## MORAL JUDGMENT AND GENEROSITY IN CHILDREN<sup>1</sup>

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Summary.—Three sets of moral judgment stories and a measure of generosity were taken from 21 middle-class girls aged 8 to 11 yr. The moral judgment stories assessed the child's conception of Piagetian intentionality, Piagetian distributive justice, and Kohlbergian principled morality. While the three sets of stories showed some degree of interrelatedness, only the measure of distributive justice showed a positive (but marginal) relationship to children's generosity. Age and IQ effects were also assessed.

Generosity in children has been the subject of an increasing research literature over the past decade (Bryan & London, 1970; Rushton, in press). One repeated finding is that it increases with age, at least over the range 6 to 13 yr. This has led to suggestions that increases in generosity may be linked to cognitive-developmental changes in, for example, role-taking ability and level of moral judgment, both of which show significant developmental changes over the same age period.

The idea of linking generosity to cognitive development stems from the work of Piaget (1932). Piaget viewed the child as progressing from a stage of egocentric morality based on authority and punishment to one based on cooperation, mutual respect, and the awareness of other's needs. According to Piaget, the morality of cooperation begins to emerge around the age of 7 and increases until around the age of 12 when mutual respect and consideration of others are firmly established.

Piaget's ideas about the development of moral judgment have given rise to a great deal of research. Most of this research has examined the development with age of specific dimensions of moral judgment, confirming movement from "immature" to "mature" responses with chronological age and, within age, with IQ and social class.

Only recently has Piaget's moral system been used to try and predict moral behavior as opposed to moral thought modes. Although early research did not show any relationship between measures of a child's level of moral judgment and resistance-to-temptation, more recent work has suggested that there may be links between moral judgment and measures of pro-social behavior such as generosity (Emler & Rushton, 1974; Fay, 1970; Rubin & Schneider, 1973; Rushton, 1975).

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Emler and Rushton (1974) and Rushton (1975) found a relationship between moral judgment and generosity in children of both sexes aged 7 to 13 yr. The moral judgment measure required children's responses to two stories taken from Piaget (1932) regarding concepts of distributive justice. The generosity measure consisted of the number of valued tokens donated to a charity from those won on a game. Fay (1970) found a relationship between moral judgment and two separate measures of generosity for 8-yr.-old boys (although not for 8-yr.-old girls or 6-yr.-olds of either sex). Her measures of moral judgment involved six pairs of stories as used by Bandura and McDonald (1963). Three of the story pairs had been adapted from Piaget (1932) and three had been constructed on the same principles as the Piaget stories. The moral judgment involved whether actions were evaluated in terms of their consequences or the intentions behind them. The measures of generosity involved (a) donating time to play with an attractive game to another child not present and (b) sharing sweets with a peer.

Rubin and Schneider (1973) found in 55 7-yr.-olds a relationship between moral judgment and two separate measures of altruism, one being generosity (donating candies to the poor) and the other being helping behavior (sorting tickets for a younger child). Six moral judgment stories were used as adapted by Lee (1971) from Kohlberg (1964).

The current study was designed to investigate the relationships between the three measures of moral judgment described above. To the degree to which these three measures of moral judgment are interrelated, the evidence is for the existence of a general moral thinking factor operating. The study also examined further the relation of moral judgment to generosity.

## METHOD

The procedures and apparatus were similar to those used by Emler and Rushton (1974). Participants were 21 girls aged 8 to 11 yr. at a middle-class fee paying school in North London. Stanford-Binet Revised Version L-M scores ranged from 88 to 160, with a mean of 116 and SD of 19. The study was conducted over two sessions in a school class room. The first session assessed moral judgment and the second, one day later, generosity. The female investigator administered the three sets of stories involving moral judgment. These assessed "principled morality" as measured by Rubin and Schneider (1973) with six stories; "intentionality" as assessed by Fay (1970) with six pairs of stories; and "distributive justice" as measured by Emler and Rushton (1974) and Rushton (1975), with two stories. Stories were altered where necessary so that protagonists were female and British. The child's responses were tape recorded and later transcribed for scoring. For the assessment of generosity, children played on an electronic bowling game, won valued tokens, and were then given an opportunity to donate some of their winnings to a little

orphan child depicted on a charity poster. The number of such tokens donated constituted the child's generosity score.

## RESULTS AND DISCUSSION

Inter-coder agreement for the three sets of moral judgment stories ranged from 86% to 93%. A Pearsonian correlation matrix was computed for all variables. This matrix is shown above the diagonal in Table 1. In order to assess the interrelations between the measures of moral judgment and of generosity, unconfounded by age or IQ, another matrix was computed partialling these out. This is shown below the diagonal in Table 1.

TABLE 1

CORRELATIONS BETWEEN 21 8- TO 11-YR.-OLD GIRLS'

MORAL JUDGMENTS AND GENEROSITY

	1	2	3	4	5	6
1. Age		-0.06	-0.07	0.04	-0.01	0.63†
2. IQ			0.06	0.40*	0.36*	0.09
3. Judgments on principles				0.60†	0.40*	-0.28
4. Judgments on intentions			0.64		0.14	-0.06
5. Judgments on distribution			0.40	0.02		0.19
6. Generosity			-0.31	-0.20	0.22	

Note.—Below the diagonal, age and IQ have been partialled out. p < .05; p < .001.

Regarding generosity, the results confirm previous findings that generosity both increases from age 8 to 11 yr. and is unrelated to IQ (see Rushton, in press). Regarding moral judgment, although no age differences were noted, there was a positive relation between IQ and concepts of intentionality and distributive justice. The positive correlation between the sets of stories suggested there was some consistency to moral judgment across categories and separate from age and IQ effects. In regard to moral judgment predicting generosity, only the stories assessing concepts of distributive justice came close (r=.22).

Three main points can be made from this study. First, while the authors did manage to produce coding frames for the stories which provided for high inter-judge reliability, they felt less than confident that these coding frames were "objective." A great deal of subjective judgment had to be used, particularly with the stories concerned with "principled morality." There is therefore a great necessity for psychometric standards to be applied in the area of moral judgment. We need measures that produce a wide range of scores, that are internally consistent, reliable, and capable of being compared to various norms. Otherwise hypothesis testing is made much more problematic. Second, we need valid and reliable measures of "generosity." Picking one single laboratory measure to test predictions from cognitive-developmental theory is less than

ideal. While such measures seem useful for studying the effect of certain experimental manipulations, they are perhaps less useful for measuring person variables unless more is known about their representativeness. Perhaps a battery of reliable and internally consistent behavioral tasks might be used or, alternatively, naturally occurring classroom or playground behavior might be measured. Thirdly, the cognitive-developmental hypothesis linking moral judgment to generosity needs to be made more explicit. Which judgments in which situations will predict what behaviors and, further, how exactly does applying a judgment produce a motivation to act?

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