This study examines the extent to which the younger (8 years old) and preadolescent (12 years old) child engage in altruistic lying for a peer who is dependent on the child for help in the form of lying behavior. Subjects were 56 Canadian, white, middle class boys. An ostensible peer gave half of the subjects help in winning a prize. The other 28 boys were refused help. One-half of the subjects in both help and refused-help conditions were 8 years old; the other half were age 12. The peer informed each subject individually that he had committed an accidental transgression and asked the subject not to tell the experimenter about it. When questioned about the accident, 12-year-olds who had received help from the peer were more willing to lie and thereby deny any knowledge of the accident than were 8-year-olds who had also received help. No differences in lying behavior were found between 8-year-olds and 12-year-olds after they had been refused help by the peer. (Author/MK)
EFFECTS OF AGE AND PRIOR HELP ON "ALTRUISTIC LYING" 1

York University

Esther R. Greenglass 2

A. INTRODUCTION

For many years social scientists have been interested in the factors affecting morality and its development in children. Hartshorne and May (13), pioneer researchers in this area, extensively studied the role of situational factors and individual difference variables which contribute to behaviors such as lying and cheating. Contrary to popular opinion, they demonstrated that there is no general trait of honesty. Rather, they found that the tendency to cheat and lie varied from situation to situation. Among the factors which they found significantly affected the frequency of occurrence of these behaviors were, the degree of risk of detection and the degree of effort required to cheat or lie. More recent results replicate those of Hartshorne and May (19).

The idea that the developing child's conception of morality is influenced more and more by considerations of surrounding circumstances is central to the theories of Piaget (18) and Kohlberg (14). Piaget has interpreted data collected by himself and others as indicating that the moral judgment of very young children is characterized by moral realism. That is, these children tend to see moral law as fixed and inflexible.
During this period, up until approximately the age of 8, the child presumably believes a moral violation should be punished in some way merely because it is a violation. Punishment is viewed as just and necessary if a crime has been committed regardless of the situational factors. In contrast, older children's judgment of justice is presumably characterized by a flexible sense of equity which involves considerations of mitigating circumstances (moral relativism), suggesting that moral relativism dominates the moralistic judgments of the child by the time of preadolescence. Harari and McDavid (12), in one of the only experiments of its kind, demonstrated that older children's overt moral behavior (lying) can be significantly altered by situational factors. While subjects (age 12 and 13) were willing to incriminate a guilty peer for a simulated transgression when questioned alone by the experimenter, they were unwilling to expose him when questioned in the presence of a peer. The results indicate that older children will violate the norm of honesty when subjected to group pressure. It may be that, as a consequence of interaction with peers, the child learns certain notions of what is expected of him by his peers. The subject in the Harari-McDavid experiment may have lied for a peer because of fear of exclusion by his peers or out of feelings of obligation to repay his peers for previous benefits received or benefits expected sometime in the future. It is expected, however, that a younger child would be less willing to violate the norm of honesty in this kind of situation.
because of his presumably inflexible sense of justice and his egocentrism which prevents him from taking the viewpoint of others (6).

A child may lie for several different reasons. The motivation for lying may fall, however, into two broad categories: There is the "selfish" lie and the "altruistic" lie. The goal of the selfish lie is predominantly to satisfy or reduce a drive or need. For example, a child's need for approval from his parents may motivate him to tell his parents that he got a B average when in fact he failed his year. In this example, lying behavior may have also functioned to reduce the child's anxiety if the child expected, on the basis of past experience, to be punished for failure. Most experimentation to date has concentrated on the analysis of determinants of selfish lying and cheating (11, 15, 17, 21). The goal of the "altruistic" lie, on the other hand, is to help another person without any expectation of obvious benefits for lying. At present there is very little known about the determinants of "altruistic" lying although it would appear that such a phenomenon is ubiquitous in our social world.

