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Brief report

Three-year-old children intervene in third-party moral transgressions

Amrisha Vaish*, Manuela Missana and Michael Tomasello Max Planck Institute for Evolutionary Anthropology, Leipzig, Germany

We investigated children's moral behaviour in situations in which a third party was harmed (the test case for possession of agent-neutral moral norms). A 3-year-old and two puppets each created a picture or clay sculpture, after which one puppet left the room. In the Harm condition, the remaining (actor) puppet then destroyed the absent (recipient) puppet's picture or sculpture. In a Control condition, the actor acted similarly but in a way that did not harm the recipient. Children protested during the actor's actions, and, upon the recipient's return, tattled on the actor and behaved prosocially towards the recipient more in the Harm than in the Control condition. This is the first study to show that children as young as 3 years of age actively intervene in third-party moral transgressions.

When preschoolers perceive themselves to be the victims of moral violations (e.g., when their property rights are violated or they are physically harmed), they actively defend themselves by protesting, arguing, and tattling (e.g., Dunn & Munn, 1987; Ingram & Bering, 2010). Naturalistic observations also show that children's spontaneous responses to moral versus conventional transgressions differ significantly (e.g., Nucci & Nucci, 1982a, b; Smetana, 1984, 1989). Surprisingly, however, prior work has not specifically targeted, in a controlled experiment, children's responses to situations in which third parties (rather than the children themselves) are harmed. This distinction is important because a victim's own responses may be driven by emotional reactions (e.g., anger) or self-interest. The real test case for moral understanding as such is thus third-party intervention or judgments, as these behaviours show an agent-neutral application of moral norms.

In the present study, we systematically showed children moral transgressions with a third party as victim (using a procedure adapted from Rakoczy, Warneken, & Tomasello, 2008). An actor puppet destroyed either a recipient puppet's belongings (Harm condition) or similar but irrelevant objects (Control condition). If children intervene because the actor's actions are harmful rather than because the actions themselves are

^{*}Correspondence should be addressed to Amrisha Vaish, Department of Developmental and Comparative Psychology, Max Planck Institute for Evolutionary Anthropology, Deutscher Platz 6, 04103 Leipzig, Germany (e-mail: vaish@eva.mpg.de).

negative, then they should intervene more in the Harm than the Control condition. Importantly, the recipient was absent during the transgressions, as Vaish, Carpenter, and Tomasello (2009, 2010) observed that children do not protest much with an adult victim present, perhaps because they expect the victim to stand up for herself.

To gain a fuller picture of children's behaviour, we assessed whether, upon the recipient's return, children tattled on the actor. Ingram and Bering (2010) found that in a naturalistic setting, 3- to 4-year-olds frequently tattled to an adult about negative behaviours towards themselves but rarely on behalf of third parties. However, as those authors suggested, children may have refrained from third-party tattling because they expected victims to speak up for themselves. Since the victim in our study was absent during the transgressions, we expected to see more tattling upon her return if her belongings were destroyed in her absence.

Finally, we assessed children's prosocial behaviour towards the recipient after her return. Toddlers sympathize with and act prosocially towards victims (e.g., Zahn-Waxler, Radke-Yarrow, Wagner, & Chapman, 1992), even when the victim provides no distress cues during the transgression (Vaish *et al.*, 2009). We thus predicted that, despite the victim's absence during the transgressions, children would show greater subsequent prosocial behaviour towards her if her belongings were destroyed.

Method

Participants

Participants were 32 3-year-olds (16 girls; *age range*: 36;00-39;28; M = 38;6; SD = 38.3 days). Of the participants, 16 children (8 girls) were randomly assigned to the Harm condition and 16 to the Control condition. One additional child was tested but excluded due to experimenter error. Children were recruited from day-care centres in a medium-sized German city and were native German speakers. All children were tested by the same two female experimenters (E1 and E2).

Materials and setting

Two hand puppets (cow and elephant) were children's interaction partners throughout the procedure. Which puppet was the actor or recipient was counterbalanced across children. E1 controlled the actor puppet and E2 the recipient puppet. A ball and puzzle served as warm-up games. During test trials, blank sheets of paper, colour pencils, and balls of clay were used.

Procedure

To warm up, the child and puppets played with a ball and then a puzzle. As the puzzle game was designed to familiarize children with situations in which they could intervene, each puppet made a mistake (wrongly placed a piece) during this game. If the child did not intervene within a few seconds, the other puppet remarked that the puzzle piece was wrongly placed and prompted the child to help place it correctly. The warm-up lasted 6-7 min.

