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Children's Decision to Help: The Effects of Causal Attributions and Affective Role-Taking

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Children's Decisions to Help:
The Effects of Causal Attributions and Affective Role-Taking

A Thesis Presented
to the Faculty of the Department of Psychology
at the College of William & Mary

In Partial Fulfillment
of the Requirements for the Degree of
Master of Arts

by

David Arthur Schultz

1995

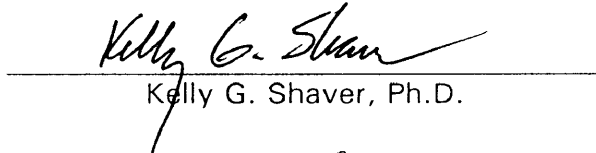
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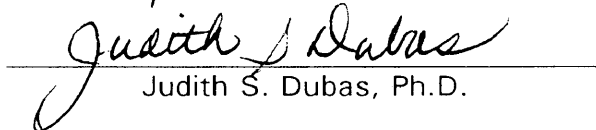
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Master of Arts


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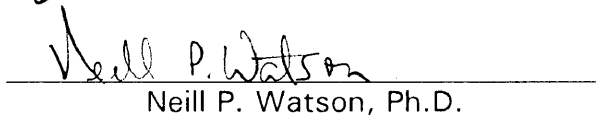

Neill P. Watson, Ph.D.

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The nature of this project, helping behaviors, reflects my interest in the Golden Rule: Do unto others as you would have them do unto you. This being the case, the inspiration for this project clearly comes from my parents, Art and Vera Schultz, who have instilled in me a great respect and appreciation for those actions intended to benefit others and, in so doing, affirm the essentially prosocial nature of human existence. Thank you, mother and father, for teaching this truth to me not only in your words but in all your relationships.

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Children's Decisions to Help:
The Effects of Causal Attributions and Affective Role-Taking

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Abstract

Piaget (1951) postulated that younger and older children's cognitive functioning is distinct. Whereas younger children are "behaviorists" (Shantz, 1983), attending to environmental cues and physical outcomes, older children are able to consider realities abstract from the presenting physical milieu. Some recent research challenges the notion that younger children are bound by their physical perceptions (e.g., Graham & Weiner, 1991). The present study investigated the extent to which younger and older children are influenced by causal attributions and affective role-taking in their willingness to help and in their reasonings for or against helping. Ninety-four first-grade (47 females, 47 males) and sixty-nine fifth-grade (41 females, 28 males) children participated. Younger children were found to be "outcome-dependent" in their prosocial decisions, helping or not helping because either they perceived help to be needed or they wanted to continue in some other activity. In addition to these considerations, older children exhibited some more abstract considerations in their helping decisions, such as distinguishing between causally controllable and uncontrollable situations and being more willing to help after imagining how they would feel in the other's situation. The first- and fifth-grade children's reports of motivation for or against helping were found to be different as well. Results are discussed with regard to the extent to which they support and question the existence of distinct social-cognitive skills within early and later childhood.

Children's Decisions to Help:

The Effects of Causal Controllability and Affective Role-taking

In Piaget's (1951) cognitive developmental framework, the young child's (i.e., 2-7-years-old) thought is permeated by "egocentrism." This "preoperational" child assumes that everyone's perspective is similar to her or his own, and therefore, for example, others can always perceive what the child is currently perceiving. A correlate to this is that in determining how to respond to a situation, the child relies on behaviors she or he can perceive, rather than underlying dynamics such as intentions and causes. As Shantz (1983) describes, the young child observes people as a "behaviorist would, defining the person in terms of her environmental circumstances and observable behavior"(p. 506). In addition to this focus upon the perceptual, Piaget believed that the younger child tended to attend to only a single dimension of her or his multifarious stimulus field. These two orientations--tending toward the physical environment and having difficulty attending to more than a single feature of the environment--leave little room for the young child to respond to more complex realities such as others' drives, intentions, and responsibilities.

Social cognition is currently of great interest to developmental and social psychologists. Many researchers have found evidence that children younger than seven years of age show some of the social-cognitive abilities Piaget reserved for the concrete-operational child of 7 to 11 years of age. For example, several studies show that preschoolers can accurately engage in perspective-taking tasks (Mossler, Marvin, & Greenberg, 1976; Selman, 1980; Shantz, 1983). As well, younger children may not be oriented so much to their perceptions as to what is most

salient within the environment (usually but not always a visual impression). If internal dynamics are made equally salient with external ones, three-year-olds have been found to prefer internal and emotionally-oriented descriptions of others' situations over external and behaviorally-oriented ones (Lillard & Flavell, 1990). The current study investigates possible differences in younger and older children's social cognitions and their effects upon the child's decision to help another. In particular, the influence of causal attributions and affective role-taking are examined.

Causal Controllability

Attribution researchers have established that the perception of controllability affects how one responds to potential helping situations. In particular, if the help recipient is perceived as a cause of her need, the potential helper is more likely to neglect her than if she is not perceived as a cause. Conversely, an attribution of causal uncontrollability to the help recipient is more likely to produce prosocial behaviors (Barnes, Ickes, & Kidd, 1979; Meyer & Mulherin, 1980; Piliavin, Rodin, & Piliavin, 1969; Reizenzein, 1986; Schmidt & Weiner, 1988; Weiner, 1980). Within the past 15 years, most research on the relation between causal controllability and helping has been driven by Weiner's attribution-affect-action model (for the most extensive discussion of the model, see Weiner, 1986). In this model, cognitive attributions of causality prefigure one's emotional response, which, in turn, tends to shape one's behavioral response. For example, relating to this study's concern, helping behavior, the model predicts that an attribution of "personal control over the cause of the need" will lead to the an affect of anger in the observer which, in turn, leads to the action of neglect. Conversely, an attribution of "lack of personal

control over the cause of the need" leads to an affect of sympathy which, in turn, leads to the action of help (Weiner, 1986).

Several studies show this link in children nine- to eleven-years-old (Barnett, 1975; Graham & Weiner, 1991; Miller & Smith, 1977). A clear understanding of the link between these attribution processes and helping behaviors within younger children, however, remains to be formulated. Research concerning the first link within the model--attribution to affect--has revealed findings suggestive for understanding children's prosocial behavior. For example, when presented with a scenario depicting a teacher who expressed either anger or pity in response to another student's poor test performance, 5-, 7-, and 9-year-old children all understood the teacher's anger as implying the student's causal controllability of the situation (Weiner, Graham, Stern, & Lawson, 1982). Although only the 9-year-olds interpreted the teacher's pity as implying an uncontrollable condition, further research suggests this may have been caused by younger children's failure to understand that lack of ability is an uncontrollable situation (Graham, Doubleday, & Guarino, 1984). Asked to describe a personal experience of pity, anger, and guilt and to rate the degree of controllability that was present within each experience, no significant differences were found between 6- through 11-year-olds' controllability ratings; the 6- to 7-year-old, 9-year-old, and 11-year-old groups of children rated equally low levels of controllability as an antecedent for pity and equally high levels as an antecedent for anger (Graham, Doubleday, & Guarino, 1984).

These findings suggest that at a young age children are able to associate emotional reactions with causal controllability. A methodological problem exists within these studies, though, insofar as they are used to support Weiner's

attribution-affect-action model (e.g., Graham & Weiner, 1991). In both studies, researchers began with an emotion and asked children to infer the attribution (i.e., level of controllability). This steps backwards on the attribution-affect-action path. A child being presented with an emotion and, upon direction, describing the causal controllability that preceded it is not the same as a child spontaneously using attribution processes as the basis for an emotional response to another. Indeed, in a study of second-graders, fifth-graders, and college students, second-graders used outcome-dependent cues rather than attribution-dependent cues to infer 12 protagonists' emotions (Thompson, 1987). Whereas fifth-graders and college students utilized attribution-dependent cues (i.e., they analyzed the causal factors leading to the outcome) and labelled the protagonists with relatively complex emotions (e.g., pride, guilt, and anger), second-graders, using outcome-dependent cues, labeled the same protagonists with relatively simple emotions (e.g., happy or sad). Consistent with these findings, other research suggests that presented with scenarios varying in controllability, 5- and 6-year-olds show pity less dependent upon attributions than all other age groups except the elderly (Graham & Weiner, 1991). These findings are congruous with Piaget's (1951) predictions concerning the preoperational child's tendency to attend to the perceptual.

How can we make sense of these seemingly contradictory findings concerning the attribution-affect link in younger children? As Lillard & Flavell (1990) found concerning young children's preferences for describing situations, it could be that Thompson (1987) has determined that the saliency of attribution-dependent cues has not fully emerged within younger children. When presented with an emotion and *directed* to infer causal controllability, younger children may be

able to do so. But when not directed--when simply presented with a situation and asked to infer emotion--younger children may attend to that which is immediately salient within the situation: their visual perceptions of the outcome. First- and second-grade, therefore, may represent a "zone of proximal development" (Vygotsky, 1978) for many children's use of causal attributions with emotional response. Many 5- to 7-year-old children may have learned *how to* differentiate causal controllability and apply this attribution to affect. This capacity is not fully developed, however, such that these younger children know causality considerations are immanently salient as a basis for their emotional responses and therefore can and should be used within helping situations independent of direction to do so.

