

Children's Reasoning About the Refusal to Help:
The Role of Need, Costs and Social Perspective Taking

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Abstract

Children (n = 133, aged 8 to 13) were interviewed about helping situations that systematically varied in recipient's need for help and the costs for the helper. In low costs situations children perceived a moral obligation to help which was independent from peer norms, parental authority and reciprocity considerations. When helping a peer involved high costs this overpowered the perceived obligation to help, but only in situations involving low need and when in line with reciprocity. When both need and costs were high, younger children expressed stronger moral indignation while older children were less negative and reasoned in terms of other solutions. Furthermore, stronger moral indignation was related to more advanced social perspective taking skills when need and costs were high.

Keywords: helping, need, costs, moral reasoning, reciprocity

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There is much research on how children evaluate and reason about negative peer behaviors, such as exclusion, bullying and discrimination (e.g. Killen, Lee-Kim, McGlothlin, & Stangor, 2002; Schuette & Killen, 2009; Smetana, 2006). In contrast, social-cognitive research on children's views about the refusal to help is scarce (Paulus & Moore, 2012). In general, there is a strong social norm to help those in need (Schwartz & Bilsky, 1990), and research with adults shows that the need of the recipient of help as well as the personal costs of helping influence the perceived obligation to help (Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991; Piliavin Dovidio, Gaertner, & Clark, 1981). Less is known about how children reason about the obligation to help, although the meaning that children attribute to helping behavior is important for understanding and facilitating prosocial behavior (Hay, 1994). In the current vignette study, children (aged 8 to 13) were interviewed about helping situations that systematically varied in terms of the recipient's need for help and the costs for the helper. The main aim of this study was to examine whether children's judgments of help reflect moral considerations, and to what extent these considerations are overpowered by psychological forms of reasoning (Turiel, 1983). In addition, children's age and social perspective taking ability were examined as well as the moral principle of reciprocity.

The Blameworthiness of Not Helping

According to social cognitive domain theory (Turiel, 1983) children's social reasoning can reflect moral, social conventional and psychological considerations. From early childhood on children apply these forms of reasoning to understand social behavior (Killen et al., 2002). Moral considerations relate to issues of wellbeing and fairness and are considered to be general,

obligatory, inalterable, and independent from rules and authority sanctions. Social conventions relate to group functioning and are context-specific, under authority jurisdiction, and rule contingent. The psychological domain concerns issues which are considered matters of personal considerations. Social cognitive domain theory argues that the meaning of particular acts is not self-evident and that, for example, not helping can be construed in various ways. The refusal to help may, for example be viewed as harmful (moral), as inappropriate because it is impolite (conventional), or as acceptable because it is based on personal considerations and individual choices (psychological).

To adequately test how children reason about the refusal to help we used a twofold design (see Killen et al., 2002; Killen, Pisacane, Lee-Kim & Ardila-Rey, 2001; Schuette & Killen, 2009). First, children were asked to evaluate the refusal to help and to explain their evaluation. Second, counterprobes were used to examine whether children's evaluation changed after contrasting parent and peer norms were introduced. Parent and peer counterprobes have been used in previous research on social exclusion (Killen et al., 2002; Tisak, 1995) and in-group bias (Aboud & Amato, 2001). The rationale behind using counterprobes is that stability in judgment is diagnostic of moral domain reasoning whereas change tends to indicate social conventional reasoning. During childhood and adolescence, peers and parents are significant others (Killen et al., 2002) that function as important sources for appropriate behavior (Smetana et al., 2009). When peers or parents disagree with a child's own judgment, children might alter their judgments and follow the social norm. However, transgressions in the moral domain are wrong, even when peers or parents view the act as acceptable (Laupa, 1986; Smetana, 1995; Tisak, 1995). In addition, the approval of not helping because of personal considerations or

individual choices should also not change when peers or parents disagree (Nucci, 1981; Tisak & Tisak, 1990).

Young children recognize the responsibility to help (Killen & Turiel, 1998; Neff, Turiel, & Anshel, 2002), and consider a refusal to help as blameworthy (Sierksma, Thijs, & Verkuyten, 2013). It has been demonstrated that children are aware of and attach great importance to the obligation to help others (Killen & Turiel, 1998; Smetana, et al., 2009) and that they claim that helping family members is of greater importance than satisfying personal desires (Neff et al., 2002). Moreover, caring for others is a deep-rooted tendency in both humans and primates (de Waal, 2009). Research has shown that children as young as three understand expectations about helping behavior (Vais, Missana, & Tomasello, 2011) and spontaneously provide help when adults indicate what they need (Tomasello, 2009). Therefore, our first hypothesis states that, by default, children will perceive the refusal to help as morally blameworthy rather than a matter of social convention or personal consideration, and therefore explain their evaluation in terms of wellbeing and fairness. Furthermore, because moral considerations are general and independent of social rules and authorities, we expect little or no change in children's evaluation when they learn that parents or peers of the helper condone the refusal to help

Personal Costs of Helping

Research using social cognitive domain theory typically focuses on violations involving physical and psychological harm (see Smetana, 2006). Children's reasoning about the refusal to help might differ from that of harming others because it involves prescriptive morality rather than proscriptive moral rules (Hauser, 2006; Janoff-Bulman, Sheikh, & Hepp, 2009). Compared to the latter, the former is less strict and more commendatory. One can avoid harming others but it is simply impossible to help everyone. Whereas harming someone is almost always

blameworthy, refraining from helping others is not (Janoff-Bulman et al., 2009; Kahn, 1992).

Hence, compared to harm-doing, the refusal to help is typically evaluated in less strict terms and might depend not only on moral considerations.

Previous research has shown that children's moral reasoning about helping can be limited or overpowered by social identity concerns (Sierksma et al., 2013), by the relationship between helper and recipient (Killen & Turiel, 1998; Olson & Spelke, 2008; Weller & Lagattuta, 2012), and by the need of the recipient (Miller, Bersoff, & Harwood, 1990; Smetana et al., 2009; Weller & Lagattuta, 2012). In addition, similar to research among adults, the perceived costs of helping might have an impact on children's reasoning about the moral obligation to help (e.g., Dovidio et al., 1991; Eisenberg & Shell, 1986; Piliavin et al., 1981).

