



THE UNIVERSITY *of* EDINBURGH

Edinburgh Research Explorer

The effect of intent and character information on children's evaluations of third-party transgressions

Citation for published version:

Cameron, S, Wilks, M & Nielsen, M 2023, 'The effect of intent and character information on children's evaluations of third-party transgressions', *Social Development*, pp. 1–14.
<https://doi.org/10.1111/sode.12675>

Digital Object Identifier (DOI):

[10.1111/sode.12675](https://doi.org/10.1111/sode.12675)

Link:

[Link to publication record in Edinburgh Research Explorer](#)

Document Version:

Publisher's PDF, also known as Version of record

Published In:

Social Development

General rights

Copyright for the publications made accessible via the Edinburgh Research Explorer is retained by the author(s) and / or other copyright owners and it is a condition of accessing these publications that users recognise and abide by the legal requirements associated with these rights.

Take down policy

The University of Edinburgh has made every reasonable effort to ensure that Edinburgh Research Explorer content complies with UK legislation. If you believe that the public display of this file breaches copyright please contact openaccess@ed.ac.uk providing details, and we will remove access to the work immediately and investigate your claim.



The effect of intent and character information on children's evaluations of third-party transgressions

Sophie Cameron¹  | Matti Wilks² | Mark Nielsen^{1,3}

¹Early Cognitive Development Centre, School of Psychology, University of Queensland, Brisbane, Australia

²Department of Psychology, The University of Edinburgh, Edinburgh, Scotland

³Faculty of Humanities, University of Johannesburg, Auckland Park, South Africa

Correspondence

Sophie Cameron

Email: sophie.cameron@uqconnect.edu.au

Abstract

Research in adults suggests that their perception of moral transgressions is affected by the moral character of the agent performing the transgression, such that undesirable actions enacted by 'good' agents are seen as less serious than those performed by 'bad' agents. This may be partly driven our tendency to view undesirable acts as less intentional when the agent has a perceived good moral character. It is currently unclear whether or not children make similar judgements. Therefore, we investigated if children's use of moral character information is consistent with their judgements of transgressions when the intent behind the act was ambiguous or blatant. Children aged 6–8-years ($N = 60$) viewed a series of six moral transgressions in which the protagonist's intent was ambiguous or blatantly harmful, and their moral character was described as being *good*, *mixed* or *bad*. The children were then asked how much they felt the behaviour was intentional, how severe it was and the degree of punishment it deserved. Transgressions performed by 'good' characters were viewed as less intentional than those by 'bad' characters, but only when the intent behind it was ambiguous. Similarly, transgressions performed by good characters were viewed as less severe

This is an open access article under the terms of the [Creative Commons Attribution](https://creativecommons.org/licenses/by/4.0/) License, which permits use, distribution and reproduction in any medium, provided the original work is properly cited.

© 2023 The Authors. *Social Development* published by John Wiley & Sons Ltd.

and deserving of less punishment than those performed by bad characters, although this effect was not moderated by intent information. These pattern of findings suggest that the view of transgressions performed by good individuals as less serious than the same act performed by bad individuals is established early in development.

KEYWORDS

blame, intent, moral character, moral evaluations, punishment

1 | INTRODUCTION

Human societies are characterised by their large-scale cooperation, which is in part underpinned by complex judgements about the moral acts of others (Fehr & Fischbacher, 2004; Gintis et al., 2008). Many factors can affect these judgements, such as the consequences of the act (Daniel et al., 2014), the degree of causality (Cushman & Young, 2011) and mitigating circumstances (Darley & Zanna, 1982; Pnevmatikos, 2018). However, there is also evidence of factors outside of the act itself affecting judgements about moral transgressions. We discuss the ways in which moral character and intent may interact to influence judgements.

1.1 | Adults' use of character and intent

Of particular importance is the moral character of the agent performing the transgression. Whilst there are many possible definitions, moral character generally refers to an individual's "normal pattern of thought and action, especially in matters relating to the happiness of others and of ... [themselves], most especially in relation to moral choice" (Kupperman, 1991, p. 13). Adults make quick and automatic judgements about the moral character of others based on very little behavioural information and use these judgements to predict future behaviour. They also seem to use it when evaluating behaviour, with evidence showing that observers may condemn a transgression less when given information to suggest that the violating agent has a good moral character than when given information suggestive of poor moral character. In line with this, Alicke and Zell (2009) found that adults are less likely to blame pleasant characters (e.g., polite, helpful and honest) than unpleasant characters (e.g., rude, unhelpful and dishonest) for committing identical transgressions. Furthermore, Nadler and McDonnell (2012) found observers attributed less blame to an agent who accidentally caused a fire due to improper storage of oxygen tanks when this occurred for a noble reason (for their sick daughter) than an ignoble one (to help college athletes cheat), and Nadler (2012) found that an agent with a good moral character is given less blame than one with a bad moral character for a reckless decision resulting in the death of another.

Across these studies the manipulation of moral character affects not just the assignment of blame, but also the perception of factors such as the causality, foreseeability or intentionality of the event; suggesting deep-rooted effects of moral character perception (Alicke & Zell, 2009; Kliemann et al., 2008; Nadler, 2012; Nadler & McDonnell, 2012; Siegel et al., 2017). In the case of intent, Kliemann et al. (2008) allowed participants to observe multiple rounds of an economic game whereby some agents' decisions suggested a fair moral character, and others suggested an unfair character. Participants were then told about potential transgressions these agents had performed in which the intent was unknown (e.g., shrinking someone's sweater). Participants rated the actions performed by unfair characters as both more intentional and more blameworthy. Some have suggested that this is the mechanism via which moral character

affects evaluations, with moral character influencing intent evaluations, which in turn influence evaluations such as blame (Alicke, 1992; Guglielmo & Malle, 2017; Malle et al., 2014).