In Thompson's (1987) study, no significant differences were found between the responses of fifth-graders and college students. By at least fifth grade, then, children's attributional processes seem to be in a very mature form. Assuming the affect-action link, one should expect that causal attributions would affect their prosocial responses in a similar manner as suggested by the literature on adult's prosocial behavior (i.e., uncontrollability leads to sympathy and helping behavior, and controllability leads to anger and neglect) (Weiner, 1986). Second-grade children's pity, though, attending to outcome-dependent cues, is less differentiated than older children's and therefore prosocial responses should be less differentiated as well; when presented with someone who needs help, younger children should tend to take this need at face-value and respond with helping behavior.

Although this last hypothesis concerning young children's prosocial behavior logically is consistent with previous research on attributions and affects and

Piaget's formulations, the one published study of children's causal attributions and helping behavior questions it. Five- and 6-year-old children did report less attributionally-discriminant pity, but these children's judgments of helping behaviors were more consistent with an attribution-dependent than outcome-dependent cognitive perspective (Graham & Weiner, 1991); a distinct difference appears in their reports of offering help to uncontrollable and controllable needs. This difference was consistent with reports of help giving in other age groups (10- to 12-, 18- to 20-, 35- to 45-, 60- to 74-, and 75- to 90-year-olds). In a recent unpublished study, however, first-grade children's judgments of helping behaviors were more consistent with an outcome-dependent than an attribution-dependent social-cognitive perspective (Schultz & Shaver, 1995). Appendix A presents the mean reports of helping from this study as a function of the child's grade, causal condition, and direction to role-take. Fifth-grade children's prosocial judgments were found to fit within an attribution-dependent model. Although these results for younger children may seem contradictory to previous research (i.e., Graham & Weiner, 1991), the previously noted discrepancy within research methodologies concerning attributions and affects may explain the difference here as well. In the Graham & Weiner (1991) study, subjects were asked to rate the degree of causal controllability prior to making judgments about one's affective or helping response. This methodology therefore makes causal attributions salient to the subject. In the Schultz & Shaver (1995) study, the perceived controllability question came after the question of prosocial response. The participant therefore was responsible for attending to attribution cues on her or his own and subsequently differentiating between prosocial responses accordingly. Understanding 5- and 6-year old children

to be in a zone of proximal development concerning the association between causal attributions and helping behaviors, one may expect the differences in judgments of helping between the Graham & Weiner (1991) and the Schultz & Shaver (1995) studies.

The present study continues the exploration of age-related associations between attribution processes and prosocial responses. Although being able to perceive differences in causal controllability, first-graders' judgments of prosocial response are predicted to be more consistent with an outcome-dependent than attribution-dependent perspective, unless the question of causal controllability previously has been made salient to them. Fifth-graders' reports of prosocial response are predicted to reflect the use of attribution-dependent social-cognitive perspective independent of direction to do so.

Affective Role-Taking

In order that an attributional analysis of emotional reactivity may become a useful developmental one, Thompson (1987) has claimed that it must be broadened to include other "social-cognitive" and "social-contextual" processes. Consistent with this call within the helping sphere, the present study is concerned with the interaction between causal attributions and the social-cognitive strategy of role-taking, defined by Hoffman (1984) as "the cognitive act of imagining oneself in another's place" (p. 106). The influences "affective" role-taking--inferring the feelings of another--may have on the enactment of children's prosocial responses are of particular interest.

Why should affective role-taking influence the child's decision to help? The answer to this lies within a recurring topic of interest in the developmental and

social psychological literature: the relationship between empathy and prosocial behavior. Empathy, defined by Hoffman (1984) as "having a feeling more appropriate to another's situation than to one's own" (p. 103), has been assumed by many theorists to promote prosocial behaviors (Batson, 1987; Hoffman, 1978; Staub, 1979; Underwood & Moore, 1982). Although this assumption is appealing intuitively, the research surrounding it has been controversial. A meta-analysis of the literature a decade ago concluded that empathy is not significantly related to prosocial behavior, although it was suggested that in mature adults a positive correlation between the two should appear (Underwood & Moore, 1982). Other theorists responded that these findings reflect researchers' failure to distinguish between sympathy and personal distress (Batson, 1987; Eisenberg, McCreath, & Ahn, 1988; Eisenberg & Miller, 1987a; Eisenberg & Strayer, 1987). Whereas "sympathy" is an empathic reaction that contains an other-oriented response and therefore leads to helping behavior, "personal distress" is an empathic reaction that contains egoistic motivation and brings about a desire to reduce anxiety within oneself. Based upon this distinction and distinguishing between different methods of measuring empathy, a more recent meta-analysis concluded that a positive correlation exists between most empathy indices and prosocial responses, although, as previously suggested, this relationship is much more consistent for adults than children (Eisenberg & Miller, 1987b). Attempting to explain the increased correlation between empathy and prosocial response found across the life span, Eisenberg and Miller (1987b) made two suggestions: 1) younger children may have some difficulty in understanding their own emotional arousal, and 2) younger children are developing competence to assert themselves prosocially. Combined,

these two factors may cause an inconsistency between children's emotional states and socially anticipated responses to those states.

The empirical relation between empathy and helping behavior is important for understanding affective role-taking because many theorists have assumed that empathy is often a consequence of role-taking (Batson, 1987; Eisenberg & Fabes, 1990; Eisenberg, Shea, Carlo, & Knight, 1991; Feshbach, 1975; Hoffman, 1982; Stotland, Sherman, & Shaver, 1971). Research provides some support for this association. Children watching a videotape who reported spontaneously using role-taking strategies (either imagining they were the protagonist or imagining the events were happening to them) rated higher on Bryant's (1982) empathy measure than the children who did not use such strategies (Chovil, 1985 as discussed in Strayer, 1987). Interesting differences associated with age have been found as well. Of children presented with sad stories and asked to maximize or minimize their empathic responses, whereas a little over two-thirds of the fourth-graders utilized a role-taking strategy to maximize their empathy, only about a third of kindergarteners and first-graders used role-taking (Bengtsson & Johnson, 1987). Most of the rest of the younger children thought about sad things unrelated to the story's content, such as breaking a leg. These findings both support and challenge Piaget's notion of egocentrism's sovereignty over younger children; although definite differences are found between younger and older children's utilization of role-taking, a third of Bengtsson & Johnson's (1987) younger children reported evidence of role-taking abilities.

These previous studies suggest that role-taking strategies enhance empathic arousal among children, and the most recent meta-analysis of the literature has

found a positive correlation (albeit weak) between empathy and prosocial behavior (Eisenberg & Miller, 1987b). Can we therefore infer that among children, affective role-taking strategies will promote prosocial behaviors, especially among older children? Although this link logically is compelling, empirical evidence has been inconsistent (for reviews, see Eisenberg, 1986; Underwood & Moore, 1982). Some researchers have found no relationship between children's affective role-taking and prosocial behaviors (Eisenberg-Berg & Lennon, 1980) or even a negative relation (Barnett & Thompson, 1984). Other studies have established a positive relationship (Brehm, Powell, & Coke, 1984; Denham, 1986; Howard & Barnett, 1981; Iannotti, 1978). These inconsistencies do not seem to be accountable by differences in the ages of the children involved; even younger children's helping behaviors have been found to be influenced by affective role-taking. For example, preschool through 2nd-grade children who were instructed to focus upon the feelings of boys and girls who would receive no prizes in another class were found to donate more tokens to these hypothetical students than their respective control group peers (Howard & Barnett, 1981). Also, and interestingly, other research with first-grade children found that "empathy instructions"--for the subject to place herself or himself in the target person's shoes--significantly increased donating behaviors of boys but not girls (Brehm, Powell, & Coke, 1984).

Examining role-taking within the prosocial motivation literature is illuminating. Eisenberg and her colleagues have classified reasonings children give to explain their prosocial behavior (e.g., "I'd help because I want her to like me" or "I'd help because I'd want somebody to help me in that situation") according to Eisenberg-Berg's (1979) prosocial moral reasoning categories and analyzed them for

age and gender differences. Eisenberg and her colleagues find no evidence that first-grade American children or younger children manipulate the cognitive strategy of role-taking on their own; in the one longitudinal study conducted on prosocial decision-making, no child reported using a role-taking strategy (e.g., "If I were in her situation, I'd want someone to help me") until the age of seven (Eisenberg *et al.*, 1983). As well, in a study in which first-grade children had previously been directed to imagine how they would feel in the other person's position, still no first-grade children reported role-taking as a motivation for helping (Schultz & Shaver, 1995). As with causal attributions, affective role-taking does not seem to be a salient social-cognitive exercise for younger children when making helping decisions. The use of role-taking in prosocial decision-making is a strategy that is learned in early to middle childhood, not appearing independently of direction to do so until the age of nine or ten (Eisenberg *et al.*, 1987; Schultz & Shaver, 1995).