Helping others can involve various costs for the helper, such as effort, physical danger and rewards forgone. The arousal cost-reward model (Dovidio et al., 1991; Piliavin et al., 1981) postulates that people experience a state of arousal when confronted with another person's distress which leads to the intention to help. Recent research demonstrates that arousal is not a necessary condition for this intention to emerge and that the model also predicts how people reason about helping situations (Fritzsche, Finkelstein, & Penner, 2000). Adults seem to follow a consistent pattern in weighing the costs and need aspects of helping situations. The decision to help and the reasoning about not helping involves a trade-off: it becomes less likely when the costs of helping increase (for a review see Dovidio et al., 1991). Higher costs for the helper imply that personal considerations and individual choices (psychological domain) become more important in evaluating the situation. Thus, when the perceived costs of helping are relatively high, this is likely to constrain the perceived moral obligation to help. Therefore our second hypothesis is that in high costs situations children might evaluate the refusal to help as less

blameworthy because there are relevant personal considerations involved. This means that we expect that in situations of relatively high costs for the helper, compared to low costs, the children will evaluate the refusal to help less negatively and explain their evaluation more in terms of psychological domain reasoning. Furthermore, when children perceive not helping in high costs situations as dependent on personal considerations of the helper, this should not be affected by parental views and norms expressed by friends (Tisak & Tisak, 1990). Consequently, when personal costs of helping are high children should not change their opinion when they learn that parents or peers of the helper have a different opinion (Nucci, 1981).

High Costs and High Need

A situation involving high costs for the helper *and* high need for the recipient, poses a dilemma. On the one hand, when the need is relatively high children might disapprove of not helping because of moral reasons. On the other hand, when the personal costs of helping are relatively high this is likely to limit the perceived moral obligation to help. Various studies have shown that in these sorts of dilemma situations, adults tend to prioritize personal costs over the moral obligation to help. They solve the dilemma by, for example, assigning the responsibility to help to others (e.g. possible bystanders) or by providing other solutions, such as helping at a later point in time (see Dovidio et al., 1991). Such strategies involve the coordination of different considerations simultaneously and therefore require a degree of cognitive flexibility (Dovidio et al., 1991; Piliavin et al., 1981).

Children between 8 to 13 years go through several cognitive maturation changes and might thus respond differently to cognitively complex situations depending on their age. Older children are better able to understand conflicting emotions and interests than younger children (Eisenberg, Murphy, & Shepard, 1997) and they express more nuanced views about social

situations (Aboud & Levy, 2000; Nucci & Turiel, 2009; Rutland, Killen, & Abrams, 2010). This is in line with Eisenberg's model (1979) which describes various levels in children's understanding of helping situations. During early elementary school years, a peak is found in needs-oriented reasoning indicated by a focus on the need of the recipient of help. Older children, on the other hand are able to consider various additional situational factors (see Black, Weinstein, & Tanur, 1980; Eisenberg, et al., 1987; Nucci & Turiel, 2009; Smetana, 1983; Smetana, Killen & Turiel, 1991). Thus when the recipient's need and the personal costs of helping are relatively high, older children might be able to take both costs and needs into account. Consequently and in line with the cost-reward model (Dovidio et al., 1991; Piliavin et al., 1981), our third hypothesis is that older children will attribute more weight to the costs of helping than younger children do. This means that older children are expected to evaluate the refusal to help as less blameworthy and either come up with other solutions to the dilemma or use psychological domain reasoning. Conversely, because younger children have more limited cognitive capacities they can be expected to foremost consider the need of the recipient. Thus, in situations in which the needs and costs are both relatively high, younger compared to older children can be expected to evaluate the refusal of help as more blameworthy and to explain their evaluation more in terms of wellbeing and fairness.

In addition to children's cognitive capacity to simultaneously weigh needs and costs, a key aspect of helping is to understand another person's distress (Eisenberg, 2000). Children differ in their ability to understand other people's views and emotions. Social perspective taking skills foster a sympathetic understanding and empathic responses to the need of others and consequently increase helping behavior (Bar-Tal & Raviv, 1982; Batson, 1991; Eisenberg et al., 1997; Fabes & Eisenberg, 1998; Hoffman, 2000). Children around the age of 8 have some

difficulties understanding that people might have perspectives which differ from their own, while around the age of 10 and 11 this ability is more developed (see Eisenberg et al., 1997). Higher social perspective taking ability implies stronger feelings of empathy and sympathy with the child in need of help and less concern with the costs for the helper. Therefore, our fourth hypothesis states that when the need and costs are both relatively high, higher social perspective taking ability is associated with a stronger moral evaluation of the refusal to help.

Reciprocity

Reciprocity is one of the key moral principles that children use in evaluating situations (Cialdini, 1993; Gouldner, 1960; Whatley, Webster, Smith, & Rhodes, 1999). The importance of reciprocity has been found among primates (Killen & De Waal, 2000) and from very early on children show a strong preference to reciprocate (e.g., Olson & Spelke, 2008). To help when having been helped before is a strong moral rule. Yet, little is known about how this rule is related to the perceived moral obligation to help. Social cognitive domain research has shown that different types of moral concerns coexist in children's reasoning about interpersonal behavior. How and when children apply moral concepts of fairness and justice may not only depend on aspects of the immediate situation (e.g., costs and needs) but also on what happened before that situation. Therefore we presented children with a moral conflict by asking them whether they would change their evaluation about the refusal to help when this refusal violated the norm of reciprocal helping. This allows us to explore a fifth issue, namely the relative strength of the moral obligation to help versus the moral obligation to reciprocate.

