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AUTHOR           Graziano, William G.  
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## ABSTRACT

The present study investigated the hypothesis that children do not use the same standards of fair play in mixed-age situations as in same-age situations. It was further hypothesized that in mixed-age encounters, younger children would use cues associated with older children (i.e., physical size) as a basis for reward deservingness. Older children, however, would base their reward distribution on task performance. Children (48 first graders, 48 third graders) were shown a photo of two other children ("players"), and a photo of two stacks of building blocks each of the players supposedly built in a game. Children were asked to divide 10 prize chips between the two in the photo. Reward distribution was measured in a 2 (grade of child allocator) x 2 (relative size of the player) x 2 (mixed- or same-age group) x 3 (relative task performance) factorial design. Data corroborated the hypotheses. Third graders consistently divided rewards on the basis of task performance, ignoring age and size variables. First graders also allocated rewards on the basis of task performance, except when a player was both older and larger. Older, larger players received disproportionately larger rewards than did same-age mates who had equivalent levels of task performance. (Author/MS)

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Standards of Fair Play in Same- and Mixed-Age  
Groups of Children

William G. Graziano

University of Georgia

In the classic approach to socialization, the young child is viewed as the recipient of influence from a variety of adult sources. In this approach, adults and adult-based institutions such as the school and the church are seen as responsible for molding the child's behavior, particularly his/her moral behavior.

While it is clear that adults play an important role in children's moral development, it is also clear that additional factors have a systematic influence. One potentially important influence is a child's peer group (Hartup, 1970, 1976a, b). Piaget (1932), for example, has suggested that it is a child's peers, not adults, that bear primary responsibility for the child's development of mature moral judgments. It is claimed that as the child grows older and engages in the give and take of social play, he/she learns that that adult-given rules are changeable, and can be altered through peer consensus and peer negotiation.

As intuitively appealing as such a claim seems, it is obvious that Piaget's picture has been painted with a broad brush. Part of the

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ambiguity in Piaget's formulation is the definition of a peer. Precisely who are these peers that are alleged to be so important for moral development?

Until relatively recently, there was a general consensus among behavioral scientists: A peer was an agemate. As a consequence of this consensual definition, almost all research on peer influence on social development has been based on some agemate interaction. But recently, this definition of peer-as-agemate has been challenged (Hartup, 1976a, b; Konner, 1975; Lewis & Rosenblum, 1975). First, theorists and researchers note that same-agemate interaction is less frequent than is generally assumed. Barker and Wright (1955), for example, found that in the contemporary society of Midwest, children spent the majority of their time with other children who differed in age from themselves by more than 12 months. Second, same-agemate interaction is relatively rare from a comparative/evolutionary perspective. Konner (1975) notes that for 99% of human's evolutionary history, humans lived in small hunting-gathering lands in which chances for same-age peer interaction were small. Same-age interaction is a relatively recent innovation in Western industrialized societies.

But there are additional reasons (besides frequency of occurrence) for mixed-age interaction being important for moral development. In more naturalistic situations in which a younger child interacts with an older child, the younger child may be learning a great deal about the uses of power and aggression (Hartup, 1976a). These experiences, in turn, may exert considerable influence on the child's developments of norms of

reciprocity and fair play. The older child has considerable potential for influencing the younger child's outcomes, both for good and for bad. Given the older child's potential to control rewards and punishments in mixed-age encounters, we should expect younger children to find cues associated with older particularly salient, and to be particularly responsive to such cues. There is evidence that children direct more attention to cues associated with reward than to neutral stimuli (Nunnally, Duchnowski & Parker, 1965). Persons associated with reward also receive more attention from children than do neutral persons (Yussen, 1974).

If peers are an important influence on moral development, then it may be important to examine children's behaviors in mixed-age as well as same-age groups. Theories that rely exclusively on data from same-age peer interaction may be providing us with a less than complete picture of the complexities of moral development.

In what ways might mixed age interaction differ from same-age interaction? Konner suggests that children's behaviors were selected for an ability to become integrated into multi-age groups. If this hypothesis is correct, we should expect children in mixed-age situations to be particularly responsive to cues associated with age differences, and to respond differently on the basis of these cues. Children in same-age situations will not have age-related cues available, and will respond on the basis of some other cues.

What are the cues associated with older children that younger children might find particularly salient? One obvious cue is physical size, a natural covariate of age. In most cases, older children are larger than younger children.

Why should physical size capture a child's attention and influence his/her judgments? First, children may be particularly responsive to size differences because size differences do not require great cognitive sophistication to assess. Theorists such as Flavell (1977) and Shantz (1975) have suggested that assessment of other persons proceed developmentally from obvious external characteristics to more correct, internal characteristics. Size, and its natural covariate age, represent just such an obvious external characteristic.

How long does the size attribute continue to be a relevant attribute dimension for younger children? While there appear to be vestige of sizeism even in adult judgments (e.g. Wilson, 1968) we may speculate that as the young child grows older and develops more sophisticated cognitive machinery, he/she comes to recognize that power and its associated cues alone do not always determine interpersonal outcomes or deservingness. With more experience, greater cognitive capacity, and more social control skills, the older child has the ability to make more subtle interpersonal judgments relating to ability and trying, and to deal more effectively with power and the less directly contingent behavior of same-age peers.