1.2 | Children's use of moral character

Like adults, children are attuned to the moral behaviours of others, and use it to guide their social interactions. When given the choice between a prosocial and antisocial puppet, pre-schoolers will selectively punish the antisocial puppet (Van de Vondervoort & Hamlin, 2017) and give more resources to the prosocial puppet (Kenward & Dahl, 2011). Even infants as young as 29 months old express a preference for prosocial agents over antisocial ones (Buon et al., 2014), and will incur a personal cost to avoid interacting with an antisocial agent (Tasimi & Wynn, 2016).

However, whilst an early emerging sensitivity to the moral valence of actions is shown from infancy, an adult conception of moral character may not emerge until later in development (Gelman et al., 2007; Kalish & Shiverick, 2004; Rholes & Ruble, 1984; Taborda-Osorio et al., 2019). Unlike adult's rapid trait inferences, younger children seem to require exposure to a higher quantity of behavioural occurrences to infer the presence of a trait (Boseovski & Lee, 2006; Brambilla et al., 2019; Kalish, 2002; Willis & Todorov, 2006), and they seem to predict future behaviour better from explicit trait information than from information about past behaviour (Liu et al., 2007). Whilst some studies suggest children understand traits and character by 4–5 years (Chen et al., 2016), others suggest that it is not until 8 years that children possess an adult like understanding of moral character and personality (Liu et al., 2007).

Like adults, children's judgements of current transgressions have been found to be coloured by previous moral behaviour. Nisan & Horenczyk (1990) found that 11–13 year olds preferred to allow a normally good than a normally bad person to misbehave. More recently, Cameron et al. (2022), demonstrated that by 6 years of age, children viewed transgressions performed by agents with a negative moral character more negatively than those with a positive moral character. In this study, 6–8-year-old children rated transgressions performed by negative characters as both more severe, and worthy of more punishment. Whilst this demonstrates that by middle-childhood children are using moral character in their evaluation of transgressions, it is unclear whether this character information is also affecting their perception of other factors of the transgression, such as intent.

1.3 | Children's use of intent

Much research has focused on children's understanding on the importance of intent in moral transgressions with children early in their development focusing more on the outcomes of an action. For example, Piaget (1932) demonstrated that very young children judge it worse to cause a large spill by accident than a small spill intentionally. Children undergo an 'action-to-intention' shift through middle childhood. Whilst it is clear that with increasing age children show concomitant sensitivity to intent, the age at which intent is considered more important than outcomes is debated, with various studies placing it anywhere between 3 and 10 years, and often varying as a function of the specific task (Cushman et al., 2013; Gummerum & Chu, 2014; Killen et al., 2011; Li & Tomasello, 2018; Nobes et al., 2009, 2017). Broadly, research indicates that intent information is weighted more heavily when it is explicit rather than implied (Gummerum & Chu, 2014; Nobes et al., 2017), and when children are making a judgment of acceptability rather than punishment (Cushman et al., 2013). Current understanding seems to suggest that children are sensitive to intent information by age 5, particularly if it is explicit (Cushman et al., 2013).

When making their intent evaluations, there is evidence that pre-school age children will be influenced by the outcome of an event. The side-effect effect has been demonstrated in this age range, whereby children judge an act with a negative side-effect to be intentional, even if the agent explicitly stated that they did not care about that outcome (Leslie et al., 2006; Pellizzoni et al., 2009; Rakoczy et al., 2015). Finally, from this age children will use intent information to inform their trait evaluations, such as inferring an agent is mean after intentionally causing harm, but

not if it is accidental (Heyman & Gelman, 1998), demonstrating that children of this age are making links between moral character and intent. However, we are aware of no research examining whether this process works in the opposite direction, such that children use moral character information when making judgements about an agent's intentions.

1.4 | The current research

Whilst we have some understanding of how and when children use moral character and intent in their judgements, a number of questions remain. This study aimed to further explore the relationship between moral character and intent in two ways. First, we investigated whether children use moral character in their evaluations of the intent behind a transgression. Second, we investigated whether their evaluations of intent and condemnation are related, such that perceived intentions shape later condemnation.

Understanding these relationships is important as, in work with adults, perceived intent has been suggested as one of the underlying mechanisms that explains how character information comes to impact moral judgement (Alicke, 1992, 2000; Siegel et al., 2017). Establishing if children use intent similarly will lead to greater understanding of the ways in which interpreting others' behaviour emerges and how moral judgements develop. Such understanding is important for those wishing to instil mature decision making in the developing mind (e.g., if young children do not routinely consider intent when evaluating others, it may prove valuable to encourage them to do so) and potentially for those engaging with young audiences (e.g., if a narrative relies on recognition of intent behind a protagonist's actions pitched at young audiences may need to be more explicit than is the case for an adult audience).

We tested children aged 6–8 years, as at this age children are using intent information in their behaviour appraisals and are using their developing understanding of moral character in their evaluations of transgressions. The children were introduced to agents of varied moral characters (good, mixed and bad). Each of these agents then engaged in a moral transgression. For half of the cases, the transgression was blatant—it was explicitly stated that the agent intended to commit the transgression. For the other half, the transgression was ambiguous—it was stated that the intent behind the action is unknown. For each transgression children were then asked to report the degree of intentionality they attributed to the action, how severe the transgression was, and whether it deserved a punishment or a reward.

We expected that, in line with Cameron et al. (2022), children's level of condemnation would vary based on the moral character of the agent performing the transgression, such that when compared with a baseline of mixed morality, 'bad' children would receive more condemnation and 'good' children receive less condemnation. We also hypothesised that children would perceive transgressions performed by 'bad' children as more intentional than those performed by 'good' children. Finally, if intention is one of the mechanisms by which moral character impacts evaluations, the effect of moral character should be stronger for ambiguous transgressions, as intent is open for interpretation. For blatant transgressions, where the intent was explicitly negative, we expected the effect of moral character on condemnation to be weaker.

2 | METHOD

2.1 | Open science

This study was preregistered on the Open Science Framework https://osf.io/7da29/?view_only=203aceb4887c4cbdb5c2f7e5fd0e0f02.¹ The materials, data and code are also made available at https://osf.io/rwxhu/?view_only=9fdbcefe6efb4184baae39c9602bd714.