Overview

This study examines how children evaluate the refusal to help in relation to the perceived need of the recipient of help and the personal costs of helping. We first hypothesize that children

consider not helping to be morally blameworthy. This means that children are expected to evaluate the refusal to help negatively, explain this in terms of the moral domain and do not change their judgment when peers or parents of the helper disagree. The second hypothesis is that high personal costs of helping limit the perceived moral obligation to help in low-need situations. Consequently, children should evaluate the refusal to help as less blameworthy when perceived costs of helping are high, explain this in terms of personal considerations of the helper and should not change their evaluation when peers or parents disagree. Third, when both the costs of helping and the recipient's need are relatively high, older children are expected to evaluate the refusal of help as less blameworthy compared to younger children because they are better able to simultaneously weigh the costs and needs of the situation. In addition, the fourth hypothesis is that because children with more advanced social perspective taking skills tend to empathize more with people in distress, they are expected to evaluate the refusal to help more negatively when both costs and needs are relatively high. Lastly, we examined the relative strengths of reciprocity and the moral obligation to help in children's evaluation of helping behavior.

Method

Participants

A total of 133 children (grade 4 and 6) from 5 regular primary schools in the Netherlands participated. These schools were located in two neighborhoods in two municipalities in the Netherlands characterized by medium to high socio-economic status (Dutch Central Bureau of Statistics, 2011). Two age groups were interviewed: 30 male and 27 female fourth graders, ($M_{age} = 9.33$, $SD = 0.61$) and 35 male and 41 female sixth graders ($M_{age} = 11.23$, $SD = 0.57$). The

children indicated that their father and mother were of Dutch origin. Participation was voluntary and signed parental permission was obtained for all participants.

Procedure

All children were interviewed individually by an experienced female Dutch research assistant at their school during a 30-min session. Interviews were held in Dutch. First, the interviewer informed each school class about the procedure of the study while stressing that it was very important that children refrained from talking to each other about the content of the interview. At the start of the interview, the interviewer mentioned that the children were asked to answer some simple questions about four stories, that there were no wrong answers, and that she was specifically interested in what they themselves thought about the stories. Children were further urged to pay close attention when listening to the stories. First, children's social perspective taking ability was assessed. Next, children listened to the four stories (presented in counterbalanced order) and answered the related questions. All answers and explanations were written down by the interviewer. At the end children were thanked and reminded not to talk with other children about the interview.

Measures

Stories. To select four stories for the study, ten stories were pretested in a pilot study with a different sample of 81 children (grades 4 through 6) of a regular primary school in the Netherlands. Children were between 8 and 12 years old ($M = 10.27$, $SD = 1.04$) and 48.1% were female. Similar to previous research (Paulus & Moore, 2012), all stories involved concrete helping situations with a person in need of help and a peer not providing that help. For each story the level of need was assessed by asking "How bad is it for (*name recipient*) that she or he does not receive help?". This was answered on a 5-point scale ranging from 1 (*not bad at all*) to 3 (*a*

little bit bad) to 5 (*very bad*). For the level of costs the question was: "How bothersome is it for (*name helper*) to help?". This question was also answered on a 5-point scale, ranging from 1 (*not bothersome at all*) to 3 (*a little bothersome*) to 5 (*very bothersome*).

We used a ranking procedure to select four stories involving, respectively, low costs and low need, high costs and low need, low costs and high need, and high costs and high need. First, the stories were ranked *within each participant* according to level of perceived costs and level of need. Ranking was from low to high, which means that higher scores implied higher costs and needs. Next, we used the mean rankings for costs and need *across participants* to calculate the sum as well as the difference of both rankings for each story (costs minus needs). The story with the lowest mean ranking sum score was chosen as the low costs-low need helping vignette (mean ranking costs = 3.72, mean ranking need = 4.83). For the high costs-high need helping vignette the story with the highest sum score was selected (mean ranking costs = 6.98, mean ranking need = 5.99). For the high cost-low need context a story with the most negative difference score was chosen (mean ranking costs = 6.54, mean ranking need = 3.00). Finally, the story with the most positive difference score was selected for the low costs-high need situation (mean ranking costs = 4.30, mean ranking need = 7.98).

The four selected stories were: "Mieke has to walk from school to her home and it rains a little. Marjolein has an umbrella and lives very close to Mieke. Mieke asks Marjolein if she could join Mieke under her umbrella. Marjolein does not help because she might get a little bit wet herself" (low costs-low need); "Bas and Tim live at the same street. Bas asks Tim for help with his homework. Tim does not help, because he has a ticket for the movies. He is going to see a movie that he really wanted to see for a long time" (high costs-low need); "Karlijn climbed up into the climbing rack at the schoolyard. She's all the way at the top. She is afraid to climb down.

She asks Susan to come and get her. But Susan does not help because she is afraid she might fall herself" (high costs-high need); and lastly "Jan is playing football with children from his street. He sprains his ankle and this hurts a lot. He asks Jeroen to help him get to the side of the street. Jeroen does not help because he wants to keep on playing" (low costs-high need).

In the present study, we used the Dutch first names given above but in 50% of the cases we used Moroccan first names for the person in need. This between-subjects manipulation was included because initially the study was also designed to examine ethnic target group differences. However, for all analyses, results showed no significant differences at all in children's perception of the refusal to help a Moroccan versus a Dutch peer. In the discussion we will consider this lack of target group differences.

Evaluation. After each story children were asked to evaluate the refusal of help using the two-step format developed by Harter (1999). Participants were first asked: "Do you think it is okay that (*name helper*) does not help (*name recipient*)?", and they answered this question with 'yes' or 'no'. Subsequently, the children were asked to indicate how strongly they approved or disapproved of the refusal to help by selecting one of two smiley faces (when not helping was approved of) or one of two frowning faces (when not helping was disapproved of). Based on this, a continuous 4-point scale was created consisting of 1 (*very much okay*), 2 (*a little bit okay*), 3 (*a little bit not okay*) and 4 (*very much not okay*). To assess domains of reasoning, children were subsequently asked to explain their answer.

Counterprobes. Children's evaluations and explanations were followed by two counterprobe questions on which they could answer 'yes' or 'no'. First, the influence of peers of the helper was examined. When children said it was okay not to help, the question was: "And when friends of (*name helper*) say she or he should help, should (*name helper*) help (*name*

recipient) then?”. Children who reported that it was not okay were asked: “And when friends of (*name helper*) say she or he does not have to help, should (*name helper*) not help (*name recipient*) then?”.

