions. When these different perspective-taking abilities (e.g., cognitive, affective, perceptual, etc.) are assessed, there are no clear and consistent interrelationships among them (Ambron & Irwin, 1975; Feffer & Gourevitch, 1960; Kurdek & Rodgaa, 1975; Rubin, 1973; Shantz, 1975; Sullivan & Hunt, 1967). Similarly, moral judgment may involve such concepts as positive justice (interpersonal conflict resolution), intentionality (the motive of an individual), or restitution (punishment providing for restoration of damages). Finally, most of the research is correlational, thus failing to provide any insight into possible causal links between the two constructs.

The present study attempted to resolve some of these issues. First, perspective taking and moral judgment were both conceptualized as multidimensional constructs. The study assessed the development of three specific dimensions

of the constructs: social and perceptual perspective taking, and the positive justice aspect of moral judgment. In addition, these dimensions were assessed for each age between the ages of 4 and 10 in order to examine the developmental sequences for each of the dimensions across a sufficiently large age span. Thus, a primary concern was to further validate the developmental sequence characterizing social perspective taking (Feffer, 1970), the general sequence assumed to characterize the development of perceptual perspective taking (Flavell, 1968), and the sequence postulated by Damon (1975) for children's conceptions of positive justice.

A second major objective was to explore the interrelationships among the three dimensions at each age from 4 to 10. Previous research has been characterized not only by the use of relatively narrow age segments, but also by a variety of behavioral referents and assessment tasks at different ages. It was expected that the use of identical tasks at each of the ages would illuminate any differences in interrelationships among the dimensions at different developmental levels.

Finally, on the basis that whose perspective or point of view the child assumed when answering a moral dilemma might have an impact on level of moral reasoning, the study compared performance when the dilemma was presented from the child's own point of view and from someone else's point of view.

In summary, then, this investigation addressed three major issues: (a) the development of social and perceptual perspective taking, and the positive justice concept of moral judgment, during the age period from 4 to 10; (b) the interrelationships among the three dimensions at each age; and (c) the impact of perspective (the child's own versus someone else's point of view) on moral judgment at each age.

## Method

### Subjects

Twenty children (10 boys and 10 girls) at each of seven age levels between four and ten years participated in the study. All were Caucasian, middle class children drawn from a nursery school, a kindergarten, an elementary school, and a summer day camp.

### Procedure

Subjects were seen individually and three tasks were administered to each child: (a) Feffer's (1970) Role-Taking Task, (b) a measure of perceptual perspective taking similar to Flavell's (1968) role-taking tasks, and (c) Damon's (1975) Test of Positive Justice. Administration of the social and perceptual perspective-taking tasks was the same for all children. However, half of the children at each age level were given the Test of Positive Justice from their own point of view (subjective perspective) and half from someone else's point of view (objective perspective). The order of administration was the same for all children, beginning with the perceptual task and ending with the social task, since pilot work had indicated that this order facilitated the involvement and cooperation of the younger children, and did not appear to influence level of performance.

### Instruments

Feffer's Role-Taking Task. This measure of social perspective taking requires that the subject make up stories for a number of scenes. Two colorful and fairly structured scenes were constructed in order to maximize the involvement and responsiveness of the younger children. The scenes were composed of cardboard figures mounted on white canvas boards. In accordance with standard procedures, the children were asked to tell a story about each of the scenes, and then asked to retell the story pretending they were each of the story char-

acters. The first scene portrayed a father, a boy, and a girl using a record player and guitar; the second portrayed a grandmother, a girl, and a baby with a cake and party supplies. Thus, for example, following the child's initial story about the first scene, the child was asked to "make believe that you are the father and tell the story again as if you are the father."

Children's responses were then classified into four categories according to Schnall and Feffer's revised Role-Taking Task Scoring Criteria: (a) simple refocusing, (b) character elaboration, (c) perspective elaboration, and (d) change of perspective. The categories reflect the varying degrees to which the children at different ages were able to refocus upon their initial stories from the various perspectives of their characters, while at the same time maintaining continuity between their various versions of the initial story.

