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The normative status of friendship:

Do young children enforce sharing with friends and appreciate reasonable partiality?

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Abstract

Contemporary moral philosophy stresses the idea of reasonable partiality. This concept proposes that close relationships carry a normative obligation to be partial towards another person. This study explored in two experiments whether 4- to 6-year-old children ($n=185$) enforce partiality from third parties (Experiment 1) and how they prioritize a norm of equality and a norm of partiality (Experiment 2). Children were presented with protagonists who could distribute resources between a friend and a disliked peer. One protagonist complied with a norm of partiality by allocating more resources to his friend, whereas the other protagonist either behaved in the opposite way (Experiment 1) or distributed resources equally (Experiment 2). In Experiment 1, children enforced partiality by protesting against the protagonist who gave more to the disliked peer and by selectively affirming the protagonist who gave more to a friend. Yet, in Experiment 2 children showed stronger enforcement of a norm of equal sharing than partiality towards a friend. The study demonstrates how young children deal with normative demands in the context of friendship. At the same time, it suggests that fairness norms are given priority. Overall, our study demonstrates how young children handle normative demands and interpersonal responsibilities.

The normative status of friendship:

Do young children enforce sharing with friends and appreciate reasonable partiality?

A central principle of modern ethics is impartiality. With the increased focus on the individual in renaissance and enlightenment came the notion that every person should be treated in the same manner. This influential principle is exemplified in statements such as ‘all are equal before the law’ (Universal Declaration of Human Rights). Thus, the principle of impartiality describes the demand that no one should be given advantage in morally relevant contexts. This principle plays a central role in many major theoretical schools of classical moral philosophy (e.g., Kant, 1785; Rawls, 1971).

Notwithstanding the undisputed role of impartiality for the maintenance of modern societies, recent developments in ethical theorizing have stressed the notion that particular human relationships carry special normative obligations with them that can be described as reasonable partiality (e.g., Feltham & Cottingham, 2010; Keller, 2013; Scheffler, 2010). It is assumed that there are good reasons, even a normative obligation for being partial towards close others (Betzler, 2014). In particular, against the notion that we should treat every person in the same manner, it has been argued that friendships cannot be realized without a particular level of partiality (Jollimore, 2000). The reciprocal nature of friendship and the special role of friends for human development might give good reasons to be partial. These philosophical reflections can be related to everyday experiences. For example, if being asked by a complete stranger to help them moving to a new flat, most likely we would be surprised by this request and would be hesitating to do so. In contrast, when being asked by a close friend, we would feel a commitment to help or, at least, give a good reason why we would not be able to do so. Taken together, there are good reasons to entertain the hypothesis that a full appreciation of friendship requires the recognition of the norm that one is, to a certain extent, obligated to favor a friend.

Although there seem to be good ethical reasons to be partial towards a friend, it is unclear to which extent this viewpoint is actually shared in everyday normative reasoning and how it develops. In other words: Do people think that one *ought* to prefer a friend or do they enforce a strict norm of impartiality? The current study was designed to assess whether reasonable partiality is an aspect of laypersons' normative reasoning and, in particular, whether such an appreciation is already present in early childhood when normative stances emerge (e.g., Carpendale et al., 2013; Damon, 1977; Killen & Smetana, 2015; Turiel, 2010). We define normative stances as views on what someone ought to do or should not do (e.g., Paulus, in press). This encompasses a broad conception of normativity. We appreciate that a differentiation in conventional and moral norms is meaningful (e.g., Turiel, 2010) and represents an important dimension between the context-dependency and unconditional validity of normative views. This study contributes to the question how children's reasoning about partiality towards friends is situated within this dimension from context-dependency to unconditional validity.

Empirical research shows that social relationships affect young children's own generosity when sharing with others (e.g., Birch & Billman, 1986; Fehr, Bernhard, & Rockenbach, 2008; Moore, 2009) and that preschool children also expect others to share more with close than with distant others (e.g., McGillicuddy-De Lisi, Watkins, & Vinchur, 1994; Mills & Grant, 2009; Olson & Spelke, 2008). In particular, by 3-4 years children are more generous towards friends and also expect others to be more generous towards friends than towards disliked others (nonfriends), even though both persons are members of the child's in-group (Paulus & Moore, 2014). They even tend to give more to a rich friend than to a poor nonfriend (Paulus, 2016), indicating that social relations are given priority over equality in their sharing. Moreover, preschool children infer others' friendship status based on partial resource allocations (Lieberman & Shaw, 2017) and, by school age, based on sharing secrets (Lieberman & Shaw, 2018).

Research with older children and adults has examined whether and to which extent personal relationships carry obligations with them. It has been shown that by adolescence friendship becomes an important value (for review see Keller, Edelstein, Krettenauer, Fang, & Fang, 2005). For example, when faced with a sociomoral dilemma in which a protagonist could either keep a promise to a friend or engage in an interesting activity with another person, adolescents recognize the obligation to keep one's promise towards a friend and predict negative feelings when violating the obligation (Keller, Edelstein, Schmid, Fang, & Fang, 1998). Yet, other studies found less conclusive evidence for the presence of normative obligations in social relationships. Miller and Bersoff (1992) assessed Northern American and Indian children's and adults' responses to moral vignettes that depicted conflicts between interpersonal and fairness issues. They found that the majority of American participants favored the justice obligations, whereas Indian participants gave priority to interpersonal relationships. The few American participants who also gave priority to interpersonal relationships justified their decision by reference to personal motivation and not by reference to normative obligations. Moreover, it has been shown that children and adults from India, but not from Northern America regard a failure to help a friend as a violation of a moral norm (Miller, Bersoff, & Harwood, 1990). Taken together, these findings provide some evidence that children expect others to share more with friends than nonfriends and that adolescents recognize the obligations that come with their commitments to friends. While these results point to the role that friendships play in childhood and adolescence, the evidence for a norm of partiality is not conclusive. It remains an open question whether humans and, in particular, already young children, adhere to the principle of reasonable partiality, that is, the norm that one ought to prefer a friend over a nonfriend. In other words, whereas previous research showed that young children prefer to give more to friend than a nonfriend and predict that others will do so as well, it is not clear whether they have a normative stance that one *should* prefer a friend.

Notably, recent work has shown that preschool children show an awareness of social norms and actively enforce social norms in others. They spontaneously protest against unfair resource distributions and show affirmative behavior when norms are obeyed (Rakoczy, Kaufmann, & Lohse, 2016; Wörle & Paulus, 2018). Moreover, young children evaluate wrongdoers negatively (Killen, Mulvey, Richardson, Jampol, & Woodward, 2011) and even punish third-parties in order to enforce norm-compliant behavior (Kenward & Östh, 2015; McAuliffe, Jordan, & Warneken, 2015). The inclination to spontaneously enforce moral norms even by third parties demonstrates the presence of strong normative commitments in preschool children (cf. Tomasello, 2009; Turiel, 2010). Previous research has focused on aspects of impartiality (e.g., Rakoczy et al., 2016; Wörle & Paulus, 2018) and its interaction with intergroup contexts (Cooley & Killen, 2015; McAuliffe & Dunham, 2016). This line of research has shown that equality is the dominant fairness principle for young children (e.g., Elenbaas, 2019).

Yet, so far no research has explored to which extent children consider a norm of partiality. Indeed, notwithstanding preschool children's strong focus on equality, they do favor their rich friends (over poor others) when it comes to actual sharing behavior (Paulus, 2016). Given the strong theoretical claims on the role of partiality in human social life (Betzler, 2014; Jollimore, 2000; Keller, 2013) and the findings that preschoolers rather favor their friends in sharing contexts than sharing equally, this study investigated whether or not a norm to be partial towards friends emerges in early childhood.

That is, the current study was designed to examine whether children hold the normative view that one should be partial towards friends in two experiments. We relied on well-established measures of normative stances in preschool children, that is, an assessment of spontaneous protest and affirmation (Rakoczy et al., 2016; Wörle & Paulus, 2018), explicit judgment and reasoning (Killen et al., 2011), as well as reward and punishment (McAuliffe et al., 2015). In Experiment 1 we presented young children with two scenarios in which a

protagonist could distribute resources between a friend and a nonfriend. In one scenario, the protagonist showed partiality towards the friend, whereas in the other scenario the protagonist preferred the nonfriend. Given previous findings that children expect others to share more with friends than nonfriends by the end of the fourth year of life (Paulus & Moore, 2014), we decided to examine children at 4 years and older. We assessed whether children would show spontaneous protest and affirmation during the protagonists' resource distribution. In addition, we examined children's explicit evaluation of the protagonists' behavior and their reasoning about whether the observed behavior was good or bad. Finally, children were presented with the possibility to reward and punish the protagonists. Given longstanding claims that young children strongly endorse equality (e.g., Damon, 1977; Elenbaas, 2019), Experiment 2 examined whether children give priority to a norm of equal sharing or to a norm of partiality, that is, to give more to a friend. To this end, we directly compared children's reactions to a protagonist who shared resources equally with reactions to a protagonist who favored a friend.

With respect to Experiment 1, we tested the following hypotheses. If children appreciate the idea that one ought to show reasonable partiality towards a friend, we would expect them in Experiment 1 to not only evaluate the agent who preferred a disliked other over a friend more negatively, but to also show selective protest against the norm violator and selective affirmation towards the protagonist who follows the norm. Yet, if children strictly follow a norm of impartiality, they should demonstrate high levels of protest and low levels of affirmation against both protagonists as neither of them distributed resources equally.

