



Brief article

Pushing moral buttons: The interaction between personal force and intention in moral judgment

Joshua D. Greene^{a,*}, Fiery A. Cushman^a, Lisa E. Stewart^a, Kelly Lowenberg^b, Leigh E. Nystrom^c, Jonathan D. Cohen^c

^a Department of Psychology, Harvard University, 33 Kirkland Street, Cambridge, MA 02138, USA

^b Stanford Law School, Crown Quadrangle, 559 Nathan Abbott Way, Stanford, CA 94305-8610, USA

^c Department of Psychology and Princeton Neuroscience Institute, Princeton University, Princeton, NJ 08544, USA

ARTICLE INFO

Article history:

Received 4 December 2008

Revised 4 February 2009

Accepted 5 February 2009

Keywords:

Moral psychology

Moral cognition

Moral judgment

Trolley problem

Personal force

Intention

ABSTRACT

In some cases people judge it morally acceptable to sacrifice one person's life in order to save several other lives, while in other similar cases they make the opposite judgment. Researchers have identified two general factors that may explain this phenomenon at the stimulus level: (1) the agent's intention (i.e. whether the harmful event is intended as a means or merely foreseen as a side-effect) and (2) whether the agent harms the victim in a manner that is relatively "direct" or "personal". Here we integrate these two classes of findings. Two experiments examine a novel personalness/directness factor that we call *personal force*, present when the force that directly impacts the victim is generated by the agent's muscles (e.g., in pushing). Experiments 1a and b demonstrate the influence of personal force on moral judgment, distinguishing it from physical contact and spatial proximity. Experiments 2a and b demonstrate an interaction between personal force and intention, whereby the effect of personal force depends entirely on intention. These studies also introduce a method for controlling for people's real-world expectations in decisions involving potentially unrealistic hypothetical dilemmas.

© 2009 Elsevier B.V. All rights reserved.

1. Introduction

Many moral and political controversies involve a tension between individual rights and the greater good (Singer, 1979). This tension is nicely captured by a puzzle known as the "trolley problem" that has long interested philosophers (Foot, 1978; Thomson, 1985) and that has recently become a topic of sustained neuroscientific (Ciaramelli, Muccioli, Ladavas, & di Pellegrino, 2007; Greene, Nystrom, Engell, Darley, & Cohen, 2004; Greene, Somerville, Nystrom, Darley, & Cohen, 2001; Koenigs et al., 2007; Mendez, Anderson, & Shapira, 2005; Schaich Borg, Hynes, Van Horn, Grafton, & Sinnott-Armstrong, 2006) and psychological (Cushman, Young, & Hauser, 2006; Greene, Morrell, Lowenberg, Nystrom, & Cohen, 2008; Hauser,

Cushman, Young, Jin, & Mikhail, 2007; Mikhail, 2000, 2007; Moore, Clark, & Kane, 2008; Nichols & Mallon, 2005; Waldmann & Dieterich, 2007) investigation. One version of the trolley problem is as follows: A runaway trolley is about to run over and kill five people. In the *switch* dilemma¹ one can save them by hitting a switch that will divert the trolley onto a side-track, where it will kill only one person. In the *footbridge* dilemma one can save them by pushing someone off a footbridge and into the trolley's path, killing him, but stopping the trolley. Most people approve of the five-for-one tradeoff in the *switch* dilemma, but not in the *footbridge* dilemma (Cushman, Young, & Hauser, 2006; Greene et al., 2001; Petrinovich, O'Neill, & Jorgensen, 1993).

* Corresponding author. Tel./fax: +1 617 495 3898.

E-mail address: jdgreene@wjh.harvard.edu (J.D. Greene).

¹ Previously we have referred to this as the "trolley" dilemma (Greene et al., 2001).

What explains this pattern of judgment? Neuroimaging (Greene et al., 2001, 2004), lesion (Ciaramelli et al., 2007; Koenigs et al., 2007; Mendez et al., 2005), and behavioral (Bartels, 2008; Greene et al., 2008; Valdesolo & DeSteno, 2006) studies indicate that people respond differently to these two cases because the action in the *footbridge* dilemma elicits a stronger negative emotional response. But what features of this action elicit this response? Recent studies implicate two general factors. First, following Aquinas (2006), many appeal to *intention* and, more specifically, the distinction between harm intended as a *means* to a greater good (as in the *footbridge* dilemma) and harm that is a foreseen but “unintended” *side-effect* of achieving a greater good (as in the *switch* dilemma) (Cushman et al., 2006; Hauser, Cushman, Young, Jin, & Mikhail, 2007; Mikhail, 2000; Schaich Borg et al., 2006). Second, many studies appeal to varying forms of “directness” or “personalness,” including *physical contact* between agent and victim (Cushman et al., 2006), the *locus of intervention* (victim vs. threat) in the action’s underlying causal model (Waldmann & Dieterich, 2007), whether the action involves deflecting an existing threat (Greene et al., 2001), and whether the harmful action is mechanically mediated (Moore et al., 2008; Royzman & Baron, 2002). The aim of this paper is to integrate these two lines of research.