Recent psychological research strongly suggests that altruistic behavior in certain situations is governed by a norm of social responsibility which prescribes that people should help those needing help even though the beneficiaries had not helped them earlier, and may not provide repayment for the help sometime in the future (1, 3, 4, 8). Additional experimentation has shown that after prior help was received, subjects gave greater help to a dependent person than did subjects who
received no prior help (2, 8). One explanation for these results involves the norm of reciprocity which prescribes that people should give benefits to those from whom benefits have been received previously, as well as to those from whom benefits are expected (9). Greenglass (10) demonstrated that a person who has received prior help from one person repays a similar person with high help. On the other hand, prior hindrance from one person results in hindrance of a similar person. In the latter case, the person is probably returning injury for injury received. It appears then, that people probably adhere to the moral tenet "do unto others as you would have others do unto you".

Very young children do not generally have the capacity to help others in distress. As they get older, however, both their competence in interacting with their environment and expectation of others that they will help when help is needed, are likely to increase. This may lead to an increase with age in the feeling of responsibility to help others who have previously extended benefits to them because they are now aware of the reciprocity norm. An increase in helping with age may also be expected from an increase in the capacity for role taking, that is, for perceiving events or responding to them by taking into consideration the standpoint of others (7). If a preadolescent child has received previous benefits from a peer, he should feel obligated to return the favor if asked for one. If, in addition, the peer asks the preadolescent child to
lie for him to help him avoid possible negative consequences (being punished) for accidentally committing a transgression, it is more likely that the preadolescent child will comply with this request than will a child who is 8 years old or younger. Presumably, the preadolescent child as compared to the 8 year old child is a) more likely to repay a peer for previous benefits and b) more likely to take mitigating circumstances into account, i.e. it was an accident, and, therefore, he is more likely to violate the norm of honesty.

The present experiment will examine the extent to which the younger (8 years old) and preadolescent (12 years old) child engage in altruistic lying for a peer who is dependent on the child for help in the form of lying behavior. In order to investigate some of the situational determinants of the development of altruistic lying, the present experiment introduces two experimental conditions—Received Help and Refused Help conditions. In the Received Help condition, the subject receives prior help in winning a prize from a peer who subsequently asks the subject to lie for him to help him avoid possible negative consequences for accidentally committing a transgression, breaking the experimenter's vase. It is expected that in this condition the 12 year old will lie more for a peer when asked to do so than the 8 year old. In the Refused Help condition, the subject is refused help in winning a prize from a peer who subsequently asks the subject to lie for him under the same circumstances described for the Received Help condition. It is
expected that both the 8 year old as well as the 12 year old will not lie for their peer in this condition. While the 8 year old presumably believes that it is necessary not to violate the norm of honesty under most circumstances, the 12 year old may be returning injury for injury received according to the reciprocity norm. By telling the truth and reporting the peer, the 12 year old is exposing him to possible punishment by an adult. Subjects would probably not lie for their peer if they think that they themselves will be blamed for the transgression. In order to minimize this possibility, in both experimental conditions, subjects are led to believe that they are not suspected of having committed the transgression.

B. METHOD

1. Subjects

The subjects were 56 Canadian, white, middle-class boys. Half of the subjects ranged in age from 12 years 6 months to 13 years 6 months and they were all in grade 6. The other half of the subjects ranged in age from 7 years 6 months to 8 years 6 months and were all in grade 2. Subjects were obtained from two public schools.

2. Procedure

a. Phase I. The subject's mother was telephoned and with her permission, the child participated in the experiment conducted in three rooms within the York Mobile Laboratory which was parked in the school yard. The experimenter individually greeted each subject and took him into the middle room (subject's room), and explained that they were going to play some
games together. On the table in this room was a glass vase containing two artificial flowers. For the first game the experimenter gave the child some crayons and paper and asked him to draw a picture of an animal. She explained that, depending upon how well he drew the picture, he could win a prize, a pencil case containing some pencils and an eraser. The experimenter told the subject that after he had drawn the picture, she would take it into another room where a child (a confederate of the experimenter) would ostensibly grade the picture. The subject was told that the other child was his age and in the same grade. The subject was also told that the other child was from another school away across town and that they probably did not know each other. The subject was led to believe that the confederate had been instructed previously to judge the subject's picture by circling a number on an assessment sheet which showed a scale with the numbers 0, 25, 50, 75, and 100. The subject was told that if the other boy gave him a lot of points, between 50 and 100, that was very good, and, as a result, he would win the pencil case. On the other hand, if the other boy gave the subject a small number of points, less than 50, that was not very good, and as a result, he would not win the pencil case. The experimenter also added that the other boy would not be drawing a picture nor would he be judged since only children from the subject's school were eligible for the prize.

