This paper investigates the effects of age and sex on the spontaneous helping behavior of preschool children. Forty-six middle-class children, 22 boys and 24 girls, attending school in a small city in northeastern Kansas took part in the study. Children were divided by median split into younger and older groups. Taped interactions of children with a needy confederate were rated on four measures representing various components of the broad dimension of helpfulness: (1) latency (in seconds) to the child's first clearly helpful response, (2) extent of spontaneous sharing, (3) degree of verbal and physical involvement with the confederate, and (4) extent of overall helpfulness. The average of two trained independent judges' ratings was used as the measure for each child on each of the four dimensions. Results indicate that older female preschoolers responded more quickly to the needs of a distressed confederate and received higher ratings on sharing, involvement, and overall helpfulness scales than did males or younger females. These findings suggest a developmental progression from lesser to greater helpfulness for preschool girls, but not for preschool boys, in a situation where the needy other's affective cues are salient. (Author/M)
The Effects of Age and Sex on Preschoolers' Helpfulness.

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SUMMARY

The effects of age and sex on the spontaneous helping of preschool children were investigated. Older female preschoolers responded more quickly to the needs of a distressed confederate and received higher ratings on sharing, involvement, and overall helpfulness scales than did males or younger females. These findings suggest a developmental progression from lesser to greater helpfulness for preschool girls, but not for preschool boys, in a situation wherein the needy other's affective cues are salient.
THE EFFECTS OF AGE AND SEX
ON PRESCHOOLERS' HELPFULNESS

A. INTRODUCTION

While several investigators (e.g., 4, 7, 9, 10) have found age to be positively associated with altruistic acts, the nature of the developmental increase is somewhat unclear. Explanations of age effects have centered on increases with age in the level of moral reasoning about prosocial behavior (2), competence for initiating helpful actions (9), and experience with the norm of social responsibility (5). In addition, the tendency to experience empathic arousal has frequently been suggested as an important mediator of altruistic behavior (6) and has been found to increase during childhood (3).

Of these potential mediators of the developmental increase in helping, a sex difference has been strongly indicated for empathy alone. In his recent review, Hoffman (3) concluded that females tend to experience vicarious affective arousal (that is, to empathize) to a greater extent than do males. With respect to sex differences in actual helping, a recent review (6) revealed that while females tend to be somewhat more helpful than males, the effects of sex on prosocial behavior have been relatively inconsistent. These inconsistent findings may be related to the use across studies of contrasting helping situations and measures to which boys and girls may be differentially responsive.

Research to date on the effects of age and sex on helpfulness has focused primarily on elementary school-aged children. The present lack of systematic research with very young children must be amended if the antecedents of empathy and helpfulness are to be clarified. As part of a more extensive project, the present study explored whether preschool boys and girls at two age levels
would differ in the degree of helping behavior directed to a target displaying obvious empathy cues. Because of the prior evidence for a developmental difference, it was expected that older children would be more helpful than younger children. In addition, since girls have demonstrated greater empathic tendencies than boys, a situation providing obvious affective cues in the "victim" appeared likely to elicit greater helping in girls than in boys.

B. METHOD

1. Subjects, Experimenter, and Confederate

Forty-six middle-class children, 22 boys and 24 girls, attending preschools in a small city in northeastern Kansas took part in the study. One girl was black; two girls and one boy were of Oriental descent; the remainder were Caucasian. The children were divided by median split into younger and older groups. The younger group ranged in age from 37 to 55 months (mean = 47.63 months); the older children ranged in age from 56-70 months (mean = 61.61 months). There were 11 children in the younger male, older male, and older female groups; there were 13 children in the younger female group.

Parental permission was obtained for all participants. The experimenter, a female undergraduate, was known to the children, having spent time with them previously in regular preschool activities. The female adult confederate was unfamiliar to the children and was dressed in a manner which was not blatantly masculine or feminine, childlike or adult.

2. Materials and Procedure

Each child was taken by the experimenter to a room where he/she was introduced to the confederate. Following a brief "get acquainted" period
during which the confederate attempted to develop a friendly relationship with the child, the confederate and the child were each given an identical basket of small toys. While the confederate was instructed to remain in the room to play with her toys, the child was led to an adjoining room and was given an opportunity to play with his or her toys.

After this play period, the experimenter explained that the child could watch the confederate playing in the next room on a "special television set." A prerecorded, but presumably live, videotape was then shown to the child. The confederate was depicted playing happily with her toys for approximately 90 seconds, after which she commented that it would be fun to pull the toys around in a wagon that she had noticed in another room in the building. At this point in the videotape, she left the room to look for the wagon. During her absence, an unfamiliar adult male came into the room, commenting to himself that he was looking for some toys. He noticed the confederate's unattended basket of toys and said, "These are nice toys. Nobody seems to be using them right now. I guess it's all right if I take them." He then picked up the toys and left.

In a few seconds, the confederate returned to the room and, apparently talking to herself, said, "Well, I couldn't find the wagon but the toys are fun to play with by themselves anyway." She then noticed that her toys were missing and became very distressed. She said, for example, "Oh, no! My toys are gone! Now I don't have anything to play with." Her feelings were clearly sad, as evidenced by her tone of voice and by a lengthy close-up of her facial expression.