Second, the influence of parents was assessed. When children indicated that it was okay not to help, they were asked: “What if the parents of (*name helper*) say she or he should help, should (*name helper*) help (*name recipient*) then?”. When children reported it was not okay to refuse help, the question was: “What if the parents of (*name helper*) say she or he should not help, should (*name helper*) not help (*name recipient*) then?”. When children changed their initial judgment this was coded ‘1’, and when they did not change this was coded ‘0’ (see Killen et al., 2002).

Reciprocity. The influence of reciprocity was measured with a third question after the counterprobes. For a judgment of okay, the question was: “What if (*name recipient*) did help (*name helper*) the last time. Should (*name helper*) help then?”. For a judgment of not okay the question read: “What if (*name recipient*) did not help (*name helper*) the last time, should (*name helper*) not help then?”. A change of judgment was coded ‘1’ and no change was coded ‘0’.

Social perspective taking ability. To assess children’s understanding of social perspectives in interpersonal situations we used the Theory of Social Mind Task designed and validated by Abrams, Rutland, Pelletier, and Ferrell (2009). The task requires children to understand a false evaluation of a character and gives a score for social perspective taking ability. Children were told the following story: “Thomas and Stefan see each other for the first time and they are playing a game together. Thomas really likes the game and has a lot of fun. Then he leaves the room to go and get something to drink in the kitchen. While Thomas is gone, Stefan steals a toy of Thomas and hides it in his pocket. Before Thomas returns to the room and

is still in the kitchen with his mother, his mother asks him whether he likes Stefan”.

Subsequently children were asked: “What do you think that Thomas will tell his mother?”, followed by: “Why do you think that?”. The coding of their answers followed the procedure outlined by Abrams and colleagues (2009). When children said Thomas would not like Stefan because he stole toys, this was coded ‘0’. When children said Thomas would still like Stefan, but could not accurately explain why (e.g. “Just because he is nice”) this was coded ‘1’, while when children said Thomas would still like Stefan because he did not know about the stealing yet, this was coded ‘2’.

A t-test was conducted to examine the association between social perspective taking ability and the grade children were in. Results showed that children in grade 6 had more advanced social perspective taking skills ($M = 1.63, SD = .67$) compared to children in grade 4 ($M = 1.32, SD = .85, t(131) = -2.40, p = .02, \text{cohen's } d = -0.41$). Inspection of social perspective taking ability within each age group showed that for grade 4, 24.6 % did not understand the story correctly, 19.3 % only partly, and 56.1 % gave a correct answer. For grade 6 more children gave a correct answer (73.7 %) and 10.5 % did not understand it, while 15.8 % partly understood the protagonist view.

Coding and Reliability

Children's explanations were examined and coding categories were constructed based on social cognitive domain theory (Killen et al., 2002; Turiel, 1983) and the cost-reward model (Dovidio et al., 1991; Piliavin et al., 1981). Two trained research assistants coded all explanations separately. They were unaware of the hypotheses of the study.

Domains The coding system comprised four categories: moral, social conventional, psychological and other solutions. Children's explanations were coded as *moral* when it reflected

reasons of wellbeing, such as concern for the recipient of help (“That probably really hurts. I would stay with him to make sure he is okay”), or appeals to fairness or equal treatment (e.g., “Well, then they both get a little bit wet. That’s better than one person getting totally wet and the other not at all”). Explanations were *social conventional* when referring to normative aspects and expectations of how to behave towards others, such as friends, and when it involved politeness or good manners (“it would be fun if she could help a little, also because they can stay friends”). Answers were also considered social conventional when children referred to the (negative) relationship consequences of not helping or argued that helping was important for the functioning of the relationship (e.g., “Then they can play together and will not get into a fight”). The *psychological* domain indicated a focus upon the helper’s goals, desires, and preferences (“Because he did not yet watch the movie while he really wants to. That’s why”). Furthermore, answers were assigned to this domain when children referred to helping being a matter of personal choice (e.g., “I think she should decide for herself, because she is her own boss”). A fourth additional category was used to assess children’s reasoning in terms of *other solutions*. In line with the cost-reward model, children sometimes referred to solutions that provide a ‘way out’ of the situation, such that the helper could satisfy personal desires while at the same time not neglecting the recipient of help (e.g., “She can help at a later moment” or “Perhaps she could go and ask the teacher?”).

For answers that did not fit into one of the abovementioned categories (e.g., “I just think it is better when he helps”) coders were instructed to assign a missing (17% of all codes were coded as missing). Explanations that reflected more than one domain were coded in separate categories. For example, when a child’s reasoning reflected both moral considerations as well as other solutions, this was placed in the category moral-other solution. Consequently, 7 mixed

categories were created but on average only 19 children per story used mixed domain reasoning. Because we did not have specific hypotheses about mixed-domain reasoning and the majority of mixed domain reasoning was below 10%, we decided to exclude these categories from the analyses. Furthermore, analyses in which more than one code for each answer was allowed (see Smetana, et al., 2009 for comparable analysis), yielded similar patterns of results.

Reliability Interrater reliability between the two coders was examined using Cohen's kappa. We used the more conservative method by only including those explanations that according to both research assistants fitted the coding system. For children's explanations concerning the high costs-low need, high costs-high need, low costs-low need, and low cost-low need, kappa was .71, .92, 1.0, and .90, respectively. In total, the two research assistants disagreed only 15 times (0,5%) about which category to assign an answer to. Therefore, we decided to use the scores of the first research assistant, rather than to solve the disagreement through discussions in which social influences can play a role. Additional analyses showed that using the scores of the second assistant yielded virtually identical results.

