



Brief article

Outcomes and intentions in children's, adolescents', and adults' second- and third-party punishment behavior



Michaela Gummerum*, Maria T. Chu

University of Plymouth, UK

ARTICLE INFO

Article history:

Received 15 May 2013

Revised 28 May 2014

Accepted 7 June 2014

Keywords:

Punishment

Children

Adolescents

Fairness

Intentions

ABSTRACT

Theories of morality maintain that punishment supports the emergence and maintenance of moral behavior. This study investigated developmental differences in the role of outcomes and the violator's intentions in second-party punishment (where punishers are victims of a violation) and third-party punishment (where punishers are unaffected observers of a violation). Four hundred and forty-three adults and 8-, 12-, and 15-year-olds made choices in mini-ultimatum games and newly-developed mini-third-party punishment games, which involved actual incentives rather than hypothetical decisions. Adults integrated outcomes and intentions in their second- and third-party punishment, whereas 8-year-olds consistently based their punishment on the outcome of the violation. Adolescents integrated outcomes and intentions in second- but not third-party punishment.

© 2014 Elsevier B.V. All rights reserved.

1. Introduction

Theories of morality suggest that norms are learned and upheld through positive (e.g., praise) or negative (i.e., punishment) reinforcement (Aronfreed, 1961; Fehr & Gächter, 2002; Henrich, 2004). People punished norm violations even when this incurs material costs for themselves, both in situations where punishers were the victim of a violation (second-party punishment) and situations where punishers were unaffected third-party observers (third-party punishment; Fehr & Fischbacher, 2004).

Like adults, children punish the norm violations of others (Furman & Masters, 1980). So far, developmental research has mainly studied children's hypothetical and non-costly punishment judgments, but not costly punishment behavior (e.g., Leman & Björnberg, 2010; Nobes,

Panagiotaki, & Pawson, 2009). Since people's judgments have been shown to strongly deviate from their actual behavior, particularly in moral contexts (Fishbein & Ajzen, 1975; Lapsley & Narvaez, 2004), hypothetical punishment judgments are unlikely to be a good indicator of costly punishment. Studying punishment behavior in tasks with tangible outcomes thus provides more valid insights into the development of moral behavior. This contributes in a novel way to our understanding of how mechanisms supporting the emergence and maintenance of morality develop over human ontogeny and bridges research on morality from different disciplines (economics, biology, psychology). This study investigated, for the first time, (i) children's, adolescents', and adults' second- and third-party punishment behavior and (ii) developmental differences in the role of outcomes and intentions for second- and third-party punishment.

The mini-ultimatum game (MUG; Falk, Fehr, & Fischbacher, 2003) assesses second-party punishment of violations of fair-sharing norms. In one-shot MUG the proposer chooses between two fixed distributions that

* Corresponding author. Address: School of Psychology, Cognition Institute, University of Plymouth, Drake Circus, Plymouth, Devon PL4 8AA, UK. Tel.: +44 01752 584 828; fax: +44 01752 584 808.

E-mail address: michaela.gummerum@plymouth.ac.uk (M. Gummerum).

allocate resources (typically money) to him-/herself and an anonymous responder. For example, the proposer can choose between keeping eight coins and giving two to the responder (8/2 offer) or allocating five coins each (5/5 offer). If the responder accepts the chosen distribution, the money is allocated accordingly. If the responder rejects, both players receive nothing. Responders' rejections of positive offers have been interpreted as costly punishment, because they incur costs for both players.

Third-party punishment has been studied in (repeated) social dilemmas where cooperation norms were violated (e.g., Fehr & Gächter, 2002) and in allocations tasks where fairness norms were violated (e.g., Fehr & Fischbacher, 2004). The latter involve three persons. Person A allocates resources to Person B, who can only accept. After being informed of Person A's allocation, Person C decides whether to punish Person A by spending some of his/her own endowment: For every unit Person C spends (e.g., one coin), Person A loses two units (e.g., two coins). Punishment in this game is costly, because both Persons A and C end up with a smaller final payoff.