In light of inconsistent results from previous helping research and suggestive evidence from work on prosocial reasonings, the present study predicts that first-grade children will not be influenced by the cognitive strategy of affective role-taking in their prosocial decisions and responses. Evidence that suggests that the association between emotions and helping behaviors becomes stronger with age (Eisenberg & Miller, 1987b), though, sustains optimism that fifth-graders' reports of prosocial responses will be affected by role-taking.

The Integration of Causal Controllability and Affective Role-Taking

One published study has examined the integration of causal attributions and role-taking. Betancourt (1990) manipulated both college students' cognitive strategy and the situation's controllability and examined students' judgments of

helping. Half of the subjects were instructed to "imagine how the person feels about what happened and how it affects his or her life," and the other half were instructed simply to attend to the facts of the situation. "Empathic set" (i.e., cognitive strategy) and perceived controllability were found to have an additive effect on helping. Also, one's empathic set affected the extent to which one perceived the situation as controllable. When asked prior to hearing the scenario to "imagine how the person feels about what happened and how it affects his or her life," subjects reported perceiving scenarios as less controllable. Such a finding is a good example of the benefits of research integrating social-cognitive processes: although attribution processes have been found to affect adult's helping behaviors in a particular manner, Betancourt's (1990) study shows that the process of making attributions can be affected significantly by a third variable--in this case, role-taking--that subsequently affects helping behaviors.

Although the additive relationship between causal attributions and affective role-taking is established for adults, how do the two processes interact within children, especially younger children who may only inconsistently utilize these social cognitions? One study has investigated this and received interesting results (Schultz & Shaver, 1995). Table 1 presents the mean reports of helping as a function of the child's grade, causal condition, and role-taking instructions. Results were analyzed separately by grade level. Consistent with Piaget's formulations, among first-grade children neither an interaction nor main effects occurred between or within causal attributions and affective role-taking; first-grade children remained outcome-dependent. Among fifth-graders, however, an interaction was found such that when instructed to role-take, a previously reported differentiation in helping

based upon perceived controllability disappeared, $F(1,26) = 4.90, p < .05$. In fifth-graders' prosocial responses, therefore, affective role-taking can be seen as moderating the negative effects of an attribution of causal controllability.

Assuming that affect leads to action, one could hypothesize that the decreased affect due to an attribution of causal controllability (and therefore less helping) was counteracted by an increased affect due to affective role-taking (and therefore a return to an expected or average amount of helping). Role-taking may not have been found to have an additive effect with causal controllability among older children because a limit may exist to the amount of affect necessary for an affirmative prosocial response. The present study is predicted to verify Schultz & Shaver's (1995) results.

Prosocial Reasoning

Differences in younger and older children's social-cognitive processing become evident when listening to their reasonings why they say they help. In making prosocial decisions young children have been found to use hedonistic and needs-oriented (i.e., simply attending to *another's* need) reasonings predominantly (Eisenberg, Lennon, & Roth, 1983; Schultz & Shaver, 1995). This finding concerning a needs-orientation is consistent with the previously noted finding that first- and second-grade children's emotional reactions and prosocial responses tend to be outcome-dependent rather than attribution-dependent (Schultz & Shaver, 1995; Thompson, 1987); a young child tends to assess a situation by its physical circumstances and respond according to this assessment. Although fifth-grade children also predominantly use needs-oriented reasonings, unlike younger children, other types of reasonings such as pragmatic concerns, interpersonal approval, and

role-taking are utilized significantly as well (Eisenberg, Shell, Pasternack, Lennon, Beller, & Mathy, 1987; Eisenberg, Miller, Shell, McNalley, & Shea, 1991; Schultz & Shaver, 1995). These findings further support the previously hypothesized social-cognitive differences between early and middle childhood.

In addition to illuminating differences in younger and older children's social-cognitive functioning, the present study's interest in Eisenberg-Berg's prosocial moral reasoning categories (1979) also is in determining if categories or subcategories need to be added to the established 10 categories with 18 subcategories. In particular, Eisenberg-Berg's (1979) categories do not include an explicit category for the use of causal attributions. Analysis of prosocial decision-making research therefore does not inform one of the relative utilization of attributional processes in children's prosocial reasoning. In previous research the author created and added a "responsibility orientation" category to Eisenberg-Berg's categories (1979) and found that a significant difference existed between first- and fifth-grade children's utilization of this type of reasoning, $F(1,57) = 8.72, p < .01$ (Schultz & Shaver, 1995). No first-grade children, in fact, reported using this strategy at all. The use of this type of reasoning relative to other categories could not be analyzed validly in this study, though, as children were asked to rate the other person's controllability of the situation as part of the previous testing process. The present study will incorporate Schultz & Shaver's (1995) adaptation of Eisenberg-Berg's categories and analyze children's decision-making accordingly.

Hypotheses

To reiterate, the hypotheses for the present study are the following: 1) although being able to perceive differences in causal controllability, first-graders'

judgments of prosocial response will be more consistent with an outcome-dependent than attribution-dependent perspective unless the question of causal controllability previously has been made salient to them, 2) if the question of causal controllability previously has been made salient to them, first-graders judgments of prosocial response will be consistent with an attribution-dependent perspective, 3) fifth-graders's judgments of prosocial response will reflect an ability to use an attribution-dependent social-cognitive perspective on their own, 4) affective role-taking will increase judgments of prosocial behaviors in fifth- but not first-grade subjects, and 5) among fifth-grade children, an interaction will occur between the situation's causal controllability and the direction to role-take such that when instructed to role-take, a previously reported differentiation in helping based upon causal controllability will disappear.

Method

Participants

Ninety-four first-grade (47 females, 47 males) and 69 fifth-grade (41 females, 28 males) children participated. Participants were students at one of two public elementary schools within the Williamsburg-James City County (Virginia) Public School system. Parental consent forms were distributed to all first- and fifth-grade children within these two schools. Children who returned a signed parental consent form were able to participate. Appendix A is a copy of the consent form. The children were divided by grade and gender and then randomly assigned to one of four conditions created by varying whether or not the protagonists in the stories could have controlled the situations and whether or not the child responded to the controllability question before the helping measure. Children were assured that

participation in the study could be terminated at any time without penalty, including during the experiment itself.

Materials

With some adaptations, the materials utilized were comparable to those of Schultz & Shaver (1995). Two vignettes were developed in which children are confronted with a choice to either make a personal sacrifice and help a same-age, same-gender, same-ethnic identity peer or continue in a self-rewarding behavior. One vignette concerned a child looking for a favorite drawing before school while the participant is engaged in her or his favorite preoccupation (e.g., playing on the computer, drawing, reading). This story was previously used with success by Schultz & Shaver (1995). The second concerned a child needing a quarter for lunch that, depending upon whether or not the participant gives her or him the quarter, will make the difference between whether or not the participant can afford to buy her or his favorite dessert. This vignette was developed for the present study.

Pen and ink illustrations portraying the vignettes were made in order to help children visualize and follow the stories. Separate drawings were sketched for male and female and Caucasian and African-American children. The illustrations purposefully were drawn without a depiction of the protagonists' facial expressions, lest the facial expressions influence the children's responses.

The stories within each vignette were varied based on the protagonist's control over the outcome. The favorite drawing became lost when either: 1) the child left it lying out after school the day before (controllable condition), or 2) another child took it from inside the child's desk and subsequently lost it (uncontrollable condition). A quarter is needed for lunch because either: 1) the child

spent a quarter before school at the school store (controllable situation), or 2) the child's parents did not give her or him enough money when she or he left for school that day (uncontrollable condition). The order of story presentation was counterbalanced across the child's grade, the child's gender, the causal condition, and the order of the questions.

The number of questions following each story was five or six depending upon whether or not the role-taking manipulation occurred. Four questions asked how much the participant: 1) would feel sorry for the other child, 2) would want to look for the drawing (or give her or him a quarter), 3) would want to keep playing with the favorite preoccupation (or keep the quarter), or 4) could have stopped the situation from happening. Participants responded to these questions by pointing to one of five increasingly large stacks of checkers (used by Eisenberg *et al.*, 1987). Each stack had a label in front of it that either said, "Not at all," "A little," "Somewhat," "Very much," or "Totally." A fifth direction/question was the affective role-taking manipulation. Participants were directed, "Now I want you to imagine you are the one who is missing your favorite drawing (or needs a quarter), and you want to find it," and then asked, "How does a person feel when a person is missing a favorite drawing and wants to find it (or needs money like this)?" Finally, the sixth question examined the participant's motivation for helping. Children were asked, "When trying to decide whether to look for the drawing (or give her or him the quarter) or keep (engaging in your favorite preoccupation or the quarter), what are some things you would think about?" If children were slow to respond, the question was rephrased to, "Why would you want to look for the drawing (or give her or him the quarter) or keep (engaging in your favorite

preoccupation or the quarter)?"

