Children’s sociomoral judgements of antisocial but not prosocial others depend on recipients’ past moral behaviour

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Abstract
This study investigated whether recipients’ past moral or immoral behaviour shapes 4-year-olds’ judgements of the agents who either harm or help the recipients. Children (N = 161) watched the agent who either harmed or helped the antisocial, prosocial, or neutral recipient. Afterwards, children indicated their sociomoral judgement of the agent’s act, their attitude towards the agent and their perception of the agent’s emotions. Children liked the agent more, ascribed less sadness to the agent, and judged the agent’s actions as less bad when the agent inflicted harm against the antisocial recipient than on the prosocial and neutral recipient. The recipient’s past behaviour did not influence children’s evaluations when the agent helped the recipient. The presented evidence indicates that by the age of 4, children develop the ability to use complex moral reasoning that allows them to monitor whether the harmful behaviour of antisocial others is justified by retaliation for past transgressions.

KEYWORDS
harm, moral development, punishment, relationship regulation, social cognition

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In the first year of life, we are capable of evaluating others based on their social behaviour. Research has shown that infants are attracted to prosocial individuals over individuals who act antisocially towards unrelated third parties (Hamlin, Wynn, & Bloom, 2007; Hamlin, Wynn, & Bloom, 2010; Hamlin & Wynn, 2011). This early developmental skill that enables infants to avoid antisocial individuals is maintained in early childhood. For example, children aged 3 avoid helping individuals who harm or intend to harm others (Vaish, Carpenter, & Tomasello, 2010) whereas children aged 4 to 5 give more resources to a puppet whose behaviour was prosocial towards third parties than to a puppet that behaved antisocially towards third parties (Kenward & Dahl, 2011; Olson & Spelke, 2008).

This evidence suggests that from the early stages of our lives, we are capable of not only tracking whether the past actions of others were positive or negative but also responding with appropriate behaviour. One of the universal responses to antisocial behaviour is the willingness to enact punishment, and children's responses are not an exception. Research has demonstrated that 5-year-olds give bad-tasting candies more often to an adult who behaved unethically towards another person than to an adult who behaved neutrally (Kenward & Östh, 2015). Additionally, children allocate more punishment towards children who engage in bad behaviour (Smith & Warneken, 2016). More importantly, children would also sacrifice their resources to punish recipients who acted unfairly or antisocially towards third parties—an act called third-party punishment (e.g., Fehr & Fischbacher, 2004).

Research investigating the development of third-party punishment showed that 4-year-olds enact punishment because they believe that antisocial actions deserve to be punished (Kenward & Östh, 2012). Moreover, when children aged 3 to 4 are in a position of authority, they are more likely to punish their antisocial in-group members rather than out-group members (Yudkin, Van Bavel, & Rhodes, 2020). Finally, 6-year-olds (but not 5-year-olds) are willing to punish other children more when they had previously proposed an unfair rather than fair allocation of resources towards third parties (McAuliffe, Jordan, & Warneken, 2015). Additionally, children aged 6 are also willing to sacrifice their resources to witness the punishment of a wrongdoer (Mendes, Steinbeis, Bueno-Guerra, Call, & Singer, 2017). Overall, the evidence we reviewed suggests that even though children display aversion to harmful behaviour, they are keen to punish individuals who break social norms (e.g., fairness). According to the theory of morality as a form of cooperation (Tomasello & Vaish, 2013), morality facilitates cooperation among humans by promoting the enforcement of social norms. Therefore, children should perceive and judge the punishment of antisocial others who violate social norms as justified.

Research has shown that the sociomoral judgements of infants and young children are not based on simple aversion to harmful behaviour but rather reflect complex moral reasoning concerning the past behaviour of the recipient. For example, 8-month-old infants prefer characters who acted negatively towards antisocial individuals and characters who acted positively towards prosocial individuals (Hamlin, Wynn, Bloom, & Mahajan, 2011). Moreover, research has found that 10-month-olds already expect third parties to act more positively towards a fair donor rather than towards an unfair donor (Meristo & Surian, 2013) and look longer at antisocial actions when they are directed towards the unfair donor than towards the fair donor (Meristo & Surian, 2014). Studies have also shown that recipients’ previous antisocial actions impact 5-year-olds’ intent-based social preferences but not their moral judgements or distributive behaviour (Li & Tomasello, 2018).