(1), Experimental manipulations. The experiment employed a 2 x 2 factorial design. Age was introduced on two
levels--8 years and 12 years and, nature of prior help was introduced on two levels--Received Help and Refused Help. Subjects were randomly assigned to each of the four experimental treatment conditions with the provision that each of the treatment conditions consisted of children from both schools.

The nature of prior help manipulation involved the number of points that the confederate assigned to the subject for his drawing. The experimenter brought back the subject's drawing with the subject's grade which was circled on the assessment sheet. The sheet was in a sealed envelope to minimize any associations that the subject might make between his grade and the experimenter. The subject opened the envelope in the presence of the experimenter. For subjects in the Received Help condition, the confederate had ostensibly circled the number 75. The experimenter gave the pencil case to the subject and said that because the other boy gave him a lot of points, he won the pencil case. For subjects in the Refused Help condition, the confederate had circled the number 25. The experimenter did not give the subject the pencil case and said that because the other boy gave him a small number of points, he did not win the pencil case.

The subject with the aid of the experimenter then filled in a brief questionnaire consisting of items which assessed the subject's understanding of the help manipulation as well as the effectiveness of this manipulation, a measure of the subject's degree of happiness with his score and, a question which asked how much the subject would like to have the confede-
rate as a friend.

b. Phase II. The experimenter then asked the subject to fill in a questionnaire which assessed his interests and hobbies. He was instructed to complete the questionnaire by himself in his room and to bring it into a third room (the experimenter's room) when he had done so. When the subject entered the experimenter's room, she shut the door and discussed the subject's responses with him. This provided the confederate with the opportunity to enter the subject's room, replace the vase with broken pieces of an identical vase and throw the flowers on the floor. After the experimenter had completed discussing the subject's questionnaire responses with him, she sent him back alone into his room adding that she would join him shortly. When the subject entered his room, he found the confederate standing beside the broken vase. The confederate then said to each subject: "I'm the boy from the other room. I graded your picture. I accidentally broke the vase when I came in here to get my book that I left in this room before. Please don't tell her that I broke the vase."

The confederate then hurried into his own room shutting the door behind him. A few moments later, the experimenter entered the subject's room and, on discovering the broken vase, said, while picking up the flowers, "Oh dear, the vase is broken. Maybe the flowers were too heavy and the vase tipped over. Do you have any idea of how the vase was broken?" It was expected that by giving the subject a plausible reason as to how the vase came to be broken, this would minimize the
possibility that the subject would think that he would be blamed. The experimenter then recorded the subject's response to the question.

The subject with the aid of the experimenter then filled in a brief questionnaire which consisted of items which assessed the subject's attitudes toward the accident, and, if applicable, his reasons for reporting the confederate. In the postexperimental inquiry, the subject was asked a series of questions designed to ascertain if he perceived the true purpose of the experiment. In the Refused Help condition, the experimenter reassured the subject that he could draw very well and then gave him the pencil case. After the experiment was completed, the subject was individually debriefed and the true purpose of the experiment was explained.

C. RESULTS

1. Extent of Lying Behavior

Table 1 presents the proportion of subjects that lied and the proportion of subjects that told the truth in each of the Age X Help conditions. This table shows that the

Insert Table 1 about here

smallest proportion of subjects that lied (.50) appears in
the Received Help-8 year old condition, and, that the largest proportion of subjects that lied (.86) appears in the Received Help-12 year old condition. The results of the binomial test (20) show that in only one condition, Received Help-12 year old condition, the proportion of subjects that lied was significantly greater than the proportion of subjects that told the truth ($x=2, N=14, p<.01$; two-tailed test).