An adapted version of Eisenberg's (1979) Prosocial Moral Reasoning Categories was utilized to evaluate children's motivations for helping. Appendix B presents this adapted version. Due to the immanent presence of controllability issues within the study, in addition to the 10 categories employed by Eisenberg, an 11th category of Responsibility Orientation (e.g., "It was her fault") was adopted. As well, because of the vagueness of some needs oriented responses (i.e., not clearly a psychological or physical needs orientation) such as "It is her *favorite* drawing," a third subcategory under the Needs-Oriented category was utilized: Context of Need.

Procedure

The procedure was similar to that used by Schultz & Shaver (1995). Children were tested individually at their school. The experimenter was one of two White males enrolled either as a graduate or undergraduate student at the College of William & Mary. All of the participants at one of the schools were tested by the undergraduate experimenter, and the participants at the second school were randomly tested by the two experimenters. Preliminary analyses revealed no significant differences in children's willingness to help based upon the experimenter differences. The experimenter sat next to the child at a table removed from the rest of the children and teachers. The study was explained as an attempt to find out what children would do in certain situations. Each child was assured of confidentiality and that participation could be terminated at any time.

Before each child heard the stories, the experimenter conducted warm-up exercises with her or him. These exercises familiarized the children with the

measures utilized in the study. During these exercises the participant was asked to indicate a favorite activity that could be performed in the classroom alone before school, and a favorite dessert at the school cafeteria. This information was subsequently applied to the appropriate vignette in order that the psychological meaning and impact of the personal sacrifice and stories were consistent for different participants.

Following the warm-up exercises, the experiment proceeded as follows. While holding up the illustration specific to the vignette and gender and race of the child, the experimenter read the vignette from a script. Following each story, children responded to the five or six questions. In order to address the question of whether or not making children salient of causal controllability affects reports of prosocial response, different participants responded to stories in one of two question orders. Half of the participants responded to questions in the following order: extent of sorrow, desire to help, desire to keep for self, extent of protagonist's control, and motivations for helping. The other half responded to the controllability question first and then the other questions in the same order. For all participants, the role-taking manipulation and question occurred following the sorrow question during the second vignette they heard.

The experimenter recorded the child's answers on a separate answer sheet. Responses to the role-taking and motivations for helping questions were recorded verbatim. Two coders blind to the study's hypotheses rated the motivations for helping according to the adapted version of Eisenberg's (1979) Prosocial Moral Reasoning Categories. Participants' responses to the motivations for helping question typically were several sentences in length. Each of these answers was

analyzed for the degree to which a particular type of motivation, as represented by each subcategory, was present in the child's response. A score of "1" was given if no reference to that particular type of reasoning was present, "2" if a vague reference was made, "3" if a clear reference existed, and "4" if the subcategory was a dominant mode of reasoning. After individually rating the subcategories, the two raters collaborated until inter-rater reliability reached 1.00 for all subcategories. The scores from each child's two vignettes were then added to obtain a general score for the child's use of each subcategory. To correspond more closely with the mean scores obtained by Eisenberg and her colleagues, who have had participants respond to four stories (Eisenberg *et al.*, 1983; Eisenberg *et al.*, 1987; Eisenberg *et al.*, 1991), each child's subcategory scores were then doubled, making the range of possible subcategory scores from 4 to 16. Scores for categories were obtained by adding the subcategory scores within each category.

Results

Data Analysis

The major hypotheses concerning causal controllability's and affective role-taking's effects upon the two different grade levels' reports of willingness to help were analyzed in a 2 X 2 X 2 (Grade X Causal Condition X Role-Taking Direction) analysis of variance (ANOVA) with repeated measures on the third variable. This analysis revealed a significant grade level difference for role-taking's effects, which will be presented later, but not causal controllability's. As first-grade children's responses were more variable than fifth-grade children's, however, some reason existed to suspect this null finding concerning causal controllability. This being the case, separate 2 X 2 (Causal Condition X Role-Taking Direction) ANOVAs for each

grade with repeated measures on the second variable were also performed to examine causal controllability's effects upon each grade more closely. The results of these analyses are presented in the following section.

Causal Controllability

Table 2 presents the mean reports of willingness to help as a function of the child's grade level, causal condition, and direction to role-take. As mentioned above, the omnibus ANOVA that included grade did not find an interaction between grade and causal condition. The results from the separate ANOVAs for each grade, however, suggest grade-level differences may exist. Consistent with Schultz & Shaver's (1995) results, causal condition was not significantly found to affect first-grade children's willingness to help. In the analysis of fifth-grade children's helping responses, however, causal condition did affect willingness to help, $F(1,67; MS_e = 1.45) = 9.60, p < .01$. Fifth-grade children were more likely to help protagonists who did not causally control their situation ($M = 3.25$) than those who did ($M = 2.61$).

To examine whether or not differences in question order may have accounted for the disparity between Graham & Weiner's (1991) and Schultz & Shaver's (1995) findings concerning first-grade children's willingness to help, question order effects for first-grade children were analyzed in a 2 X 2 (Question Order X Causal Condition) ANOVA with willingness to help following the first story as the dependent variable. Self-report of helping following the second story was excluded from analysis because once the children heard all the questions following the first story the issue of protagonist controllability was known by the participant to be a salient feature of the study. First-grade children reported more willingness

to help if they were not asked about the protagonist's controllability of the situation prior to the helping measure ($M = 3.33$) than if they were ($M = 2.78$), $F(1,90; MS_e = 1.84) = 3.80, p = .054$. Although this general effect was found, a significant interaction between the question order and the causal controllability of the situation was not found; question order was not found to affect willingness to help protagonists--who either did or did not cause their situations--differently. This being the case, the discrepancies between Graham & Weiner's (1991) and Schultz & Shaver's (1995) results would not seem to be attributable to different question orders.

To understand the relationship between the child's grade and the causal condition further, 2 X 2 (Grade X Role-taking Condition) ANOVAs with repeated measures on the second variable were performed for each of the two causal conditions. Within vignettes with protagonists who caused their predicament, a trend was found for first-grade children to be more willing to help the protagonist ($M = 3.02$) than fifth-grade children ($M = 2.61$), $F(1,81; MS_e = 1.93) = 3.47, p < .07$. Within vignettes with protagonists who did not cause their predicament, though, no significant difference was found. This may seem to suggest that differences between younger and older children's willingness to help based upon causal controllability is more accountable by differences in response to controllable situations than uncontrollable ones, but, again, the originally reported omnibus ANOVA that included grade did not reveal a significant interaction between the child's grade and the causal condition.

In considering possible differences between younger and older children's utilization of causal attributions in their helping decisions, a next question becomes,

Do first- and fifth-grade children perceive the causality of situations similarly? In order to answer this question, a 2 X 2 X 2 (Grade X Causal Condition X Gender) ANOVA was performed on responses following the first story to the question, "How much could s/he have stopped this from happening?" Table 3 presents children's mean perceptions of controllability as a function of their grade, causal condition, and direction to role-take. An interaction between grade and perceived controllability was not found. Rather, an overall main effect for causal condition was found such that protagonists within the controllable situations were perceived as having more causal control over the predicament ($M = 3.87$) than those within uncontrollable situations ($M = 3.03$), $F(1,155; MS_e = 1.63) = 17.91, p < .001$. A main effect for grade was also found such that fifth-grade children perceived more causality in the protagonist's actions ($M = 4.03$) than first-grade children ($M = 3.03$), $F(1,155; MS_e = 1.63) = 24.98, p < .001$. First-grade and fifth-grade children did perceive causality distinctions in a similar manner, therefore, but fifth-grade children in general saw more causal controllability than first-grade children.

Neither first- nor fifth-grade children's perceptions of controllability were significantly related to their willingness to help following the first or the second story, though. Table 4 presents the correlations for both first- and fifth-grade children between perceived controllability, sympathy, willingness to help, and desire to keep the quarter (or keep playing a favorite preoccupation) following the first story. One would expect that the correlation between perceived controllability and willingness to help would be significantly negative, but this was not the case. Apparently, although both first- and fifth-grade children make causal attributions, these attributions are either unrelated or only moderately related to their helping

decisions. Among the dependent variables, only sympathy and desire to keep the quarter (or keep playing a favorite preoccupation) were correlated significantly with willingness to help. This was true for both first-grade, $r(92) = .44, p < .001$, and fifth-grade, $r(67) = .58, p < .001$, children's sympathy and first-grade, $r(92) = -.64, p < .001$, and fifth-grade, $r(67) = -.41, p < .001$, children's desire to keep the quarter (or playing with a favorite preoccupation. One may hypothesize that the relationship between the children's desire to keep and willingness to help shows that those who desired to have their favorite dessert more (or keep playing their favorite activity) were less willing to help, but this causal relationship between willingness to help and desire to keep was not established.

