



Reports

Moral signals, public outrage, and immaterial harms [☆]David Tannenbaum ^{a,*}, Eric Luis Uhlmann ^b, Daniel Diermeier ^c^a Department of Psychology and Social Behavior, University of California, Irvine, USA^b Management and Human Resources Department, HEC Paris, France^c Kellogg School of Management, Northwestern University, IL, USA

ARTICLE INFO

Article history:

Received 30 July 2010

Revised 5 April 2011

Available online 17 May 2011

Keywords:

Moral judgment

Moral character

Signaling

Informational value

ABSTRACT

Public outrage is often triggered by “immaterially” harmful acts (i.e., acts with relatively negligible consequences). A well-known example involves corporate salaries and perks: they generate public outrage yet their financial cost is relatively minor. The present research explains this paradox by appealing to a person-centered approach to moral judgment. Strong moral reactions can occur when relatively harmless acts provide highly diagnostic information about moral character. Studies 1a and 1b first demonstrate dissociation between moral evaluations of persons and their actions—although violence toward a human was viewed as a more blameworthy act than violence toward an animal, the latter was viewed as more revealing of bad moral character. Study 2 then shows that person-centered cues directly influence moral judgments—participants preferred to hire a more expensive CEO when the alternative candidate requested a frivolous perk as part of his compensation package, an effect mediated by the informativeness of his request.

© 2011 Elsevier Inc. All rights reserved.

The popular news-commentary show *Countdown with Keith Olbermann* includes a segment called “The Worst Person in the World.” On January 22, 2009, the “winner” was former Merrill Lynch CEO John Thain who, in the midst of cutting thousands of jobs, purchased \$28,000 curtains for his office using company funds (Gasparino, 2009). Thain is only one of many corporate executives whose career and reputation has suffered because of outrage over such perks. Although many of these cases involved executives who caused genuine harm to their organizations—making decisions that led to bankruptcy or massive job lay-offs—public scorn has focused on the more symbolic aspects of their alleged misbehavior. The former CEO of Tyco International, Dennis Kozlowski, was convicted for stealing over \$80 million from his company, but is mostly remembered for spending \$6,000 on shower curtains and hosting an extravagant birthday party for his wife in Italy (which included a vodka-urinating ice sculpture in the shape of Michelangelo's statue David; Hills & Michaels, 2002; Johnson, 2003).

By most accounting standards, expenses such as Thain's \$28,000 curtains are financially immaterial, a small expense for a company the size of Merrill Lynch. For our purposes, we will call an act *immaterial* if it incurs costs that are negligible relative to a comparison act of greater harm or to commonly accepted measures of damage—financial loss,

harm to property or physical wellbeing, and so forth. The puzzle is why some immaterial acts (e.g., frivolous perks) lead to widespread moral indignation even as other, objectively more harmful acts do not seem to elicit similar or greater outrage. For instance, Mr. Thain's yearly financial compensation of \$83.1 million did not provoke nearly as much negative publicity or anger as his considerably less expensive office curtains.

The present research seeks to explain public outrage over immaterial harms by appealing to a *person-centered* approach to moral judgment (Pizarro & Tannenbaum, in press). In addition to assessing the permissibility of an action (an act-based judgment), people use behavior as a cue to make inferences about the agent performing those acts (a person-based judgment). As a result, the character information signaled by a behavior serves as an additional input to judgments of blame, over and above evaluations of the act.

Person-centered moral judgments

Many prominent research programs in moral psychology, including dual-process accounts (Greene, Nystrom, Engell, Darley, & Cohen, 2004; Moore, Clark, & Kane, 2008) and computational approaches to moral judgment (Mikhail, 2007), have focused on the conditions whereby people are sensitive to the permissibility of actions (deontological concerns) or their corresponding consequences (utilitarian concerns). While the distinction between deontic permissions and consequences is both psychologically meaningful and theoretically rich, these approaches focus exclusively on moral judgments about actions rather than judgments about persons.

On the other hand, there are reasons to believe people also care about *who* someone is, not just *what* they have done. A long tradition

[☆] This research was supported by a fellowship from the Institute for Humane Studies to the first author. We thank Clayton Critcher, Pete Ditto, Erik Helzer, and Yoel Inbar for their comments on an earlier draft.

* Corresponding author at: Department of Psychology and Social Behavior, 4201 Social & Behavioral Sciences Gateway, University of California, Irvine CA 92697-7085, USA.