In order to assess the relative effects of age on lying behavior, the $\chi^2$ for testing the significance of the difference between proportions for independent samples (5) was used to test the difference between the proportions of 8 year olds and 12 year olds that lied in each of the "help" conditions. In the Received Help condition, lying was differentially affected by age: 12 year olds lied significantly more than 8 year olds ($z=2.11, p<.04$). In the Refused Help condition lying was not differentially affected by age ($z=.47, p>.05$).

2. Test of Experimental Manipulations

Questionnaire I, administered at the end of Phase I, included items to test the subject's understanding of the help manipulation, the effectiveness of this manipulation, a measure of the subject's degree of happiness with his score and, a question which asked how much the subject would like to have the confederate as a friend. When subjects in the Received Help condition were asked how they won the pencil case, both the 8 year olds and the 12 year olds stated that
they won because the other boy had given them a good mark. Subjects in the Refused Help condition stated that their loss was due to the poor mark that they received from the confederate. One of the items asked the subject how much the other boy had either helped him to win the pencil case or how much he had stopped the subject from winning. All of the subjects in the Received Help condition stated that the other boy had helped them to some extent to win the pencil case. In the Refused Help condition all of the subjects stated that the other boy had stopped them to some extent from winning. There were no differences between the 8 year olds and the 12 year olds either in the extent to which they stated that the other boy had either helped them in the Received Help condition, or in the extent to which they stated that the other boy had stopped them from winning in the Refused Help condition.

Other questionnaire results point to the differential degree of happiness engendered by the "help" manipulation. A $\chi^2$ was used to test the difference between the proportion of subjects that stated that they were either "very happy" or "a little happy" and the proportion of subjects that stated that they were indifferent, "a little unhappy" or "very unhappy" in the two help conditions (see Table 2). The "help" manipulation significantly affected the subject's degree of happiness with his score ($z=6.77, p<.01$): More subjects in
the Received Help condition than in the Refused Help condition reported that they were happy to some extent with their score. There were no differences between the 8 year olds and the 12 year olds within each of the help conditions in their reported degree of happiness with their score.

The "help" manipulation had a significant effect on the extent to which the subject wanted the confederate as a friend. A $\chi^2$ was used to test the significance of the difference between the proportion of subjects that stated that they wanted the confederate as a friend either "quite a bit" or "very much" and the proportion of subjects that stated that they wanted the confederate as a friend "a little" or "not at all", in the two help conditions. While most subjects appeared to want the confederate as a friend to some degree, there was a greater tendency for subjects to want the confederate as a friend in the Received Help condition than in the Refused Help condition ($z=2.03$, $p<.05$).

A final question assessed the criteria that the subject thought the confederate had used in deciding on his score. For the most part the subject stated that the confederate had used one of the following types of criteria in assessing his drawing.
Color, shape, "by looking at it", "he liked (or did not like) it", etc. There appeared to be no difference in the frequency with which each of these different criteria was used in either the age or help conditions.

3. Test of Subject's Attitudes toward the Accident

Questionnaire II, administered at the end of Phase II, included an item which assessed the degree to which the subject thought he would help the confederate if he were in some kind of trouble and, a question which asked whether or not the subject thought he would be blamed for breaking the vase. Another item asked the subject how much he believed a person should be punished for accidentally breaking the vase. Where applicable, the subject was asked why he reported the confederate to the experimenter. When subjects were asked if they would help the confederate if he were in some kind of trouble, 52 out of 56 subjects responded that they would do so--one subject in each of the four Age X Help conditions responded either "no" or "maybe" to this question. On another item which asked to what extent someone who had accidentally broken the vase deserved punishment, 52 out of 56 subjects stated that he deserved punishment either "a little" or "not at all", as opposed to "very much" or "quite a bit". Another item asked the subject if he thought that he would have been blamed for breaking the vase. If, in fact, the subject believed that he would have been blamed for breaking the vase, this would provide an impetus for re-
porting the confederate (telling the truth) thus eliminating himself as the culprit. The proportions of subjects that stated that they thought they would be blamed were computed for each of the Age X Help conditions. Since these proportions did not vary with either age or experimental condition, they were combined. A \( \chi^2 \) yielded no relationship between the proportions of subjects lying for those who stated that they thought they would be blamed for breaking the vase and for those subjects who stated that they thought they would not be blamed (\( z = .50, p > .05 \)) (see Table 3). When the subject reported the confederate (told the truth), his reasons for doing so were assessed. Subjects in both age groups gave one or more of the following reasons for telling the truth: "It was an accident", "it is wrong to tell a lie", "so the other boy would not get into trouble", or "I don't know". The reasons given for telling the truth did not appear to be differentially affected by either age or experimental condition.