2.2 | Participants

We recruited a sample of 60 children between 6- and 8-years old (31 female, $M = 89.18$ months, $SD = 10.10$). This sample size was decided a priori, and gave us adequate power (.82) to detect a small to medium effect ($f = .17$) with an alpha level of .05, for a within-participants ANOVA. Of these, a total of 49 children were recruited at a large metropolitan science museum. At the time of testing parents were asked to complete an optional demographic survey. Of the participants who took part in studies during this period, the majority reported their child's ethnicity as Australian (81.20%). Of the remainder, 5.47% reported their ethnicity as Asian, 3.91% reported were European, 1.56% were American and 7.81% preferred not to volunteer this information. The majority reported that only English was spoken at home (64.80%), with 30.5% indicating another language was also spoken and 4.69% not volunteering this information.

Due to challenges encountered in recruiting and testing during the COVID pandemic, an additional 11 children were tested via the web-conferencing software, Zoom.² Parents who had previously expressed an interest in having their children participate in research were recruited via email. When they were contacted, parents filled out a short demographic survey. In this survey, the majority of parents reported their child's ethnicity as Caucasian (81.82%). Of the remainder 18.18% were Asian and 9.10% were Pacific Islander (parents could report more than one ethnicity). In addition to this, the majority (90.91%) reported speaking only English at home. Finally, the parents of the sample were well educated, 100% having completed secondary schooling and undertaking additional education, such as university or a trade.

2.3 | Procedure

This study used a within-participants design, with each child participating in six trials. Each trial consisted of one moral scenario, with subsequent associated measures assessing children's perception of the scenario. Of the six scenarios, three depicted ambiguous intentions (Hit, Break, Scare) and three depicted blatant intentions (Taunt, Unfairness, Steal). Each scenario was accompanied by a picture of the actions described. Figures 1 and 2 show an example of each



FIGURE 1 © 2021 GoAnimate, Inc.³ An example of an ambiguous scenario. This is a story about Emma. Normally Emma is a (very good/okay/very bad) child, who (e.g., always) does the right thing and (e.g., never) gets in trouble. This is Emma here, and this is another child, called Caleb. One day Emma was playing in the park with Caleb. Emma threw the ball and it hit Caleb in the back of his head, hurting him. We do not know whether Emma hit Caleb with the ball on purpose.



FIGURE 2 © 2021 GoAnimate, Inc. An example of a blatant scenario. This is a story about Chloe. Normally Chloe is a (very good/okay/very bad) child, who (e.g., always) does the right thing and (e.g., never) gets in trouble. This is Chloe here, and this is another child, called Ethan. One day Ethan was walking to class and his lunch fell out of his backpack. Chloe saw this and decided to take his lunch so that she could eat it. We know that Chloe took Ethan's lunch on purpose.

type of scenario. The full range of scenarios can be seen in the OSF repository for this project. We also conducted a small pilot study to ensure that the scenarios were viewed as equal in severity, reported in Appendix A.

The ambiguous and blatant scenarios were grouped together to produce two separate blocks. The order of these two blocks was randomised, and the order of the individual scenarios within each block was also randomised. Each scenario featured a male and female agent, one of which was a transgressor, and one of which was a victim. The roles that each agent played was randomised across participants.

The moral character of the transgressor was manipulated to produce three conditions. This was operationalised via a short description at the start of each scenario describing the 'usual' behaviour of that agent as good ("Child is a very good child. He/she always does the right thing and never gets in trouble."), mixed ("Child is an okay child. He/she sometimes does the right thing, but sometimes does the wrong thing too.") or bad ("Child is a very bad child. He/she always does the wrong thing and gets in trouble a lot."). Each block featured one agent of each moral character in a random order, so that each child saw every combination of moral character (good, mixed and bad) and transgression type (ambiguous and blatant).

2.4 | Measures

For each story children responded to three measures assessing their perceptions of the transgression. Before the trials began, the researcher acquainted the child with three response scales and asked them some unrelated questions to ensure they understood (e.g., "How much do you like being on holidays?"). Each measure was accompanied by a visual aid, and all children displayed a clear understanding of the scales.

To measure intent, children were asked "How much do you think the child meant to do that?" with responses recorded on a scale of 0 (not at all) – 4 (completely). To measure severity of the transgression children were asked "Was it good, bad or not good or bad that Child did that?" with responses recorded on a 7-point scale where –3 was "extremely bad" and 3 was "extremely good." Finally, Children's perception of the appropriate punishment for the transgression was assessed by asking "Should Child be punished, rewarded, or not punished or rewarded from that?." This was measured on a 7-point scale where –3 was "big punishment" and 3 was "big reward."

3 | RESULTS

3.1 | Preliminary analysis

To test whether the dependent variables were affected by the demographic variables of age and sex, and their interaction, we ran a series of generalised linear models. None of these effects reached significance ($p > .065$), and are therefore not included in the main analysis.

3.2 | Analysis approach

We conducted a series of within-participant factorial ANOVAs to investigate the effects of Character (good, mixed and bad), transgression Type (ambiguous and blatant) and the interaction of these on the three dependent variables (intention, severity and punishment). Significant main-effects were followed up with Tukey tests, and significant interactions were followed up with the simple effects of Character at each level of Type.

3.3 | Intention

A significant main effect of Type indicated that our manipulation was successful, as children perceived the blatant transgressions ($M = 2.23$, $SD = .98$) as more intentional than the ambiguous transgressions ($M = 1.11$, $SD = 1.06$), $F(1, 59) = 88.93$, $p < .001$, $\eta^2 = .24$. Furthermore, children's perception of the intention of the action was significantly affected by the moral character of the agent performing it, $F(2, 59) = 9.36$, $p < .001$, $\eta^2 = .03$. Specifically, transgressions performed by bad agents ($M = 1.95$, $SD = 1.09$) were seen as more intentional than those performed by both mixed ($M = 1.58$, $SD = 1.16$), $t = 3.19$, $p = .005$, $d_z = .41$, and good agents ($M = 1.48$, $SD = 1.19$), $t = 4.13$, $p < .001$, $d_z = .53$, with there being no significant difference in perception between the latter two, $t = .94$, $p = .615$, $d_z = .12$.