In summary, we may hypothesize that young children utilize different standards of fair-play in dealing with older children than in dealing with age-mates. Because older children are usually larger than him/herself a young child may consider size a relevant attribute in judgments of deservingness. Size is related to norms of power and the potential rewardingness of an encounter; it is an easy attribute for children to assess; and, in Konner's terms, it is diagnostic of the presence of a

contingently responsive person. In dealing with agemates who are all roughly equivalent in size, however, a young child will not have such easily accessible cues, and may have to find some other basis for judgment.

In this study, first and third grade children were shown photographs of two other children who were players in a tower game, and asked to distribute rewards to the two players. The relative age, relative size, and relative task performance of the two players were independently manipulated.

It was hypothesized that first graders would not follow a task-based equity rule, but third graders would. More specifically, it was hypothesized that: (a) When first graders allocate rewards among same-size players, they will distribute rewards equally among the players, and ignore age and task performance differences; (b) When first graders allocate rewards among different-size players, they will distribute more rewards to the larger, and ignore age and task performance differences; and (c) When third graders allocate rewards, they will consistently follow a task-based equity rule, and ignore age and size differences among the players.

#### Method

In this study, 48 first graders and 48 third graders from a suburban St. Paul, Minnesota parochial school were shown a Polaroid photo to two other children ("players") and a photo of two stacks of building blocks each of the players supposedly built in the tower game. Children were asked to divide 10 prize chips between the two players in the photo.

Reward distribution was measured in a 2 (grade of child allocator) X 2 (mixed- or same-age pair) X 2 (relative size of the player) X 3 (relative task performance) factorial design.

### Results

Results of the study were complex, and limits of time and space force us to only briefly summarize the findings.

First, there was a significant grade X size interaction [ $F(1,80) = 9.50, p < .01$ ] Post hoc comparisons indicated that first-graders responded differently from third graders in dealing with larger players. Third graders did not allocate player rewards on the basis of relative size, while first graders did.

Second, there was a significant grade X composition X size interaction [ $F(1,80) = 4.66, p < .05$ ]. In the mixed-age, different size player condition, first graders allocated relatively more to the larger third grade player, regardless of his task performance.

### Conclusion

The present study provides support for three theoretically important points. First, young children do not use the same rules of fair play in dealing with older, larger children as in dealing with same-size age mates. This finding is important given that virtually all research testing deservingness formulations in children are based exclusively on data from groups of same-age (and presumably, same-size) children.

Second, although younger children had a fair-play rule to respond to subtle task performance differences in dealing with same-age peers,

this rule was superceded or modulated when a young child dealt with older, larger children.

Third, this data is relevant to theorists who propose that mixed-age interaction is of special theoretical significance (Hartup, 1976a, b; Konner, 1975). That young children did not respond differentially to age alone or to size alone suggests that the attribute dimension is an age/size configuration (cf. Brooks & Lewis, 1976). Mixed-age interaction cannot be explained as merely the interaction of same-age children who happen to differ in size (see also Graziano, French, Brownell & Hartup, 1976).



References

- Barker, R. G., & Wright, H. Midwest and its children. New York: Harper & Row, 1955.
- Brooks, J., & Lewis, M. Infants' responses to strangers: Midget, adult, and child. Child Development, 1976, 47, 323-332.
- Flavell, J. Cognitive development. Englewood Cliffs, N. J.: Prentice-Hall, 1977.
- Graziano, W., French, D., Brownell, C., & Hartup, W. Peer interaction in same- and mixed-age triads in relation to chronological age and incentive condition. Child Development, 1976, 47, 707-714.
- Hartup, W. Peer interaction and social organization. In P. Mussen (Ed.), Carmichael's manual of child psychology. New York: Wiley, 1970, 361-456.
- Hartup, W. W. Cross-age vs. same-age peer interactions: Ethological and cross-cultural perspectives. In V. Allen (Ed.), Children as tutors: Theory and research in tutoring. New York: Academic Press, 1976(a).
- Hartup, W. W. Peer relations: Developmental implications and interaction in same- and cross-age situations. Young Children, 1976(b).
- Konner, M. Relations among infants and juveniles in comparative perspective. In M. Lewis & L. Rosenblum (Eds ), Friendship and peer relations. New York: Wiley, 1975.
- Lewis, M. & Rosenblum, L. (Eds.), Friendship and peer relations. New York: Wiley, 1975.

- Nunnally, J., Duchnowski, A., & Parker, A. Association of neutral objects with reward: Effects on verbal evaluation, reward expectancy and selective attention. Journal of Personality and Social Psychology, 1965, 1, 270-274.
- Piaget, J. The moral judgment of the child. London: Rutledge & Keegan Paul, 1932.
- Shantz, C. W. The development of social cognition. In M. Hetherington (Ed.), Review of child development research. Chicago: University of Chicago Press, 1975.
- Wilson, P. R. Perceptual distortion of height as a function of ascribed academic status. Journal of Social Psychology, 1968, 74, 97-102.
- Yussen, S. Determinants of visual attention and recall in observational learning by preschoolers and second graders. Developmental Psychology, 1974, 10, 93-100.