4. Results of Postexperimental Inquiry

When subjects were asked about the purpose and hypotheses of the experiment, they replied, for the most part, that the purpose was to play games with them. None of the subjects in the experiment guessed its true purpose.
D. DISCUSSION

The results supported the hypothesis that 12 year olds are more willing to lie for a peer who previously helped them than are 8 year olds. Lying behavior in this situation consists in denying any knowledge of an accidental transgression committed by the peer and thereby functions to help the peer avoid possible punishment. Further, after receiving help from a peer, 12 year olds were more likely to lie for him than they were to tell the truth. The results show that both 8 year olds and 12 year olds who receive help were happy with their score and also that they would have liked to have the confederate as a friend either "very much" or "quite a bit". It appears then that while subjects in both age groups were probably grateful for the score assigned by the confederate, 12 year olds were more likely to return the favor by lying than were 8 year olds. Even though they were happy with their score and they expressed positive feelings toward the confederate, 8 year olds were less willing to violate the norm of honesty in order to repay the confederate for his earlier assistance.

The fact that there were subjects who told the truth in this experimental situation, and thus, incriminated the confederate, is somewhat surprising in view of the apparently rather compelling normative requirements of the situation which appeared to prescribe that the subject protect the confederate from possible punishment in both of the help cond -
tions. In response to two items on Questionnaire II, most subjects stated that they would help the confederate if he were in some kind of trouble and, that someone who had broken the vase deserved punishment only "a little" or "not at all". It appears then that the subject in both age groups may have believed that the confederate did not deserve punishment because he broke the vase accidentally. Reporting the confederate may involve the institution of some kind of retributive justice which would almost certainly involve punishment for the confederate. On the other hand, by lying, the subject was probably attempting to protect the confederate from possible punishment. Contrary to expectation, then, it appears that 8 year olds are willing to violate the norm of honesty under certain conditions.

A substantially large proportion of subjects in both age groups in the Refused Help condition lied for the confederate. There was evidence that subjects, who had been refused help, understood that the confederate had stopped them from winning the pencil case. These subjects were less happy with their score and expressed less eagerness to have the confederate as a friend than subjects who had received help from the confederate. While the subject may have experienced some resentment toward the confederate as a result of his refusing to help him, there was no evidence that the subject was willing to express resentment toward the confederate by reporting him to the experimenter, and thus, exposing him to possible...
punishment. It may be that, for subjects in both age groups, the refused help manipulation functioned to increase the salience of the normative requirements of the situation, thus making the subject more aware of "how a person should really behave in this kind of situation". In this condition, the confederate's hindrance of the subject who needed his help to win the prize in Phase 1, may have augmented the contrast between the confederate's behavior and the behavior the subject perceived was expected of him in this situation, namely helping behavior in the form of lying. Therefore, by lying for the confederate and thus helping him, the subject may have been setting himself apart from the confederate. The same explanation may be applied to one of the findings reported by Greenglass (10) that subjects, after having been hindered in winning a prize, extended high help to a person who was perceived as highly dissimilar to the person who hindered the subject previously. It may be that hindrance of the subject increased the salience of the social responsibility norm, thereby reminding the subject to help a dependent person.

The subjects who told the truth and thus incriminated the confederate, appeared not to do so because they thought that they themselves would be blamed for breaking the vase since the results of an analysis showed no relationship between the frequency with which subjects told the truth and the frequency with which subjects stated that they would be blamed for the accident.