We present two experiments examining a directness/personalness factor that we call *personal force*. An agent applies personal force to another when the force that *directly* impacts the other is generated by the agent’s muscles, as when one pushes another with one’s hands or with a rigid object. Thus, applications of personal force, so defined, cannot be mediated by mechanisms that respond to the agent’s muscular force by releasing or generating a different kind of force and applying it to the other person. Although all voluntary actions that affect others involve muscular contractions, they do not necessarily involve the application of personal force to another person. For example, firing a gun at someone or dropping a weight onto someone by releasing a lever do not involve the application of personal force because the victims in such cases are directly impacted by a force that is distinct from the agent’s muscular force, i.e. by the force of an explosion or gravity. The cases of direct harm examined by Royzman and Baron (2002) are not so direct as to involve the application of personal force. The direct/indirect distinction described by Moore and colleagues (2008) is similar to the distinction drawn here between personal and impersonal force, but Moore and colleagues do not systematically distinguish between physical contact and personal force.

Experiments 1a and b aim to document the influence of personal force, contrasting its effect with those of physical contact (1a–b) and spatial proximity (1a) between agent and victim. Experiment 1a also introduces a method for controlling for effects of *unconscious realism*, i.e. a tendency to unconsciously replace a moral dilemma’s unrealistic assumptions with more realistic ones. (“Trying to stop a trolley with a person is unlikely to work.”) Experiments 2a and b examine the interaction between personal force and intention. More specifically, we ask whether the effect of personal force depends on intention and vice versa.

2. Experiment 1a

We compared four versions of the *footbridge* dilemma to isolate the effects of spatial proximity, physical contact, and personal force on moral judgments concerning harmful actions. We also tested the unconscious realism hypothesis by controlling for subjects’ real-world expectations.

2.1. Method

2.1.1. Subjects

Subjects were 271 females, 337 males, and 12 genders unknown. The mean age was 31. Subjects were recruited anonymously in public venues in New York City and Boston. Subjects were paid \$3.

2.1.2. Design, materials, and procedure

Subjects responded to one of four versions of the *footbridge* dilemma in a between-subject design, indicating the extent to which the proposed action is “morally acceptable.” In the *standard footbridge* dilemma ($n = 154$, Fig. 1a), the agent (named Joe) may save the five by pushing the victim off the footbridge using his hands. This action involves spatial proximity, physical contact, and personal force. In the *remote footbridge* dilemma ($n = 82$, Fig. 1d), Joe may drop the victim onto the tracks using a trap door and a remote switch. This action involves none of the three aforementioned factors. The *footbridge pole* dilemma ($n = 72$, Fig. 1b) is identical to the *standard footbridge* dilemma except that Joe uses a pole rather than his hands to push the victim. This dilemma involves spatial proximity and personal force without physical contact. The *footbridge switch* dilemma ($n = 160$, Fig. 1c) is identical to the *remote footbridge* dilemma except that Joe and the switch are adjacent to the victim. This dilemma involves spatial proximity without physical contact or personal force. Comparing *remote footbridge* to *footbridge switch* isolates the effect of spatial proximity. Comparing *standard footbridge* to *footbridge pole* isolates the effect of physical contact. Comparing *footbridge switch* to *footbridge pole* isolates the effect of personal force.

The text of the *standard footbridge* dilemma is as follows:

An empty runaway trolley is speeding down a set of tracks toward five railway workmen. There is a footbridge above the tracks in between the runaway trolley and the five workmen. On this footbridge is a railway workman wearing a large, heavy backpack. If nothing is done, the trolley will proceed down the main tracks and cause the deaths of the five workmen (see Fig. 1).

It is possible to avoid these five deaths. Joe is a bystander who understands what is going on and who happens to be standing right behind the workman on the footbridge. Joe sees that he can avoid the deaths of the five workmen by pushing the workman with the heavy backpack off of the footbridge and onto the tracks

Download English Version:

<https://daneshyari.com/en/article/10457872>

Download Persian Version:

<https://daneshyari.com/article/10457872>

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