Children then received two test trials (Picture and Clay; order counterbalanced across children), each consisting of an activity phase and a test phase. The actor initiated the first test trial and the recipient initiated the second trial. The activity phases began as follows:

Picture

The assigned puppet brought out four sheets of paper and three colour pencils, and handed one of each to the child, the other puppet, and herself. Realizing she had one extra sheet, she placed it to the side on the table. Then the child and puppets each drew a picture: the actor drew a house, the recipient drew a flower, and the child drew whatever she liked.

Clay

The assigned puppet brought out four clay balls and handed one each to the child, the other puppet, and herself. Realizing she had one extra ball, she placed it on the table. Then the actor sculpted a tortoise, the recipient sculpted a snail, and the child sculpted whatever she liked.

During both activities, each puppet happily showed off her drawing/sculpture twice, and both puppets took an active interest in the child's drawing/sculpture. When they were finished (after about 8 min), the recipient placed the child's drawing/sculpture on the floor, and her own and the actor's drawings/sculptures on the table next to the extra sheet of paper or clay ball. She then left the room and the test phase began according to condition. In the Harm condition, the actor said in a neutral but firm manner, 'Well, I don't like the cow's/elephant's flower/snail. I'm going to tear/break it now'. In the Control condition, she said in the same manner, 'Well, I don't like the blank sheet of paper/ball of clay. I'm going to tear/break it now'. In both conditions, she then moved towards the target object (5 s) and repeated, 'Yes, I'm going to tear/break it now'. Picking up the object, she returned to her position (5 s), said, 'Yes, I'm going to tear/break it now', then destroyed the object and threw the pieces into a bin (30 s). The actor's intention was repeated and her actions presented in this stepwise manner to provide children with ample occasions to protest.

After the object was destroyed, the recipient reentered, looked into the bin, and neutrally said 'Hmm' to show that she had noticed something there. She looked at the remaining objects on the table, again said 'Hmm' neutrally, and looked back into the bin. In the Harm condition, the recipient then said in a somewhat surprised and sad tone, 'Oh, that was my flower/snail', waited about 6 s, said 'Oh well' mildly despondently, and returned to her seat. In the Control condition, the puppet behaved the same way except that she noted in a neutral tone that the object in the bin had been the blank paper or extra clay. Children's protest was coded until the recipient's reentry, and their tattling and prosocial behaviour were coded from the recipient's reentry until she returned to her seat (see details below).

The second test trial began when the recipient was reseated. The recipient was somewhat quiet at the start of the second trial (for about 50 s), but was then happy again. In the Harm condition, this showed that the recipient really cared about her objects and was sad when they were destroyed (which helped maintain the validity of the second trial). However, it was also done in the Control condition to keep the conditions as similar as possible. After the second trial in the Harm condition, the actor apologized to the recipient and drew her a new picture.

Coding and reliability

The primary coder coded all sessions from videotape. For the warm-up puzzle game, children's interventions when the puppets made mistakes were coded as spontaneous or prompted. Reliability on a random 25% of the sample was perfect, $\kappa=1$.

Children's responses during the test phases were assigned the following codes (and scores): 'normative protest' (score of 3), 'imperative protest' (2), 'hints of protest' (1), or 'no protest' (0; see Table 1, for details). Reliability on a random 25% of the sample was excellent ($\kappa=1$ for whether or not a child protested; $\kappa=.88$ for the highest code per trial).

Table I. Coding scheme for protest

Category	Protest score	Behaviours
Normative protest	3	Child intervenes in a normative way, using normative vocabulary, reference to the rule ('No, you're not supposed to do that' or 'You may not do that'), or reference to the recipient's emotional state ('She will be sad then')
Imperative protest	2	Child expresses an imperative, such as a command to stop the action, without use of normative elements ('No! Don't tear it!'), or expresses simple disagreement with the actor's action ('No!')
Hints of protest	I	Child protests but clear attribution to the other two categories is not possible; includes using a protesting tone of voice in exclamations ('Hey!'), questions ('Why are you doing that?'), or statements ('But I like the cow's flower' or 'That is not nice')
No protest	0	Child shows no protest

Children's tattling and prosocial behaviour were coded as binary (yes/no) variables (see Table 2, for details). Reliability on a random 25% of the sample was excellent: $\kappa = .81$ and 1 for tattling and prosocial behaviour, respectively.