The extent to which children felt sorry for the protagonist was analyzed in a $2 \times 2 \times 2 \times 2$ (Grade \times Causal Condition \times Question Order \times Practice Effects) ANOVA with repeated measures on the fourth factor. The fourth factor is labelled "Practice Effects" as opposed to "Role-taking" because the sympathy measure was always taken prior to the direction to role-take; differences in reported sympathy following the first and second story therefore cannot be due to role-taking but rather are due to practice effects. Table 5 presents children's mean report of sympathy as a function of their grade, causal condition, and question order. Grade was found to interact with causal condition such that first- and fifth-grade children's sympathy for protagonists who did not cause their predicaments (M 's = 3.59 & 3.22, respectively) and first-grade children's sympathy for those who did ($M = 3.41$) were similar, but fifth-grade children responding to a protagonist who did cause her or his situation reported less sympathy than these others ($M = 2.40$), $F(1,155; MS_e = 2.06) = 4.19, p < .05$. Similar to first-grade children's

willingness to help, therefore, their sympathy was not attribution-dependent.

Question order was found to moderate the effects of causality on sympathy, $F(1,147) = 8.57, p < .01$. When the question of perceived controllability was asked prior to the sympathy measure, reported sympathy toward protagonists who caused their predicaments ($M = 3.17$) and those who did not ($M = 3.19$) was similar. When the sympathy measure was the first question asked, however, protagonists who did not cause their situations received more sympathy ($M = 3.61$) than those who did ($M = 2.63$). This result is counterintuitive. One would expect that making the controllability issue salient by asking a question about it would lead to increased distinctions in subsequent sympathetic response to protagonists. Conversely, however, making a controllability judgment prior to a sympathy judgment erased differences that were present otherwise.

Affective Role-taking

The previously mentioned 2 X 2 X 2 (Grade X Causal Condition X Role-Taking) ANOVA with repeated measures on the third factor detected a trend for role-taking's effects upon willingness to help to interact with the child's grade level, $F(1,147) = 3.60, p < .06$. The separate 2 X 2 (Causal Condition X Role-Taking) ANOVAs for each grade found that first-grade children's willingness to help ($M = 3.06, SD = 1.37$) did not significantly increase after receiving role-taking instructions ($M = 3.07, SD = 1.53$), but fifth-grade children's did (M 's = 2.68 & 3.17 and SD 's = 1.37 & 1.15, respectively), $F(1,67) = 8.55, p < .01$.

The Integration of Causal Controllability and Affective Role-taking

Within the 2 X 2 (Causal Condition X Role-Taking) ANOVA for the fifth-grade children, the effects of role-taking did not interact with the situation's causal condition; role-taking and causal condition had an additive effect upon their willingness to help. An interesting interaction did occur, however, between causal condition and role-taking in children's perceptions of controllability. Although main effects for causal condition were found following the first story each child heard, analyzing perceived controllability including both stories in a 2 X 2 X 2 X 2 (Grade X Causal Condition X Role-taking X Question Order) ANOVA, with repeated measures on the third variable, found a significant causal condition by role-taking interaction, $F(1,155; MS_e = 1.32) = 10.95, p < .01$. Whereas children perceived differences in causal controllability following the first story consistent with the causal condition ($M's = 3.87$ & 3.03 for controllable and uncontrollable situations, respectively), they did not make this distinction following the second story ($M's = 3.46$ & 3.45). A first hypothesis concerning why this might be the case is that the role-taking direction affected the perception of controllability such that imagining oneself in the other's situation homogenized different children's perceptions. This being the case, one would expect an interaction between the question order and role-taking, because the second story's question of perceived controllability was either asked before or after the role-taking manipulation depending upon the question order. This interaction was not found, however.

Because asking the perceived controllability question before and after role-taking produced statistically similar results, the interaction between causal condition and role-taking is not so much between causal condition and role-taking as between

causal condition and practice effects. Why practice effects would produce these means is difficult to understand. After responding to a perceived controllability measure following the first story, the child probably was more attentive to controllability issues when listening to the second story. This would probably produce an increase in perceived controllability within both causal conditions, though, rather than a regression to the mean. A regression to the mean interpretation seems most appropriate, but the strength of the present effect seems stronger than a typical regression to the mean; the significantly different means for causal condition following the first story not only became insignificant but became virtually identical after the second story.

Prosocial Reasoning

Table 6 presents the mean scores for each prosocial moral reasoning subcategory and category as a function of the child's grade and gender. For both first- and fifth-grade's, the most prevalent mode of reasoning was hedonistic. This reflects the element of personal sacrifice intrinsic within their prosocial decisions; children did not want to stop participating in their self-proclaimed "favorite" activity or part with the quarter that would allow them to buy their self-declared "favorite" dessert. The second most-often used type of decision-making for both first- and fifth-grade children was a concern for the others' needs. This reasoning category has been found to be the most prevalent mode of reasoning in other research (e.g., Eisenberg *et al.*, 1983; Eisenberg, *et al.*, 1987), but the personal sacrifice entailed with helping in the present study was probably emotionally greater than that in other studies.

Prosocial moral reasoning subcategory scores were analyzed in a 2 X 2

(Grade X Gender) multivariate analysis of variance (MANOVA) with the 21 subcategories as a multivariate dependent measure. Despite overall similarities, first- and fifth-grade children reasoned differently, Pillai's trace = .36, approximate $F = 3.73$ with 21 and 139 df, $p < .001$. Univariate F -tests revealed that fifth-grade children used certain types of reasoning more than first-grade. First-grade children utilized a responsibility orientation (e.g., "It was her fault") considerably ($M = 5.00$), but this type of reasoning was found to be the second most prevalent mode of motivation--hedonistic gain to self being the first--among fifth-grade children ($M = 7.19$), $F(1,159; MS_e = 10.50) = 20.12$, $p < .001$. Consistent with grade-level differences in role-taking's effects upon willingness to help, very few first-grade children considered how they would feel in the other's situation when explaining their willingness to help ($M = 4.09$), but this type of judgment was used considerably by fifth-grade children ($M = 4.84$), $F(1,159; MS_e = 3.26) = 6.07$, $p < .05$. As well, direct reciprocity (e.g., "I'd give her a quarter because she'd give me money sometime when I needed it") was used infrequently by first-grade children ($M = 4.02$) but fairly commonly by fifth-grade children ($M = 4.46$), $F(1,159; MS_e = .92) = 9.86$, $p < .01$, and, finally, fifth-grade children considered the context of the other's need (e.g., "It's her favorite drawing") more frequently ($M = 5.94$) than first-grade children ($M = 4.83$), $F(1,159; MS_e = 6.03) = 7.49$, $p < .01$.

Discussion

Consistent with Piaget's claims that younger children attend to immediate cues from the physical environment, first-grade children were found to be largely outcome-dependent in their prosocial decisions. Abstract social-cognitive processes

such as causal attributions and affective role-taking did influence fifth-grade children's judgments. These differences are of degree and not of kind, however, as first- and fifth-grade children overall were not found to differ significantly in the use of causal attributions in their helping decisions and only marginally did so in their utilization of affective role-taking.

Causal Controllability

As predicted, when the question of causal controllability was not made salient to first-grade children, their willingness to help was not affected by the other's causal controllability of the situation. As well, and consistent with previous findings, fifth-grade children did make this distinction without prompting (Barnett, 1975; Graham & Weiner, 1991; Miller & Smith, 1977). Contrary to predictions, however, making causal controllability salient by asking a question concerning it prior to the helping measure still did not lead to a significant difference in first-grade children's willingness to help protagonists who either did or did not causally control their situations. This result is inconsistent with the results of Graham & Weiner (1991), who found that first-grade children reported responding differently based upon this distinction. A methodological consideration may help explain the discrepancies between Graham & Weiner's (1991) and Schultz & Shaver's (1995) results. Graham & Weiner's two uncontrollable scenarios involved a person with a cast falling forward and knocking one over and a person becoming ill and failing to feed one's goldfish. These stories not only alleviate the protagonists from causal responsibility for the situations but, on account of physical handicaps, also actively elicit sympathy for them. To not help these protagonists, therefore, one must not only be disinterested in helping them but also overcome the social expectation that

one should help the physically handicapped person. When uncontrollability more simply involves not having caused the situation, such as in the present study, the protagonist's controllability or uncontrollability of the situation is not a salient enough reality for most younger children to attend to and base their helping decisions.

Grade level differences concerning usage of causal attributions need to be stated carefully. First- and fifth-grade children were not found to be dissimilar in their utilization of causal controllability within their helping decisions. Although examining each grade individually revealed that whereas fifth-grade children's willingness to help was affected by causal controllability, first-grade children's was not affected, the overall analysis did not reveal a grade-level difference in causal controllability's effects. In addition, examining children's motivations for or against helping shows that a significant number of first-grade children reported orienting toward the other's responsibility for the situation. For first-grade boys, in fact, a responsibility orientation was the most-often used type of reasoning other than pragmatic, hedonistic gains for the self (e.g., buying dessert). In addition, among first-grade children, asking the controllability question prior to the helping measure decreased willingness to help in general (but not contingent upon the level of causal controllability). The social cognitive exercise of utilizing causal attributions therefore seems to be in a transitional stage in younger childhood. Many younger children associate causality considerations with their helping decisions. This association is not sufficiently established or refined, though, such that it produces significantly different responses to others of differing levels of culpability. Through the process of hearing other people, especially one's parents, make statements

such as, "I'm not going to help her because she *shouldn't* have..." younger children learn that causal controllability is a salient feature within a helping situation and learn to discriminate more precisely between agents who could have and could not have controlled situations.