E-mail address: dtannenb@uci.edu (D. Tannenbaum).

in social psychology has focused on the importance of global trait inferences in social judgment (Fiske & Taylor, 1991; Gilbert, 1998; Jones & Davis, 1965; Kelley, 1967; Ross & Fletcher, 1985) and recent research suggests that person perception is primary. Global evaluations of people are employed automatically and effortlessly, develop remarkably early on in life, and (despite considerable variability) are found across cultures (Choi & Nisbett, 1998; Hamlin, Wynn, & Bloom, 2007; Lieberman, Jarcho, & Obayashi, 2005; Uleman, Saribay, & Gonzalez, 2008; Willis & Todorov, 2006).

Furthermore, the focus on persons may be most pronounced in the moral domain. The most basic dimension of person perception—an individual's warmth or benevolence (Fiske, Cuddy, & Glick, 2007)—speaks at least partly to the moral qualities of an agent. Moreover, studies examining the component parts of warmth judgments find that traits related to the morality component (e.g., honesty, sincerity, and trustworthiness) are dominant in forming global impressions of others relative to other components of warmth (such as sociability; Brambilla, Rusconi, Sacchi, & Cherubini, 2011). In short, social perception is at its root person perception, and person perception appears to place special weight on moral traits.

From a functional perspective, it makes sense that people would show a concern for moral character. Research from various disciplines suggests that moral thinking helps us resolve fundamental collective action problems and coordinate behavior with other agents (Gintis, Bowles, Boyd, & Fehr, 2005; Haidt, 2007). To the extent that moral character is predictive of whether a person will cooperate or defect in joint endeavors, such information is valuable when making basic social decisions. So even when an act is immaterially harmful (e.g., wasting a tiny fraction of company money on expensive curtains), the information gleaned may be highly diagnostic of personal character and useful for predicting more consequential future acts (e.g., irresponsible leadership decisions).

An informational approach

Some of these insights go as far back as David Hume's conjecture that blame is our reaction to behaviors indicating bad moral character (Hume, 1739/1888). Hume suggested an inferential approach to judgments of blame—people have imperfect information about the moral character of others, and an act serves as a *signal* about a person's character. Following Hume, we argue that people have negative moral reactions to acts that are highly informative of the agent's immoral character, and that such judgments may be independent of evaluations of the act itself.

While the concept of informativeness has been operationalized in numerous ways (see Nelson, 2005; Nelson, McKenzie, Cottrell, & Sejnowski, 2010), we examine participants' subjective assessments of informativeness without relying on a normative framework. We simply make two assumptions: (i) people assess the extent that a behavior provides information about moral character and (ii) when possible, use such information to inform their judgments.

A full elucidation of why certain acts are perceived to be informative lies beyond the scope of this paper. Classic attribution models, such as Kelley's (1967) covariation model and Jones and Davis' (1965) correspondent inference model, specify some of the basic factors involved in drawing global traits from specific acts, including an act's distinctiveness, stability over time, social desirability, and the degree that other people engage in the same behavior. More recent work identifies further sources whereby people derive character information, such as an act's costliness (Grafen, 1990; Spence, 1973), speed (Critcher et al., 2011), and controllability (Pizarro, Uhlmann, & Salovey, 2003). While this body of research paints a rich picture of when social perceivers go from acts to dispositions, prior models have not articulated (and empirical studies have not examined) the degree to which moral judgments are predicated on evaluations of acts versus evaluations of persons, or whether people distinguish between the two.

One novel aspect of the current paper therefore is to show that act-judgments can be dissociated from person-judgments. Another novel aspect of the current research is to show how sensitivities in the differential informativeness of an act can help to explain moral reactions to immaterial harms.

The present research

The current studies examine and confirm two basic premises necessary for any viable person-centered account of moral judgments. Studies 1a and 1b demonstrate that evaluations of moral character (person-based judgments) are independent of evaluations of actions (act-based judgments) by showing a dissociation between the two types of judgments. For our purposes we define a person-based judgment as "an evaluation of the global moral worth of an individual" and an act-based judgment as "an assessment of the acceptability or permissibility of a given behavior." Establishing a dissociation between act- and person-judgments is important because it indicates that person-centered judgments are not superfluous or the by-product of judgments about an action, but are a separate psychological process. Study 2 demonstrates that person-based cues influence moral judgments by directly measuring the informativeness of an act and examining its effects on judgments.