Finally, as evident in Figure 3, the interaction between Character and Type was significant, $F(2, 118) = 3.57$, $p = .031$, $\eta^2 = .01$. The simple effects indicated that the moral character did not affect the perception of intentionality when the transgression was blatant, $F(2, 118) = 2.40$, $p = .095$, $\eta^2 = .02$. However, the simple effect of Character was significant when the transgression was ambiguous, $F(2, 118) = 10.25$, $p < .001$, $\eta^2 = .08$, indicating that ambiguous transgressions performed by bad agents ($M = 1.48$, $SD = 1.05$) were seen as more intentional than those performed by good agents ($M = .73$, $SD = .92$), $t = 4.53$, $p < .001$, $d_z = .58$. There was no difference in perceived intentionality of transgressions performed by mixed agents ($M = 1.10$, $SD = 1.08$) and either good agents or bad agents ($t = 2.21$, $p = .073$, $d_z = .29$ and $t = 2.31$, $p = .056$, $d_z = .30$ respectively).

3.4 | Severity

Averaging across the character types, children viewed the blatant transgressions ($M = -1.98$, $SD = .99$) as more severe than the ambiguous ones ($M = -1.04$, $SD = 1.07$), $F(1, 59) = 76.75$, $p < .001$, $\eta^2 = .17$. Furthermore, there was a significant main effect of Character, $F(2, 118) = 4.81$, $p = .010$, $\eta^2 = .02$. Follow up tests indicated that children viewed transgressions performed by bad agents ($M = -1.72$, $SD = 1.01$) as more severe than those performed by good agents ($M = -1.35$, $SD = 1.22$), $t = -3.04$, $p = .008$, $d_z = .39$. They did not distinguish between transgressions performed by mixed agents ($M = -1.47$, $SD = 1.11$) and either bad or good agents ($t = -2.07$, $p = .101$, $d_z = .27$ and $t = -.97$, $p = .600$, $d_z = .13$ respectively). The Type \times Character interaction was not significant, $F(2, 118) = 1.07$, $p = .35$, $\eta^2 < .01$ as can be seen in Figure 4.

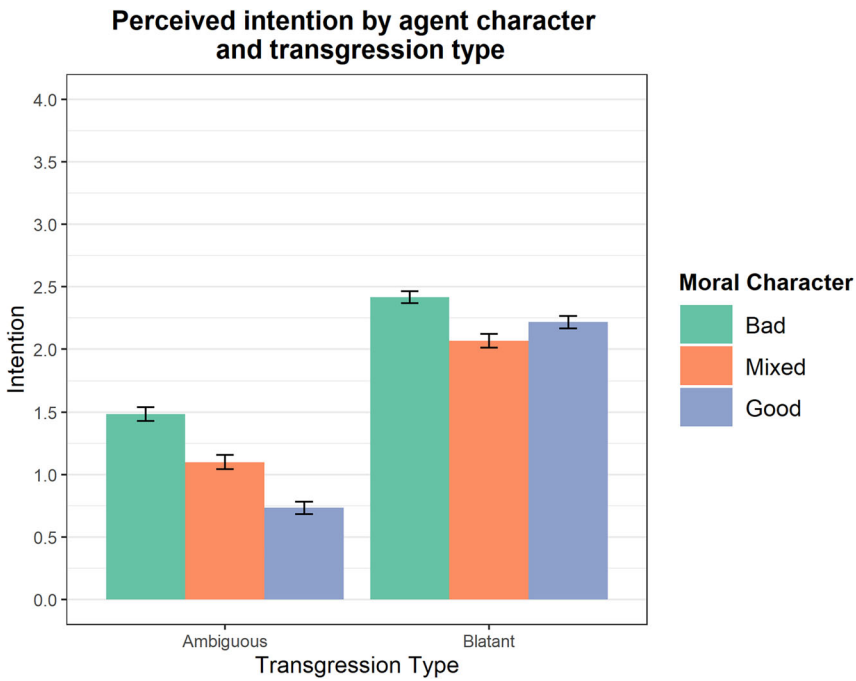


FIGURE 3 Perceived level of intentionality of the transgression, by the moral character of the agent, and ambiguity of the transgression. Note: Error bars represent ± 1 se.

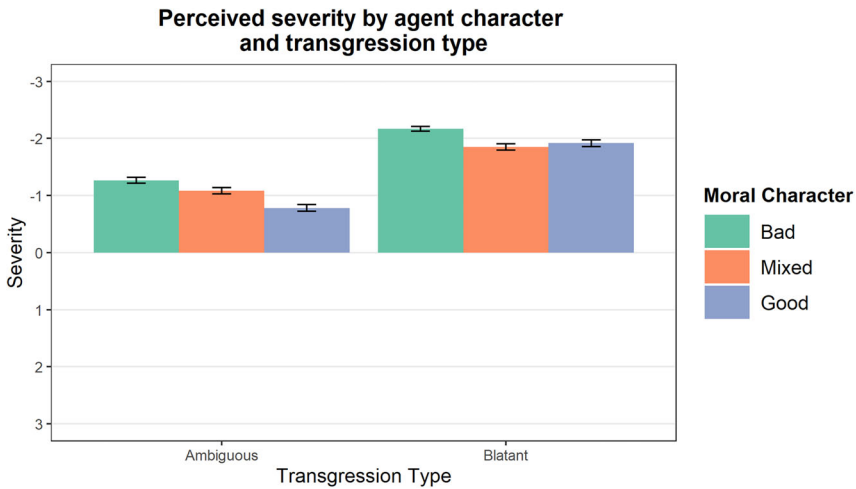


FIGURE 4 Perceived level of severity of the transgression, by the moral character of the agent, and ambiguity of the transgression. Note: Error bars represent ± 1 se.

