

## The Effects of Grade and Sharing Cost on Children's Perceptions of Sharing

DIANE M. LICKENBROCK

JANET KUEBLI\*

Saint Louis University

*This study examined first (n = 30) and fourth graders' (n = 30) perceptions about sharing. All children heard a vignette in which their friends shared. Half of the children heard a vignette in which sharing posed a high cost (HC), and the remainder heard one in which their friend had a low cost (LC). Afterward, children answered questions regarding sharing motives and their feelings. Children then heard a vignette in which they shared and answered similar questions. Lastly, they made a moral judgment about a nonsharing friends. Results showed that fourth graders perceived sharing as harder for their friends than did first graders. Additionally, children who heard the HC vignette reported it was less okay for their friends not to share than children who heard the LC vignette.*

Sharing is often thought of as the act of giving an object to someone else either permanently or for a finite amount of time (Eisenberg, 1992). Few investigations have examined children's perceptions of sharing directly. However, children's self-reports may facilitate investigation of their reasoning for why they or others share. Children may share because perspective-taking fosters empathic concern about others' feelings or desires. Alternatively, children may be motivated to share because of an expectation of receiving something in return. At some ages, children may share because an authority figure urged them to share. Children may also share simply because someone previously shared with them. The present study investigated the motivations school-age children provided for sharing.

Observational approaches are a common strategy for studying children's sharing behaviors (e.g., Eisenberg-Berg & Neal, 1979). However, researchers who employ this approach usually fail to use self-report in addition to their observational methods (e.g., Hay, Caplan, Castle, & Stimson, 1991; Ioannidou-Dumont, 1986). Contrastingly, some have used self-report as the only means to get a closer look at children's sharing behaviors (e.g., Batson, Fultz, Schoenrade, &

Paduano, 1987; Eisenberg, Miller, Shell, McNalley, & Shea, 1991; Kim, 1998). An example is Kim (1998) who studied Korean first-, third- and fifth-graders' concepts of authority and moral reasoning. Children were given stories about potential moral events that occurred at school (e.g., sharing candy). In interviews, children were presented with pairs of different authority figures, each of whom gave a hypothetical directive for what they should do in a situation. Children selected the authority figure whose instruction they would follow and provided justifications for their answer. Overall, children provided three types of justifications: authority-based, act orientations (i.e., the child shared the candy because it was a good thing to do), and authority combined with act orientations. Results showed some age differences, but no gender differences. Notably, fifth graders used authority

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Correspondence concerning this article should be addressed to Diane M. Lickenbrock, University of Notre Dame, Psychology Department, 118 Hagggar Hall, Notre Dame, IN 46556. E-mail: dlickenb@nd.edu

\*Faculty supervisor

motives combined with act orientations more than did first or third graders.

Studies also examine sharing by children with their friends. Their motivations for sharing with their friends may be different than motivations for sharing with others (e.g., siblings or strangers). Berndt (1981), for example, interviewed first and fourth graders about their willingness to share with and/or help a friend with four different scenarios. After each story, the children were asked if they would share, for how long, and what they would do if their friends asked them to share. Consistent with previous research, more fourth graders than first graders reported that they would share with their friends and also refused less often to share than did first graders. Berndt's study further underscores age differences in children's explanations regarding sharing. However, Berndt failed to consider how much the children shared and its role on how participants would perceive sharers' motivations and feelings. Therefore, the researchers in the present study manipulated the amount that the children had shared with them. The children were put into one of two groups (a) high cost and (c) low cost. High cost means children who shared with participants suffered a high cost because they shared the majority of their candy. Conversely, low cost means that children who shared with the participants suffered a low cost because they shared a small amount of their candy.

### Statement of the Problem

The current study extended previous studies by examining first- and fourth-graders' perceptions of their own as well as their friends' motivations and feelings for sharing. One aim was to describe any overarching themes in children's motivations for sharing. Two sets of hypotheses examined children's perceptions: (a) when the children's friends were sharers and (b) when the children were sharers. A final hypothesis addressed children's judgments about not sharing. The researcher did not take gender into consideration because previous research about sharing failed to find any gender differences (e.g., Eisenberg-Berg & Neal, 1979; Kim, 1998).