Importantly, the present studies are not the first to demonstrate moral outrage over immaterial acts. For instance, Haidt, Koller, and Dias (1993) document negative moral reactions to harmless but disgusting acts such as having sex with a dead chicken. However, this research was focused on demonstrating participants' inability to provide a rational explanation for their judgments ("moral dumbfounding"). Instead here we aim to explain why participants find immaterial acts offensive by appealing to the distinction between act-centered and person-centered moral judgments. To this end, we first demonstrate that judgments of acts and persons can be dissociated in the domain of immaterial harms. We then show the perceived informativeness of immaterial acts (i.e., the extent to which such acts speak to moral character) plays a direct role in influencing moral judgments. Such findings would provide evidence that moral outrage over immaterial acts can be driven by person-centered concerns.

A final point: although this paper does not attempt to parse the exact features of moral character that people find informative, we begin with some working assumptions. When asked to describe the qualities of a moral person, people view both a sense of integrity and a capacity for empathy as crucial aspects of moral character (Aquino & Reed, 2002; Lapsley & Lasky, 2001; Walker & Hennig, 2004). Integrity and empathy have been conceptualized alternatively as key components of one broader dimension of moral character (Lapsley & Lasky, 2001) or two separate but correlated components (Walker & Hennig, 2004). Therefore, we expect acts that signal deficits in empathy or integrity to be potentially useful sources of information when making moral judgments. The present studies examined immaterial harmful acts that revealed deficits in empathy (Studies 1a and 1b) or integrity (Study 2).

Study 1a

One reason that prior research may not have distinguished between act- and person-judgments is because they may be thought to be one and the same. After all, by common belief good people are those who do good things and bad people are those who do bad things. Furthermore, it seems that many features important for determining the blameworthiness of an act would also be important for determining bad moral character. Take the difference between first- and second-degree murder as an example. What makes first-degree murder worse than second-degree murder as an act is that first-degree murder requires a premeditated intention to kill (malice aforethought). However, it seems that engaging in premeditated

harm would also be indicative of worse moral character. The conceptual overlap between acts and persons makes it difficult to know if subjects genuinely derive information about people independent of evaluations of their acts, or if act- and person-judgments are psychologically indistinguishable.

Therefore, a first step towards establishing that moral evaluations are sensitive to person-centered concerns would be to show that person-centered judgments can be psychologically separated from act-centered judgments. Accordingly, Studies 1a and 1b demonstrate that act-person dissociations can occur in moral judgment; an act can be viewed as relatively less blameworthy, yet signal a more severe deficit in moral traits such as empathy. Study 1a demonstrates this dissociation under conditions of joint evaluation and Study 1b under conditions of separate evaluation. Study 1a further rules out the alternative explanation that this pattern of results can be attributed to an act's novelty or rarity.

Methods

Sixty-eight undergraduates (34 females) completed an anonymous survey. Participants read a scenario involving two persons, "John" and "Robert" (two names identified as similar in intelligence, age, and other connotations; see Kasof, 1993). Both targets learned that their respective girlfriends had been unfaithful, and reacted violently to the news. The *woman-beater* scenario read as follows: "John learns that his girlfriend of 8 years has been sleeping around with another man. Upon hearing this, John becomes overwhelmed with rage and beats up his girlfriend." The *cat-beater* scenario replaced "beats up his girlfriend" with "beats up his girlfriend's cat." The pairing of the names with the target descriptions was counterbalanced across participants.

Participants were asked to evaluate whose *actions* were more immoral on a 7-point scale (1 = *definitely John beating up his girlfriend*, 7 = *definitely Robert beating up his girlfriend's cat*). Participants also assessed character attributes, including which person was more empathic, sadistic, "sick and twisted," "screwed up," and likely to feel sorry for the homeless, help the homeless, enjoy the suffering of others, and have normal human feelings. Participants responded to these items on a 7-point scales ranging from 1 (*definitely John*) to 7 (*definitely Robert*). Responses were combined to form an index of *moral character* evaluations ($\alpha = .83$). All items were coded so that higher scores reflected negative reactions towards the cat-beater, and lower scores reflected negative reactions towards the woman-beater. Participants were also asked which of the two acts was "more statistically common" using the same 7-point scale as before.