This evidence suggests that infants and young children can evaluate acts not solely based on their value but also by considering the value of the recipient’s previous actions. According to the social-cognitive domain theory (Smetana, Jambon, & Ball, 2014; Smetana & Ball, 2018), children in their sociomoral judgements consider not only the act but also the current context and the recipient’s characteristics (Helwig & Principe, 1999; Slomkowski & Killen, 1992). Therefore, children may form sociomoral judgements from different perspectives embedded in different social domains (e.g., moral norms, conventional norms, and social norms). Therefore, immoral behaviour directed towards another person might be judged negatively when the moral norm is considered (it is wrong to hurt others). However, if the behaviour punishes someone who has previously behaved antisocially, children may judge the action positively out of social concern for proper group functioning. These assumptions align with the relationship regulation theory (Rai & Fiske, 2011), which argues that the relational context in which harm occurs defines its acceptability. Therefore,
if children consider who is harmed (e.g., antisocial character) and why (e.g., punishment for past transgressions), then their acceptability of harm should not depend solely on the positive or negative value of the act but rather on the relational status between the agent and the recipient and the current context of the punishment.

In fact, there is evidence that children's moral judgements are influenced by the type of harm (prototypical vs. necessary) and peer relationship context. Specifically, with increasing age (from 5 to 11 years old), children rate more leniently necessary harm (actor transgresses to prevent injury); however, prototypical harm is not less wrong and less deserving of punishment (Jambon & Smetana, 2014). Moreover, children aged 4 to 9 years judge that transgressions against bullies and disliked peers are more acceptable and less deserving of punishment than those against friends (Smetana & Ball, 2018). Finally, recent research has shown that when young children collaborate with partners who help them acquire resources but also harm third parties, their obligation to sustain the beneficial relationship is stronger than their aversion to antisocial others. In the result, children express a positive attitude towards the partner, even though they recognize the partner's actions as immoral (Myslinska-Szarek, Bocian, Baryla, & Wojciszke, 2020). Therefore, we propose that children's sociomoral judgements of individuals who harm others depend on the social and relational context in which antisocial behaviour occurs.

2 | THE PRESENT STUDY

In this paper, we sought to extend past developmental research on the role of the recipient's past moral behaviour in evaluations of antisocial others. We examine 4-year-olds' attitudes, sociomoral judgements, and emotions regarding individuals who either help or harm others who previously acted either prosocially or antisocially. Past research has investigated either infants' preferences of antisocial individuals who acted negatively towards antisocial individuals (Hamlin et al., 2011) or infants' expectations towards acts of third parties directed towards unfair and fair donors (Meristo & Surian, 2013; Meristo & Surian, 2014). However, these studies do not answer the question of why infants prefer characters who harm antisocial others. Therefore, we sought to address this gap by investigating whether 4-year-olds would judge harm inflicted on antisocial others as good or bad. In this way, the present study would answer the question of whether young children prefer characters who harm antisocial others because they evaluate their behaviour as morally good. There are several reasons to assume that children's attitudes (e.g., liking) would be strongly associated with their moral judgements.

First, similarity and dissimilarity to others affect infants' perception of harm (Hamlin, Mahajan, Liberman, & Wynn, 2013). Additionally, preschoolers attribute more guilt to characters whom they do not like (Dumhan & Emory, 2014). More importantly, recent research has shown that preschoolers' patterns of resource distribution follow their normative views (Paulus, Nöth, & Wörle, 2018). Because the distribution of resources is a frequently used indirect measurement of liking (Plötner, Over, Carpenter, & Tomasello, 2015; Vogelsang & Tomasello, 2016), these results suggest that children's attitudes follow their moral judgements.