The results of this experiment are probably not a function
of the demand characteristics of the situation (16), since
the findings of a postexperimental inquiry indicated that
subjects did not perceive the true purpose of the experiment.

E. SUMMARY

An experiment using 56 boys examined the effects of age
and nature of prior help on subsequent lying behavior in
behalf of another. An ostensible peer gave one-half of the
subjects help in winning a prize. The other half of the
subjects was refused help in winning a prize. One-half of
the subjects in each of the help conditions was 8 years old
and the other half was 12 years old. The peer informed the
subject that he committed an accidental transgression and
he asked the subject not to tell the experimenter about it.
When questioned about the accident, 12 year olds who had
received help from the peer were more willing to lie and
thereby deny any knowledge of the accident than were 8 year
olds who had also received help. No differences in lying
behavior were found between the 8 year olds and the 12 year
olds after they had been refused help by the peer.
REFERENCES


FOOTNOTES

1. This research was funded by a Minor Research Grant from York University to the author. The author is indebted to K. Mowat for her capable assistance. Grateful acknowledgement is made to the administrative officials and teachers of the York County Board of Education, without whose generous cooperation this research would not have been possible.

2. Requests for reprints should be sent to Esther R. Greenglass, Department of Psychology, York University, Downsview, Ontario, Canada.

3. Acknowledgement is due to the Canadian Junior Red Cross that donated the Mobile Laboratory to York University.

4. Two boys of different ages were employed as confederates in this experiment. For each age group, the confederate was the same age as the subject. The confederates attended different schools from those of the subjects and they did not know any of the subjects.
<table>
<thead>
<tr>
<th>Condition</th>
<th>Proportion of subjects that lied</th>
<th>Proportion of subjects that told truth</th>
<th>Difference in proportions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received help</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 12</td>
<td>.86</td>
<td>.14</td>
<td>.72*</td>
</tr>
<tr>
<td>n=14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refused help</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 12</td>
<td>.71</td>
<td>.29</td>
<td>.42</td>
</tr>
<tr>
<td>n=14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Received help</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 8</td>
<td>.50</td>
<td>.50</td>
<td>0</td>
</tr>
<tr>
<td>n=14</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Refused help</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age 8</td>
<td>.64</td>
<td>.36</td>
<td>.28</td>
</tr>
<tr>
<td>n=14</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<.01
TABLE 2

PROPORTIONS OF SUBJECTS THAT STATED THAT THEY WERE EITHER HAPPY, OR INDIFFERENT OR UNHAPPY IN EACH OF THE HELP CONDITIONS

<table>
<thead>
<tr>
<th>Condition</th>
<th>Proportion of subjects reporting happiness</th>
<th>Proportion of subjects reporting indifference or unhappiness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Received help</td>
<td>1.00</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>( n=14 )</td>
<td>( n=14 )</td>
</tr>
<tr>
<td>Refused help</td>
<td>.11</td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td>( n=14 )</td>
<td>( n=14 )</td>
</tr>
</tbody>
</table>
TABLE 3

PROPORTIONS OF SUBJECTS THAT STATED THAT THEY THOUGHT THEY WOULD BE BLAMED AND THAT THOUGHT THEY WOULD NOT BE BLAMED FOR THE ACCIDENT FOR SUBJECTS WHO TOLD THE TRUTH AND FOR SUBJECTS WHO LIED

<table>
<thead>
<tr>
<th>Subjects telling truth or lying</th>
<th>Proportion of subjects that thought blame</th>
<th>Proportion of subjects that thought no blame</th>
</tr>
</thead>
<tbody>
<tr>
<td>Truth</td>
<td>.28</td>
<td>.7</td>
</tr>
<tr>
<td>n=5</td>
<td></td>
<td>n=13</td>
</tr>
<tr>
<td>Lie</td>
<td>.34</td>
<td>.66</td>
</tr>
<tr>
<td>n=13</td>
<td></td>
<td>n=25</td>
</tr>
</tbody>
</table>