3.5 | Punishment

Averaging across the character types, children viewed the blatant transgressions ($M = -1.67$, $SD = 1.08$) as deserving of more punishment than the ambiguous ones ($M = -.82$, $SD = 1.25$), $F(1, 59) = 69.26$, $p < .001$, $\eta^2 = .12$. There was also a significant main effect of Character, $F(2, 118) = 7.49$, $p < .001$, $\eta^2 = .03$. Follow up tests indicated that children viewed

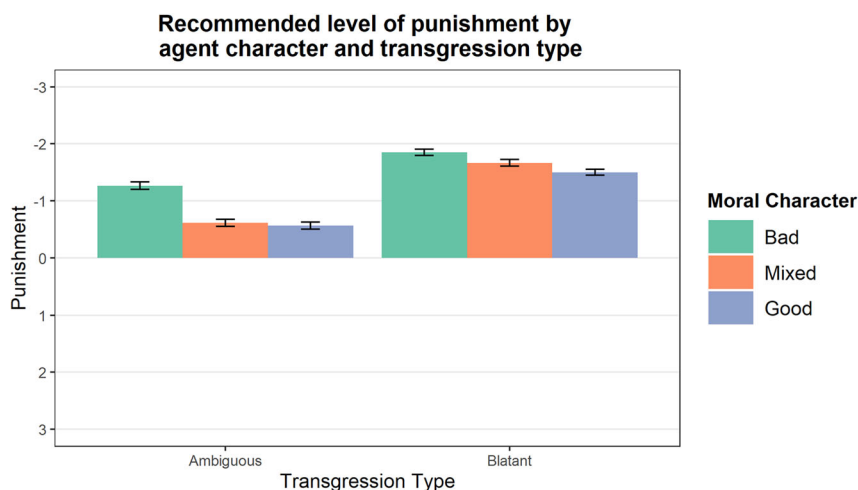


FIGURE 5 Recommended level of punishment for the transgression, by the moral character of the agent, and ambiguity of the transgression. Note: Error bars represent ± 1 se.

transgressions performed by bad agents ($M = -1.56$, $SD = 1.20$) as worthy of more punishment than those performed by both good agents ($M = -1.03$, $SD = 1.10$) $t = -3.66$, $p = .012$, $d_z = .48$, and mixed agents ($M = -1.14$, $SD = 1.27$), $t = -2.91$, $p = .001$, $d_z = .38$. They did not distinguish between transgressions performed by mixed agents and good agents, $t = -.76$, $p = .730$, $d_z = .10$. The Type \times Character interaction was not significant, $F = 1.36$, $p = .261$, $\eta^2 < .01$ as shown in Figure 5.

4 | DISCUSSION

In this study we investigated whether 6–8-year-old children would take previous character traits into account when judging ambiguous and blatant transgressions of third-party individuals. Our results suggest that children do use information about both moral character and intention when making such evaluations. We found that information about moral character affected children's interpretation of the intent behind ambiguous, but not blatant, transgressions. Specifically, children viewed ambiguous transgressions as more intentional when performed by bad agents as opposed to good agents. This provides some of the first evidence that children consider moral character when interpreting another's intentions. It is consistent with work in adults, suggesting that moral character affects the perceived intent of actions (Nadler & McDonnell, 2012). However, children did not use information about character to interpret what their intent might have been in blatant transgressions. This indicates that our manipulation of ambiguity was successful, and that children will use moral character to guide their inferences about others' actions when intentionality is unknown, but not when it is made obvious.

We also replicated previous research demonstrating that children take moral character into account when evaluating transgressions (Cameron et al., 2022; Nisan & Horenczyk, 1990). In line with past work, children viewed transgressions by a bad agent as more severe and deserving of more punishment than those performed by good agents. We extend past findings by demonstrating that this effect was consistent across both ambiguous and blatant transgressions. That is, bad moral character increased condemnation towards blatant transgressions to the same extent as ambiguous transgressions. However, this contrasts with the afore noted finding that children were using moral character to interpret the intent of the ambiguous transgressions. If children thought that blatant transgressions performed by bad agents were just as intentional as good agents, why did they still express more condemnation towards the bad agents?

There are several possible explanations, but perhaps the strongest is that the effect of moral character information on children's evaluations is independent of the effect of intent information. This is consistent with models of blame such as the blame validation model (Alicke, 2000; Kliemann et al., 2008). Whilst some models of blame, such as the path model discussed in the introduction, predict the assignment of blame to be determined by the evaluation of factors such as intent, foreseeability and causality (Alicke et al., 2011; Malle et al., 2014), the blame validation model instead suggests that judgements are independent of such factors. In this model, seemingly unrelated features of the transgression, such as a transgressor's negative moral character, may prompt spontaneous evaluations of higher levels of blame (Alicke, 2000; Kliemann et al., 2008). This is consistent with our finding that moral character affected children's evaluations independently of intent. Nonetheless, whilst these results may be considered support for the blame validation model, it is also possible that the effect of moral character did vary based on intent information, but that the current study was underpowered to detect these differences. Replication with an increased sample size will help clarify this.

Additionally, we found that, whilst children gave harsher ratings to bad agents, they did not distinguish between good and mixed agents in their evaluations. This may speak to the fact that children display a negativity bias in their moral judgements, paying more attention to negative character information (Boseovski & Lee, 2006; Doebel & Koenig, 2013; Kinzler & Shutts, 2008; Vaish et al., 2008, 2010) an effect that is also found in adults (Baumeister et al., 2001). In this setting, this may mean that negative moral character information has a larger impact on condemnation than positive character information. The early emergence of this bias may be particularly adaptive, to avoid interactions with antisocial agents.

There are a number of limitations in our methodology that that can be addressed by future research. We used a rather broad moral character manipulation; specifically, a global trait description of the child, and their usual behaviour (e.g., "X is a very good child, they always do the right thing, and never get in trouble"). This was done to increase children's comprehension of the information, considering that children find it easier to understand traits from such global descriptions (Liu et al., 2007), and to enhance the likelihood that they would all interpret the moral character information in the same way. We acknowledge that this may seem unusual, as we often infer moral character from observing someone's behaviour in the real world. However, it does reflect social sharing, where people (particularly in small communities), may report about someone's character (Feinberg et al., 2012; Sommerfeld et al., 2007). Nevertheless, future research could explore providing children with specific instances of behaviour and allowing them to make their own inferences about moral character. This would also allow the exploration of whether the current effects vary when the domains of previous behaviour are matched to the transgression, as research with adults has suggested (Efron & Monin, 2010).