Experiment 1

Method

Participants

The final sample included 103 children with a mean age of 63.88 months ($SD = 7.69$, range = 48 – 82 months; 53 female). Five additional children were tested but excluded from the final

sample due to experimental mistake ($n = 3$), insufficient language understanding ($n = 1$), or the loss of attention during the task ($n = 1$). Another 16 additionally tested children had to be excluded because they failed to respond correctly to relevant check questions (see Experimental Design and Procedure). All participants were typically developing children from daycare centers located around Munich (Germany). Children's caregivers gave written informed consent for participation.

Materials

Two 65 cm tall hand puppets (Living Puppets) which were played by the experimenter acted as protagonists in two resource allocation scenarios (henceforth: two conditions). The puppets were counterbalanced between conditions. Recipients were represented by pictures of four other puppets (two recipients per condition, counterbalanced between conditions). All puppets differed in their clothing and hair color.

A ball, two puzzles, paper and pencils, and a wind-up toy were used for the warm-up trials. Erasers and stickers served as items to distribute (one type of item per condition, counterbalanced between conditions). The recipients' different friendship statuses were introduced by pictures of a thumbs-up (friend, F) or thumbs-down (nonfriend, NF) symbol. Both recipients received envelopes to store their items.

Tasty (colorful) cookies and disgusting (plain green) cookies were used for the punishment/reward phase (cf. Wörle & Paulus, 2018). For the evaluation phase, a 4-point smiley scale was used (cf. Killen et al., 2011).

Experimental Design and Procedure

All participants were tested individually in a quiet room. Experimental sessions were videotaped. Each session started with three warm-up trials. After that, two conditions were enacted. In one condition, the protagonist consistently favored the friend (*F-more Puppet*)

whereas in the other condition, the protagonist consistently favored the nonfriend (*NF-more Puppet*). All participants were exposed to both conditions, the order of presentation was counterbalanced between participants. After they have seen both conditions, participants could punish or reward the protagonists and were asked to evaluate their behavior. A description of each phase in more detail is given below.

Warm-Up Trials. The experimenter introduced the protagonist puppets by their names and each of them played ball with the participant. Two out of three warm-up trials were administered with each puppet including an instrumental mistake of the puppet to accustom the participants to protest: 1. The puppet placed a puzzle piece incorrectly. 2. The puppet used a broken pencil for drawing a picture. 3. The puppet moved a wind-up toy by hand. If participants did not intervene spontaneously, the experimenter asked the child whether the puppet was making a mistake and encouraged him/her to correct the puppet.

Resource allocation scenarios. Two conditions were enacted. In each scenario, two recipients were introduced by showing a picture of them. Both were told to go to the same preschool as the protagonist. One was introduced as the best friend (F), who spends much time and often plays together with the protagonist. The other recipient was introduced as someone the protagonist does not like (NF), who is no friend and does not play together with the protagonist. A thumbs-up (F) and thumbs-down (NF) symbol were used to introduce the friendship status. The experimenter explained that both recipients like stickers or erasers (that is, the respective resource of the upcoming allocation scenario). Incorrect answers to check questions about who the protagonist does (not) like served as an exclusion criterion for the final sample.

Each resource allocation scenario was composed of two trials that were presented in a fixed order. In the first trial, the protagonist distributed five items between the recipients (one receiving one item, the other receiving four items). In the second trial, the protagonist puppet distributed another three items between the recipients (one receiving zero items, the other receiving three items). Across trials, the same recipient (F/NF) was favored by the protagonist:

the friend in the F-more condition, the nonfriend in the NF-more condition. The allocation procedure followed a standardized scheme of three steps with pauses of 5 seconds in between, to offer some time to the participants to intervene. First, the protagonist puppet expressed her intended distribution verbally. Second, she repeated the distribution and indicated it by moving the respective amount of items in the direction of the recipients. Third, the protagonist allocated the items one by one to the recipients, vocalizing her action. After the first condition was finished, the second condition was presented.

After both allocation scenarios were completed, final check questions tested whether participants were still aware of the social relationships (friend and nonfriend of the protagonists) and the allocation decisions of the protagonists. Incorrect answers about the resource allocations served as an exclusion criterion for all analyses. Nine children who answered the relationship question for the nonfriend incorrectly but were correct in recognizing the friendship relation, were included in the final sample. Exploratively excluding these children did not change the pattern of results.

Punishment/reward phase. The experimenter introduced a bowl filled with different types of cookies, tried one of each type and highlighted the different tastes by verbal comments and matching facial expressions. Participants' understanding regarding the different cookie types was tested and they were corrected in case of mistakes. From the remaining six cookies (three of each type), participants could allocate as many as they wanted to the protagonists. They could also leave cookies in the bowl if they wanted to. The instructions were: "You can now distribute cookies between Tim and Max. You can distribute some cookies to Tim and some cookies to Max and you can leave some in the bowl. You don't have to distribute all cookies, but you can distribute them. You can decide."

Evaluation phase. Participants were introduced to a 4-point smiley scale ranging from *very bad* to *very good*. First, they made a dichotomous choice whether the behavior of each protagonist was good or bad. For a more fine-grained answer, the behavior was additionally

rated on the smiley scale and participants were asked to justify their evaluation. Finally, participants judged whether the protagonists should have done something different and if so, what they should have done (cf. Wörle & Paulus, 2018).

Coding and data analysis

Resource allocation scenarios. In a first step, participants' verbal reactions during both trials (5 items and 3 items) of each scenario were transcribed from the videotapes. The critical phase for registering utterances started when the protagonist puppet received the items to allocate and ended when all items have been placed on the recipients' envelopes. Comments were included in the analysis until the next trial started. Overall, 54 out of 103 children (52%) protested or affirmed in at least one of the trials. Second, the verbal reactions were categorized into protest and affirmation according to their valence. Differentiating between these types of normative responses is informative as protest rather shows what should not be done (that is, it indicates the violation of a norm), whereas affirmation clarifies what precisely should be done (that is, it indicates the adherence to a particular norm). Third, following previous studies (e.g., Rakoczy et al., 2008; Wörle & Paulus, 2018), protest and affirmation were coded following different categories that reflect increasing indicators of normativity and that are explained in greater detail in the following paragraph. Overall, four categories from *no protest/affirmation* to *normative protest/affirmation* were distinguished. In case of multiple utterances within one response phase, the qualitatively highest category was assigned.

No protest/affirmation was assigned if the participant did not show any verbal reaction that was related to the situation. *Expectation-related protest/affirmation* (e) was assigned for comments expressing a violation of expectations (e.g. "Why?" for protest) or indicating that the observer's expectations were met (e.g. "Yes, because they are friends." for affirmation). Expectations about behaviors are suggested to constitute a basis for normativity. They allow to evaluate a behavior with regard to how people usually behave. As they do not directly enforce

behavior on others, they are only weak indicators for normativity. The category *imperative protest/affirmation* (i) was assigned for comments that expressed disapproval (e.g. “Why not give him more?” for protest) or reinforcement of the protagonist’s behavior (e.g. “Yes, do it like that!” for affirmation). These comments demonstrate an underlying conviction of how things ought to be done and an enforcement of these convictions on others. Yet, as they do not contain normative vocabulary, they are regarded as a weaker indicator than explicit normative statements. *Normative protest/affirmation* (n) applied to utterances including normative vocabulary (e.g. “This is unfair!” for protest or “This is very good!” for affirmation). The normative category also included comments expressing an emotional reaction to the observed behavior that indicates an evaluation, by showing moral outrage (e.g. “What’s the point of that?” for protest) or enthusiasm (e.g. “Cool!” for affirmation). Using normative vocabulary presents direct evidence of an underlying normative stance, thus resulting in the highest category of normative protest/affirmation. Notably, we included emotional reactions as emotions are suggested to indicate the existence of personal norms (Montada, 1993). Empirical studies revealed that emotions such as anger, as a form of moral outrage, play an important role in norm-enforcing behavior (e.g. Fehr & Fischbacher, 2004; Jordan, McAuliffe, & Rand, 2016) and are thus indicators of normative evaluation of observed behavior. A second independent observer coded a random sample of 25% of all sessions to assure interrater reliability. For the categorization of verbal protest/affirmation, Cohen’s kappa indicated almost perfect interrater agreement for protest, $\kappa = .85$, and affirmation, $\kappa = .87$.

Two variants of protest/affirmation scores were computed (cf. Wörle & Paulus, 2018). The more liberal protest (e/i/n) and affirmation (e/i/n) scores reflect the number of trials (out of 2) in which any form of protest/affirmation (expectation-related, imperative, or normative) occurred. The more conservative protest (i/n) and affirmation (i/n) scores indicate the number of trials which included either imperative or normative protest/affirmation.

Punishment/reward phase. The number of disgusting cookies out of 3 given to each protagonist puppet (F-more, NF-more) was recorded as punishment. Accordingly, the number of tasty cookies out of 3 given to each protagonist puppet represented the measure of reward.

Evaluation phase. The rating of each protagonist's behavior on the smiley scale received a code from 1 (*very bad*) to 4 (*very good*).