Both first- and fifth-grade children were found to perceive differences accurately in the extent to which the protagonist could have stopped the situation from happening. Their perceptions of controllability, however, were not related to their reports of sympathy or willingness to help. This finding seriously questions the applicability of Weiner's (1986) attribution-affect-action model to children, especially younger children. Clearly younger children are not attribution-dependent, and therefore the model would not apply to their helping decisions. Even fifth-grade children reported an insignificant relationship between perceived controllability and sympathy, though, and the usefulness of the model for understanding children's helping decisions therefore needs to be questioned.

Affective Role-taking

As hypothesized, affective role-taking influenced fifth-grade but not first-grade children's helping decisions. As well, whereas very few younger children reported an orientation toward role-taking in their reasonings for or against helping the other, this was a common motivation among fifth-grade children. These differences are consistent with Piaget's notion that until the age of seven, the younger child is egocentric in her or his perspective. Not until after this point can a child understand what another person sees or feels like. It should be noted that these findings do not provide evidence that fifth-grade children actually took the perspective of the other, though. The present study did not measure whether the

effects of affective role-taking upon helping behavior are moderated by empathy or social desirability. The fifth-grade child could have imagined how a person would feel in the protagonist's situation but just as likely could have intuited that the experimenter wanted her or him to recognize that if she or he was in the other's situation, she or he would want someone to help her or him.

In either of these previous two cases, though, this finding is nonetheless significant. For one, it adds to the literature concerning the social-cognitive exercise of role-taking and its effects upon helping. As suggested by Carlo *et al.*, (1991), inconsistencies in this literature may be due to different role-taking exercises--that is, affective, cognitive, or perceptual role-taking--being related or not related to the demands of helping within the situations experimenters have presented to participants. In the present study affective role-taking is relevant to the helping task; how one would feel about not having her or his *favorite* drawing may be a strong motivator for another's willingness to help her or him. Indeed, fifth-grade children were found to be more willing to help after imagining how they would feel in the other's situation. Studies that pay closer attention to the match between the type of role-taking and the demands of the other's needs may find a more consistent relationship between role-taking and helping than previous research has. As well, affective role-taking did not affect first-grade children's willingness to help. Regardless of whether this was moderated by empathy or social desirability, this grade-level difference is significant. Assuming for a moment that social desirability is the mediating variable, this finding still reflects that a strong association between helping and imagining one's feelings in the other's situation is not found in the younger child's mind. Even though younger children had been

asked to role-take immediately preceding the helping measure, they did not feel compelled to report that they would be more willing to help. The relationship between one's feelings within the other's situation and willingness to help is not strong enough, therefore, to divert the younger child's attention away from the relationship between more immediate considerations (e.g., the other's physical needs and one's own desires) in their helping decisions.

The Integration of Causal Controllability and Affective Role-taking

Consistent with Schultz & Shaver's (1995) findings, within fifth-grade children's willingness to help an interaction was hypothesized to occur between causal condition and affective role-taking. This interaction did not occur. Rather, causal condition and affective role-taking had an additive effect upon helping. This is consistent with Betancourt's (1991) findings concerning college students and suggests that older children's social-cognitive processes are in a very mature form. The inconsistency with Schultz & Shaver's (1995) findings probably reflects ceiling effects in their data. Out of the possible score of 5.00, their fifth-grade children obtained a mean score of 4.56 for helping a protagonist who did not cause her or his situation prior to the role-taking manipulation (see Table 1 for complete report of means). Fifth-grade children in the uncontrollable condition therefore did not have much room to exhibit their affective role-taking prowess in relation to their willingness to help. Another plausible but elusive explanation, though, concerns the relationship found in the present study between causal condition and practice effects with regards to perceived controllability. For both first- and fifth-grade children, the perceived distinction found between causal conditions following the first story disappears following the second. If perceived controllability were related

to willingness to help--which it was not significantly found to do in the present study--then this interaction would be consistent with Schultz & Shaver's (1995) findings. Further research that presents subjects with more than two stories may prove fruitful for understanding these practice effects and their relationship to fifth-grade children's willingness to help.

Prosocial Reasoning

The most striking feature concerning children's motivations for helping is that both first- and fifth-grade children rely heavily upon an orientation toward their own needs and the needs of the other. Not exclusively first-graders, therefore, but both first- and fifth-grade children fit Shantz's (1983) designation as "behaviorists." Despite other clear differences in social-cognitive abilities, this supports the recent emphasis placed by theory of mind theorists upon perceiving children in young and middle childhood as more similar than different (Flavell, Miller, & Miller, 1993). It needs to be noted, however, that other research concerning younger and older children's prosocial moral reasonings do not find these similarities. Most studies find a sharp change between the preschool years and second- or third-grade such that a hedonistic orientation decreases dramatically and a needs orientation increases (Eisenberg, Boehnke, Schuhler, & Silbereisen, 1985; Eisenberg *et al.*, 1983). The discrepancy between the present study's data and these other studies' points to the fact that prosocial cognitions are contextual in nature; a child will reason differently depending upon the salient features of the situation. In the present study's vignettes, the personal sacrifice involved in helping was great; something that was admittedly the child's "favorite" needed to be foregone in order to help. Eisenberg's stories also include an element of personal sacrifice, but they

do not contain the personal relevance contained within the present study's vignettes.

Relatedly, an orientation toward the other's responsibility was utilized significantly by both younger and older children. This is not a category included in Eisenberg's scheme because she has not found children to use this type of reasoning frequently (Eisenberg, personal communication). The utilization of this type of orientation is clearly dependent upon the situation presented to the child, though. As the data suggest, a responsibility orientation is most likely to occur if the protagonist behaves as a causal agent in a manner discrepant with the child's expectations. This type of situation is prevalent within children's daily lives: Mary was supposed to wear sneakers for a field trip but did not and now her feet hurt; Johnny should not have been touching the sculpture in the library, and now it is broken. These scenarios being prevalent, a responsibility orientation deserves empirical attention and understanding as a valid prosocial moral reasoning subcategory in its own right.

Despite striking similarities in reasoning, differences between younger and older children's social-cognitive skills can be seen in their reports of why they would or would not be willing to help another. All of these differences concerned fifth-grade children's greater utilization of certain types of orientations. Previously mentioned were the increases in the use of responsibility orientation and role-taking. As well, fifth-grade children employed more considerations of future reciprocity and the context of the need. Each of these orientations reflects an ability to attend to features not immediately present within the physical environment. This reflects an increased ability not to be bound by visual

perceptions. This is a difference in quantity, though, not quality. First-grade children did report abstract types of orientations such as stereotyped reasonings of what good or bad people would do, how much the other person might like her or him if she or he helped, and the other person's responsibility for the situation. The younger child is beginning to attend to more abstract considerations, therefore, and will be able to do so increasingly over the next several years.

Conclusion

Consistent with Piaget's (1954) claims, younger and older children differed in their reliance on social-cognitive skills in their helping decisions. Younger children were found to participate in abstract social cognitions, such as making causal attributions, but did not apply these to their helping decisions. Older children both made and utilized these cognitions. Consistent with recent emphases within social-cognitive development (Flavell *et al.*, 1993), however, these differences can be seen as differences in quantity and not in quality. Both younger and older children predominantly attended to immediate, perceptible needs in their helping decisions. As well, although first-grade children failed to manipulate their perceptions of causality and imagining how they would feel in the other's situation in their willingness to help, they did display the ability to associate abstract considerations with their motivations for helping.

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Table 1
Mean Self-Report of Helping Response as a Function of the Participant's Grade, Causal Condition, and Directions to Role-take: Schultz & Shaver (1995)

	Causally Controllable Situation		Causally Uncontrollable Situation	
	Not directed	Role-taking	Not directed	Role-taking
First-grade:	4.93 (.27)	5.00 (.00)	4.80 (.56)	4.87 (.35)
	$n = 14$		$n = 15$	
Fifth-grade:	4.06 (.77)	4.56 (.72)	4.79 (.64)	4.71 (.47)
	$n = 16$		$n = 14$	

Note. Standard deviations appear in the parentheses.

Table 2
Mean Self-Report of Willingness to Help as a Function of the Child's Grade, Causal Condition, and Directions to Role-take

	Causally Controllable Situation		Causally Uncontrollable Situation	
	Not directed	Role-taking	Not directed	Role-taking
First-grade:	2.94 (1.30)	3.10 (1.60)	3.22 (1.46)	3.09 (1.44)
	$n = 48$		$n = 46$	
Fifth-grade:	2.31 (0.96)	2.91 (1.12)	3.06 (1.18)	3.44 (1.13)
	$n = 35$		$n = 34$	

Note. Standard deviations appear in the parentheses.