### Friend as Sharer

(1) There would be no significant age or cost differences in the feelings or motives children attributed to themselves or to sharers when they were recipients of their friend's sharing.

(2) First graders overall would perceive sharing as easier for their friends than would the fourth graders. Furthermore, fourth graders in the high-cost group (HCG) would perceive sharing as less easy for their

friends than would the fourth graders in the low-cost group (LCG).

### Child as Sharer

(1) When the roles were reversed, and participants became sharers, children in the HCGs were expected to report sharing more than would children in the LCGs.

(2) It is anticipated that in the high-cost condition, older children would attribute more positive feelings to themselves and to their friends than would younger children. This was thought because in the HCG where children are sharing a larger amount of candy, older children are perceived by the present researchers to focus on the intrinsic reward; therefore, would be proud for doing something that was difficult, but nice, for their friends. However, the younger children would focus more on the extrinsic factors of giving away something that they really wanted instead of looking at the gesture that was made to their friends. This claim, for example, is supported by Piaget (1932/1965) who focused on moral development. He said that younger children, who have not yet developed autonomous morality do not understand fairness, equality, or the perspectives of others. Therefore younger children may focus more on the idea of giving away something that they are fond of rather than on how their friends might feel. The children may, therefore, think that their friends' thoughts do not differ from their own.

3) Overall, sharing would be perceived as easier by children in the LCG than in the HCG. Moreover, fourth grade children in the HCG would report sharing as less hard to do than would younger children in the same group.

### Not Sharing

First graders, overall, and fourth graders in the low-cost condition were predicted to judge not sharing to be less acceptable than would fourth graders in the high-cost condition.

## Method

### Participants

The participants for this study were children attending one of two parochial schools located in a midsize suburban Midwestern city. The sample included 60 children: 83.3% White, 8.33% Hispanic, 6.71% African American, and 1.66% Native American. The children were solicited through the schools and were in the first (age  $M = 7.05$ ,  $SD = .58$ ) and fourth grades (age  $M = 9.96$ ,  $SD = .61$ ). Parents were asked to complete a permission form and a short demographic questionnaire ahead of time.

### Interview

The purpose of the interview was used to establish the child's view about how right it is to share. Therefore, one of the questions that the interviewer asked the child was if there were no rule about sharing and the child did not want to share, how it would be okay for the child not to share (moral question). Additionally, three vignettes were designed specifically for this study: high cost, low cost, and reciprocity. High cost meant that there was a high cost to the friend who shared. The high-cost vignette told the story of a friend who had four tootsie rolls and the child shared three tootsie rolls. Low cost meant that there was a low cost to the friend who shared. The low-cost vignette told the story of a friend who had four tootsie rolls and who shared one tootsie roll. Half of the children in each age group received the low-cost vignette. Finally all children heard a reciprocity vignette. The final vignette was a reciprocity vignette. It told the story of a child (the participant) given three cookies for dessert at lunch. At lunch, the child's friend does not have any cookies. This was a reciprocity vignette because after hearing the vignettes in which the child shared with him/her, now the participant was given the chance to decide how much (if any) to share back. (See Appendix A for sample vignettes).

### Procedure

Before data collection began, the first author briefly visited the classrooms to get acquainted. The experimenter returned to the schools 2 weeks later to conduct data collection for those children whose parents returned a signed consent form. Children were tested individually in a classroom away from other students. Before starting the formal interview, each child was asked to think of the first name of a close friend in the class and to think about this friend when answering the questions. The researchers thought that this would make the child more able to answer the questions if he/she were thinking of a real person rather than someone fictitious.

The formal interview consisted of three parts. First, the researcher read a short vignette to the children. All children heard a vignette in which their friends shared with them. Half of the children in each age group heard the vignette in which sharing posed a high cost to their friend. The remaining children heard a vignette in which there was a low cost for sharing with their friend. The child first answered the question, "why their friend should share". Children's verbal responses were recorded by the experimenter and were later coded into three categories by two independent coders (percent agreement was .88). The final categories were: friendship, being nice, or miscella-

neous (i.e., don't know, authority, reciprocity). Then children answered three more questions: (a) their feelings about their friend sharing (b) how their friends would feel about sharing, and (c) how easy or hard it would be for their friend to share. The children answered questions using a child-friendly 4-point Likert scale, designed by the first author, using cartoon faces ranging from *really happy* to *really sad*. Another scale was used for the easy or hard question that was also another child-friendly 4-point Likert scale, designed by the first author, using thumbs ranging from really hard (*two thumbs down*) to really easy (*two thumbs up*; see Appendix B). After each answer, children provided reasons for the answers that they chose.