The experimenter turned off the television set and told the child that the camera in the other room was now off. She then mentioned that
she had some other work to do for a few minutes. Escorting the child (with his/her basket of toys) back to the room where the confederate had remained, the experimenter instructed the child to do whatever he/she wanted while waiting. The child was also cautioned at this time not to go back into the experimenter's room because she would be very busy there.

The child was left alone with the confederate for a period of two minutes and was free to help or not help in any manner he/she chose. During this time, the confederate periodically remarked, "I don't have anything to play with," but this remark was discontinued, of course, if and when the child offered to share his/her own toys. The interaction between the child and the needy confederate was videotaped through a one-way mirror for the later assessment of helping behaviors. Following the two-minute period, the experimenter reentered, thanked the child for participating, and returned him/her to the classroom.

C. RESULTS

The taped interactions were rated on four measures representing various components of the broad dimension of helpfulness: (1) latency (in seconds) to the child's first clearly helpful response, (2) extent of spontaneous sharing, (3) degree of verbal and physical involvement with the confederate, and (4) extent of overall helpfulness. Overall helpfulness ratings were intended to provide an indication of the child's general helpfulness, taking into consideration all of the other aspects. Extent of spontaneous sharing was rated on a behaviorally anchored 6-point scale; involvement and overall helpfulness were rated on 5-point scales.

The average of two trained independent judges' ratings was used as the measure for each child on each of the four dimensions. Inter-rater
reliabilities ranged from .83 to .99. Ratings on the four helping measures, which were found to be highly intercorrelated, were initially analyzed with a multivariate analysis of variance. Unexpectedly, a significant interaction of Age Level and Sex was revealed by the MANOVA \([F(4,27) = 2.82, p < .05]\). To clarify the effects of Age Level and Sex on the individual helping measures, separate univariate ANOVA's were also performed. Mean scores for each dependent measure by Age Level and Sex are presented in Table 1. Significant main effects of Age Level were found for three of the four dependent measures \([\text{all } F'(1,30) > 5.00, p < .05]\). For involvement ratings, the effect of Age Level reached only marginal significance \([F(1,30) = 2.75, p < .11]\). In each case, older children were rated as interacting more prosocially than were the younger children. These main effects were qualified by significant Age Level X Sex effects on two of the dependent measures \([\text{both } F'(1,30) > 5.00, p < .05]\). Newman-Keuls tests indicated that the older females responded helpfully in fewer seconds and received higher ratings on the involvement scale than did the remaining three groups, which did not differ significantly from each other. While the interaction for sharing ratings \([F(1,30) = 3.28, p < .08]\) and overall helpfulness ratings \([F(1,30) = 4.09, p < .06]\) attained only a borderline level of statistical significance, the pattern of findings for these indices paralleled that of the other two measures.

**D. DISCUSSION**

In the present study, older female preschoolers responded more quickly to the needs of a distressed confederate and received higher ratings on
sharing, involvement, and overall helpfulness scales than did males or younger females. Another recent observational study (1), exploring the expression of prosocial behaviors between young same-sex siblings, has yielded a similar pattern of findings. In naturally occurring dyadic interactions, wherein each sibling’s affective state was presumably quite salient, older females demonstrated higher rates of sharing, helping, and comforting than males or younger females. The results of the Abramovitch et al. (1) and present studies suggest a developmental progression from lesser to greater helpfulness for young girls, but not for young boys, in situations in which the other’s affective state is salient. Moreover, these findings suggest that it may not be until the later preschool period that girls begin to demonstrate the heightened empathic tendency, relative to their male counterparts, that is associated with enhanced helping.

Further replications and clarifications of the age X sex effect on helping within the preschool age range are, of course, needed. To directly assess the influence of empathy on prosocial behaviors in young boys and girls, reliable and valid measures of empathy are greatly needed for this age level (8). Moreover, future investigations should systematically vary helping situations as to their salience of empathy cues; the findings of such studies could serve to further clarify the role of empathic arousal in age and sex differences in young children’s helpfulness.
REFERENCES


### TABLE 1
MEAN LATENCY TO HELP (IN SECONDS), SHARING RATINGS, INVOLVEMENT RATINGS, AND OVERALL HELPFULNESS RATINGS BY AGE LEVEL AND SEX

<table>
<thead>
<tr>
<th>Sex</th>
<th>Latency to Help (in seconds)</th>
<th>Sharing</th>
<th>Involvement</th>
<th>Overall Helpfulness</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Younger</td>
<td>Older</td>
<td>Younger</td>
<td>Older</td>
</tr>
<tr>
<td>Male</td>
<td>82.45</td>
<td>75.55</td>
<td>2.36</td>
<td>2.64</td>
</tr>
<tr>
<td>Female</td>
<td>86.46</td>
<td>28.86</td>
<td>2.27</td>
<td>4.18</td>
</tr>
<tr>
<td>Total</td>
<td>(84.63)</td>
<td>(52.20)</td>
<td>(2.31)</td>
<td>(3.41)</td>
</tr>
</tbody>
</table>

**Note:** Higher sharing, involvement, and overall helpfulness ratings are associated with greater prosocial behavior.