Results and discussion

A two-level (question type: actions vs. moral character) repeated measures analysis of variance (ANOVA) found a reliable difference in judgments, $F(1, 67) = 49.11$, $MSE = 1.41$, $p < .001$. Follow-up tests using the scale midpoint of 4 as the test value (since participants made comparative judgments of John and Robert) indicated that the cat-beater's actions were seen as less wrong than those of the woman-beater, $M = 3.04$, 95% Confidence Interval (CI) [2.59, 3.50], $p < .001$. However, the cat-beater was as also seen as having worse moral character than the woman-beater, $M = 4.47$, 95% CI [4.21, 4.74], $p < .001$. An internal analysis found that 76% of our participants showed the predicted act-person dissociation (for details, see the Supplementary Materials).

We also ruled out that this act-person dissociation could be explained by a frequency of occurrence account (in other words, that our participants made stronger inferences about moral character regarding the cat-beater because cat-beating might be less common than domestic abuse). Models of Bayesian inference dictate that low probability events are especially informative (e.g., McKenzie &

Mikkelsen, 2007) and, in a similar fashion, social psychological research on person perception suggests that rare behaviors lead to stronger trait-based attributions (Ditto & Jemmott, 1989; Fiske, 1980; Jones & Davis, 1965; Kelley, 1967). Indeed, participants did report that the cat-beater had performed a more uncommon act than the woman-beater, $M = 2.00$, 95% CI [1.71, 2.90], $p < .001$. However, there was no reliable association between perceived rarity and act-judgments, $r = .16$, $n = 68$, $p = .19$, or person-judgments, $r = -.05$, $n = 68$, $p = .66$. To further test if rarity was responsible for the dissociation between act- and person-judgments, we conducted a repeated-measures analysis of covariance (ANCOVA) with rarity judgments included as a covariate alongside question type (actions vs. moral character). If rarity judgments explain the dissociation, then the effect of question type should diminish while frequency judgments remain statistically significant. However, we found that question type continued to reliably explain judgments, $F(1, 133) = 29.32$, $MSE = 2.37$, $p < .001$, while rarity judgments did not, $F < 1$. In other words, the act-person dissociation persisted even when statistically controlling for perceptions of rarity.

Study 1b

Study 1a identified an act-person dissociation: violence directed at animals signaled a more severe deficit in empathy than similar violence directed at a human being, even though harming a human was seen as a more blameworthy action. A potential concern regarding the results of Study 1a is that participants provided their reactions to the woman-beater and cat-beater under conditions of joint evaluation rather than separate evaluation. In other words, each participant in Study 1a evaluated both targets. Joint evaluation promotes the use of explicit comparisons and logical rules, and can elicit different preferences than separate evaluation (Hsee, Loewenstein, Blount, & Bazerman, 1999). Study 1b therefore sought to replicate the observed act-person dissociation when participants evaluated *either* the woman-beater *or* the cat-beater.

Methods

A sample of 273 adults (145 females, $M_{\text{age}} = 34$ years) took part in an online survey. The materials and design paralleled that of Study 1a, with some exceptions. The primary difference was that participants were randomly assigned to make moral judgments about either acts or persons, and judged either the woman-beater or cat beater. That is, the study employed a 2 (evaluative task: acts vs. persons) \times 2 (target scenario: cat-beater vs. woman-beater) between-subjects design.

Since both target behaviors involved acts that are normally viewed as highly immoral, we took some additional steps to prevent ceiling effects. First, participants responded on 100-point scales so that they would be less inclined to use the endpoints of the scale. Second, the target scenario was embedded within a set of three additional scenarios involving moral infractions of varying degrees (a student cheating on an exam, a con artist scamming senior citizens out of their savings, and a hit-and-run incident involving a drunk driver). This was done in order to implicitly "norm" participants to the endpoints of the scale, such that beating a cat or woman would be more likely to fall within the middle of the scale. The filler scenarios were always presented prior to the target scenario and in a counter-balanced order (the ordering of the filler scenarios did not significantly impact or qualify any of the results).

Participants were randomly assigned to evaluate either the morality of the target's actions ("How morally blameworthy is this act?", "How deserving of punishment is this act?", and "How immoral is this act?"; $\alpha = .86$) or his character traits ("How sadistic is this person?", "How likely is this person to have normal human feelings?", and "How cruel is this person?"; $\alpha = .73$). Responses were provided on scales ranging from 0 (*not at all*) to 100 (*extremely*). All items were scored such that higher scores reflected more negative evaluations.