The justification of the evaluation was categorized into four categories that considered reasoning about the procedural justice (e.g., equal sharing) and the relationship between the protagonists. *Procedural-based* responses focused only on the allocation of resources itself (e.g. "Because he gave many stickers to him and only few to him."). If the response was referring to the status of the friendship or nonfriendship (e.g. "Because they are friends."), it was categorized as *relationship-based*. All justifications taking into account both the distribution procedure and the friendship status were categorized as *procedural- and relationship-based* (e.g. "Because he gave more to his friend."). Replies that did not relate to these categories were classified as *other responses*.

The replies about whether the puppets should have done something different were first coded as Yes or No. In case of "yes", specifications about what should have been done differently were classified into four categories. Comments demanding to give an equal amount of items to both recipients were coded as *equal distribution*. Suggestions to favor the same recipient as the puppet did, but in a more extreme manner, were coded as *more extreme inequality*. Correspondingly, suggestions to favor the same recipient but in a less extreme manner were coded as *less extreme inequality*. Replies that suggested to favor the other recipient than the puppet did were classified as *reversed inequality*. All replies that did not relate to these categories were coded as *other responses*.

Interrater reliability for the evaluation justifications was almost perfect as computed by Cohen's kappa, with $\kappa = 0.89$. For the statements about what the puppets should have done differently, interrater reliability was almost perfect as well, with $\kappa = .87$.

Results

Paired sample two-tailed *t*-tests were computed to assess whether the participant's protest/affirmation, their punishment/reward, and their evaluation behavior differed between the F-more and the NF-more Puppet. Analyses of Variance (ANOVA) were additionally applied to investigate punishment/reward of the different puppets. Pearson's chi-squared tests were computed to investigate the independence of evaluation justifications from evaluation's valence and the frequencies of alternative suggestions. Pearson correlation analyses completed the analyses by investigating the association of significant measures with age.

Preliminary ANOVAs revealed comparable protest and affirmation on the different trial types (5 items, 3 items). This factor is thus not further discussed in the subsequent section. Likewise for gender (male, female), preliminary analyses did not yield differences in any form of protest/affirmation (e/i/n, i/n), punishment/reward, and evaluation. Consequently, the factor is dropped from subsequent analyses. Preliminary ANOVAs revealed an order effect on protest (e/i/n), $F(1,101) = 5.34$, $p = .023$, with generally more protest when the F-more Puppet was presented first. Likewise, order of presentation had an effect on protest (i/n), $F(1,101) = 4.18$, $p = .044$. Furthermore, preliminary analyses yielded an order effect on punishment, $F(1,101) = 3.99$, $p = .049$, with generally more punishment when the F-more Puppet was presented first. No order effects were revealed for affirmation (e/i/n, i/n), reward, and evaluation.

Protest during resource allocation

Fig. 1A shows the mean number of trials in which participants showed some form of protest toward the F-more Puppet and the NF-more Puppet. Regarding the mean number of trials

comprising any form of protest (e/i/n), participants showed more protest towards the NF-more Puppet ($M = 0.53$, $SD = 0.75$) than to the F-more Puppet ($M = 0.09$, $SD = 0.32$), $t(102) = 6.26$, $p < .001$, $d = 0.763$. Similarly for the occurrence of only imperative or normative protest (i/n), participants protested more towards the NF-more Puppet ($M = 0.25$, $SD = 0.59$) than to the F-more Puppet ($M = 0.06$, $SD = 0.27$), $t(102) = 3.31$, $p < .001$, $d = 0.414$. Importantly, the effects of puppet and order did not interact, $F(1,101) = 0.77$, $p = .383$ for protest (e/i/n) and $F(1,101) = 0.13$, $p = .718$ for protest (i/n). Thus, the difference in protest against the two puppets was comparable across both orders of conditions. Neither selective protest (e/i/n), $r(101) = .16$, $p = .117$, nor selective protest (i/n), $r(101) = .20$, $p = .054$, against the NF-more Puppet was significantly correlated with age (based on a difference score of protest towards the NF-puppet minus the F-puppet).

Affirmation during resource allocation

Fig. 1B shows the mean number of trials in which participants showed some form of affirmation toward the F-more Puppet and the NF-more Puppet. Overall, children showed more affirmation (e/i/n) towards the F-more Puppet ($M = 0.50$, $SD = 0.80$) than towards the NF-more Puppet ($M = 0.16$, $SD = 0.48$), $t(102) = 5.20$, $p < .001$, $d = 0.514$. Considering only imperative and normative affirmation, participants still expressed more affirmation (i/n) towards the F-more Puppet ($M = 0.41$, $SD = 0.76$) than towards the NF-more Puppet ($M = 0.15$, $SD = 0.47$), $t(102) = 4.36$, $p < .001$, $d = 0.411$. Importantly, the difference in affirmation against the two puppets was comparable across both orders, since puppet and order did not interact, $F(1,101) = 0.11$, $p = .736$ for affirmation (e/i/n) and $F(1,101) = 0.01$, $p = .906$ for affirmation (i/n). Neither selective affirmation (e/i/n), $r(101) = -.03$, $p = .777$, nor selective affirmation (i/n), $r(101) = -.07$, $p = .496$, of the F-more Puppet was significantly correlated with age (based on a difference score of affirmation towards the NF-puppet minus the F-puppet).

In order to examine whether the results were driven by our coding of emotional reactions as indicators for normative stances, we rerun the analyses without including these reactions. Notably, the results of the differences in protest and affirmation between conditions stayed the same.

Taken together, children consistently showed more affirmation towards the puppet favoring the friend irrespective of which measure was taken into account. In line with this, children consistently protested more against the puppet favoring the nonfriend, as hypothesized.

Punishment and Reward

Participants distributed in general more tasty cookies than disgusting cookies, $F(1,102) = 15.47$, $p < .001$, $\eta^2 = .132$. This was the case for the F-more Puppet (tasty: $M = 1.23$, $SE = 0.08$; disgusting: $M = 0.94$, $SE = 0.09$) as well as for the NF-more Puppet (tasty: $M = 1.16$, $SE = 0.08$; disgusting: $M = 0.97$, $SE = 0.09$). However, the lack of a main effect of Puppet (F-more, NF-more), $F(1,102) = 0.31$, $p = .581$, and interaction, $F(1,102) = 0.16$, $p = .687$, points towards the fact that participants did not differentiate between the two puppets in their punishment and reward behavior.

Evaluations

Evaluations as measured on the 4-point smiley scale differed significantly between the two puppets, $t(101) = 5.58$, $p < .001$, $d = 0.75$. As predicted, children evaluated the behavior of the puppet favoring her friend better ($M = 3.19$, $SE = 0.11$) as compared to the puppet who distributed more to the nonfriend ($M = 2.25$, $SE = 0.13$). Children's evaluation of the F-more puppet was above average (2.5 on the 4-point scale), $t(101) = 6.12$, $p < .001$, whereas their evaluation of the NF-more puppet was around the midpoint of the scale, $t(102) = -1.87$, $p = .064$. See Figure 3 for an overview.

For the justifications of their evaluations, participants were divided into groups of children who evaluated the puppets' behavior positively (*very good* or *good* on the smiley scale) or negatively (*very bad* or *bad* on the smiley scale). For the F-more Puppet, 79 participants (76.7%) expressed a positive evaluation of the distribution behavior and 23 participants (22.3%) evaluated the behavior negatively. This distribution differed from chance, $\chi^2(1, N = 102) = 30.75, p < .001$. The NF-more Puppet's behavior was evaluated positively by 42 participants (40.8%) and negatively by 61 participants (59.2%). This distribution did not differ from chance, $\chi^2(1, N = 103) = 3.50, p = .061$. The frequencies of justifications for the positive or negative evaluations are depicted in Table 1. In order to investigate the relation between justifications and evaluation's valence, both categories focusing on the relationship (*relationship-based* and *procedure- and relationship-based* justifications) were grouped together and contrasted against *procedure-based* justifications. The proportion of justifications was different depending on the evaluation's valence for both the F-more Puppet, $\chi^2(1, N = 58) = 10.77, p = .001$, and the NF-more Puppet, $\chi^2(1, N = 67) = 7.78, p = .005$. In particular, when the behavior of the F-more Puppet was evaluated negatively, more children than expected used procedure-based justifications ($p = .026$). When this behavior was evaluated positively, there was a tendency that children rather used relationship- or procedure-and relationship-based justifications ($p = .082$). When the behavior of the NF-more Puppet was evaluated positively, there was a tendency that children justified the behavior based on the procedure ($p = .078$).

When asked about whether the F-more Puppet should have done something differently, 42 participants (40.8%) replied with "yes", 59 participants (57.3%) with "no", and 2 children gave no answer. Thinking about whether the NF-more Puppet should have done something differently, 80 participants (77.7%) answered "yes", 22 participants (21.4%) "no", and 1 child gave no answer. For the children who answered "yes", the frequencies of the suggestions what the puppets should have done are displayed in Table 2. The frequencies of the strategies (*equal distribution, reversed inequality, more/less extreme inequality* combined as *inequality*) were

investigated for both puppets. For the F-more Puppet, most participants did not specify an alternative suggestion but the strategy most often used among the remaining children was *equal distribution*, $\chi^2(2, N = 14) = 7.00, p = .030$. For the NF-more Puppet, *reversed inequality* was mainly suggested, $\chi^2(2, N = 42) = 27.57, p < .001$. The difference score, reflecting the degree to which the F-more Puppet was evaluated more positively, was not significantly associated with age, $r(100) = .16, p = .114$.