Data Analytic Strategy

Separate analyses were performed for children's evaluations of the four stories, for their explanations, and for change of judgment with regard to counterprobes and reciprocity. First, we examined children's evaluations of the different helping contexts with multivariate multilevel regression analyses using MLwiN 2.21 (Rasbash, Charlton, Browne, Healy, & Cameron, 2009). In the multivariate multilevel model, different responses (within-subjects) can be examined and compared by treating them as observations nested within individuals (see Goldstein, 1995; Snijders & Bosker, 1999). This strategy offers greater flexibility in analyzing the separate stories compared to ANOVA with repeated measures. A two-level structure was examined for each

helping context. Level 1 involved children's evaluations of the refusal of help in the four different situations ($n = 532$ in total). Note that there was no variation at this level as it was only included to define the multivariate structure (see Goldstein, 1995; Snijders & Bosker, 1999). Level 2 denoted the individual respondents ($n = 133$). All models were estimated using the Iterative Generalized Least Squares algorithm (IGLS), and relative model improvement was assessed by comparing the fit (deviance) of nested models. Differences between these statistics follow a Chi-square distribution, and degrees of freedom are given by the differences in numbers of parameters (Snijders & Bosker, 1999). Moreover, in the multivariate model it is possible to test whether effects of predictors are statistically different for two or more dependent variables by comparing the fit of models with common regression coefficients versus separate coefficients.

For the examination of children's explanations, a paired t-test was used to compare the use of different domains of reasoning aggregated across the four helping contexts. Mean proportions of the domains are reported for each story and chi-square analysis was used to assess the relation between domains of reasoning and children's age and social perspective taking ability.

To examine changes in children's judgments for the four stories in relation to peers and parents, logistic multilevel analysis was performed in MLwiN 2.21 (Rasbash et al., 2009). This method allows analyzing non-normal, correlated dichotomous target values and is therefore the preferred method over ANOVA with repeated measures (see Hox, 2010; Jaeger, 2008). The dependent variable was 'overall change of evaluation' ('1' change, '0' no change). Two levels were included: evaluation for each story (1) and the child (2). Models were analyzed with a binomial distribution and logit link. Two dummies were included to indicate odds that children

changed their evaluation when peers and parents disagreed. A similar logistic multilevel model was estimated for the influence of reciprocity.

Results

Evaluations About the Refusal of Help

Prior to conducting our multivariate multilevel analyses we calculated the average evaluation of the refusal to help across the four scenarios. Children evaluated the refusal to help negatively ($M = 3.11$, $SD = 0.39$) and significantly above the neutral midpoint of the scale, $t(132) = 32.51$, $p < .001$. We proceeded with our multilevel analyses in two steps. First, we tested a so-called intercept-only model to examine the average evaluations of the refusal to help in each of the four situations. This model yielded the exact mean scores given in Table 1, together with the variances, and covariances of the four evaluations (see Table 2).

Table 1 shows that almost all children evaluated the refusal of help in the low costs- high need story as not okay, and significantly above the midpoint of the scale $t(131) = 43.49$, $p < .001$. Similarly, the refusal to help was evaluated negatively for both the low costs-low need and the high cost-high need story and above the midpoint of the scale, respectively $t(132) = 26.71$, $p < .001$ and $t(132) = 15.00$, $p < .001$. However, in the high costs-low need context a majority of children indicated that the refusal to help was okay, and the score was significantly under the midpoint of the scale $t(132) = 5.08$, $p < .001$. Additional analysis showed that the evaluations of the four stories all differed significantly from each other at $p < .001$, and that children's evaluations were in line with the hypotheses. When costs of helping were low, children expressed the strongest negative evaluation about the refusal of help. This was found both for the relatively high and low need situations. In contrast, a small majority of the children evaluated the

refusal to help as being okay in the high cost-high need situation. Additionally, when both costs and need were high most children disapproved of not helping, although this evaluation was considerable less negative compared to the low costs helping situations.

In the next model we evaluated the influence of age (grade, dummy variable) and social perspective taking ability (mean-centered score) by adding them as predictors to the model and specifying separate coefficients for each dependent variable. This led to a significant improvement in model fit $\chi^2(2) = 19.08, p < .001$. As expected there were significant effects of age and social perspective taking ability in the high costs-high need situation only (see Table 2). In line with the hypothesis, older children evaluated the refusal to help in this situation as less blameworthy compared to younger children ($\eta^2 = .05$). Moreover, children who scored higher on social perspective taking ability evaluated the refusal to help in this situation as more blameworthy compared to children scoring low on social perspective taking ability ($\eta^2 = .07$).

To examine whether the effects of age and social perspective taking ability were significantly different for the high costs-high need situation versus the other three situations, we ran two additional models. In the first model we estimated common effects for both age and social perspective taking for all situations. The fit of this model was significantly worse than the fit of our original model with separate coefficients, $\chi^2(6) = 17.07, p = .009$. This means that the effects of social perspective taking ability and age differed for the stories. To examine whether these different effects can be attributed to the difference between the high costs-high need situation and the other three situations, we also tested a model with common coefficients for the latter and a separate effect for the former. The fit of this second additional model was not significantly worse than the fit of our original model (Table 2), $\chi^2(4) = 3.02, p = .56$, but better than the fit of our first additional model, $\chi^2(4) = 14.06, p = .007$. Hence, the second more

parsimonious model can be preferred and indicates that age and social perspective taking affect children's evaluation differently in the high costs-high need story compared to the other three stories.

Children's Explanations

A set of pairwise t-tests was used to compare the overall frequency of different types of reasoning across the four stories. Results showed that moral domain reasoning ($M = .90$, $SD = .84$) was more frequently used compared to social conventional reasoning ($M = .20$, $SD = .47$), $t(132) = 7.66$, $p < .001$, Cohen's $d = 1.04$, compared to psychological domain reasoning ($M = .23$, $SD = .49$), $t(132) = 7.46$, $p < .001$, Cohen's $d = 0.97$, and compared to other solutions ($M = .47$, $SD = .62$), $t(132) = 4.32$, $p < .001$, Cohen's $d = 0.59$. This supports the first hypothesis that children tend to reason about the refusal to help in terms of the moral domain. To examine which domains of reasoning were used for the different stories, we considered the mean proportions for each story and separately for type of evaluation (okay vs. not okay; see Table 3).