Table 3
Mean Self-Report of Perceived Controllability as a Function of the Child's Grade, Causal Condition, and Directions to Role-take

	Causally Controllable Situation		Causally Uncontrollable Situation	
	Not directed	Role-taking	Not directed	Role-taking
First-grade:	3.42 (1.43) <i>n</i> = 48	2.98 (1.55)	2.64 (1.37) <i>n</i> = 45	3.04 (1.49)
Fifth-grade:	4.49 (0.82) <i>n</i> = 35	4.11 (1.11)	3.56 (1.28) <i>n</i> = 34	4.06 (1.18)

Note. Standard deviations appear in the parentheses.

Table 4
Correlations between Perceived Controllability, Sympathy, Willingness to Help, and Desire to Keep Following the First Story as a Function of the Child's Grade

	Perceived Controllability	Sympathy	Willingness to Help
First-Grade:			
Sympathy	.02		
Willingness to Help	.20	.44*	
Desire to Keep	-.03	-.36*	-.64*
	<i>n</i> = 94		
Fifth-Grade:			
Sympathy	-.24		
Willingness to Help	-.22	.58*	
Desire to Keep	.04	-.36*	-.41*
	<i>n</i> = 69		

* $p < .001$

Table 5
Mean Self-Report of Sympathy as a Function of the Child's Grade, Causal Condition, and Question Order

	Causally Controllable Situation		Causally Uncontrollable Situation	
	Order One	Order Two	Order One	Order Two
First-grade:	3.81 <i>n</i> = 24	3.00 <i>n</i> = 24	3.41 <i>n</i> = 22	3.75 <i>n</i> = 24
Fifth-grade:	2.53 <i>n</i> = 19	2.25 <i>n</i> = 16	2.97 <i>n</i> = 17	3.47 <i>n</i> = 17

Note. Order One contains the perceived controllability measure prior to the sympathy measure. Order Two does not. The Mean Squared Error terms (*MS_e*) for the distributions are 2.09 for Between-Subjects Effects and 1.10 for Within-Subjects Effects.

Table 6
Mean Self-Report of Prosocial Motivation

Category	1st-grade		5th-grade		<i>MS_e</i>
	Girls	Boys	Girls	Boys	
<i>Magical View of Authority</i>	4.09	4.30	4.14	4.22	1.09
<i>Hedonistic Reasoning</i>	18.43	18.13	18.44	19.14	24.92
Pragmatic Gain to Self	9.87	9.19	9.42	8.71	17.79
Direct Reciprocity	4.00	4.04	4.29	4.71	.92
Affectional Relationship	4.55	4.89	4.73	5.71	4.43
<i>Nonhedonistic Pragmatism</i>	4.47	4.38	4.44	4.21	1.80
<i>Concern for Others' Needs</i>	16.68	14.77	16.73	15.64	23.93
Physical Needs	6.09	5.15	5.42	5.21	7.56
Psychological Needs	5.92	4.64	5.22	4.71	5.64
Context of Need	4.68	4.98	6.10	5.71	6.03
<i>Concern with Others' Humanness</i>	4.00	4.00	4.44	4.21	1.30
<i>Stereotyped Reasoning</i>	13.36	12.60	13.02	12.50	6.23
Good/Bad Person	5.36	4.51	4.78	4.50	5.24
Majority Behavior	4.00	4.09	4.15	4.00	.17
Others and Their Roles	4.00	4.00	4.10	4.00	.10
<i>Approval/Interpersonal Orientation</i>	4.38	4.13	4.24	4.50	1.60
<i>Responsibility Orientation</i>	4.30	5.70	6.59	8.07	10.50
<i>Overt Empathic Orientation</i>	8.43	8.55	9.46	9.00	6.30
Sympathetic Orientation	4.30	4.51	4.44	4.43	2.48
Role Taking	4.13	4.04	5.02	4.57	3.26
<i>Internalized Affect</i>	8.30	8.38	8.44	8.00	1.67
Positive Affect: Conseq.	4.14	4.09	4.29	4.00	.95
Positive Affect: Self-respect	4.17	4.30	4.15	4.00	.71
<i>Abstracted Types of Reasoning</i>	12.55	12.38	12.49	12.36	1.72
Internalized Laws, Norms	4.38	4.26	4.20	4.21	1.03
Concern for Rights	4.09	4.00	4.15	4.14	.32
Condition of Society	4.09	4.13	4.15	4.00	.44

Note. Category names appear in italics, and subcategories are indented. Five categories--Magical View of Authority, Nonhedonistic Pragmatism, Concern with Humanness, Approval/Interpersonal Orientation, and Responsibility Orientation--are both a category and a lone subcategory within that category.

**Appendix A
Permission Form**

Hello. I am a graduate student in psychology at the College of William & Mary. Dr. Kelly Shaver and I are researching children's helping behaviors. We are looking to see if the following two factors influence a child's decision to help another: 1) whether or not the person who needs help is at fault for her or his need, and 2) whether or not the child who could help imagines how the person who needs help is feeling. We are asking for your permission to let your child participate in our study.

Your child will be read two short stories depicting common school-related situations (e.g., a child missing a pen). Your child then will be asked several questions concerning the child's "at-faultness" for the situation, feelings the child in the story and your child as an observer have, and your child's response to the situation. Your child's participation will take no more than ten minutes from her or his in-class time.

Preceding the stories and questions I will explain to each child that her or his answers will not affect their grades for class and, in fact, will never be known to anyone except myself and Dr. Shaver; their answers will remain anonymous. Children will also be told that if for any reason they want to discontinue participation in the study once it has started, the study will stop.

Both the College of William & Mary and the Williamsburg-James City County Public Schools have approved this study. I would be happy to speak with you if you have any questions or concerns about the study. My office phone number is 221-3891, and my home phone number is 565-3143. If you would like to receive the results of the study, please write your name and address below.

Thank you,

David Schultz

(please tear at line and keep above description)

I give permission for my child to participate in David Schultz' and Dr. Kelly Shaver's study of helping behavior

I do not give permission for my child to participate

child's signature

parent or guardian's signature

date

child's name

parent or guardian's name

Please send results to the following address:

PLEASE RETURN FORM TO YOUR CHILD'S TEACHER BY FEBRUARY 4th

Appendix B
Adapted Version of Eisenberg-Berg's (1979)
Prosocial Moral Reasoning Categories

1. *Obsessive and/or magical view of authority and/or punishments.*

Avoidance of punishment and unquestioning deference to power are valued in their own right. The physical consequences of action determine its goodness regardless of human values and needs. Example: "If he didn't help, someone would find out and punish him."

2. *Hedonistic reasoning.*

(a) *Pragmatic, hedonistic gain to the self*: Orientation to gain for oneself (besides gain resulting from direct reciprocity). Example: "She wouldn't help because she'd want to go to the party."

(b) *Direct reciprocity*: Orientation to personal gain due to direct reciprocity (or lack of it) from the recipient of an act. Example: "She'd help because they'd give her food the next time she needed it."

(c) *Affectional relationship*: Individuals' identifications with another, their liking for the other, and the other's relation to one's own needs are important considerations in the individual's moral reasoning. Example: "She'd share because she'd probably have friends in the town."

3. *Nonhedonistic pragmatism.*

Orientation to practical concerns that are not directly related to either selfish considerations or the other's need. Example: "I'd help because I'm strong."

4. *Concern for others' needs (needs-oriented reasoning).*

(a) *Concern for others' physical and material needs*: Orientation to the physical and material needs of the other person. Examples: "He needs blood," or "She's hurt."

(b) *Concern for others' psychological needs*: Orientation to the psychological needs and affective states of the other person. Example: "They'd be happy if they had food."

(c) *Concern for the context of the need*: Orientation to the context of the other's need. Example: "It may be her/his favorite card," or "The papers may be important."

5. *Reference to and concern with humanness.*

Orientation to the fact that the other is human, living, a person. Example: "He'd help because "they're human," or "they are people, too."

6. *Stereotyped reasoning.*

(a) *Stereotypes of a good or bad person:* Orientation to stereotyped images of a good or bad person. Example: A child would help because "it's nice."

(b) *Stereotyped images of majority behavior:* Orientation to "natural" behavior and what most people would do. Example: "It's only natural to help."

(c) *Stereotyped images of others and their roles:* Orientation to stereotyped image of others and what others do. Example: "I'd help because farmers are nice people."

7. *Approval and interpersonal orientation.*

Orientation to others' approval and acceptance in deciding what is the correct behavior. Example: "They'd like her if she helped."

8. *Responsibility Orientation.*

Orientation to the other's responsibility in her/his cause of need. Examples: "I wouldn't need to help her/him if s/he hadn't tried to skip the step," or "It was her/his fault."