Table 2. Coding scheme for tattling and prosocial behaviour

Category	Coding	Behaviours
Tattling	Yes/no	Child tells recipient puppet or E2 with a complaining or disapproving tone of voice that the actor puppet or E1 destroyed the target object ('The cow tore it up' or 'She tore up your beautiful flower!'), accompanied by explicit naming and/or pointing to the actor puppet or E1 (thus, simply neutrally informing the recipient about what had happened was not coded as tattling)
Prosocial behaviour	Yes/no	Child comforts (e.g., strokes), makes suggestions ('You can draw a new flower' or 'You can draw my Lion further'), helps (e.g., offers to draw another picture), or shares with recipient puppet or E2 (e.g., gives own drawing) (cf. Vaish et al., 2009; Zahn-Waxler et al., 1992)

Results

Warm-ub

During the warm-up puzzle game, all children corrected each puppet at least once. Two children needed prompting to do so when the first puppet made a mistake but all children did so spontaneously for the second puppet. Thus, children were comfortable correcting the puppets and nearly all did so without coaching.

Testing phases

Protest

Children's protest was first analysed as a binary variable: all three protest forms (imperative, normative, and hints) were pooled into one 'protest' code and compared against the 'no protest' code. As predicted, significantly more children protested in the Harm condition (12 of 16) than in the Control condition (4 of 16), $\chi^2(1, N = 32) = 8.00$, p = .005 (see Figure 1). In a second analysis, we kept the three protest codes separate and compared children's highest codes across conditions. This revealed significant condition differences, Mann-Whitney U = 58.0, NHarm = NControl = 16, p = .007. Children thus clearly showed greater verbal protest when witnessing a puppet destroying another puppet's belongings than when witnessing a physically similar but harmless situation.

Tattling

An analysis of children's tattling revealed the predicted condition difference: whereas 7 of 16 children (44%) in the Harm condition tattled on the actor, no child in the Control condition did so, Fisher's exact test, p=.007.

Prosocial behaviour

Children's prosocial behaviour also revealed the expected result: 7 of 16 children (44%) behaved prosocially in the Harm condition whereas no child behaved prosocially in the Control condition, Fisher's exact test, p = .007.

Note that we attempted to test 2-year-olds using the same procedure but, with 10 children per condition, found no evidence of protest, tattling, or prosocial behaviour.

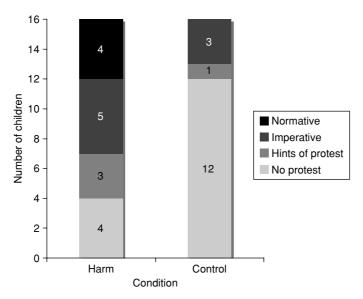


Figure 1. Number of children in each condition who showed each form of protest as their highest form of protest.

Children occasionally commented on the situation (e.g., 'Broken'), but did so to equivalent degrees in both conditions.

Discussion

We examined how children behave when they witness moral transgressions involving a third party as victim. After 3-year-olds witnessed one puppet destroying another puppet's belongings, they actively intervened on behalf of the absent victim by verbally protesting against the transgressions, and subsequently tattling on the transgressor and acting prosocially towards the victim. These behaviours were reduced or entirely absent in a Control condition in which the actor puppet behaved similarly but did not destroy the other puppet's belongings. Thus, children did not respond to the actions *per se* but only to actions that harmed another's property. Three-year-olds thus apply their moral norms in action and in an agent-neutral manner. These results also correspond with recent findings that 3-year-olds punish (by withdrawing help from) individuals who have harmed a third party (Vaish *et al.*, 2010).

Several children in the Harm (but not the Control) condition tattled about the transgressor to the victim. Preschoolers thus tattle not only when they themselves have been harmed (Ingram & Bering, 2010) but also when the transgression affects a third party, at least when the victim was absent during the transgression.

Children in the Harm (but not the Control) condition also acted prosocially towards the recipient. This fits with recent findings (Vaish *et al.*, 2009) that toddlers sympathized with an adult victim even when she showed no distress upon being harmed and they subsequently helped her more if she had been harmed than not been harmed. Moreover, prosocial behaviour towards the victim is an important additional measure because the other two measures – protest and tattling – could conceivably be responses to the violation of a social norm more generally ('Do not destroy others' belongings') rather than out of concern for the victim. However, children's prosocial behaviour towards the victim shows that they did perceive the Harm situation as a moral transgression against the victim.

In sum, young children actively intervene in third-party moral transgressions, and they tattle on the transgressors and act prosocially towards the victims of such transgressions. Already by 3 years of age, then, children demonstrate sophisticated, agent-neutral moral understanding.

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