In order to investigate whether children focused mainly on giving more to a friend, giving less to a nonfriend, or both, we additionally coded the *relationship-based* and *procedure- and relationship-based* justifications of children who evaluated the puppets in line with our hypotheses (i.e. positive evaluation of F-more Puppet and negative evaluation of NF-more Puppet). Across both puppets, 20 justifications addressed only the friend (e.g. “Because he gave more to his friend.”), 8 addressed only the nonfriend (e.g. “Because he is not his friend.”), and 36 addressed both recipients (e.g. “Because his best friend got many and his not-best friend got one.”). That is, about 88% of these justifications addressed the friend and 69% the nonfriend. As computed by a McNemar’s test with continuity correction, more justifications referred to the relation to the friend than to the nonfriend, $\chi^2(1, N = 64) = 4.32, p = .038$.

Discussion

Experiment 1 examined whether or not young children actively enforce a norm that one ought to show partiality towards close friends. Overall, while there was no effect for the punishment/reward measure, the pattern of children’s evaluations as well as their spontaneous protest and affirmation behavior indicated that children enforced partiality with a friend.

It should be noted that order of presentation did not interact with condition. That is, the difference in protest against the two puppets was comparable across both orders of conditions. This renders it unlikely that children’s lesser protest against someone who favored a friend was caused by an anchor effect of having first observed someone who favors a

nonfriend (i.e. a lesser of two evils effect). In addition, there was no order effect for selective affirmation and the evaluation measure. That is, children's selective affirmation of the protagonist who favored a friend was not affected by having first observed a protagonist who favored a nonfriend. Moreover, one should note that for most measures children were able to comment on and evaluate the protagonists individually. Thus, they would have been able to rate both protagonists negatively or to protest against both protagonists to the same extent. Indeed, in the study by Wörle and Paulus (2018) 3- to 4-year-old children protested against both a protagonist who gave more to a poor than to a rich other and a protagonist who gave more to a rich than to a poor other, potentially as both violated a norm of equal sharing. Yet, this was not the case in the present experiment. Finally, being asked what the NF-more protagonist should have done differently, a large number suggested a reversed inequality. In contrast, in each condition only a small number of children suggested an equal distribution. Overall, this suggests that young children, to some extent, consider the normative obligations related to friendships.

One has to note that in the current setup we relied on an uneven number of items for the single trials and an equal division was therefore not possible on the level of single items. Yet, an equal split would have been possible across both trials as the number of items added up to eight. Alternatively, one could have realized an equal treatment by alternating the recipient who received more. Indeed, taking turns seems to be one strategy by which preschoolers realize equal treatment (e.g., Groke, Rossano, & Tomasello, 2015; Melis, Groke, Kalbitz, & Tomasello, 2016). Finally, children realize an equal split of an uneven number of items by removing items from the total quantity (Shaw & Olson, 2012). Importantly, none of these strategies that would have realized an equal division were demanded by the participants. Rather, when being asked what the NF-more puppet could have done differently, the majority suggested a reversed inequality. Yet, we cannot exclude that it was too difficult for preschool children to apply these strategies in the current context.

While there was no interaction between order and condition, there was on average a higher amount of protest and punishment (across both conditions) when the F-more puppet was presented first. This effect was not hypothesized, and we can only speculate about its nature. It is interesting to note that this effect was only there for sanctioning behaviors (protest, punishment). It may be possible that observing the interaction between friends created a more open atmosphere and made it easier for children to express their inclination to sanction others. We have to leave it to future research to explore this effect in detail.

Interestingly, a closer look at children's justifications shows that a majority referred to the friendship relation and a (smaller) majority also referred to the relationship to the nonfriend. It is possible that these two types of argumentation represent two different sides of the same coin. Alternatively, it is possible that the results could be driven by two (not mutually exclusive) considerations; that one should favor a friend and that one should not favor a nonfriend. Both aspects could play a role in children's evaluations that were assessed after the allocation scenarios were completed.

Notably, a look at the distribution of evaluations suggested that the average scores of the evaluation were driven by a rather bimodal distribution. A large majority of children evaluated the F-more protagonist positively whereas a majority evaluated the the NF-more protagonist negatively. In both conditions, however, there were also children who showed an opposite pattern. In particular, a minority also rated the NF-more protagonist positively. We will turn to this point in the General Discussion.

Before turning to a comprehensive theoretical discussion of these findings, we wanted to explore in greater detail the significance of a norm of partiality in children's moral world. More precisely, we examined whether children prioritize a norm of partiality towards friends over a norm of equal sharing or vice versa. On the one hand, in their own behavior, they rather tend to give more to a friend than to share equally (Paulus, 2016). On the other hand, the norm of equality has been shown to be very strong in preschool children, even overruling

ingroup favoritism (e.g., Cooley & Killen, 2015; Wilks & Nielsen, 2018) or other fairness principles (Elenbaas, 2019). Experiment 2 was designed to answer this question. It closely followed the design of Experiment 1 with the exception that we did not include the punishment and reward measure as it did not yield clear results in the first experiment. Moreover, in order to realize the possibility of equal distribution in each trial, protagonists could distribute an even number of items.

If the norm of partiality is given high priority, children should affirm the protagonist who prefers his friend and protest against the protagonist who distributes resources equally. Yet, if the norm for equal sharing trumps the norm of partiality, we would expect that children in Experiment 2 should protest against the protagonist preferring the friend and should affirm the protagonist who distributes resources equally.

Experiment 2

Method

Participants

The final sample comprised 82 children with a mean age of 63.09 months ($SD = 8.63$, range = 37 – 79 months; 38 female). The exact age of two children was missing. Two additional children were tested but excluded from the final sample due to experimental mistake ($n = 1$) or loss of attention ($n = 1$). Another 9 additionally tested children were excluded because they failed to answer relevant check questions correctly (see Experimental Design and Procedure). Sample characteristics and consent protocol were the same as in Experiment 1.

Materials

Materials were the same as in Experiment 1 with the following differences. For the evaluation phase, a 5-point smiley scale was employed in order to allow for neutral evaluations.

Additionally, the punishment/reward phase was excluded, since no differences between conditions were detected in Experiment 1, and thus no cookies have been used.

Experimental Design and Procedure

The general procedure of Experiment 2 closely followed Experiment 1 with the following main differences: The NF-more Puppet was replaced by the Equal puppet, the punishment/reward phase and the question about what the protagonist should have done differently was dropped (as we experimentally assessed the answers that were most often given by children in Experiment 1, that is, equal sharing vs preferring the friend, this question was no longer necessary), and the evaluation phase was extended by a question on which protagonist's behavior was preferred.

Following the three warm-up trials, the two conditions were enacted. In one condition, the protagonist puppet consistently favored the friend (*F-more Puppet*). In the other condition, the protagonist consistently distributed the items equally between the friend and the nonfriend (*Equal Puppet*). All participants were presented with both conditions, and the order of conditions was counterbalanced between participants. Afterwards, participants were asked to evaluate the behavior of each puppet and to decide, whose behavior they preferred.

Warm-Up Trials. The procedure of the warm-up trials followed exactly Experiment 1. The smiley scale, which was used for the evaluation phase, was introduced directly after the warm-up trials with daily life examples.

Resource allocation scenarios. The introduction of the two recipients (F, NF) followed exactly Experiment 1. Each condition consisted of two trials. In each trial, the protagonist distributed four items between the recipients. The number of items was changed from five to four, in order to allow for equal distribution. In the F-more condition, the F was consistently favored (3 vs. 1 item; 4 vs. 0 items). In the Equal condition, both F and NF received two items in each trial. The stepwise allocation procedure exactly followed the standardized scheme of Experiment 1. After

both scenarios were completed, final check questions tested whether participants were still aware of the allocation decisions of the protagonists. Incorrect answers served as an exclusion criterion for all analyses.

Evaluation phase. After both conditions were completed, participants evaluated each protagonist's behavior on the 5-point smiley scale ranging from *very bad* to *very good*. Additionally, they were asked to justify their evaluations. Finally, participants decided whether they preferred the behavior of the F-more Puppet or of the Equal Puppet.

Coding and data analysis

Resource allocation scenarios. Coding of the resource allocation scenarios followed the procedure from Experiment 1. Overall, 39 out of 82 children (48%) protested or affirmed in at least one of the trials. A second independent observer rated a random sample of 25% of all sessions to assure interrater reliability. Cohen's kappa indicated perfect agreement for protest, $\kappa = 1$, and almost perfect agreement for affirmation, $\kappa = .85$.

Evaluation phase. The rating of each protagonist's behavior on the smiley scale was coded from 1 (*very bad*) to 5 (*very good*). The coding of the justifications of the evaluation followed the procedure of Experiment 1. Interrater reliability for the justifications was very good with $\kappa = .85$. The general evaluation of the protagonists was coded with a score of 1, if the participant preferred the Equal-more Puppet's behavior, and a score of 2, if the participant preferred the F-more Puppet's behavior.