Second, studies on adults have shown that attitudes (e.g., liking) and judgements of moral character are strongly associated (Wojciszke, 2005). Individuals described as helpful, kind, and non-egoistic are liked much more than individuals described as envious, malicious, and unfair are (Wojciszke, Abele, & Baryla, 2009). Moreover, liking an actor explains why observers judge the actor's unethical behaviour as less wrong when this behaviour serves the observer's interests (Bocian & Wojciszke, 2014). Finally, research directly investigating whether interpersonal attitudes influence judgements of moral character found that positive attitudes biased perceptions of others' moral character (Bocian, Baryla, Kulesza, Schnall, & Wojciszke, 2018). Also, a different line of inquiry showed that preferences for moral vs. immoral traits in others depend on our current goals. Specifically, it was found that moral traits increase liking when morality advances our goals, but when immorality is conducive to our goals, the preference for moral traits is eliminated or reduced (Melnikoff & Bailey, 2018).

To probe whether children consider the recipient's past moral behaviour when harm occurs, we introduced a control condition that did not include information regarding the recipient's past prosocial or antisocial behaviour.
In this way, the present study would answer the question of whether children's sociomoral judgements of harm (vs. help) account only for the valence of the act (helping vs. harming) or for the recipient's past behaviour (prosocial vs. antisocial vs. neutral). Specifically, we assumed that children would like the agent who harms the antisocial recipient (vs. the neutral recipient) more and would like the agent who harms the prosocial recipient (vs. the neutral recipient) less. Because children's moral judgements should follow their attitude judgements, we assumed that children would judge the harm inflicted on an antisocial recipient as less bad than the harm inflicted on a prosocial recipient than the harm inflicted on a neutral recipient.

A novel contribution of the present study was that we also investigated how children attribute emotions to individuals who harm others based on the recipient's past moral behaviour. Past research has shown the happy victimizer phenomenon, which indicates that children at the age of 6 or 7 attribute positive emotions (e.g., happiness) to those who harm others (Arsenio & Kramer, 1992; Krettenauer, Malti, & Sokol, 2008; Murgatroyd & Robinson, 1993). However, different research has found evidence that the expression of an apology reversed the happy victimizer phenomenon, showing that children attributed negative feelings to the wrongdoer who apologized and positive feelings to the wrongdoer who did not (Smith, Chen, & Harris, 2010). Additionally, we have evidence that younger children struggle with understanding how the transgressor might feel after wrongdoing. For example, it has been shown that when no display of guilt was present, 4-year-olds but not 5-year-olds still thought that the transgressor felt bad (Vaish, Carpenter, & Tomasello, 2011, Study 1). Only when the transgressor displayed guilt with an apology were the 4-year-olds able to draw the same conclusion as the 5-year-olds about the wrongdoer's feelings (Vaish et al., 2011, Study 2). Finally, in the context of peer relationships, research has shown that children aged 4 to 9 years attributed less negative emotion to actors transgressing against bullies than against friends (Smetana & Ball, 2018). Therefore, it seems essential to investigate whether the happy victimizer phenomenon occurs when information on the recipient's moral behaviour is introduced.

On the one hand, past studies suggest that while older children (6 to 7 years old) attribute positive emotions to antisocial characters (Arsenio & Kramer, 1992; Krettenauer et al., 2008; Murgatroyd & Robinson, 1993). On the other hand, and importantly for the present study, research has demonstrated that the relational context shapes young children's attribution of emotions because children attribute less negative emotion to characters who transgress against bullies (Smetana & Ball, 2018). Therefore, we hypothesized that the recipient's past moral behaviour would impact children's attributions of emotions to the agent who harms (vs. helps) the recipient. Specifically, we predicted that compared with the control group, 4-year-olds would attribute less negative emotion to an agent who harmed an antisocial recipient and more negative emotion to an agent who harmed a prosocial recipient.

2.1 Method

In this paper, we report all measures, all manipulations, and any data exclusions. This study was found exempt by the Ethics Committee Chair, Faculty of Psychology, [redacted], [redacted], because there was no deception during the experimental manipulation and because children's parents, based on a full description of the procedure, consented to their children's participation in the experiment. The data that support the findings of the presented study are openly available at https://osf.io/tu3hs/.