9. *Overt empathic orientations.*

(a) *Sympathetic orientation:* Expression of sympathetic concern and caring for others. Examples: "He would feel sorry for them," or "She'd be concerned."

(b) *Role taking:* The individual takes the perspective of the other and explicitly uses this perspective in personal reasoning. Examples: "I'm trying to put myself in her shoes," or "She'd know how it feels."

10. *Internalized affect.*

(a) *Simple internalized positive affect and positive affect related to consequences:* The individual simply states that he or she would "feel good" as a result of a particular course of action without giving a reason, or says that the consequences of his or her act for the other person would inspire good feelings. The affect must be used in a context that appears internalized. Example: "She'd help because seeing the villagers fed would make her feel good."

(b) *Internalized positive affect from self-respect and living up to one's values:* Orientation to feeling good as the result of living up to internalized values. Example: "I'd feel good knowing that I had lived up to my principles."

(c) *Internalized negative affect over consequences of behavior:* Concern with feeling bad or guilty due to the consequences of an act. Example: "She would feel guilty because the girl was hurt."

(d) *Internalized negative affect due to loss of self-respect and/or not living up to one's values:* Orientation to feeling bad as the result of not living up to internalized values. Example: "He'd think badly of himself if he didn't do the right thing."

11. *Other abstract and/or internalized types of reasoning.*

(a) *Internalized law, norm, and value orientation*: Orientation to an internalized responsibility, duty, or need to uphold the laws and accepted norms or values. Examples: "She has a duty to help needy others," or "He'd feel he had a responsibility to assist because of his values."

(b) *Concern with the rights of others*: Orientation to protecting individual rights and preventing injustices that violate another's rights. Example: "I'd help because her right to walk down the street was being violated."

(c) *Generalized reciprocity*: Orientation to indirect reciprocity in a society (i.e., exchange that is not one-to-one but eventually benefits all). Example: "If everyone helps one another, we'd all be better off."

(d) *Concern with the condition of society*: Orientation to improving the society or community as a whole. Example: "If everyone helps, society would be a lot better."

Appendix C Data

The following is a description of the variable names appearing on the succeeding page's data list:

The first variable (subject) is simply the number of the subject as she or he was entered into the SPSS data file.

The next eight variables (gender through school) are independent variables. Gender, grade, race, and school refer to demographic information about the subject. Causal, question, story, and tester refer to experimental manipulations. Causal refers to whether the stories the subject heard were both controllable (controll) by the protagonist or uncontrollable (uncontro). Question refers to whether the first question asked was the perceived controllability measure (Stopped) or the sympathy measure (Sorry?). Story refers to whether the story concerning another child who needs money (cafeteria) or the story concerning a lost drawing (classroom) came first. Tester refers to whether the subject was tested by the research assistant (Terence) or the primary researcher (David).

The next eight variables (sorry1 through stopped2) are dependent variables measured by the five increasingly large stacks of checkers. Descriptions of the particular questions each of these variables refers to can be found in the Method section. The 1 or 2 at the end of each variable name refers to whether the measure was taken following the first or second story.

The next forty-two variables are the prosocial reasoning dependent variables. Descriptions of each variable can be found in Appendix B. The 1 or 2 at the end of each variable name refers to whether the measure was taken following the first or second story.

The twenty-eight compute statements create new prosocial reasoning dependent variables. Each subject's prosocial reasoning scores following the two stories are averaged to determine an individual score for each subject for each subcategory.


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1631211112222452334141111111113141111111111111141141111411111
end data.
compute mgcl = (mgcl1 + mgcl2)*2.
compute prgmtc = (prgmtc1 + prgmtc2)*2.
compute rcprcty = (rcprcty1 + rcprcty2)*2.
compute affctnl = (affctnl1 + affctnl2)*2.
compute nnhdnst = (nnhdnst1 + nnhdnst2)*2.
compute physcl = (physcl1 + physcl2)*2.
compute psychlg = (psychlg1 + psychlg2)*2.
compute cntxtl = (cntxtl1 + cntxtl2)*2.
compute hmnss = (hmnss1 + hmnss2)*2.
compute gdprsn = (gdprsn1 + gdprsn2)*2.
compute mjrty = (mjrty1 + mjrty2)*2.
compute othrsrl = (othrsrl1 + othrsrl2)*2.
compute apprvl = (apprvl1 + apprvl2)*2.
compute rspnsbl = (rspnsbl1 + rspnsbl2)*2.
compute symptht = (symptht1 + symptht2)*2.
compute rltkng = (rltkng1 + rltkng2)*2.
compute pscnsqn = (pscnsqn1 + pscnsqn2)*2.
compute slfrspc = (slfrspc1 + slfrspc2)*2.
compute lwnrm = (lwnrm1 + lwnrm2)*2.
compute rghts = (rghts1 + rghts2)*2.
compute cndtn = (cndtn1 + cndtn2)*2.
compute hdnstc = prgmtc + rcprcty + affctnl.
compute needs = physcl + psychlg + cntxtl.
compute strtypd = gdprsn + mjrty + othrsrl.
compute empathic = symptht + rltkng.
compute affect = pscnsqn + slfrspc.
compute abstract = lwnrm + rghts + cndtn.
variable labels mgcl 'obsessve magcal view'
prgmtc 'prgmtic hdnstic gain' rcprcty 'direct reciprocity'
affctnl 'affctioal reltionshp' nnhdnst 'nonhdnistic prgmtism'
physcl 'physical needs' psychlg 'psychological needs'
cntxtl 'context of need' hmnss 'others hummanness'
gdprsn 'stereotype of good' mjrty 'stereotype of majrity'
othrsrl 'stereotype of role' apprvl 'approval orientation'
rspnsbl 'rspnsblty orienttion' symptht 'sympthtc orientation'
rltkng 'role taking' pscnsqn 'pos affct--cnsquencs'
slfrspc 'pos affct--slf rspct' lwnrm 'laws or norms'
rghts 'others rights' cndtn 'condition of humnity'
hdnstc 'hedonistic needs' needs 'others needs'
strtypd 'stereotyped reasning' empathic 'overt empathic'
affect 'internalized affect' abstract 'abstract rules or norms'.

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Appendix D
MANOVA for Willingness to Help

The following is the SPSS printout of the 2 X 2 X 2 (Grade X Causal Condition X Role-Taking) analysis of variance (ANOVA) examining children's willingness to help:

manova help1 help2 by grade (1,2) causal (1,2)/wsfactors roletake (2) /omeans/design.

163 cases accepted.
0 cases rejected because of out-of-range factor values.
0 cases rejected because of missing data.
4 non-empty cells.

1 design will be processed.

Cell Means and Standard Deviations

Variable .. HELP1		desire to help			
FACTOR	CODE	Mean	Std. Dev.		N
GRADE	first				
CAUSAL	controll	2.938	1.295		48
CAUSAL	uncontro	3.196	1.455		46
GRADE	fifth				
CAUSAL	controll	2.314	.963		35
CAUSAL	uncontro	3.059	1.179		34
For entire sample		2.902	1.287		163

Variable .. HELP2		desire to help			
FACTOR	CODE	Mean	Std. Dev.		N
GRADE	first				
CAUSAL	controll	3.104	1.601		48
CAUSAL	uncontro	3.043	1.460		46
GRADE	fifth				
CAUSAL	controll	2.914	1.121		35
CAUSAL	uncontro	3.441	1.133		34
For entire sample		3.117	1.376		163

Tests of Between-Subjects Effects.

Tests of Significance for T1 using UNIQUE sums of squares						
Source of Variation	SS	DF	MS	F	Sig of F	
WITHIN CELLS	347.48	159	2.19			
CONSTANT	2866.32	1	2866.32	1311.58	.000	
GRADE	1.52	1	1.52	.69	.406	
CAUSAL	10.73	1	10.73	4.91	.028	
GRADE BY CAUSAL	5.74	1	5.74	2.62	.107	

Tests involving 'ROLETAKE' Within-Subject Effect.

Tests of Significance for T2 using UNIQUE sums of squares						
Source of Variation	SS	DF	MS	F	Sig of F	
WITHIN CELLS	205.52	159	1.29			
ROLETAKE	4.94	1	4.94	3.82	.052	
GRADE BY ROLETAKE	4.66	1	4.66	3.60	.059	
CAUSAL BY ROLETAKE	1.43	1	1.43	1.11	.294	
GRADE BY CAUSAL BY ROLETAKE	.05	1	.05	.04	.843	

ABOUT THE AUTHOR

David Arthur Schultz grew up in Germantown, Maryland. He attended the University of Maryland where he studied European Religious History and received his Bachelor of Arts degree in 1990. He then studied theology and the psychology of religion at The Divinity School of Yale University and received a Master of Divinity degree in 1993. He entered the Master of Arts program in General-Experimental Psychology at the College of William & Mary in August of 1993. Mr. Schultz departs the College of William & Mary to pursue a Doctor of Philosophy degree in Clinical Psychology at the University of Delaware. At the University of Delaware, he will be researching with Dr. Carroll Izard and studying emotional expressions of young children.