Results

Paired sample two-tailed *t*-tests were computed to compare participant's protest/affirmation and evaluation behavior regarding the F-more and the Equal Puppet. A chi-squared test was computed to test the frequencies of the general evaluation about which puppet's behavior was

preferred. Pearson correlations were employed to investigate the relation of significant measures with age.

Preliminary analyses revealed comparable protest and affirmation on the two trials. Likewise, gender (male, female) and order of conditions had no effect on protest/affirmation and evaluation behavior. Consequently, these factors are dropped from the following analyses.

Protest during resource allocation

Fig. 2A shows the mean number of trials in which participants showed some form of protest towards the F-more Puppet and the Equal Puppet. Participants generally showed more protest (e/i/n) towards the F-more Puppet ($M = 0.32$, $SD = 0.61$) than to the Equal Puppet ($M = 0.11$, $SD = 0.42$), $t(81) = 2.56$, $p = .012$, $d = 0.40$. Considering only imperative or normative protest (i/n), participants still showed more protest towards the F-more Puppet ($M = 0.23$, $SD = 0.53$) than to the Equal Puppet ($M = 0.09$, $SD = 0.39$), $t(81) = 2.04$, $p = .045$, $d = 0.31$. Order and puppet did neither interact for protest (e/i/n), $F(1,80) = 1.25$, $p = .266$, nor for protest (i/n), $F(1,80) = 1.15$, $p = .288$. The difference in protest against the two puppets was thus comparable for both orders of conditions. Neither selective protest (e/i/n), $r(78) = .01$, $p = .924$, nor selective protest (i/n), $r(78) = .05$, $p = .638$, against the F-more Puppet was significantly correlated with age (based on a difference score of protest towards the F-more Puppet minus the Equal Puppet).

Affirmation during resource allocation

Fig. 2B shows the mean number of trials in which participants showed some form of affirmation toward the F-more Puppet and the Equal Puppet. Overall, children's affirmation (e/i/n) did not differ significantly between the F-more Puppet ($M = 0.21$, $SD = 0.49$) and the Equal Puppet ($M = 0.29$, $SD = 0.64$), $t(81) = -1.02$, $p = .310$, $d = 0.15$. Similarly regarding imperative or normative affirmation (i/n), children did not differ significantly between the F-more Puppet ($M = 0.18$, $SD = 0.47$) and the Equal Puppet ($M = 0.27$, $SD = 0.63$), $t(81) = -1.07$, $p = .289$, $d = 0.15$. Neither

selective affirmation (e/i/n), $r(78) = .03$, $p = .776$, nor selective affirmation (i/n), $r(78) = -.02$, $p = .868$, of the Equal Puppet was significantly correlated with age (based on a difference score of affirmation of the Equal Puppet minus the F-more Puppet).

Taken together, children consistently protested more against the puppet favoring the friend. This tendency was not reflected in the affirmation towards the puppets.

Evaluations

Evaluations as measured on the 5-point smiley scale differed significantly between the two puppets, $t(81) = 5.72$, $p < .001$, $d = 0.99$. Participants evaluated the behavior of the Equal Puppet better ($M = 4.18$, $SE = 0.16$) than the behavior of the F-more Puppet ($M = 2.56$, $SE = 0.20$). Children's evaluation of the F-more puppet was below average (3 on the 5-point scale), $t(81) = -2.20$, $p = .031$, $d = 0.24$, whereas their evaluation of the Equal puppet was above average, $t(81) = 7.35$, $p < .001$, $d = 0.81$. One child was excluded from the analysis of the preferred behavior because a response to that question was missing. Overall, the majority of participants (74%) preferred the behavior of the Equal Puppet over the behavior of the F-more Puppet, $\chi^2(1, N = 81) = 18.78$, $p < .001$. See Figure 3 for an overview.

In order to investigate the justifications of the evaluations, participants were split into groups of children who evaluated the puppets' behavior positively (*very good* or *good* on the smiley scale) or negatively (*very bad* or *bad* on the smiley scale). Overall, eight children (3 for F-more and 5 for Equal Puppet) evaluated a puppet's behavior with a 3 (*middle*). These children were excluded from the analyses of the justifications. The F-more Puppet's distribution behavior was evaluated positively by 29 participants (35.4%) and negatively by 50 participants (61.0%). This distribution differed from chance, $\chi^2(1, N = 79) = 5.58$, $p = .018$. For the Equal Puppet, 64 participants (78.0%) evaluated the behavior positively and 13 participants (15.9%) evaluated the behavior negatively. This distribution differed from chance, $\chi^2(1, N = 77) = 33.78$, $p < .001$. The frequencies of justifications for the positive or negative evaluations are depicted

in Table 3. As illustrated, mainly *procedure-based* justifications were employed overall. The frequency of *relationship-based* and *procedure- and relationship-based* justifications in contrast to *procedure-based* justifications was comparable for positive and negative evaluations of the F-more Puppet, $\chi^2(1, N = 56) = 1.38, p = .240$, as well as the Equal Puppet, $\chi^2(1, N = 57) = 0.67, p = .413$.

Discussion

Experiment 2 investigated the relative importance of partiality and equality in early childhood. The pattern of results suggests that young children prioritize an equal distribution over partiality towards friends. The results relate well to other findings about a strong concern for equality in preschool children (e.g., Cooley & Killen, 2015; Elenbaas, 2019; Shaw & Olson, 2012) and to findings that older children and adults from Western societies (Miller & Bersoff, 1992) prioritize justice concerns over interpersonal obligations.

Importantly, there was no effect of order of presentation. Like in Experiment 1, this pattern indicates that children's normative evaluations were not subject to an anchor effect. In contrast to Experiment 1, however, the results were less consistent across the measures. On the one hand, children protested more against the protagonist who favored a friend and also preferred the behavior of the equal distributor. On the other hand, there was no clear difference in children's affirmative behavior between the conditions. Children affirmed both protagonists to the same extent.

Similar to Experiment 1, the results of the evaluations were driven by a rather bimodal distribution of evaluations. Whereas a majority of children rated the equally distributing protagonist (very) positive and the F-more protagonist (very) negative, did a third of the children rate the F-more protagonist as (very) positive. We will turn to this point in the General Discussion.

Overall, this suggests that the 4- to 6-year-old children, on average and in vast majority, prioritize equality over partiality towards friends, but at the same affirm partiality towards friends to the same extent as an equal distribution. The implications of our findings will be further discussed in the next section.

Exploratory analyses across experiments

Each of the two experiments showed a contrast between two principles of resource distributions. As one principle (partiality towards the friend) appeared in both experiments and appeared to be evaluated differently, we compared children's evaluations across both experiments. Given that the scales in both experiments differed slightly (Experiment 1: 1-4; Experiment 2: 1-5), we plotted the evaluations on a common scale (1-10) by means of a linear transformation (see Figure 4).

We first compared the evaluation of the F-more puppet across experiments. The F-more puppet was more positively evaluated in Experiment 1 than in Experiment 2, $t(182) = 5.54, p < .001, d = 0.82$. Moreover, we analyzed whether children viewed a transgression against partiality in Experiment 1 as wrong as a transgression against equality in Experiment 2. There was no difference between children's evaluation of the NF-more puppet in Experiment 1 and the F-more puppet in Experiment 2, $t(183) = 0.41, p = .683, d = 0.06$. Likewise, the evaluation of the F-more puppet in Experiment 1 was comparable with the evaluation of the Equal puppet in Experiment 2, $t(182) = -1.21, p = .226, d = 0.18$.

General Discussion

Recent moral philosophy stresses the idea that close human relationships carry special normative obligations with them and demand that one is obligated to act partially towards friends (e.g., Betzler, 2014; Jollimore, 2000; Scheffler, 2010). At the same time, impartiality has been suggested to be a cornerstone of human morality (Kant, 1785; Rawls, 1971). The

current study investigated whether or not young children enforce a norm that one ought to show partiality towards close friends. Across two experiments, we compared 4- to 6-year-old children's reactions towards a protagonist who showed partiality towards a friend with a protagonist who either preferred a non-friend (Experiment 1) or who distributed resources equally (Experiment 2). In order to control for potential ingroup biases, the nonfriend was introduced as a child from the same preschool the protagonist does not like to play with. The results suggest that partiality towards the friend is perceived differently depending on the context. In Experiment 1, children on average selectively affirmed the protagonist who allocated more resources to her friend and selectively protested against the protagonist who gave more to a non-friend. Being asked what the protagonist who favored the nonfriend should have done differently, the largest proportion of answers referred to a reversed inequality, that is, favoring the friend. In Experiment 2, children on average selectively protested against the protagonist who favored a friend and the majority also evaluated the protagonist who shared equally positively. Yet, there was no clear difference in selective affirmation. Thus, whereas impartiality and equal distribution take precedence whenever possible, partiality towards close friends guides children's evaluative stances and normative reasoning when equal distribution is not an option. Our findings highlight how preschool children handle different normative demands and interpersonal responsibilities. It suggests that partiality in close relationships plays a role in children's thinking, but that equality is a stronger normative stance.