2.1.1 Participants

The participants were 4-year-old children (N = 161; 85 girls, 77 boys) who were between the ages of 44 months and 63 months (M = 52.74 months, SD = 4.0 months). Fifteen additional children were tested but were excluded from data analysis due to experimenter error (four children), excessive shyness (five children), inability to understand the experimental procedure (3 children) or distraction and lack of response to the experimenter’s questions
(three children). Children were recruited from kindergartens in a medium-sized city in Poland. No data on ethnicity or socioeconomic status were collected, but approximately 99% of the population from which the sample was drawn was native Polish, and the population includes a broad mix of socioeconomic backgrounds. All children were healthy with no disabilities. The data were collected between January and September 2018. Based on a sensitivity power analysis, this sample size provides 0.80 power for the detection of an effect size of $f^2 = 0.17$.

### 2.1.2 Design and materials

Children were tested individually in a separate room in their kindergartens and randomly assigned to one of the six conditions based on a 2 (the agent: helper vs. harmer) × 3 (the recipient: prosocial vs. antisocial vs. neutral) between-subjects design (24–29 children per condition). First, we measured children’s attitudes towards puppets (a lion and a bear) using a 5-point scale (five different-sized stars, see the Supplement) to control for the possible influence of preferences on their later responses. Figure 1 presents a summary of the experimental procedure.

### 2.1.3 Procedure

In the first phase, children received knowledge about the past act of the recipient (prosocial vs. antisocial vs. neutral). Under the supervision of a researcher, each child watched a video with two puppet characters—either a lion or a bear (Puppet 1) acting prosocially, antisocially or neutrally towards a giraffe (Puppet 2). In the video, the giraffe (Puppet 2) built a tower block from Lego Duplo coloured blocks. Puppet 1 then appeared and, depending on the research condition, located a lost brick for the giraffe (the prosocial act), destroyed the giraffe's tower (the antisocial act) or acted neutrally (no action).

In the second phase, children watched another video showing a new interaction between the recipient that previously acted prosocially or antisocially or neutrally (Puppet 1) and new actor (Puppet 3). In the video, children either watched the agent puppet verbally expressing willingness to help (e.g., I will help you find your lost brick) or something else.

**FIGURE 1** The experimental procedure. In the first phase, children watched the video showing the recipient puppet acting antisocially, prosocially, or neutrally. The recipient puppet is the lion or the bear puppet (counterbalanced), which either helped the giraffe puppet locate the lost brick or destroyed the giraffe’s tower. During the second phase, children watched the video showing the agent puppet helping or destroying the recipient’s puppet tower. After watching both videos, we asked children to make sociomoral judgements about the agent puppet.
and then helping locate the recipient’s puppet brick (the helping actor) or watched the agent puppet verbally expressing willingness to harm (e.g., I will destroy your tower) and then destroying the recipient’s puppet tower (the harming actor). The videos from both the first and second phases were separated by a short break with a falling curtain, indicating that the scenes and performing puppets were independent of each other (see the Supplement for the video examples). For each condition, we counterbalanced which puppet—the lion or the bear—was the agent puppet or the recipient puppet.

After watching both videos, the first researcher left the room, and the second researcher, blind to the hypothesis and research condition, first asked children about the videos to probe whether they perceived them as two separate scenes (see the Supplement for more information). Then, she asked children several questions about the agent’s behaviour. The questions were asked in the following fixed order: (1) Liking: ‘How much do you like the lion/bear right now? Can you show which of the five stars you picked for the lion/bear puppet?’ (2) Sociomoral judgement: ‘Do you think the lion/bear acted in a good or bad way? If you think it was bad, please point out how bad it was (five different-sized thunderbolts), or if it was good, how good was the behaviour (five different-sized suns)?’ (3) Emotions: "Do you think the (lion/bear) was happy or sad? If you think it was happy, please point out how happy it was (five different-sized happy faces), or if it was sad, how sad it was (five different-sized sad faces; see the Supplement for more information).

2.1.4 Coding

All judgements were assessed on 5-point scale. For the liking judgement, scores ranged from 1 (I do not like it at all) to 5 (I like it very much), with 3 (I do not know) as the neutral value. The sociomoral judgement was rated on a 5-point scale and was coded based on the way in which the children had seen the act. For bad judgement, scores ranged from −5 (extremely bad) to −1 (slightly bad) whereas for good judgement, scores ranged from 1 (slightly good) to 5 (extremely good) without a zero midpoint. Judgement of emotions was also rated on a 5-point scale and was coded based on the way in which the children attributed emotions to the agent. For the sad emotion, scores ranged from −5 (extremely sad) to −1 (slightly sad) whereas for the happy emotion, scores ranged from 1 (slightly happy) to 5 (extremely happy) without a zero midpoint.