Additionally, we used different sets of stimuli for the ambiguous and blatant scenarios which could have led to differences across conditions as a function of scenario type. Ideally, we would have used one common set of stimuli; but it was not possible to design six separate scenarios that could all be plausibly intentional or accidental. For example, there was no succinct way to word a child laughing at another as accidental. Nevertheless, our pilot study suggested that, in the absence of intention information, all scenarios were seen as similarly severe—thus we consider it unlikely that the different scenarios influenced our results.

Further, children were asked the three questions for each transgression in a fixed order—intent, severity and then punishment. The intention question was deliberately included first; given that the intention manipulation was central to this study, we wanted to be sure that children had considered the intention behind the transgression before making their judgements. However, it may have been beneficial to counterbalance the order of the severity and punishment questions. There is some evidence for children in this age-range of the 'constraint hypothesis', whereby judgements of wrongness constrain later punishment judgements (Cushman et al., 2013). Given that punishment judgements are less sensitive to intent, counterbalancing these questions may have ensured that observed differences in punishment judgements were not affected by severity judgements. Finally, as with most developmental psychology research (Nielsen et al., 2017) this study is WEIRD-centric, and as children's judgements of moral transgressions can vary with

their cultural background (e.g., Miller & Collette, 2022) extending this work to contrasting groups is necessary to deepen our understanding of the ontogeny of such behaviour.

This study offers a more nuanced understanding of how children use character information to evaluate others moral transgressions. We found, for the first time, that character information influences children's perception of the *intention* behind actions. However, they are discerning in this practice, using moral character for ambiguous, but not blatant, transgressions. Moreover, we replicated previous research demonstrating that children use moral character information to guide their judgements of the severity of moral transgressions, with particularly harsh judgments for children with a negative moral character. This suggests that, by 6 years of age, children use moral character to shape not only their judgement of and response to the outcome of a transgression, but also the intention of the transgressor (when appropriate). This offers new insight into children's surprisingly sophisticated ability to understand transgressions performed by others and broadly contributes to the developing picture of how children relate to and think about the moral world.

ACKNOWLEDGMENTS

The authors would like to thank the participating children and their parents, as well as the Queensland Museum for their support on this project throughout the data collection period.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are openly available at https://osf.io/rwxhu/?view_only=9fdbcefe6efb4184baae39c9602bd714.

ETHICS STATEMENT

This study received ethics approval from The University of Queensland Ethics Review Board (#2020001138).

ORCID

Sophie Cameron  <https://orcid.org/0000-0001-8378-0433>

ENDNOTES

¹This pre-registration includes a third hypothesis, that was ultimately dropped from the study. We also stated our intention to complete all data collection online, however changing circumstances allowed us to complete the majority of our data collection in person.

²To ensure that these two testing formats did not affect results, the main analysis was run excluding these zoom participants. This did not change the pattern of results, and therefore these two samples are collapsed for the remainder of the study.

³Images are copyrighted by and used by permission of VYONDTM. VYOND is a trademark of GoAnimate, Inc., registered in Australia, Brazil, the European Union, Norway, the Philippines, Singapore, Switzerland and the United Kingdom.

REFERENCES

- Alicke, M. (1992). Culpable causation. *Journal of Personality and Social Psychology*, 63(3), 368–378. <https://doi.org/10.1037/0022-3514.63.3.368>
- Alicke, M. (2000). Culpable control and the psychology of blame. *Psychological Bulletin*, 126, 556–574. <https://doi.org/10.1037/0033-2909.126.4.556>
- Alicke, M., Rose, R., & Bloom, D. (2011). Causation, norm violation, and culpable control. *Journal of Philosophy*, 108, 670–696. <https://doi.org/10.5840/jphil20111081238>
- Alicke, M., & Zell, E. (2009). Social attractiveness and blame. *Journal of Applied Social Psychology*, 39(9), 2089–2105. <https://doi.org/10.1111/j.1559-1816.2009.00517.x>