Results and discussion

Using a between-subjects design, we find an act-person dissociation similar to Study 1a. Participants viewed the cat-beater's actions as less wrong ($M = 73.03$, $SD = 21.83$) than the woman-beater's actions ($M = 79.98$, $SD = 17.92$), $t(133) = 1.99$, $p < .05$, $d = 0.35$. When making assessments about the person, however, participants viewed the cat-beater as having worse moral character ($M = 61.42$, $SD = 21.28$) than the woman-beater ($M = 51.03$, $SD = 20.87$), $t(136) = 2.90$, $p = .004$, $d = 0.50$. An analysis of variance confirms that the act-person dissociation (the interaction between evaluative task and target scenario on judgments) was reliable, $F(1, 269) = 11.99$, $MSE = 425.42$, $p < .001$.

Study 1b replicated the observed act-person dissociation under conditions of separate rather than joint evaluation. Although Studies 1a and 1b did not intend to answer *why* animal cruelty is viewed as especially informative about moral character, it is worth noting that animal abuse is a strong predictor of other antisocial and illegal behaviors (Becker, Steuwig, Herrera, & McCloskey, 2004; Walton-Moss, Mangello, Frye, & Campbell, 2005). Clinical research on animal abuse suggests that such behaviors signal an erosion of normal empathic responses and an ability to fully internalize moral rules. But regardless of the ultimate basis of this act-person dissociation, Studies 1a and 1b clearly show that assessments of a person's character are not always the same thing as an evaluation of their actions.

Study 2

Having established in Studies 1a and 1b that judgments of people can be independent of evaluations of their actions, we now examine how person-centered cues play a direct role in influencing moral judgments. Participants evaluated candidates for a CEO position, and the type of compensation package requested was manipulated between-subjects. We hypothesized that requesting a frivolous perk (even when controlling for its monetary costs) would signal poor moral character, and participants would be especially opposed to such candidates. It was further expected that participants would find the perk more informative about "who the candidate really was" as a person than monetary compensation, and that perceived informativeness would predict moral judgments.

Methods

Eighty-one adults (54 females, $M_{\text{age}} = 35$ years) took part in an online survey.¹ Participants were randomly assigned to one of three between-subjects conditions. All participants read that Peterson Manufacturing was interviewing two candidates for CEO, John and Robert. The two candidates had comparable backgrounds and employment histories, and this information was counterbalanced across participants. In all conditions the high salary candidate requested a salary of \$2 million per year and the low salary candidate requested a salary of \$1 million per year plus a signing bonus. The signing bonus was manipulated between subjects, and consisted of \$40,000 cash (*cash only* condition), a \$40,000 marble table (*marble table* condition), or a \$40,000 marble table engraved with the candidate's portrait (*personalized table* condition). We reasoned that the marble table would be perceived as a frivolous perk and viewed negatively, but that the personalized table would be seen as especially egotistical and reflective of poor priorities.

Participants rated the candidates in terms of their relative *integrity* (e.g., "Who has more integrity"; 5 items, $\alpha = .88$), *anticipated behavior* (e.g., "Who would you expect to make more sound business decisions as CEO?"; 4 items, $\alpha = .91$), and *hiring preferences* (e.g., "Who would you hire as CEO?"; 3 items, $\alpha = .95$) on 7-point scales ($-3 = \text{definitely John}$,

$3 = \text{definitely Robert}$). Responses were scored so that low scores indicated more negative evaluations of the low salary candidate and high scores indicated more negative evaluations of the high salary candidate. Participants also rated the informativeness of each candidate's compensation request by indicating how much it "revealed about who he *really* is and what he *really* is like" and "revealed about his true moral character" ($1 = \text{nothing}$, $7 = \text{a great deal}$). All dependent measures 397 for Study 2 are provided in the Supplementary materials section.

Results

As shown in Table 1, participants viewed the low salary candidate more favorably than the high salary candidate when the former requested a \$40,000 cash bonus. Participants viewed the low salary candidate as having greater integrity and more likely to behave responsibly in the future, and provided more positive hiring evaluations (all $ps < .05$). However when the low salary candidate asked for a signing bonus in the form of a \$40,000 marble table, participants made the opposite pattern of attributions. They now saw the low salary candidate as having *less* integrity and as *less* likely than the high salary candidate to behave responsibly in the future ($ps < .05$). This pattern was most pronounced when the candidate asked for a marble table with his portrait engraved into it—a particularly egregious perk. The difference in judgments across the three conditions was sizable, with Cohen's d ranging from 0.56 to 2.43.