2.2 Results

2.2.1 Manipulation checks

The repeated t test analysis showed that the bear and the lion were equally liked before the experiment (M = 4.70, SD = 0.56 vs. M = 4.56, SD = 0.76, respectively; t(160) = 1.71, p = .090).

2.2.2 Liking

We subjected the liking measurement to a two-way analysis of variance in a 2 (the agent: helper vs. harmer) × 3 (the recipient: prosocial vs. antisocial vs. neutral) design. The analysis revealed the main effect of the agent’s act (F(1, 155) = 169.80, p < .001, $\eta^2_p = .52$) and the main effect of the recipient’s past behaviour (F(2, 155) = 10.81, p < .001, $\eta^2_p = .12$; see Table 1). More importantly, these effects were qualified by a significant interaction between the agent’s act and the recipient’s past behaviour (F(2, 155) = 25.02, p < .001, $\eta^2_p = .24$). The interaction was such that the recipient’s past behaviour had no impact on the children’s liking of the helping agent (F(2, 76) = 2.41, p = .097) but
shaped the children’s liking of the harming agent \( (F(2, 79) = 26.34, p < .001, \eta^2_p = .40) \). As expected, children’s basic aversion towards the harming agent (vs. helping agent) in the control condition \( (M = 3.11, SD = 0.96) \) was modified by the recipient’s past behaviour. Specifically, children display a positive attitude towards the agent who harmed the antisocial recipient \( (M = 3.84, SD = 1.02, p = .025) \) and a negative attitude towards the agent who harmed the prosocial recipient \( (M = 1.90, SD = 1.01, p < .001; \text{see Figure 2}) \).

\[ \text{TABLE 1} \]

Means and standard deviations for liking judgement as a function of a 2 (the agent: helper vs. harmer) × 3 (the recipient: prosocial vs. antisocial vs. neutral) design

| Recipient   | Helper | Harmer | Marginal |
|-------------|--------|--------|----------|
|             | \( M \) | \( SD \) | \( M \) | \( SD \) | \( M \) | \( SD \) |
| Prosocial   | 4.92   | 0.28   | 1.90     | 1.27     | 3.26   | 1.70   |
| Antisocial  | 4.50   | 0.92   | 3.84     | 1.02     | 4.19   | 1.02   |
| Neutral     | 4.74   | 0.66   | 3.11     | 0.96     | 3.91   | 1.16   |
| Marginal    | 4.71   | 0.70   | 2.90     | 1.27     |        |        |

Note: \( M \) and \( SD \) represent the mean and standard deviation, respectively.

\[ \text{FIGURE 2} \]

Impact of recipient’s past social behaviour on children’s liking score of the helping or harming agent. Error bars represent standard error. Liking scores were rated on a 5-point scale ranging from 1 (I do not like it at all) to 5 (I like it very much), with 3 (I do not know) as the neutral value.

2.2.3 | Sociomoral judgement

The sociomoral judgement of the helping or harming agent was subjected to a similar 2 × 3 two-way analysis of variance. This analysis yielded the main effect of the agent’s act \( (F(1, 155) = 575.22, p < .001, \eta^2_p = .79) \) whereas the main effect of the recipient’s past behaviour was nonsignificant \( (F(2, 155) = 1.49, p = .230; \text{see Table 2}) \). However, the interaction between the agent’s action and the recipient’s past behaviour was significant \( (F(2, 155) = 6.51, p = .002, \eta^2_p = .08) \). The interaction was such that the recipient’s past behaviour had no impact on the children’s sociomoral judgement of the helping agent \( (F(2, 76) = 1.28, p = .283) \) but shaped children’s sociomoral judgement of the harming agent \( (F(2, 79) = 7.56, p = .001, \eta^2_p = .16) \). As predicted, children’s sociomoral judgement regarding harm (vs. help) in the control condition \( (M = -4.39, SD = 2.00) \) was modified by the recipient’s past behaviour. Specifically, children judged harming acts as less bad when the recipient was antisocial \( (M = -2.68, SD = 2.13, p = .007) \). However, contrary to expectations when the recipient was prosocial, children’s
TABLE 2  Means and standard deviations for sociomoral judgement as a function of a 2 (the agent: helper vs. harmer) × 3 (the recipient: prosocial vs. antisocial vs. neutral) design