Low personal costs of helping. When the costs of helping were low, children were expected to disapprove of the refusal to help and explain this in terms of wellbeing and fairness. For the low costs-high need story, 79% of all explanations involved moral domain reasoning. Similarly, 78% of all explanations for the low costs-low need story involved moral reasons. Thus, when costs of helping were low, the majority of children reasoned in terms of the moral domain (see Table 3).

High costs and low need. When costs were high and need was low, children were expected to perceive not helping as less blameworthy and to explain their judgment in terms of personal considerations of the helper. As expected, most explanations (59%) given for the 'okay' judgment referred to personal preferences and individual choice. Psychological domain

reasoning was thus most frequent when children evaluated the refusal of help as okay, while other forms of reasoning were not often used.

High cost and high need. When children were presented with a dilemma between high costs and high need, we expected that age and social perspective taking skill influence children's explanations. Chi-square tests were performed for the influence of age and social perspective taking ability on domains of reasoning. Results show a significant association between domains of reasoning and the grade children are in, $\chi^2(3) = 10.31$ $p = .02$. Younger, compared to older children, were more likely to reason in terms of wellbeing of the child in need of help (proportion based on total explanations for this story: respectively .15 versus .05). They might, for example say: "No! you really need to help! Otherwise she might stay in there all night!". In line with the cost-reward model, older compared to younger children more often mentioned 'other solutions' (respectively .31 versus .16). Older children, for example reasoned: "Well if you are really afraid then you still have to go and get someone to help".

Furthermore, there was a marginal significant association between children's social perspective taking skills and their use of the moral domain, $\chi^2(2) = 5.78$, $p = .06$. Children with more advanced social perspective taking skills tended to reason more in terms of the moral domain compared to less able children and unable children (proportion based on total explanations for this story, respectively .14, .01 and .02). In addition, when we compare the group of children that were unable or in part able (right answer but wrong explanation) to the children that correctly explained the protagonists view, a significant difference was found, $\chi^2(1) = 5.78$, $p = .02$. This indicates that children with better social perspective taking skills reasoned more in terms of the moral domain compared to children with less advanced skills.

Change of Evaluation

To assess whether children changed their evaluation when parents or peers of the helper did not agree with them, logistic multilevel analyses were performed. For the influence of parents and peers one multivariate model was examined with the changes in both cases as the dependent variables. Additionally we examined whether the mean odds of a change in evaluation differed according to children's initial evaluation (which was included as a mean-centered moderating variable). Results showed that, for all stories, there was no difference between children that initially evaluated the refusal of help as okay and not okay in the odds that they changed their evaluation. Results of the models without initial evaluation are reported in Table 5.

Proportions of children that changed their evaluation are presented in Table 4. As can be seen and in line with the second hypothesis, most change in judgment was found for the high costs-low need context in which children evaluated the refusal of help as okay. In line with the first hypothesis, for stories that elicited a strong negative evaluation (low costs-high need, low costs-low need) children were less likely to change their evaluation.

Low costs of helping. Results of the logistic multilevel analysis (see Table 5) show that for the helping contexts in which costs were low and children evaluated the refusal of help as not being okay, a change of judgment was highly unlikely for both counterprobes of peers and parents. Thus, for these two stories, the great majority of children were not influenced by peers or parents of the helper having a different opinion. When the influence of peers and parents was compared by using dummies, results showed that both sources of influence did not differ significantly ($p_s > .10$) for these stories. This pattern of findings further suggests that children reasoned about the refusal to help in terms of a moral obligation.

High costs of helping. When costs of helping were high and recipient's need was relatively low, more change of judgment was found (Table 5). Whereas peers disagreement did

not lead to much change in evaluation, parents did change children's evaluation of the helper. When both counterprobes were compared, results showed that parents were more effective in changing children's evaluation than peers ($b = 2.10, p < .001$).

High cost and high need. Overall, a change of judgment was highly unlikely for both counter-probes of peers and parents when costs as well as needs were high. The influence of age and social perspective taking ability on the likelihood that children changed their evaluation was also assessed. When a dummy variable for age was entered in the logistic multilevel model, only a main effect for age was found. Older children were less likely to change their opinion compared to younger children ($b = -0.59, p = .04$). No significant interaction effects were found with each probe separately. Additionally, when social perspective taking was added to the logistic multilevel model, no significant main or interactions effects for social perspective taking were found.

Reciprocity

Proportions in Table 4 show that for all stories reciprocity was most influential in changing children's evaluation, while peers were least important. A separate logistic model was estimated for the influence of reciprocity within the four stories. Results shown in Table 5 indicate that only in the high costs-low need situation the majority of children changed their evaluation when they learned about reciprocity. When children found the refusal to help okay, they were likely to change their evaluation when they learned that the helper did not reciprocate the help received earlier. However, when children condemned the refusal to help, most children did not change their evaluation. This means that the children still found it wrong to refuse help after they learned that earlier the recipient of the help had not offered help him- or herself. In an additional model we further examined whether children who approved of the refusal to help

initially (centered mean score for evaluation across the four stories) were more likely to change their evaluation when learning about reciprocity. Results showed that children who condemned the refusal of help were indeed less likely to change their evaluation overall compared to children who disapproved of not helping after learning about reciprocity ($b = -1.25$, $sd = 0.25$). This indicates that approval of not helping is more likely to be overpowered by reciprocity than disapproval of not helping.

Summary of Findings

In summary, results show that when the costs of helping were low, children evaluated the refusal to help most negatively, whereas when costs were high and need was low, a small majority of the children accepted the refusal to help. When both costs and need were high, older compared to younger children were less negative about the refusal of help, and children with better social perspective taking skill were more negative compared to less able children. Additionally, when costs were low, children explained their evaluation predominantly in moral terms, while the high costs-low need situation was explained most often in terms of psychological domain reasoning. For the high costs and high need story, older children more often mentioned other solutions and younger children expressed moral concerns, and children better at social perspective taking reasoned more in terms of the moral domain. Children did not change their evaluation when peers or parents disagreed in the low cost helping contexts and in the high need and high costs context. They changed their evaluation more often when parents disagreed in the high costs helping context. Furthermore, reciprocity was a more important consideration for changing one's mind about the initial acceptance than non-acceptance of not helping, especially in the high cost-low need situation.