In the second part of the interview, children heard a different vignette in which they become potential sharers and were asked if they would share or not, and if so, how much. Children then were asked four similar questions about their motives and feelings about sharing. Third, children described rules for sharing at their school, and then made a moral judgment about their friends not sharing.

### Results

First, a chi-square test for independence was performed to compare grade by type of motive (what reason the children attributed to their friends for sharing). The results indicated that there were no significant grade or motive differences. Another chi-square test for independence was used to assess cost (high or low) by type of motive. The results also indicated there were no significant differences. Despite the fact that the results revealed no significant differences, it was interesting to note that more friendship answers were attributed by children in the low-cost group than in the high-cost group. Furthermore, more *being nice* answers were attributed by children in the high-cost group than children in the low-cost group (See Table 1).

TABLE 1

		Cost		
		Low	High	Total
Motives	Being nice	10	19	29
	Friendship	12	8	20
	Other	8	3	11
Total		30	30	60

**Friend/Child as Sharer**

For the set of questions in which the friend was the sharer, separate 2 (grade) X (cost) Analysis of Variance (ANOVA) assessed the effects of grade (first or fourth) and type of cost (high or low) on the responses to each question that was asked. For the question about the feelings of the children in relation to the friends sharing, the results indicated there was a significant main effect for age,  $F(1, 56) = 4.35$ ,  $p = .04$ , such that the fourth graders in the high-cost group reported sharing would be more difficult for friends than the first graders. There were no interactions. The results revealed no significant grade or cost differences or interactions for the remainder of the questions in which the friends were sharers (see Table 2). For the set of questions in which the children were sharers, a 2 (grade) X 2 (cost) ANOVA revealed no significant main effects or interactions for any of the four questions (see Table 2).

**Moral Question**

For the moral question asking how ok (or not ok) would it be for the friends to keep all of the tootsie rolls, the results from another 2 (grade) X 2 (cost) ANOVA revealed a significant main effect for cost,  $F(1,56) = 7.29$ ,  $p = .01$ , such that the children in the high-cost group reported that it would be less okay for their friends to keep all of the candy ( $M = 2.90$ ,

$SD = .68$ ) than the children in the low-cost group reported ( $M = 3.00$ ,  $SD = .73$ ; see Table 2).

**Discussion**

The results suggested a trend such that, overall, the low-cost group responded with more “friendship” answers and the high cost responded with more “being nice” answers. Therefore, the participants could have looked at the amount of candy being shared as a method of perceiving their friends’ motive for sharing. The researchers were surprised by this finding. Although this finding was not statistically significant, if one was to increase the sample size, it is anticipated that this finding would be significant.

It was expected that there would be no significant age or cost differences in the feelings children attributed to themselves as the recipient of their friends’ sharing. For the question “if your friend shared this way how would you feel”, the data revealed that the first grade children answered differently than the fourth graders. Specifically, the researchers explain these findings as at different ages children could perceive the motives of people differently. Though when it came to them sharing with other friends, and how their friends would feel about being shared with, there were no differences in response. This finding can be interpreted that children at all ages can give reasons for why they share and have the ability to take the per-

**TABLE 2****Descriptive Statistics**

	1st Grade		4th Grade	
	Low cost <i>M (SD)</i>	High cost <i>M (SD)</i>	Low cost <i>M (SD)</i>	High cost <i>M (SD)</i>
<b>Friend as sharer*</b>				
Child's feelings	3.07 (.70)	3.00 (.93)	3.40 (.74)	3.53 (.83)
Friend's feelings	3.00 (1.00)	2.93 (1.03)	3.13 (.74)	2.93 (.96)
Friend's ease	2.73 (1.10)	2.60 (1.18)	3.07 (.96)	2.20 (.94)
<b>Child as sharer*</b>				
Sharing cookies	2.93 (.80)	3.00 (.66)	2.53 (.64)	2.53 (.66)
Child's feelings	3.67 (.82)	3.53 (.64)	3.73 (.60)	3.53 (.74)
Friend's feelings	3.00 (1.10)	3.20 (.86)	3.33 (.82)	2.73 (1.10)
Child's ease	3.87 (.35)	3.80 (.41)	3.87 (.36)	3.80 (.41)
<b>Moral question**</b>	3.60 (.51)	3.20 (.78)	2.80 (.86)	2.20 (.68)

\* Children responded using 4-point Likert scales with 1 being the lowest answer and 4 being the highest.