The children's six responses (three for each scene) were scored according to the social perspective-taking level represented, beginning with no perspective-taking skills (0), and progressing through Schnall and Feffer's four stages (1-4). Mean scores were then computed for each child. Mean scores were used for both this measure and for the Test of Positive Justice in order to provide equivalent samples of the children's behavior on the two measures. This was in contrast to the usual procedure of using the mean of the highest performance levels for each scene on the social task, and a major stage (modal) score on the moral task.

Perceptual Perspective-taking Task. A test of perceptual perspective taking was designed, administered, and scored similar to those developed by Flavell (1968). In this task, the child was shown a configuration of three buildings (a bank, a house, and a garage) placed diagonally on a white board, with the bank closest to the child and the garage at the rear. On the opposite side of the board, facing the child, was a small green toy hippopotamus. A duplicate board covered by a sheet of white paper and a duplicate

set of buildings were given to the child. He was first asked to reconstruct the configuration as he saw it (to guarantee that any task failures were not due to problems in reconstruction ability). The child was then asked to reconstruct the configuration from the hippo's point of view: "Now, take the buildings and put them on this board so that they look to you, here, just like they look to the hippo, over there." If the child made an incorrect response, he was told to walk over to the hippo's position and "see what he sees from over there," and was then given a second chance to reconstruct the configuration. The child's configuration was traced on the paper covering the board, and any differences between first and second attempts were noted.

To perform correctly, three dimensions had to be attended to and coordinated:

- (a) front/back: the recognition that the hippo sees the backs of the buildings;
- (b) near/far: the recognition that the garage is viewed in front by the hippo, with the bank in the rear; and
- (c) left/right: the recognition that the child's left and right are reversed from the hippo's point of view.

Responses were scored from 0 to 6, ranging from a completely egocentric view of the configuration (0), to one aspect correct (usually front/back) on the second (1) or first (2) attempt, to two aspects (usually front/back and near/far) correct on the second (3) or first (4) attempt, and finally, to all three aspects correct on the second (5) or first (6) attempt.

Damon's Test of Positive Justice. This test of moral judgment has been used to assess such aspects of justice as the fair distribution of property, ownership and personal rights, responsibility for another's welfare, and what constitutes a good response to another's actions (Damon, 1975). Damon has reported that children's conceptions of positive justice progress through a series of six distinct phases (0-A through 2-B) which are closely age-related between the ages of 4 and 10, and reflect an increasing ability to recognize, articulate,



and coordinate the perspectives of others in a moral situation.

The particular dilemma used in this study was concerned with the distribution of property and rewards. The children were presented with a situation in which a class has made paintings and drawings which were sold at a fair, and then asked how the money should be distributed. Questions designed to elicit criteria underlying the children's reasons for the distribution, e.g., equality, merit, need, were then presented to the children. As indicated above, half of the children at each age were presented with the dilemma from their own point of view (subjective perspective). For example, these children were asked if they should get extra money if they made the most pictures, the best pictures, were the best behaved, were poor, etc. In contrast, the children in the objective perspective condition were asked if Kathy should get extra money if she made the most pictures, if Andy should get extra money if he made the best pictures, if Jim should get extra money if he were the best behaved, if Billy should get extra money if he were poor, etc. Responses to all the questions were scored according to Damon's Scoring Manual for Positive Justice. The scoring differentiates children who are not able to deal effectively with other points of view (Substages OA and OB), those who have an awareness that others may have different perspectives than their own (Substages 1A and 1B), and finally, those who demonstrate an ability to construct all possible points of view (Substages 2A and 2B). Following the assignment of the children's responses to the appropriate positive justice substage, the substages were coded for data analysis (0-5), and average stage scores were computed for each child.