Discussion

This study makes a novel contribution to the literature by examining how children reason about the refusal to help by taking into account the need of the recipient of help as well as the personal costs of helping. Although some studies have examined how children reason about helping others (e.g., Kahn, 1992; Nucci & Turiel, 2009; Smetana, 2009; Weller, & Lagattuta, 2012) less is known about how children weigh both the wellbeing of another child and the costs for the helper in their evaluation of the refusal to help. Additionally, there is a large literature on how children weigh various aspects of social exclusion and peer victimization. But children's reasoning about the refusal to help might differ from harming others. The former involves prescriptive rather than proscriptive morality and tends to be less strict and more commendatory (Janoff-Bulman et al., 2009).

Supporting the first hypothesis, the findings show that children overall disapproved of not helping and that they used moral reasons for explaining their evaluation. When the helping situation involved low personal costs for the helper, children evaluated the refusal to help as blameworthy and explained this in terms of the recipient's wellbeing or a lack of fairness. Moreover, when peers or parents disagreed with them this did not change their mind. These findings were found for helping situations involving low and relatively high need and independent of children's age. This suggests that children perceive the obligation to help in terms of the moral domain and not as a social convention. In line with social cognitive domain theory (Turiel, 1983) the moral obligation to help was found to be independent from peer norms and parental authority.

Secondly, we expected that the moral obligation to help can be overpowered by relevant other concerns. Indeed, results show that when the personal costs of helping were relatively high

the children evaluated the refusal to help as less blameworthy. Helping in these situations was considered a personal matter, also when peers disagreed. Thus, in line with the cost-reward model (Piliavin et al., 1981) children tended to prioritize the personal costs of helping when these were perceived as relatively high and these personal considerations overpowered the moral obligation to help. This reasoning was already apparent in children as young as 8 years and did not change for early adolescents. These findings, for the first time, show that children consider personal costs of helping as an acceptable reason for not following the moral obligation to provide help.

When the children were presented with the more complex and dilemmatic situation of relatively high need of help and high costs of helping, we found that children's reasoning depended on their age and social perspective taking ability. Confirming the third hypothesis, early adolescents evaluated the refusal of help in that situation as less blameworthy compared to younger children. In agreement with the cost-reward model (Piliavin et al., 1981), early adolescents explained their evaluation more often in terms of other solutions, such as "she can help at a later moment". Younger children more frequently expressed moral concerns about fairness and recipient's wellbeing. Similar to research on social exclusion (e.g., Recchia, Brehl, & Wainryb, 2012) and on the permissibility of fulfilling personal desires in family situations (Smetana et al., 2009), these results suggest that younger children focus primarily on preventing harm and unfairness, while early adolescents increasingly attend to multiple considerations involved in the refusal of help (see also Weller & Lagattuta, 2012; Nucci & Turiel, 2009).

Results testing the fourth hypothesis show that children with more advanced social perspective taking ability disapproved more strongly of not helping than children with less advanced social perspective taking ability. The former group of children also more often

expressed moral reasons for their disapproval of the refusal to help compared to the latter. This implies that more advanced social perspective taking ability increases children's focus on the recipient in need of help. Being able to understand the distress of others strengthens the perceived moral obligation to help. Interestingly, although age was positively related to social perspective taking ability, the results show that both age and social perspective taking had independent and contrasting effects on children's reasoning about helping when need and costs were both relatively high. Older compared to younger children are more able to take the perspective of the peer in need of help but they are also more likely to take the costs for the helper into account. Thus, older children seem better able to weigh the different considerations and to make up their own mind. The findings show that younger children compared to early adolescents were more likely to change their evaluation after hearing that significant others think otherwise.

For the fifth exploratory hypothesis on the influence of reciprocity we found that overall reciprocity was more influential in changing children's evaluation compared to peer and parent norms, also when children evaluated the refusal of help as wrong. This suggests that reciprocity is a moral obligation which can be in conflict with the obligation to help. However, for the low costs situations, the majority of the children did not change their evaluation when they learned that the one asking for help had not helped him- or herself before. This provides further support for the importance of the moral obligation to help. Thus, the moral obligation to help was more powerful than the lack of reciprocity. Only when the costs of helping were relatively high and children evaluated the refusal of help as okay, did they change their opinion after learning that the recipient had helped before. This indicates that the moral norm of reciprocity ('but s(h)e has

helped earlier') can become more important than the psychological domain reasoning that is initially used to justify the refusal to offer help.

Contrary to our expectations, when the costs of helping were high and children evaluated the refusal of help as okay because of personal considerations, they changed their mind when the parents of the helper disagreed. This suggests that children's conception of which issues are up to the child and to the parents are somewhat unstable during childhood. With age, parental control reduces and children's perceived personal domain expands, especially in adolescence (Smetana, Crean, & Campione-Barr, 2005; Smetana et al., 2009). We found no age differences in response to parent or peer norms. Future research could examine whether adolescents' evaluation about the refusal to help in high cost situations is more stable compared to that of children and early adolescents.

As part of the initial design, ethnic target group differences were also examined. We did not find any differences in children's evaluations and reasoning when the recipient of help was a Dutch (ethnic in-group) or Moroccan (ethnic out-group) child. Yet, previous research using first names and vignettes has found intergroup effects in children's evaluation of helping behavior (e.g., Sierksma et al., 2013; Weller & Lagattuta, 2012). There might be methodological explanations for this, such as that the helping situations in the current study combined several issues, whereas other studies often examine one or two aspects of helping (Sierksma et al., 2013; Weller & Lagattuta, 2012; Smetana, et al., 2009). Aspects of costs and need might have been more salient to children, thereby overpowering the rather subtle intergroup manipulation of ethnic names. Especially since the current study was conducted on white schools and participants were Dutch majority group children, for which ethnicity is not such a central part of the self-concept in late childhood and preadolescence (Quintana, 1998; Verkuyten, Masson, & Elffers, 1995).