Material outcomes, particularly the equality of the distribution, influence second- and third-party punishment. In ultimatum games, adults punished offers giving them less than 20% of the resources about half of the time, but they accepted equal offers (Camerer, 2003; Güth & Tietz, 1990). Six- to 10-year-old (Sally & Hill, 2006) and 9- and 12-year-old (Sutter, 2007) children also rejected unequal offers. In third-party punishment, about 60% of adults punished unequal offers (Fehr & Fischbacher, 2004). The more unequal the offer, the more adults and children punished it (Fehr & Fischbacher, 2004; Gummerum, Takezawa, & Keller, 2009). These findings resonate with research showing that from middle childhood the majority of children make equal allocations (e.g., Blake & McAuliffe, 2011; Fehr, Bernhard, & Rockenbach, 2008; Gummerum, Hanoch, & Keller, 2008; Shaw & Olson, 2012) and regard equal allocations as morally right in anonymous sharing situations (Keller, Gummerum, Canz, Gigerenzer, & Takezawa, 2013).

In addition to outcomes, responders' perceived intentions of violators (i.e., accidental vs. deliberate violation) influence punishment. So far, the role of intentions in punishment has only been investigated in second-party situations (Blount, 1995; Nelson, 2002). In MUG, juxtaposing a particular distribution option available to the proposer (e.g., a 8/2 offer) with alternative offers (e.g., 5/5 or 10/0) allows for examining intention-based punishment. Adults punished an unequal 8/2 offer less when the alternative, foregone offer was 10/0 (an even more unequal offer) than when the alternative offer was an equal split, suggesting that punishment was at least partly influenced by whether the fair-sharing norm was violated intentionally or unavoidably (Falk et al., 2003).

Studies examining the role of intentions in children's and adolescents' second-party punishment produced mixed results. Sutter (2007) showed that 7- to 10-year-olds punish proposers based on intentions, but Güroğlu, van den Bos, and Crone (2009) found no evidence that 9-year-olds' punishment of identical unequal offers vary with alternative offers. Both studies concur with research

on children's hypothetical punishment judgments: while preschool and elementary school children differentiated between intentional and accidental transgressions and well- and ill-intentioned actions, it is not until 10 years of age that children based their punishment judgments more strongly on violator's intentions than outcomes (Helwig, Zelazo, & Wilson, 2001; Karniol, 1978; Zelazo, Helwig, & Lau, 1996).

We used the MUG and created a new game, the mini-third-party punishment game (MTPP), to measure children's, adolescents', and adults' second- and third-party punishment. Using the MTPP made it possible to assess the role of intentions and outcomes in children's, adolescents', and adults' costly third-party punishment of unfair allocations for the first time. We expected more intention-based punishment in adolescents and adults than children. That is, adolescents and adults should be more likely than children to punish the default 8/2 offer more when the alternative offer was equal (5/5) or benefitted the receiver (2/8) than when the alternative offer was even more unfair (10/0).

Additionally, we investigated the time participants took to make their punishment decisions (i.e., response time, RT). RTs reflect the relative difficulty with which decisions are made: "Easy" or dominant decisions produce shorter RTs than complex decisions for which a person has to override his/her dominant response (Lahat, Helwig, & Zelazo, 2012; Rubinstein, 2007). If punishment is based on equality concerns, punishing the unequal default offer of 8/2 should be equally difficult regardless of the alternative, foregone offers. Therefore, the RTs associated with punishment of the unequal default offer (8/2) should remain constant across different alternative offers. If participants consider the violator's intentions, punishing the 8/2 default offer when the foregone offer is even more unequal (i.e., a 10/0 offer) should be more difficult and thus associated with longer RTs than when the foregone offer is equal.

2. Method

2.1. Participants

Ninety-eight 8-year-olds ($M_{\text{age}} = 8.27$ years, $SD = 0.68$; 49 females), 104 12-year-olds ($M_{\text{age}} = 12.50$ years, $SD = 1.09$; 54 females), 109 15-year-olds ($M_{\text{age}} = 15.49$ years, $SD = 0.52$; 46 females), and 132 adult undergraduate students ($M_{\text{age}} = 21.76$ years, $SD = 6.07$; 104 females) participated. Minors were recruited from primary and secondary schools serving middle-class communities in southern England.

2.2. Procedure

Minors were tested in a quiet room at their school, adults in the laboratories of the authors' university. Up to six participants were seated at separate computer terminals and entered an identification code, their date of birth, and gender. Participants received instructions for both games and were told that the points distributed in these games would be converted into money (adults) or glow

Download English Version:

<https://daneshyari.com/en/article/10457748>

Download Persian Version:

<https://daneshyari.com/article/10457748>

[Daneshyari.com](https://daneshyari.com)