### Results

Interrater reliability was established for the Role-Taking Task ( $r = .99$ ) and the Test of Positive Justice ( $r = .91$ ), based on a sample of 50 protocols for each measure. The central analysis involved three procedures. First, a

multivariate analysis of variance was performed on all three measures to assess the significance of the overall developmental trend within the age period sampled, as well as the significance of the developmental trends for each of the abilities. A post hoc comparison of differences between successive age levels was then done using Tukey's HSD to identify the periods of significant developmental change. Second, a correlational analysis was carried out to determine the relationships among the abilities at all seven ages sampled. Third, a contingency analysis (Finney, Latsch, Bennett, & Hsu, 1963) was then used to assess the impact of perspective (subjective versus objective) on positive justice scores.

#### Developmental Analysis

For each of the measures, scores increased with age. The multivariate analysis of variance yielded a significant overall developmental trend,  $F(6, 133) = 26.64, p < .01$ . No significant sex differences were found on any of the measures, and the data for the two groups were combined.

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 Insert Table 1 about here  
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Social Perspective Taking. The univariate analysis yielded a significant effect of age on social perspective taking,  $F(6, 133) = 35.22, p < .01$ . However, post hoc comparison revealed a significant increase in social perspective-taking ability only between the ages of 6 and 7 ( $p < .01$ ).

Perceptual Perspective Taking. Similarly, the univariate analysis yielded a significant effect of age on perceptual perspective taking,  $F(6, 133) = 25.31, p < .01$ , with a significant increase only between ages 8 and 9 ( $p < .05$ ).

Positive Justice. Finally, the univariate analysis yielded a significant effect of age on positive justice,  $F(6, 133) = 167.36, p < .01$ . Post hoc comparison indicated that there were significant increases between the following

ages: 4 to 5, 5 to 6, 6 to 7, 8 to 9 ( $p < .01$ ), and 9 to 10 ( $p < .05$ ).

Thus, within this age period, children exhibited clearly increasing social and perceptual perspective-taking ability, as well as increasing ability to deal with the concept of positive justice. However, for each of these abilities, significant increases were not found at each age sampled. Nor were the periods of significant change identical for the different abilities. Nevertheless, a number of such periods did coincide: from 6 to 7 for social perspective taking and positive justice, and from 8 to 9 for perceptual perspective taking and positive justice.

It is important to note, however, that although the perceptual task provided a single measure of ability, both the social and moral tasks produced a number of samples of reasoning that were averaged to provide comparable summary scores. Thus, at all ages, children had higher level competencies in both social and moral domains than their ~~mean~~ responses indicated. For example, by age 5, most of the children were able to demonstrate simple perspective-taking ability in at least some of their reasoning on both social (75%) and moral (95%) tasks, although the average social and moral scores at this age level suggest that the children did not exhibit these competencies characteristically.

#### Interrelationships Among the Abilities at Specific Ages

Intercorrelations among the abilities varied at different ages, suggesting that the interrelationships among the abilities were not simply a function of the different tasks.

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 Insert Table 2 about here  
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Significant correlations were found for social perspective taking and positive justice at age 5 ( $p < .01$ ), for perceptual perspective taking and positive

justice at age 6 ( $p < .05$ ), and for social and perceptual perspective taking at age 7 ( $p < .05$ ). It appears that the age period from 5 to 7 is particularly important for intercorrelations among the three abilities.

#### The Impact of Perspective on Positive Justice

Although there were no significant differences in mean positive justice scores for subjective (the child's own point of view) versus objective (someone else's point of view) perspective at any age level, there was some evidence that perspective can have a significant impact on positive justice reasoning at particular ages. At ages 5, 7, and 9, the proportion of children using reasoning characteristic of a particular positive justice substage varied as a function of subjective versus objective perspective. At age 5, significantly more children in the subjective condition gave at least one response at a higher level than their mean positive justice score ( $p < .01$ ), a tendency that was not found at other ages. However, at ages 7 ( $p < .01$ ) and 9 ( $p < .05$ ), significantly more children in the objective condition exhibited reasoning at one level lower than their mean positive justice score.

#### Discussion

The results of the present study provide strong evidence that between the ages of 4 and 10, children exhibit increasing ability to recognize, articulate, and coordinate social and perceptual perspectives, as well as increasing understanding of the concept of positive justice. There is additional support for the developmental sequence described by Feffer (1970) concerning social perspective taking, for the general sequence assumed to characterize children's development of perceptual perspective taking (Flavell, 1968), and for the developmental sequence postulated by Damon (1975) for children's conceptions of positive justice. The fact that there were significant increases only between certain successive ages within this period for all three dimensions in-

icates that these abilities do not develop uniformly during the period, but are characterized by particular periods of major shifts.