It is important to note that in the current study children's own interest was not at stake. That is, the current study goes beyond demonstrating that children themselves are more generous towards close others (e.g., Fehr et al., 2008; Paulus & Moore, 2014). Moreover, by focusing on children's normative reactions, it extends previous work that explored how children infer friendship status (e.g., Liberman & Shaw, 2017). By presenting children with protagonists and recipients with whom they did not have any personal relationship, children's

reactions towards them are not driven by self-interest (e.g., sharing more with a friend in the expectation that she will pay back). Rather, children's normative reactions such as their spontaneous protest and affirmation as well as their explicit judgments of others' behavior indicates the presence of an agent-neutral norm that serves as the basis for judging others (cf. Nagel, 1970).

In the first experiment, both children's evaluations as well as their spontaneous protest and affirmation behavior provide converging evidence that children on average evaluated partiality towards friends more positively than partiality towards the non-friend. In addition, this interpretation is supported by children's reasoning about the protagonists' behavior. We thus found corroborating evidence across a number of different measures. Yet, there was no effect on their reward and punishment behavior. This pattern of results differs from previous work using the same paradigm in which preschool children showed selective punishment and rewarding behavior toward protagonists who either violated or followed a norm of charity by sharing more with a rich than with a poor other (Wörle & Paulus, 2018). One interpretation of this difference could be that although children consider partiality towards friends as a possible principle of resource distribution, the majority perceives its violation as being less severe compared to the violation of classical moral principles such as giving more to poor than rich others or as sharing equally.

This interpretation is supported by the findings of Experiment 2. Children prioritized a norm of equal distribution over a norm of partiality. This pattern of results relates to other studies demonstrating a strong concern for equality in young children's reasoning (e.g., Cooley & Killen, 2015; Elenbaas, 2019; Shaw & Olson, 2012). That is, while preschool children appreciate partiality towards friends to some extent, it also demonstrates that – on a normative level – a majority of young children gives more weight to a norm of equality. In a situation in which equal sharing was possible, there was a tendency to evaluate partiality towards friends as unfair. Most noteworthy, children protested more when a protagonist

favored a friend than when she shared equally. At the same time, children affirmed both behaviors to the same extent. This finding demonstrates that young children situate partiality in the context of other normative demands.

Notably, when comparing the result patterns across both experiments, we see that on average children evaluated the agent who gave more to a friend more positively in Experiment 1 (above average) than in Experiment 2 (below average). Moreover, they evaluated this agent as positively in Experiment 1 as they evaluated the agent who shared equally in Experiment 2. This is interesting as children were evaluating the same behavior. Given that the evaluation measures were always presented after the completion of both allocation scenarios and were thus likely influenced by a comparison with the other protagonist, children's evaluations should be interpreted in relative terms. At the same time, children's protest and affirmation (that was assessed during each puppets' actions and not after the completion of the allocation scenarios) was not affected by order of presentation. Overall, we interpret this pattern as being in line with findings that contexts affect judgments and that young children learn to handle a variety of different norms and principles (e.g., Kienbaum & Wilkening, 2009; McGillicuddy-De Lisi et al., 1994; Turiel, 2010).

It is an interesting speculation whether these principles form a (more or less) stable hierarchy of principles of resource distributions, or whether children handle them at the same level and apply them differently depending on context. This question relates to ongoing lines of research in the field (e.g., Abramson, Daniel, & Knafo-Noam, 2017; Collins, Lee, Sneddon, & Döring, 2017; Rizzo, Elenbaas, & Vanderbilt, 2018). For example, Collins and colleagues (2017) demonstrated that by 5 years children make consistent choices about their personal hierarchy of values. In this context, it is important to note that our experiments can be interpreted in a comparative nature. Experiment 1 demonstrated that on average partiality towards a friend is rated more positively and normatively enforced compared to partiality towards a nonfriend. Experiment 2 showed that for a majority of children equality is rated more

positively and normatively enforced compared to partiality towards a friend. One speculative interpretation is that this pattern of results represents a hierarchy of principles of resource distributions in which for most children equality is given priority over partiality towards a friend that in turn is prioritized over partiality towards a non-friend. Thus, our study contributes to this debate by exploring the extent to which friendship is one aspect in children's evaluations of others' behavior and how it relates to other normative principles.

Research on preschool children's actual distribution behavior has shown that they distribute resources rather to friends than to strangers (Olson & Spelke, 2008). Notably, they do so even when the friend is wealthy and the stranger (or non-friend) is poor (Paulus, 2016). This suggests that children's own behavior is guided by partiality towards friends. In contrast, on the level of normative considerations and moral reasoning as assessed in Experiment 2, children prioritize a norm of equal sharing above a partiality norm. This pattern of results suggests that children's normative views do not always reflect their actual behavior. Similar patterns have been observed in studies concerning equal sharing: while 3- to 6-year-old children reported that they should share equally, they actually shared less than half (Smith, Blake, & Harris, 2013). Our study together with previous work adds to these findings by suggesting a similar dissociation between behavior and norms even when children's own interests are not at stake, that is, even when children did not gain from the distributions themselves (e.g., Olson & Spelke, 2008; Paulus, 2016). Yet, on the other hand, a further line of work suggests relations between children's normative views and their actual behavior (Dahl & Killen, 2018). Thus, given these contrasting findings and theoretical views, it would be valuable to explore in greater detail the circumstances under which young children's behavior and their normative views coincide or diverge.

Our main question concerned whether or not young children appreciate the idea that one ought to show reasonable partiality towards a friend. How can we interpret the complex set of findings with respect to this question? How can we situate it in the dimension between

the context-dependency and unconditional validity of normative views? Can we conclude that young children regard partiality towards a friend as a norm or an obligation? On the one hand, a majority of children clearly preferred equality over partiality towards friends in Experiment 2. On average, they more negatively evaluated the protagonist who favored a friend than a protagonist who shared equally. Thus, the results do not suggest that partiality towards friends is regarded as an obligation or unconditional norm. Partiality is therefore not comparable with many central moral norms children appreciate and enforce on others (e.g., Turiel, 2010). On the other hand, in the same experiment they affirmed partiality towards friends to the same extent as equal sharing. In Experiment 1, they selectively enforced partiality towards friends over partiality towards nonfriends, and rated the first principle considerably higher and positive. After all, if they would have perceived partiality towards friends as inherently bad, they could have evaluated both protagonists negatively or could have protested against both protagonists to the same extent. The answer to the main question, we guess, depends thus on our conception of norms and normativity. Children do not regard partiality towards friends as being an unconditional moral obligation (as they do with equality). Yet, given children's normative responses in the first experiment and their affirmative behavior in the second experiment, there seems to be a normative notion in their responses. In addition, a view at the distribution of responses suggests that a third of participants in Experiment 2 rated the protagonists who distributed more to the friend than sharing equally as positive. Given our broad conception of normativity as views on what someone ought to do or should not do, we interpret these results as indicative for a weaker normative stance concerning partiality towards friends in preschool children. From a social domain theoretical point of view, it might correspond to a conventional or an instrumental norm. Another possibility, related to a relational view of morality, is that relationships represent a distinctive source of reasons that have normative weight (Scheffler, 2010) and that young children learn to appreciate from

early on. Notwithstanding these possibilities, a majority of children gives higher priority to equality when evaluating others.

While the present study indicates that young children pay attention to potential obligations coming from friendship, it leaves open the ontogenetic emergence of this stance. The age-related parallels between the development of children's own inclination to share more with friends as well as their prediction of others' behavior (Olson & Spelke, 2008; Liberman & Shaw, 2017; Paulus & Moore, 2014), and their normative expressions revealed in this study could point to an interrelation between these three phenomena. That is, the emergence of a stance to favor friends could be supported by children's own experiences in sharing contexts with close others, their observation of others' actual behavior, and the potential direct demands of their own friends (e.g., "we are friends and friends share with each other"). It is possible that the observation of regularities could contribute to the emergence of a normative stance (e.g., Roberts, Gelman, & Ho, 2017). Moreover, it would be interesting to explore in greater detail the developmental interplay between children's own tendency to favor their friends (Paulus, 2016) and their normative stance that one ought to share equally, even between friends and non-friends (as revealed in this study). One possibility is that in their everyday life, children experience different demands from significant others. Whereas some peers and caregivers demand equal sharing, might friends demand selective sharing with them. In a related vein, we found evidence for considerable inter-individual variability in children's evaluations. These findings seem to demand future work to clarify the nature of this variability and to deepen our understanding how children come to quite opposed evaluations of central principles of resource allocations. It should be noted that the non-friend was a person the protagonist knew, but did not like to play or interact with. We choose this person in order to control for potential in-group biases. Yet, it would be interesting to explore whether children would enforce partiality towards friends when the protagonist were to be confronted with a stranger rather than a non-friend. In

addition, given proposals that moral development is related to children's self-concept (e.g., moral self-concept; Krettenauer, Campbell, & Hertz, 2013), it would be interesting to assess how the tension between normative demands of friendship and classical moral obligations is reflected in children's emerging moral self-concept. Finally, given cross-cultural variation in children's friendship reasoning (Keller et al., 2005) and findings of differences between Western and non-Western societies in relative priority of obligations coming from social relations versus fairness concerns (Miller & Bersoff, 1992), it would be highly interesting to systematically explore cross-cultural differences in preschoolers' partiality norm. The findings of cross-cultural differences point to an impact of the social environment and social interactions on young children's normative development (Carpendale et al., 2013; Carpendale & Lewis, 2004).