| Recipient | Agent | Helper | | | | Harmer | | | | | Marginal | | |
|-----------|-------|--------|----|----|--------|----|----|--------|----|----|--------|----|
|           |       |        | M | SD | M | SD | M | SD |
| Prosocial |       | 4.92   | 0.28 | -4.66 | 1.86 | -0.32 | 5.00 |
| Antisocial|       | 3.90   | 2.94 | -2.68 | 2.13 | 0.79 | 4.19 |
| Neutral   |       | 4.19   | 0.28 | -4.39 | 2.00 | -0.18 | 4.91 |
| Marginal  |       | 4.30   | 2.36 | -3.96 | 2.15 |        |      |

Note: M and SD represent the mean and standard deviation, respectively. Positive values represent judgements coded as good (1 to 5). Negative values represent judgements coded as bad (−1 to −5).

FIGURE 3  Impact of the recipient’s past social behaviour on children’s sociomoral judgement of the helping or harming agent. Error bars represent standard error. Sociomoral judgement was rated on a 5-point scale. For bad judgement, scores ranged from −5 (extremely bad) to −1 (slightly bad). For good judgement, scores ranged from 1 (slightly good) to 5 (extremely good)

sociomoral judgement was no different from that of children in the control condition (M = −4.66, SD = 1.86, p = .873; see Figure 3).

2.2.4 | Emotions

Finally, we tested whether the recipient’s past social behaviour affected children’s perception of the agent’s feelings. This analysis revealed the main effect of the agent’s act (F(1, 134) = 184.72, p < .001, η²_p = .58) whereas the main effect of the recipient’s past behaviour was nonsignificant (F(2, 134) = 2.39, p = .096; see Table 3). However, once again, the interaction between the agent’s action and the recipient’s past behaviour was significant (F(2, 134) = 4.50, p = .013, η²_p = .06). The recipient’s past behaviour had no impact on the children’s emotional attribution of the helping agent (F(2, 64) = 2.77, p = .071) but influenced their emotional attribution of the harming agent (F(2, 70) = 3.80, p = .027, η²_p = .10). As assumed, in comparison to the control condition (M = −3.36, SD = 3.15), children attributed less sadness to the harming agent when the recipient was antisocial (M = −1.26, SD = 3.18, p = .022), but contrary to expectations, children did not perceive the harming agent to be more sad when the recipient was prosocial (M = −3.48, SD = 3.02, p = .892; see Figure 4).1
Although much research has examined the development of children's preferences and behaviour regarding prosocial and antisocial individuals, little research has investigated how the past moral behaviour of the recipient shapes children's sociomoral judgements of helping and harming characters. In this paper, we addressed this scarcity by demonstrating that 4-year-olds' attitudes, sociomoral judgements and attributions of emotions in response to an agent's helping or harming behaviour depend on the recipient's past prosocial or antisocial behaviour. In the present study, we have shown that children's aversion to characters who harm others was attenuated when harm was inflicted on the antisocial individual and strengthened when harm was inflicted on the prosocial individual. As expected, the recipient's past behaviour has also shaped children's sociomoral judgement. Specifically, children judged harming the antisocial recipient as less bad than harming the prosocial or neutral recipient. Finally, children's attributions of emotions were also influenced by the recipient's past behaviour. Children attributed less sadness to the agent who harmed the antisocial recipient than to the agent who harmed the prosocial or neutral recipient. Overall, the present study significantly contributes to the literature by presenting evidence that children's sociomoral judgements do not reflect simple aversion to harmful behaviour but rather complex moral reasoning concerning whether the recipient's past behaviour was good or bad.
3.1 | Theoretical contribution