The additional finding that there are significant intercorrelations among the three dimensions only during the 5 to 7 period suggests that some of the inconsistency in the literature concerning the relationships between moral judgment and perspective taking, and among the various kinds of perspective taking, may be due not only to conceptual and methodological variability, but also to the different age levels sampled. A further implication is that the interrelationships among the abilities may best be understood with reference to a number of common perspective-taking components that underlie all three abilities and that may be differentially important at different ages, as well as their different verbal, attentional, information-processing, perceptual and conceptual components.

A common perspective-taking component is the recognition that others may have different perspectives or points of view: that other children have rights, needs, and desires on the moral task; that the situation is viewed differently from the roles of the various story characters on the social task; and that the hippo sees a different configuration on the perceptual task. To the extent that a child can recognize and articulate different perspectives, and that they are important in negotiating particular levels of the tasks, intersections among the abilities would be expected. It is during the 5 to 7 period that both of these requirements are met in connection with simple perspective taking, and it is during this period that significant interrelationships among the abilities are found.

Similarly, all three tasks also require both sequential and simultaneous perspective taking for more advanced functioning. Successful task completion requires the child to deal with a variety of moral (e.g., equality, merit, need)

perspectives, to coordinate a number of spatial perspectives (front/back, near/far, and left/right), and to coordinate the behavior and internal states of the story characters on the social task. The fact that there were no significant intercorrelations among the abilities at ages 4, 8, 9, and 10 suggests that either the non-perspective-taking components of the abilities are relatively more important at these ages, or that sequential and simultaneous perspective taking emerge at different ages in social, perceptual, and moral domains (Piaget's "horizontal decalage").

It is impossible to assess the latter possibility of a horizontal decalage without the use of comparable tasks in the three domains, thus assuring that the child is equally likely to utilize his perspective-taking competencies in all areas. It is clear that the tasks used in the present study are not synchronous in accordance with Toussaint's (1974) criterion of equivalent information-processing requirements. For example, the spatial task was particularly demanding in terms of both task and response requirements. It involves not only a three object array, but also the coordination of front/back, near/far, and left/right relationships, an achievement of considerable complexity and difficulty for the young child (Piaget & Inhelder, 1956; Laurendeau & Pinard, 1970). Furthermore, the child was asked to make inferences about a toy hippopotamus who cannot see, as opposed to another child who can see, thus requiring the use of hypothetical reasoning (Cox, 1975), and was asked to reconstruct the configuration, a more difficult mode of response than matching or pointing. Without question, research in all three areas is characterized by the use of tasks differing in complexity, difficulty, reliability, and validity. Furthermore, in order to make an accurate assessment of the role of perspective taking across domains, it is necessary not only to have synchronous tasks, but also to identify and evaluate the relevant verbal, attentional, information-processing, perceptual and con-

ceptual components for each of the abilities, and to establish the role that these emerging cognitive abilities play in the development and mediation of perspective-taking ability. It is quite likely, for example, that increasing use of verbal mediation, more effective attentional deployment, increases in memory capacity and strategies, and increased capacity for conceptual-symbolic thought play an important role in the development of perspective taking.

The third finding, that perspective can have a significant impact on moral reasoning at particular ages, combined with the above results, lends support to the contention that perspective taking mediates moral judgment, as opposed to a view of both phenomena as manifestations of a general decentering process. These results extend Yussen's (1976) findings that adolescents and college students are able to display different levels of moral judgment from social perspectives other than their own.