\*\* Children responded using a 4-point Likert scale with 1 being the highest and 4 being the lowest.

spective of others. But when it comes to situations that involve themselves in relation to others, younger children may still have difficulty taking the perspectives of others.

Also, there were no differences found in the feelings that the children attributed to themselves if they were the person sharing, or how easy or hard it would be for them to share. This can be interpreted that children at these ages think that in order for them to share that it must be easy for them and they must have positive emotions about themselves.

It was predicted that first graders, overall, and fourth graders in the low-cost condition, would judge not sharing to be less acceptable than would fourth graders in the high-cost condition. There was a significant main effect for cost with the moral question. Overall the children in the low-cost group attributed not sharing as less okay than the high-cost. However, the data conveys that first graders, overall, and fourth graders in the high-cost condition judged sharing to be more unacceptable than the fourth graders in the low-cost condition. By looking at the reasons the first-grade and fourth-grade children in the high-cost group provided for why they chose their particular answer, we found that they thought that not receiving any candy was unfair. More specifically, if their friends gave them more candy in the previous story, and then decided not to share it with them, the children decided that it was less okay for their friends to keep the candy than the children that did not get that much candy to begin with. This was an interesting finding to note.

### Limitations of the Present Study and Implications for Future Research

One limitation of the present study is that children may have given answers that they thought were socially desirable rather than their true answer. This possibility could be tested simply by after interviewing the children, observing them at lunch or during playtime to see if what they said in the interview was consistent with what they really do. Furthermore during assent, the children were told that they were going to be talking about sharing; perhaps this primed them to respond in certain ways. This could be controlled for by telling the children that they were going to talk about classmates instead of sharing or friendship. Another possible limitation is that some children may not find the items shared in the vignettes as desirable.

Future researchers could ask each child what their favorite candy is and use that in the vignette. Like all studies using Likert-type scales, it was found that sometimes the children wanted to pick another answer that was not available (i.e., a little happy and a little sad). Future researchers could add another cartoon face option to the Likert-types scales to help alleviate this problem.

Future research could look at other age groups and compare their answers to the answers given by the first and fourth graders in this study. The children sometimes expressed that the situations in the vignettes were not fair; however, the researcher did not follow-up with an additional question assessing their reasoning. Therefore, it would be interesting to ask a question about the fairness of sharing and to compare different ages and cost groups. Being that this interview was written for the purpose of this study, future researchers could help to validate and edit this measure and over time it could be used for future studies on perceptions of children in regards to sharing.

In conclusion, this study assessed how perspective taking abilities of children in regards to sharing. This study is important because if teachers and parents know how their children think (in regards to focusing on intrinsic or extrinsic factors), parents and teachers could be better able to teach children about sharing.

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**APPENDIX A**

**Sample Vignettes**

**High-Cost Vignette:**

Imagine one day your friend comes to school with four tootsie rolls. And you really like tootsie rolls. Your friend gives you three tootsie rolls. So she/he had one left for him/herself.

**Reciprocity Vignette:**

Now imagine one more thing. The next day your mom gave you 3 cookies for dessert with your lunch. That day your same friend doesn't have any dessert with her/ his lunch.

**Low-Cost Vignette:**

Imagine one day your friend comes to school with four tootsie rolls. And you really like tootsie rolls. Your friend gives you one tootsie roll. So she had three for herself.

**Moral Vignette:**

Imagine for a minute that there was no rule for sharing at your school. And your friend didn't want to share with you. How ok (or not ok) would it be for your friend to keep all of the tootsie rolls for his/herself?

**APPENDIX B**

**Samples of Likert Scales used in interview**