Taken together, the current study suggests that young children consider the normative status of friendship and, under some conditions, enforce a partiality norm even from unrelated third parties. At the same time, if equal distribution is an option, children prioritize equality over partiality.

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Figure and Table Captions

Figure 1. Mean number of trials (out of 2) in which participants showed any form protest/affirmation (expectation-related, imperative, normative) as a function of Puppet (F-more, NF-more). Error bars indicate the standard errors. A: Protest. B: Affirmation.

Figure 2. Mean number of trials (out of 2) in which participants showed any form protest/affirmation (expectation-related, imperative, normative) as a function of Puppet (F-more, Equal). Error bars indicate the standard errors. A: Protest. B: Affirmation.

Figure 3. Distribution of participants' evaluations of the respective protagonists. A: Experiment 1. B: Experiment 2.

Figure 4. Mean evaluation as a function of experiment and protagonist. Note that the ratings of each experiment were linearly transformed to a scale from 1 to 10 to allow direct comparisons. Error bars indicate standard errors of the means.

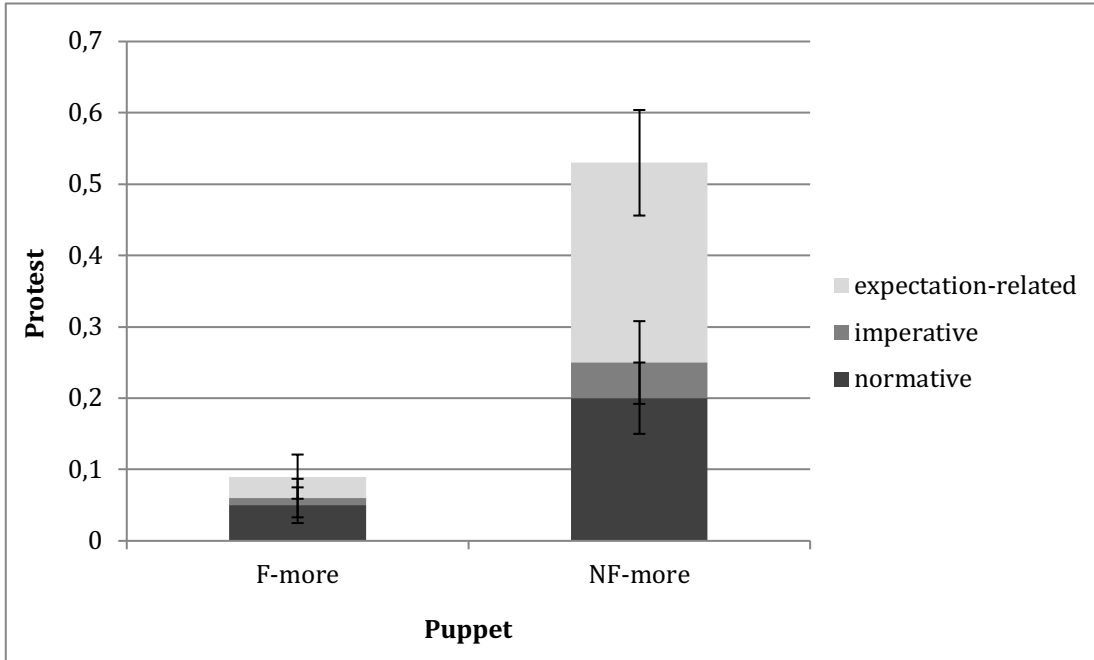
Table 1. Number (and percentage) of children who gave justifications of the respective category for their positive or negative evaluations for each puppet in Experiment 1.

Table 2. Number (and percentage) of children who gave suggestions of the respective category what each puppet should have done differently.

Table 3. Number (and percentage) of children who gave justifications of the respective category for their positive or negative evaluations for each puppet in Experiment 2.

Figure 1

A



B

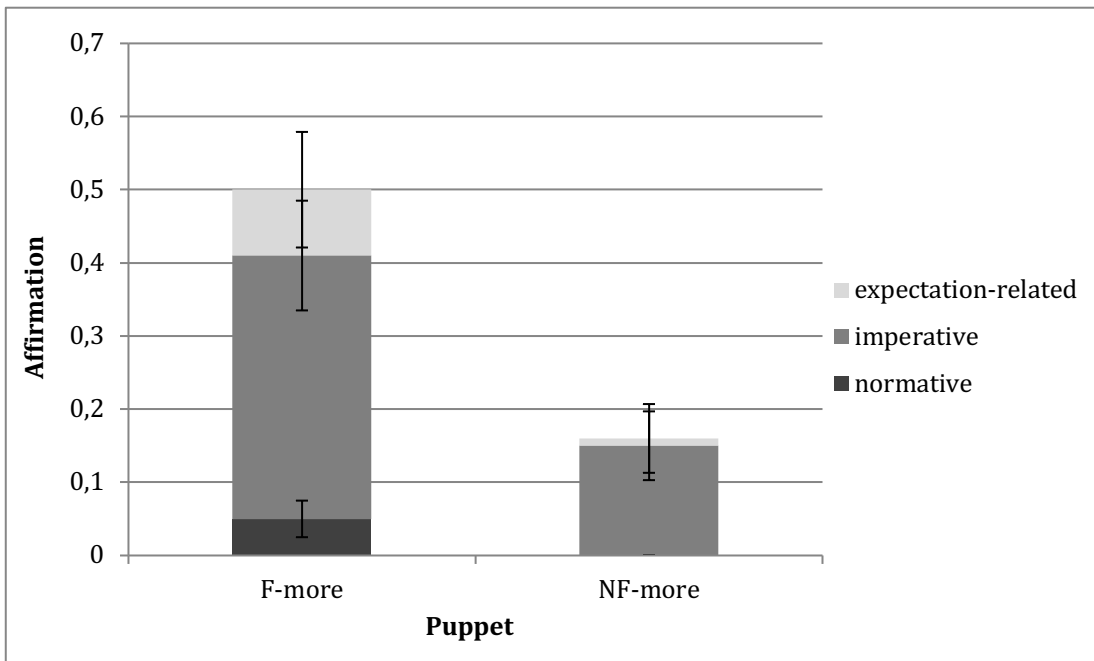
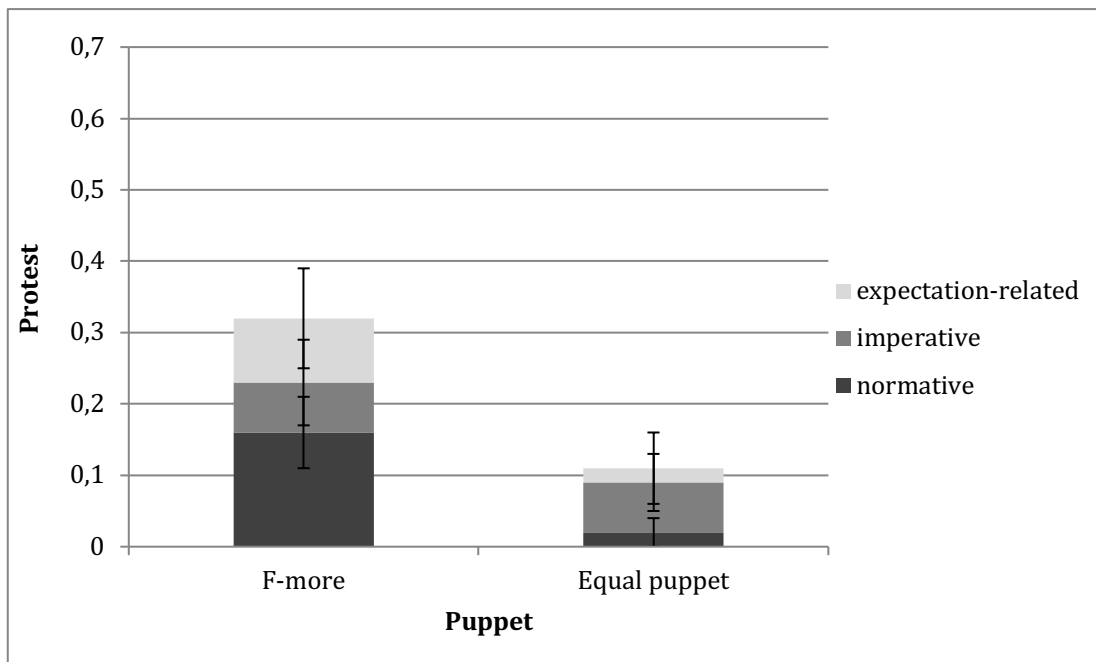