In terms of informational value, the candidate's request was seen as particularly revealing if he requested a frivolous perk. Participants in the marble table condition saw the table request as more informative about the candidate ($M = 4.45$, $SD = 1.45$) than the high-salary request ($M = 3.74$, $SD = 1.70$), $t(30) = 3.77$, $p < .001$, $d = .70$. Similarly, participants in the personalized table condition saw the request as more informative ($M = 5.57$, $SD = 1.17$) than the high-salary request ($M = 4.31$, $SD = 1.23$), $t(26) = 4.88$, $p < .001$, $d = .94$. In the cash only condition, unlike the two table conditions, participants did not see the cash bonus as reliably more informative about the candidate ($M = 4.28$, $SD = 1.65$) than asking for a larger salary ($M = 4.10$, $SD = 1.65$), $t < 1$.

We also examined if differences in informativeness ("informational advantage") mediated evaluations of the candidates. Evaluations of the candidates (integrity, anticipated future behaviors, and hiring preferences) were highly correlated and loaded on the same underlying factor, so we collapsed them into a single measure of candidate evaluations ($\alpha = .95$). As expected, this global index of candidate evaluations reliably co-varied with experimental condition in a manner consistent with the findings reported earlier, $F(2, 78) = 16.77$, $MSE = 1.26$, $p < .001$. Next, we established that greater informational advantage for the low salary candidate (i.e., $\text{informativeness}_{\text{Low salary}} - \text{informativeness}_{\text{High salary}}$) was associated with more negative evaluations for that candidate ($r = -.46$, $n = 81$, $p < .001$). We then performed a mediation analysis of

Table 1
Results from Study 2.

	Experimental conditions						<i>F</i> (2, 78)	<i>MSE</i>
	Cash bonus		Marble table		Personalized marble table			
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>		
Integrity	1.08 _a	0.82	0.01 _b	1.20	−1.16 _c	0.99	29.03***	1.07
Anticipated future behaviors	0.54 _a	1.04	−.15 _b	1.37	−.80 _c	1.20	7.51***	1.50
Hiring preferences	0.83 _a	1.42	−.54 _b	1.79	−1.04 _b	1.62	8.48***	2.69
<i>N</i>	23		31		27			

Note: Condition means, standard deviations, and omnibus *F* tests for dependent variables in Study 2. Row means that do not share subscripts differ significantly at the $p < .05$ level.
(*** $p \leq .001$).

¹ 19 participants were excluded from the analysis because they failed to pass basic comprehension checks (for details on the specific items, see the Supplementary materials).

informational value on candidate evaluations using analysis of covariance (ANCOVA). When informational advantage was added as a covariate alongside experimental condition, the effect of condition was attenuated but still reliable, $F(2, 77) = 10.35$, $MSE = 1.13$, $p = .001$, and informational advantage continued to reliably co-vary with candidate evaluations, $F(1, 77) = 10.02$, $MSE = 1.13$, $p = .002$. A Sobel test confirmed that partial mediation by informational value was reliable, accounting for 19.5% of the total effect ($z = 2.21$, $p < .05$).

Discussion

Participants indicated a willingness to pay a high financial cost to avoid choosing a CEO candidate that asked for a frivolous executive perk. One might conclude that decision makers—as a matter of principle—refuse to pay for a perk even when such a refusal makes no sense financially. A person-centered approach, however, suggests that perks can speak to moral character in a way monetary compensation may not. As a candidate's requests became increasingly frivolous—from a cash bonus to a marble table to a marble table *with his face carved into it*—participants viewed the request as ever more informative of negative moral characteristics, and opposed hiring the candidate. Person-centered cues appeared to drive judgments, as participants were unwilling to hire the candidate who requested a perk only when that perk sent a strong negative signal about the candidate's character.