First, while previous research has focused on infants’ preferences (Hamlin et al., 2011) and expectations (Meristo & Surian, 2013; Meristo & Surian, 2014) regarding characters who acted positively or negatively toward prosocial or antisocial others, we examined whether children perceived help or harm as good or bad depending on the past social behaviour of the recipient. Therefore, the present study corroborates past studies that have shown that children believe that transgressions against bullies are more acceptable and less deserving of punishment (Smetana & Ball, 2018) by providing evidence that children not only display a positive attitude toward individuals who harm antisocial others but also judge their harmful behaviour as less bad. Second, this finding suggests that children's willingness to punish others who violate norms of fairness (McAuliffe et al., 2015), such as in-group members (Yudkin et al., 2020), and to witness the punishment of wrongdoers (Mendes et al., 2017) is motivated not only by the belief that antisocial actions deserve to be punished (Kenward & Östh, 2012) but also by the perception of punishment as morally justified.

The present results suggest that children's sociomoral judgements of antisocial others depend on the recipient's past behaviour and are, therefore, inherently relational, as proposed by the social-cognitive domain theory (Smetana et al., 2014; Smetana & Ball, 2018). Past research has shown that children's moral judgement reflects their concern for others' welfare because children rated necessary harm to be less wrong and less deserving of punishment than prototypical harm (Jambon & Smetana, 2014). Evidence found in the present study corroborates these results by showing that children’s acceptability of harming others depends on the relational context between the recipient and the agent. Therefore, the present study may suggest that children judged harm inflicted on an antisocial individual (vs. a neutral or prosocial individual) as less bad because their sociomoral judgements are motivated by concern for others' welfare and the protection of social norms. In this way, the present research contributes to relationship regulation theory (Rai & Fiske, 2011) and the theory of virtuous violence (Fiske & Rai, 2014), which describes violence as justified or even required if it is committed in retaliation for a previous transgression (i.e., eye for an eye).

Our work contributes to past research investigating the happy victimizer phenomenon (Arsenio & Kramer, 1992; Krettenauer, Malti, & Sokol, 2008; Murgatroyd & Robinson, 1993; Smetana & Ball, 2018; Smith et al., 2010; Vaish et al., 2011). In the present study, children judged individuals who harmed antisocial others as less sad than individuals who harmed prosocial or neutral others. This result suggests that at the age of 4, information about the past moral behaviour of the target shape children’s beliefs about the transgressor’s feelings. This evidence corroborates past research that has shown that children attribute less negative emotion to characters when they transgress against bullies (Smetana & Ball, 2018). Therefore, the present study suggests that the happy victimizer phenomenon might be moderated by the information about the victim's past moral behaviour.

In addition, past research has shown that when the transgressor does not present guilt, 4-year-olds but not 5-year-olds still think that the transgressor feels bad (Vaish et al., 2011). In the present study, that lack of guilt display after transgression could shape children's beliefs about the transgressor’s feelings. Future studies investigating the happy victimizer phenomenon should vary both information: victim's moral character and transgressor's display of guilt to determine which information has a more substantial impact on children’s beliefs about the transgressor’s feelings.

3.2 | Limitations and further directions

We recognize that our work has some limitations that might warrant future research. For example, recent research regarding intention-based judgements has found that 3- and 5-year-olds' sociomoral judgements were not sensitive to the social context of the past behaviour of the recipient (Li & Tomasello, 2018). The different focus
of the past and present study may explain the discrepancy in the results. While the study of Li and Tomasello (2018) aimed to investigate intent-based sociomoral judgements, our work tested outcome-based sociomoral judgements. We may only speculate that the joint influence of the agent's intention, the outcome of the agent's behaviour and the past recipient's social behaviour was cognitively too demanding to affect children's sociomoral judgements. Therefore, the answer to the question of whether older children's intent-based and outcome-based sociomoral judgements are affected by the past behaviour of the recipient warrants future research.