Moreover, previous research shows children tend to inhibit explicit racial biases (Banaji, Baron, Dunham, & Olson, 2008; Olson & Dunham, 2011). Our measure might not have captured the subtlety and implicit nature of children's intergroup biases. Future studies should examine ethnic target group differences more closely, for example, by making the ethnic background of the target more salient.

Limitations and Future Directions

Some limitations of the research should be considered. We examined children's evaluations across four hypothetical helping situations. Future work should examine the generality of these findings across other types of needs and costs involved in helping. Furthermore, we used written stories that were read to children. These descriptions can differ from observations of actual interactions and from children's own behavior. It is important to study the combination of needs and costs in real-life helping situations. Additionally, previous research has shown that children are concerned about their self-reputation leading to face-work in social contexts (e.g., Banerjee, Bennett, & Luke, 2010; Hatch, 1987; Sluckin, 1981). Hence, children might have been reluctant to express an evaluation that goes against the prevailing social norms about helping. However, a great number of children accepted the refusal of help in high costs situations. Another limitation is that it is not clear whether the present findings generalize to children from different socioeconomic and ethnic backgrounds. The cross-sectional nature of the current work also limits conclusion about how children's reasoning about helping relates to their socio-cognitive development. Future work should consider a more heterogeneous sample and a longitudinal design to study developments over time.

To increase our understanding about children's reasoning about the refusal to help, future research could also examine other abilities than social perspective taking such as empathy and

multiple classification ability (Aboud, 1988). Research also suggests that it is important to distinguish between different forms of pro-social behavior (for an overview see Paulus & Moore, 2012) and future work could, for example, focus on the influence of costs and need in situations of sharing and comforting behavior.

Conclusion

Taken together, our findings provide novel insights into how children reason about the refusal of help when different personal costs and needs are involved. Using stories that systematically varied the recipient's need and the personal costs for the helper, this study shows that children perceive helping as a moral obligation but that high personal costs of helping are considered an acceptable reason to refuse help. This indicates that the moral obligation to help is less strict compared to children's conception of, for example, harming others which is typically considered wrong (Smetana, 2006). To our knowledge, this is the first study that examined children's evaluations as well as their explanations of the refusal to help. This allowed us to show that when both the recipient's need and the costs of helping were high, older children were able to consider other solutions whereas younger children more strongly condemned the refusal of help in moral terms. Moreover, children with better social perspective taking skills expressed stronger moral disapproval compared to children with less advanced skills. This research shows that, similar to research on social exclusion (Killen et al., 2002), helping is a multifaceted phenomenon. Understanding how and when children perceive the obligation to help peers is important to stimulate prosocial behavior and foster socio-emotional development. The current research has tried to make a systematic contribution in improving this understanding.

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Table 1

Means, Standard Deviations and Proportions for Evaluation of the Refusal to Help

	Mean (<i>sd</i>)	okay	not okay
<i>Story</i>			
High costs-Low need	2.34 (0.77)	.60	.40
High costs-High need	3.00 (0.77)	.25	.75
Low costs-Low need	3.32 (0.57)	.05	.95
Low cost-High need	3.80 (0.47)	.02	.99

Note. Proportions of okay and not okay calculated per story.

Table 2

Multivariate Multilevel Regression Model for Evaluations about the Refusal of Help in Each Story in Relation to Grade and Social Perspective Taking

	High costs Low need	High costs High need	Low costs Low Need	Low costs High need
Grade 4 (vs. 6)	0.03	-.36**	0.11	-0.04
Social perspective taking ability	-0.05	0.21**	-0.00	0.06
<i>(Co) variance</i>				
High costs Low need	0.58			
High costs High need	0.17	0.53		
Low costs Low need	0.11	0.05	0.32	
Low costs High need	-0.03	0.04	0.06	0.22
Deviance	965.81			

Note. Separate coefficient model. The (co)variances indicate the unexplained variation and covariation of the dependent variables in the model.

** $p < .01$

Table 3

Mean Proportions for Types of Reasoning According to Evaluation for Each Helping Context

<i>Story</i>	<i>Evaluation</i>	Moral	Social conventional	Psychological	Other solution
High costs- Low need	okay	.05	.00	.59	.36
	not okay	.24	.29	.00	.47
High costs- High need	okay	.00	.00	.75	.25
	not okay	.28	.13	.04	.56
Low costs- Low need	okay	.00	.00	.00	.14
	not okay	.78	.16	.00	.07
Low costs- High need	okay	.00	.00	.00	.00
	not okay	.79	.09	.02	.09

Note. Proportions are calculated on all domains of reasoning per story according to evaluation.

Missings not included.

Table 4

Proportion of Children that Changed Their Initial Evaluations in Relation to Peers, Parents and Reciprocity

<i>Story</i>	<i>Probe</i>		
	<i>Peers</i>	<i>Parents</i>	<i>Reciprocity</i>
High costs - Low need	.17	.62	.71
High costs - High need	.04	.32	.50
Low costs - Low need	.07	.33	.40
Low costs- High need	.02	.18	.32

Note. Proportions of change calculated for each counterprobe separately per story (changes versus no change).

Table 5

Logistic Multilevel Model for Change of Evaluation According to Each Story and Counterprobe

<i>Story</i>	<i>Probe</i>		
	Peers coefficient (<i>sd</i>)	Parents coefficient (<i>sd</i>)	Reciprocity coefficient (<i>sd</i>)
High costs- Low need	-1.62 (0.23)	0.48 (0.18)	0.88 (0.19)
High costs-High need	-3.24 (0.46)	-0.74 (0.19)	-0.39(0.18)
Low costs- Low need	-2.62 (0.34)	-0.73 (0.19)	-0.02(0.17)
Low costs- High need	-3.76 (0.57)	-1.55 (0.23)	-0.76 (.19)

Note. Dependent variable 0 = no change, 1 = change. Coefficient represents the mean odds that children change their evaluation. Probe for peers and parent examined and compared in the same model, reciprocity in a separate model.