The overall results suggest that when a sufficiently large developmental span is sampled, it becomes apparent that the relationship between perspective taking and moral judgment changes at different ages, and is most pronounced during the 5 to 7 period. This finding is in accord with the Piagetian (1970) conception of this period as a transitional one for the development of concrete operations, as well as consistent with a view of this period as one of disequilibrium which is characterized by inconsistency, conflict, and internal contradiction, and maximum susceptibility to the effects of situational and task-related manipulations (Flavell & Wohlwill, 1969). The finding is also in agreement with a good deal of evidence implicating the 5 to 7 period as an important one for social-cognitive development (e.g., Shantz, 1975), as well as for the development of a wide range of cognitive abilities (e.g., White, 1965).

There are two general implications for further study in this area. First, the development of both perspective taking and moral judgment must be more clearly

delineated in terms of a multivariate analysis which incorporates a specification of relevant constructs, their dimensions, operational measures of the constructs and dimensions, relevant task and response variables, and a developmental analysis which identifies the role of all of these factors at specific developmental periods. For example, the nature of the specific dimension involved as well as the task and response measures used may influence the age at which the ability is manifested. The development of perspective taking is probably best viewed not as a "have it/have it not" skill, but as a process of increasing perspective-taking ability (Selman, 1975), with sequential changes in the forms and/or modes of the abilities becoming manifested at various ages in various domains depending on variations in these factors.

Second, the development of perspective taking might be usefully viewed within a systems framework that specifies the relationship of perspective taking to other developmental skills, processes and behavioral systems; the role that perspective-taking abilities play in the development of interpersonal behavior; and the role of such experiential factors as parent-child, sibling and peer relationships. On one integrative level, for instance, one might delineate the increasing cognitive capacities of the child, such as an increased capacity for conceptual-symbolic thought. This structural level might be conceptualized as necessary but insufficient for the development of such social competencies as perspective taking, which are in turn necessary but insufficient for the development of such social behavioral systems as morality and prosociality.



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Table 1

Means and Standard Deviations for Measures of Positive Justice, Social and Perceptual Perspective Taking

Age	Measures					
	Positive Justice		Social Perspective Taking		Perceptual Perspective Taking	
	$\bar{X}$	SD	$\bar{X}$	SD	$\bar{X}$	SD
4	.68	.48	.48	.55	.00	.00
5	1.37**a	.41	.53	.51	.85	.88
6	2.12**	.37	.68	.43	1.20	.77
7	2.64**	.41	1.27*	.58	1.95	1.05
8	2.98	.48	1.46	.57	1.95	.89
9	3.79**	.53	1.82	.48	3.20*	1.77
10	4.27*	.39	2.21	.38	3.70	1.72

<sup>a</sup>Significant increase in ability compared with preceding age (\* $p < .05$ , \*\* $p < .01$ ).

Table 2  
Intercorrelations Among Measures of Positive Justice,  
Social and Perceptual Perspective Taking

Measure	Age						
	4	5	6	7	8	9	10
Positive Justice x Social Perspective Taking	.04 <sup>a</sup>	.64**	.29	-.03	.10	.17	.17
Positive Justice x Perceptual Perspective Taking	--- <sup>b</sup>	.32	.50*	-.01	.33	.31	.10
Social x Perceptual Perspective Taking	--- <sup>b</sup>	.13	.29	.44*	-.19	.01	.01

<sup>a</sup>Based on a sample size of 20.

<sup>b</sup>All children at this age had the same perceptual perspective-taking score.  
\* $p < .05$ , \*\* $p < .01$ .

#### Footnote

A shorter version of this paper was presented at the biennial meeting of the Society for Research in Child Development, New Orleans, Louisiana, March 17-20, 1977. The paper is based on the first author's master's thesis under the supervision of the second author. Special thanks are due to Alexander W. Siegel for his critical reading of the manuscript and many helpful comments, and to Martin S. Greenberg for his support and encouragement. Grateful appreciation is expressed to Sister Grace Hartzog of Seton Hill Nursery School, Mrs. Jo Anna Lizza of Seton Hill Kindergarten, Dr. Robert J. Nevin of the Greensburg Salem School District, and the staff and administration of the Greensburg YMCA Day Camp for their generous cooperation. Requests for reprints should be addressed to Diane T. Marsh, Department of Psychology, University of Pittsburgh, Pittsburgh, Pa. 15260.