The interesting finding of the present research is that the recipient's past social behaviour did not affect children's sociomoral judgement of the helping agent. One plausible explanation is that we found ceiling effects for sociomoral judgement of prosocial recipients. Future studies could use 7- or even 11-point scale to capture more nuanced differences in children's judgements of harm directed towards prosocial individuals. Another plausible explanation is that adverse events are more blatant for children, and therefore, they pay more attention to them. Previous studies showed a strong negativity bias in children of all ages (Rozin & Royzman, 2001; Vaish, Grossmann, & Woodward, 2008). Moreover, young children expect others to behave prosocially towards third parties (Smith, Blake, & Harris, 2013; Schmidt & Sommerville, 2011). Also, according to the theory of virtuous violence (Fiske & Rai, 2014), harm must be justified, and information about the recipient's previous behaviour might serve as a plausible premise. This explanation is consistent with studies that have shown that for adults, treating immoral events as impossible is a default option (Phillips & Cushman, 2016). Therefore, children in our study could be more impacted by the agent's antisocial behaviour than by the agent's prosocial behaviour because the prosocial behaviours may be perceived by young children as default and not requiring justification.

Future studies might also investigate to what extent a Theory of Mind assessment, specifically, false beliefs about the agent's knowledge of the recipient's past behaviour could explain the present results. On the one hand, research has shown that ToM has a significant impact on preschoolers' moral judgements (Leslie, Knobe & Cohen, 2006; Knobe, 2005) and longitudinal research has confirmed that with age, the ability to make complex moral judgements based on ToM increases (Smetana, Jambon, Conry-Murray, & Sturge-Apple, 2012). On the other hand, studies have found evidence that 3-year-olds are not aware that others might have moral beliefs different from their own and judge others' actions correspondingly with their own beliefs. Only 5-year-olds are better in differentiating their own moral beliefs from the beliefs of other people (Wainryb & Ford, 1998). Moreover, even though 4-year-olds can attribute false beliefs, research has demonstrated that this ability is fully developed no sooner than by the age of 5 (Sullivan, Zaitechik, & Tager-Flusberg, 1994). Recent research has suggested that lack of fully developed ability to attribute false belief about the agent's knowledge might explain why the past moral behaviour of the recipient did not impact 3-year-olds' intent-based moral judgment (Li & Tomasello, 2018).

It is, therefore, possible that 4-year-olds in our study based their moral judgements on their knowledge of the recipient's previous behaviour. Accordingly, children in our study could prefer agents who act negatively towards antisocial recipients because they might believe that agents have the same knowledge about the recipient's past behaviour as they have. Moreover, research has demonstrated that 4-years-olds judge the act as intentional if its consequences were negative versus positive (Leslie et al., 2006). Hence, one could argue that the asymmetry between the helper and harmer evaluations in our study appeared because children might be more likely to extend the false belief to the harmer than the helper. More studies involving older children (above the age of 4) and an additional measure of ToM are needed to investigate how ToM development affects sociomoral judgements of acts aimed at the recipients who behaved prosocially or antisocially in the past.

Finally, we used hand puppets as the agent and the recipient to ensure the most standardized experimental conditions. Although using hand puppets instead of a real people is frequently used method in studies on the preschoolers' sociomoral judgements (e.g., Margoni & Surian, 2020; Plötner, Over, Carpenter, & Tomasello, 2015; Van de Vondervoort & Hamlin, 20172017), we cannot rule out that children could not see the experimental task as a real social situation. Therefore, conceptual replication of present studies with peers instead of puppets is needed.
4 | CONCLUSION

In conclusion, although children judged harmful behaviour as bad and perceived harmful individuals as sad, their judgements changed under the influence of the past antisocial behaviour of the target. We demonstrated that 4-year-old children judged harm as less bad and harmful individuals as less sad when their behaviour was directed at the antisocial recipient. More importantly, we found evidence that children display a positive attitude towards individuals who harm antisocial others, proving that children’s aversion to harm and antisocial others might be prevented when it is justified by recipients’ past transgressions. Therefore, the present results indicate that by the age of 4, children consider the recipient’s past moral behaviour in their sociomoral judgements of harm and antisocial agents, which requires skills reflecting complex moral reasoning.

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CONFLICT OF INTEREST
We have no known conflict of interests to disclose.

DATA AVAILABILITY STATEMENT
The data are openly available at https://osf.io/tu3hs/.

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ENDNOTE
1 All the effects for liking, sociomoral judgement and emotions remained significant ($p<.001$) when we controlled for the children’s initial liking score of both the agent and the recipient.

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SUPPORTING INFORMATION
Additional Supporting Information may be found online in the Supporting Information section.

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