- Baumeister, R., Bratslavsky, E., Finkenauer, C., & Vohs, K. (2001). Bad is stronger than good. *Review of General Psychology*, 5(4), 323–370. <https://doi.org/10.1037/1089-2680.5.4.323>
- Boseovski, J., & Lee, K. (2006). Children's use of frequency information for trait categorization and behavioral prediction. *Developmental Psychology*, 42(3), 500–513. <https://doi.org/10.1037/0012-1649.42.3.500>
- Brambilla, M., Carraro, L., Castelli, L., & Sacchi, S. (2019). Changing impressions: Moral character dominates impression updating. *Journal of Experimental Social Psychology*, 82(May 2018), 64–73. <https://doi.org/10.1016/j.jesp.2019.01.003>
- Buon, M., Jacob, P., Margules, S., Brunet, I., Dutat, M., Cabrol, D., & Dupoux, E. (2014). Friend or foe? Early social evaluation of human interactions. *PLoS ONE*, 9(2), e88612. <https://doi.org/10.1371/journal.pone.0088612>
- Cameron, S., Wilks, M., Redshaw, J., & Nielsen, M. (2022). The effect of moral character on children's judgements of transgressions. *Cognitive Development*, 63, 101221. <https://doi.org/10.1016/j.cogdev.2022.101221>
- Chen, E., Corriveau, K., & Harris, P. (2016). Person perception in young children across two cultures. *Journal of Cognition and Development*, 17(3), 447–467. <https://doi.org/10.1080/15248372.2015.1068778>
- Cushman, F., Sheketoff, R., Wharton, S., & Carey, S. (2013). The development of intent-based moral judgment. *Cognition*, 127(1), 6–21. <https://doi.org/10.1016/j.cognition.2012.11.008>
- Cushman, F., & Young, L. (2011). Patterns of moral judgment derive from nonmoral psychological representations. *Cognitive Science*, 35(6), 1052–1075. <https://doi.org/10.1111/j.1551-6709.2010.01167.x>
- Daniel, M., Bauman, C., Cushman, F. A., Pizarro, D. A., & Peter, A. (2014). Moral judgement and decision making. In G. Keren, & G. Wu (Eds.), *The Wiley Blackwell handbook of judgment and decision making* (pp. 1–51). Wiley.
- Darby, B., & Schlenker, B. (1989). Children's reactions to transgressions: Effects of the actor's apology, reputation and remorse. *British Journal of Social Psychology*, 28, 353–364. <https://doi.org/10.1111/j.2044-8309.1989.tb00879.x>
- Darley, J. M., & Zanna, M. P. (1982). Making moral judgments: Certain culturally transmitted excuses are generally believed to absolve people of blame for harming others. *American Scientist*, 70(5), 515–521.
- Doebel, S., & Koenig, M. (2013). Children's use of moral behavior in selective trust: Discrimination versus learning. *Developmental Psychology*, 49(3), 462–469. <https://doi.org/10.1037/a0031595>
- Effron, D., & Monin, B. (2010). Letting people off the hook: When do good deeds excuse transgressions? *Personality and Social Psychology Bulletin*, 36(12), 1618–1634. <https://doi.org/10.1177/0146167210385922>
- Fehr, E., & Fischbacher, U. (2004). Social norms and human cooperation. *Trends in Cognitive Sciences*, 8(4), 185–190. <https://doi.org/10.1016/j.tics.2004.02.007>
- Feinberg, M., Willer, R., Stellar, J., & Keltner, D. (2012). The virtues of gossip: Reputational information sharing as prosocial behavior. *Journal of Personality and Social Psychology*, 102(5), 1015–1030. <https://doi.org/10.1037/a0026650>
- Gelman, S. A., Heyman, G. D., & Legare, C. H. (2007). Developmental changes in the coherence of essentialist beliefs about psychological characteristics. *Child Development*, 78(3), 757–774. <https://doi.org/10.1111/j.1467-8624.2007.01031.x>
- Gintis, H., Henrich, J., Bowles, S., Boyd, R., & Fehr, E. (2008). Strong reciprocity and the roots of human morality. *Social Justice Research*, 21(2), 241–253. <https://doi.org/10.1007/s11211-008-0067-y>
- Guglielmo, S., & Malle, B. F. (2017). Information-acquisition processes in moral judgments of blame. *Personality and Social Psychology Bulletin*, 43(7), 957–971. <https://doi.org/10.1177/0146167217702375>
- Gummerum, M., & Chu, M. T. (2014). Outcomes and intentions in children's, adolescents', and adults' second- and third-party punishment behavior. *Cognition*, 133(1), 97–103. <https://doi.org/10.1016/j.cognition.2014.06.001>
- Heyman, G. D., & Gelman, S. A. (1998). Young children use motive information to make trait inferences. *Developmental Psychology*, 34(2), 310–321. <https://doi.org/10.1037/0012-1649.34.2.310>
- Kalish, C. (2002). Children's predictions of consistency in people's actions. *Cognition*, 84(4), 237–265. [https://doi.org/10.1016/S0010-0277\(02\)00052-5](https://doi.org/10.1016/S0010-0277(02)00052-5)
- Kalish, C., & Shiverick, S. (2004). Children's reasoning about norms and traits as motives for behavior. *Cognitive Development*, 19(3), 401–416. <https://doi.org/10.1016/j.cogdev.2004.05.004>
- Kenward, B., & Dahl, M. (2011). Preschoolers distribute scarce resources according to the moral valence of recipients' previous actions. *Developmental Psychology*, 47(4), 1054–1064. <https://doi.org/10.1037/a0023869>
- Killen, M., Lynn Mulvey, K., Richardson, C., Jampol, N., & Woodward, A. (2011). The accidental transgressor: Morally-relevant theory of mind. *Cognition*, 119(2), 197–215. <https://doi.org/10.1016/j.cognition.2011.01.006>
- Kinzler, K. D., & Shutts, K. (2008). Memory for “mean” over “nice”: The influence of threat on children's face memory. *Cognition*, 107(2), 775–783. <https://doi.org/10.1016/j.cognition.2007.09.005>
- Kliemann, D., Young, L., Scholz, J., & Saxe, R. (2008). The influence of prior record on moral judgment. *Neuropsychologia*, 46(12), 2949–2957. <https://doi.org/10.1016/j.neuropsychologia.2008.06.010>
- Kupperman, J. (1991). *Character*. Oxford University Press.
- Leslie, A. M., Knobe, J., & Cohen, A. (2006). Acting intentionally and the side-effect effect theory of mind and moral judgment. *Psychological Science*, 17(5), 421–427. <https://doi.org/10.1111/j.1467-9280.2006.01722.x>
- Li, J., & Tomasello, M. (2018). The development of intention-based sociomoral judgment and distribution behavior from a third-party stance. *Journal of Experimental Child Psychology*, 167, 78–92. <https://doi.org/10.1016/j.jecp.2017.09.021>