Figure 2

A



B

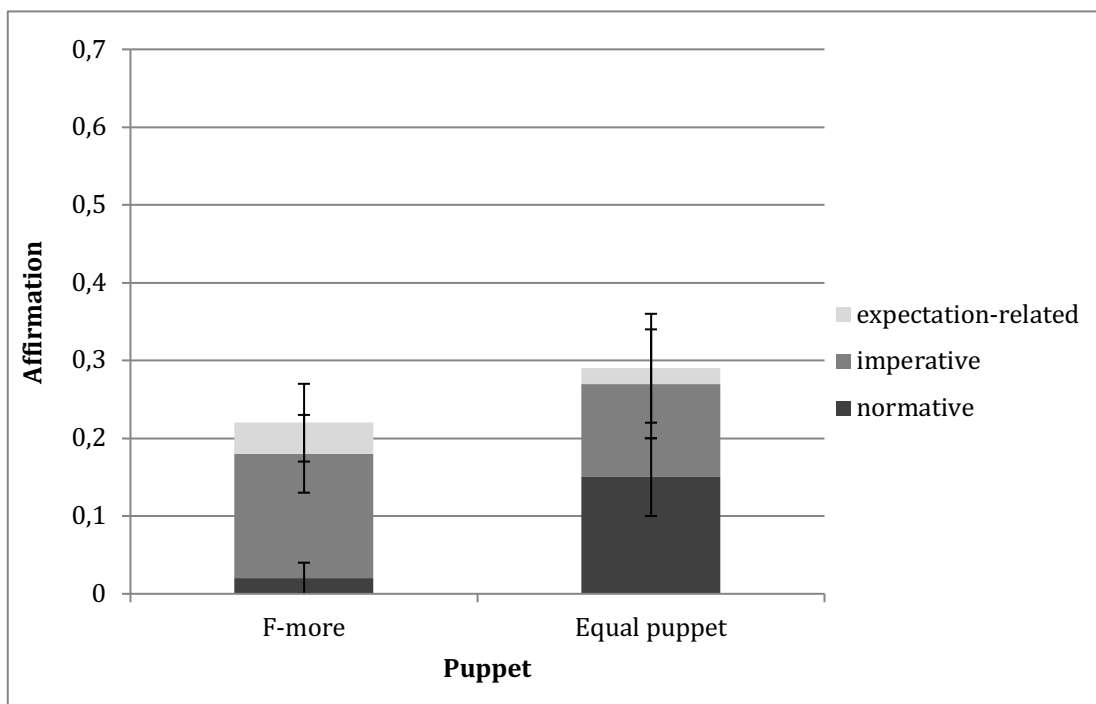
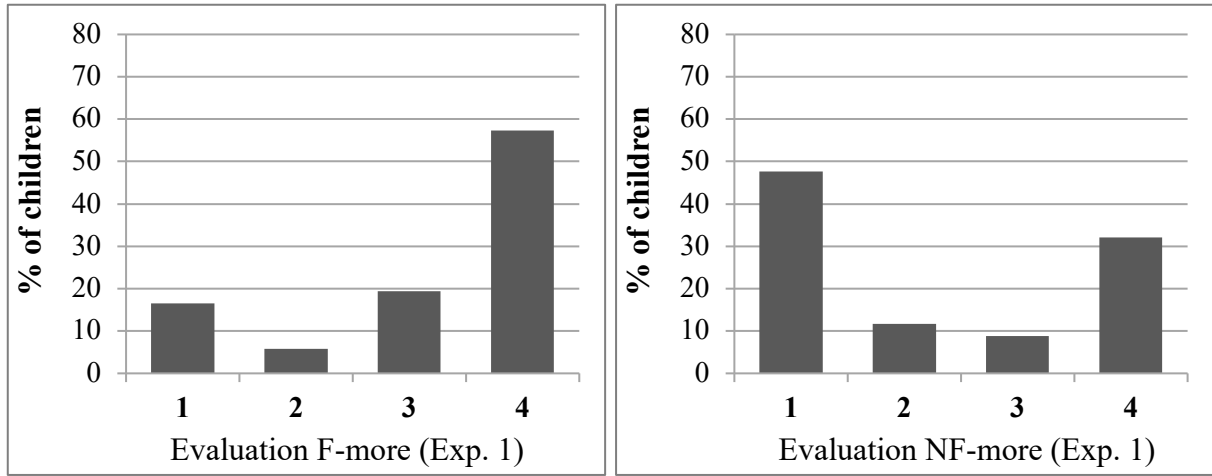


Figure 3

A



B

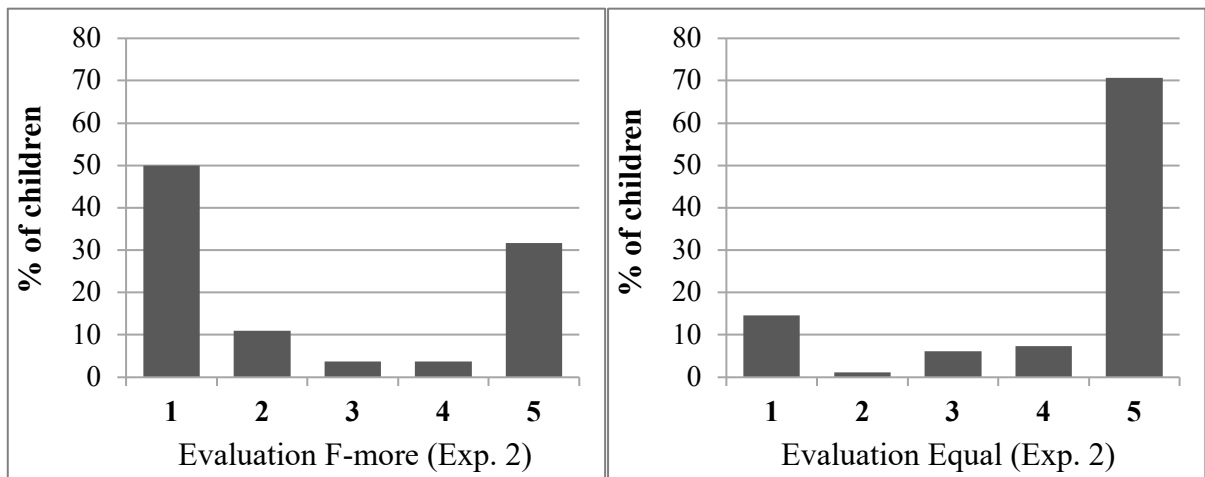


Figure 4

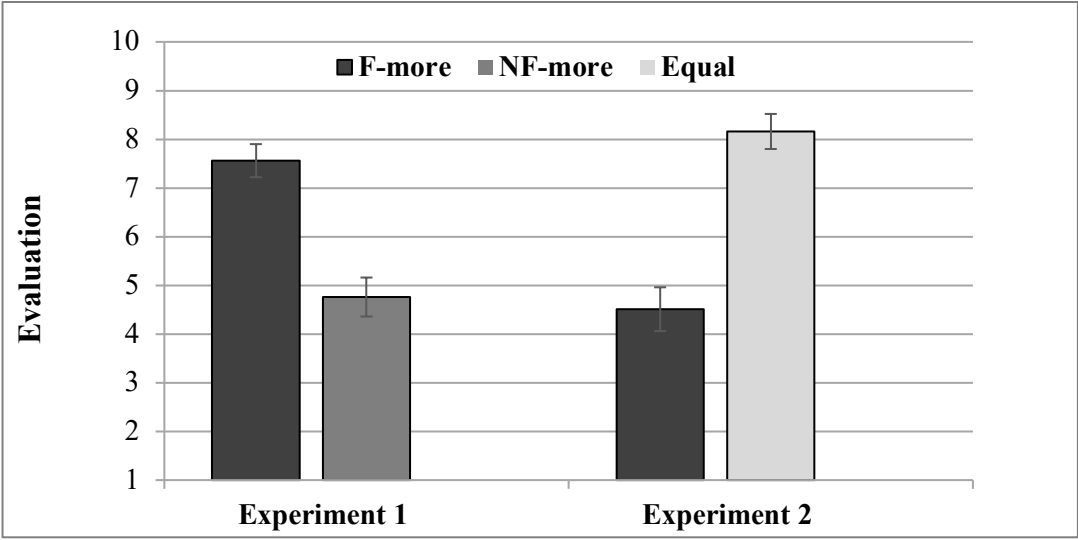


Table 1

	<i>F-more Puppet</i>		<i>NF-more Puppet</i>	
	Positive evaluation	Negative evaluation	Positive evaluation	Negative evaluation
Procedure-based	11 (13.9%)	11 (47.8%)	14 (33.3%)	14 (23.0%)
Relationship-based	11 (13.9%)	2 (8.7%)	2 (4.8%)	9 (14.8%)
Procedure- and relationship-based	21 (26.6%)	2 (8.7%)	5 (11.9%)	23 (37.7%)
Other responses / No answer	36 (45.6%)	8 (34.8%)	21 (50.0%)	15 (24.6%)

Table 2

	<i>F-more Puppet</i>	<i>NF-more Puppet</i>
Equal distribution	9 (21.4%)	7 (8.8%)
More extreme inequality	2 (4.8%)	3 (3.8%)
Less extreme inequality	2 (4.8%)	2 (2.5%)
Reversed inequality	1 (2.4%)	30 (37.5%)
Other responses / No answer	28 (66.7%)	38 (47.5%)

Table 3

	<i>F-more Puppet</i>		<i>Equal Puppet</i>	
	Positive evaluation	Negative evaluation	Positive evaluation	Negative evaluation
Procedure-based	11 (37.9%)	31 (62.0%)	42 (65.6%)	5 (38.5%)
Relationship-based	4 (13.8%)	4 (8.0%)	3 (4.7%)	2 (15.4%)
Procedure- and relationship-based	2 (6.9%)	4 (8.0%)	5 (7.8%)	0 (0%)
Other responses / No answer	12 (41.4%)	11 (22%)	14 (21.9%)	6 (46.2%)