- Liu, D., Gelman, S., & Wellman, H. (2007). Components of young children's trait understanding: Behavior-to-trait inferences and trait-to-behavior predictions. *Child Development, 78*(5), 1543–1558. <https://doi.org/10.1111/j.1467-8624.2007.01082.x>
- Malle, B. F., Guglielmo, S., & Monroe, A. E. (2014). A theory of blame. *Psychological Inquiry, 25*(2), 147–186. <https://doi.org/10.1080/1047840X.2014.877340>
- Miller, R., & Collette, T. (2022). Cultural differences in children's recommended punishment of moral transgressions. *Athens Journal of Social Sciences, 9*, 223–234. <https://doi.org/10.30958/ajss-9-3-1>
- Nadler, J. (2012). Blaming as a social process: The influence of character and moral emotion on blame. *Law and Contemporary Problems, 75*(2), 1–31.
- Nadler, J., & McDonnell, M. H. (2012). Moral character, motive, and the psychology of blame. *Cornell Law Review, 97*(2), 255–304.
- Nielsen, M., Haun, D., Kärtner, J., & Legare, C. (2017). The persistent sampling bias in developmental psychology: A call to action. *Journal of Experimental Child Psychology, 162*, 31–38. <https://doi.org/10.1016/j.jecp.2017.04.017>
- Nisan, M., & Horenzyk, G. (1990). Moral balance: The effect of prior behaviour on decision in moral conflict. *British Journal of Social Psychology, 29*(1), 29–42. <https://doi.org/10.1111/j.2044-8309.1990.tb00884.x>
- Nobes, G., Panagiotaki, G., & Engelhardt, P. E. (2017). The development of intention-based morality: The influence of intention salience and recency, negligence, and outcome on children's and adults' judgments. *Developmental Psychology, 53*(10), 1895–1911. <https://doi.org/10.1037/dev0000380>
- Nobes, G., Panagiotaki, G., & Pawson, C. (2009). The influence of negligence, intention, and outcome on children's moral judgments. *Journal of Experimental Child Psychology, 104*(4), 382–397. <https://doi.org/10.1016/j.jecp.2009.08.001>
- Pellizzoni, S., Siegal, M., & Surian, L. (2009). Foreknowledge, caring, and the side-effect effect in young children. *Developmental Psychology, 45*(1), 289–295. <https://doi.org/10.1037/a0014165>
- Piaget, J. (1977). *The moral judgement of the child*. Free Press.
- Pnevmatikos, D. (2018). When do children start to take mitigating circumstances into account when judging the act of killing. *Cognitive Development, 48*(August), 94–104. <https://doi.org/10.1016/j.cogdev.2018.07.007>
- Rakoczy, H., Behne, T., Clüver, A., Dallmann, S., Weidner, S., & Waldmann, M. R. (2015). The side-effect effect in children is robust and not specific to the moral status of action effects. *PLoS ONE, 10*(7), 1–10. <https://doi.org/10.1371/journal.pone.0132933>
- Rholes, W., & Ruble, D. (1984). Children's understanding of dispositional characteristics of others. *Child Development, 55*(2), 550–560. <https://doi.org/10.2307/1129966>
- Siegel, J. Z., Crockett, M. J., & Dolan, R. J. (2017). Inferences about moral character moderate the impact of consequences on blame and praise. *Cognition, 167*, 201–211. <https://doi.org/10.1016/j.cognition.2017.05.004>
- Sommerfeld, R., Krambeck, H., Semmann, D., & Milinski, M. (2007). Gossip as an alternative for direct observation in games of indirect reciprocity. *Proceedings of the National Academy of Sciences of the United States of America, 104*(44), 17435–17440. <https://doi.org/10.1073/pnas.0704598104>
- Taborda-Osorio, H., Lyons, A., & Cheries, W. (2019). Examining infants' individuation of others by sociomoral disposition. *Frontiers in Psychology, 10*, 1271. <https://doi.org/10.3389/fpsyg.2019.01271>
- Tasimi, A., & Wynn, K. (2016). Costly rejection of wrongdoers by infants and children. *Cognition, 151*, 76–79. <https://doi.org/10.1016/j.cognition.2016.03.004>
- Vaish, A., Carpenter, M., & Tomasello, M. (2010). Young children selectively avoid helping people with harmful intentions. *Child Development, 81*(6), 1661–1669. <https://doi.org/10.1111/j.1467-8624.2010.01500.x>
- Vaish, A., Grossmann, T., & Woodward, A. (2008). Not All Emotions Are Created Equal: The Negativity Bias in Social-Emotional Development. *Psychological Bulletin, 134*(3), 383–403. <https://doi.org/10.1037/0033-2909.134.3.383>
- Van de Vondervoort, J., & Hamlin, K. (2017). Preschoolers' social and moral judgments of third-party helpers and hinderers align with infants' social evaluations. *Journal of Experimental Child Psychology, 164*, 136–151. <https://doi.org/10.1016/j.jecp.2017.07.004>
- Willis, J., & Todorov, A. (2006). First impressions: Making up your mind after a 100-ms exposure to a face. *Psychological Science, 17*(7), 592–598. <https://doi.org/10.1111/j.1467-9280.2006.01750.x>

How to cite this article: Cameron, S., Wilks, M., & Nielsen, M. (2023). The effect of intent and character information on children's evaluations of third-party transgressions. *Social Development, 1*–14. <https://doi.org/10.1111/sode.12675>

APPENDIX A

Pilot

We conducted a small pilot study ($N = 20$) to ensure that children were perceiving the different types of moral scenarios as equally severe. The children (aged 6–8-years old) were tested via Zoom. They were read each of the six scenarios, without the information about intent. For each scenario they were asked to rate the unacceptability of the act, and whether it warranted a punishment or a reward.

For each measure, we ran a paired sample t -test, to determine whether there was a significant difference between the average ratings of the ambiguous and blatant scenarios. The results showed no difference between the severity ratings of the ambiguous scenarios ($M = -1.83$, $SD = .91$) and blatant scenarios ($M = -1.92$, $SD = 1.03$), $t(58) = .61$, $p = .545$. There was also no difference between the punishment ratings of the ambiguous scenarios ($M = -1.73$, $SD = .93$) and blatant scenarios ($M = -1.87$, $SD = 1.02$), $t(58) = 1.17$, $p = .248$. The mean ratings of each scenario are reported in Table A1.

TABLE A1 Means and standard deviations of ratings of severity and punishment for moral scenarios.

Type	Scenario	Severity	Punishment
Ambiguous	Hit	-2.05(.83)	-1.80(1.01)
	Break	-2.11(.88)	-2.05(.78)
	Scare	-1.35(.88)	-1.35(.88)
	Overall	-1.83(.91)	-1.73(.93)
Blatant	Steal	-1.70(1.38)	-2.10(.97)
	Unfairness	-2.00(.86)	-1.70(1.13)
	Taunt	-2.05(.76)	-1.80(.95)
	Overall	-1.92(1.03)	-1.87(1.02)