General discussion

The present research sought to understand public outrage over immaterial harms by drawing on (i) the distinction between act- and person-centered moral judgments and (ii) the informational value provided by social behaviors. Studies 1a and 1b demonstrate that person-centered moral judgments are not simply a by-product of judging an action, as some acts can be seen as less wrong yet signal *worse* moral character. For example, although violence toward a human was viewed as more blameworthy than violence toward an animal, animal cruelty signaled more severe deficits in empathy. Study 2 demonstrates that person-centered cues can directly influence moral judgments. People condemned CEO candidates who requested frivolous perks as part of their compensation package, even preferring to hire a considerably more expensive candidate. Participants also found these frivolous perks (compared to monetary compensation) as more informative about the candidates' moral character, and judgments of informativeness statistically mediated hiring judgments.

The present studies appear to provide support for David Hume's insight that "blame and punishment are not directly for acts but for character traits" (Bayles, 1982, p. 7). Here, we captured this perspective as an informational approach to hypothesis testing: individuals have imperfect information about an agent and use behavioral cues as a way to gain insight into that agent's character. People not only have beliefs that some behaviors are more informative than others, but also incorporate such beliefs into their judgments of blame. Because most actions of moral significance are likely to be highly informative about character, we believe that person-centered cues play an important role in judgments of blame.

Limitations and future directions

Although the current studies do not answer the question of *why* some acts are viewed as highly informative of moral character, future studies will clearly need to do so. People use many properties of an act to help derive information about the person who carried it out (Critcher et al., 2011; Jones & Davis, 1965; Kelley, 1967; Spence, 1973). Moreover, how people use such information will depend on their lay theories about human motivations and personal agency (e.g.,

Uleman et al., 2008) and the goals of the judgment task. As a result, we believe that any comprehensive model of act vs. person-centered moral judgments will view such evaluations as complex and multiply-determined.

The present investigations relied heavily on participants from the United States and other Western countries. This is important because of cross-cultural differences in the tendency to attribute behavior to personal character (Miller, 1984; Norenzayan, Choi, & Nisbett, 2002). Although both East Asians and Westerners frequently interpret behavior in terms of personality traits and other dispositions, East Asians are significantly more likely to take into account the situational context (Choi & Nisbett, 1998; Lieberman et al., 2005). But because moral thinking helps to solve universal interpersonal concerns (Haidt, 2007), we venture to guess that this gap between members of "individualist" and "contextualist" cultures narrows in the moral domain. In other words, when it comes to issues of moral character, contextualist individuals should become more likely to attend to, and make use of, dispositional attributions. Providing preliminary evidence for this idea, Uhlmann et al. (2011) found that American and Indian participants drew equally negative inferences regarding the moral traits of a CEO who received frivolous perks. However, this hypothesis needs to be explored more systematically in subsequent research.

Another remaining question is the role of implicit versus explicit mental processes in these effects. Although speculative, there are reasons to doubt the informativeness of an act is deliberately extracted and consciously employed to make calculated inferences of moral character. Trait inferences in general and moral judgments in particular tend to occur spontaneously and intuitively (Gilbert, 1998; Haidt, 2001). Therefore, we believe that even when the outputs of moral judgments (e.g., outrage over immaterial harms) are consciously accessible, participants' introspective access into the underlying psychological processes is likely far from perfect. Future research should address this issue empirically.

Conclusion

Returning to our initial example of John Thain, it seems unlikely that a TV segment on "The Worst Acts in the World" would have featured his purchase of \$28,000 curtains. But such an act did land him on "The Worst Person in the World." Public outrage over John Thain's office refurbishing illustrates the potential damage of engaging in frivolous, albeit immaterially harmful acts. Such cautionary tales speak to the large costs for individuals and organizations that ignore the moral signals broadcasted by their behavior.

Appendix A. Supplementary data

Supplementary data to this article can be found online at [doi:10.1016/j.jesp.2011.05.010](https://doi.org/10.1016/j.jesp.2011.05.010).

References

- Aquino, K., & Reed, A., II (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83, 1423–1440.
- Bayles, M. (1982). Character, purpose and criminal responsibility. *Law and Philosophy*, 1, 5–20.
- Becker, K. D., Steuwig, J., Herrera, V. M., & McCloskey, L. A. (2004). A study of firesetting and animal cruelty in children: Family influences and adolescent outcomes. *Journal of the American Academy of Child and Adolescent Psychiatry*, 43, 905–912.
- Brambilla, M., Rusconi, P., Sacchi, S., & Cherubini, P. (2011). Looking for honesty: The primary role of morality (vs. sociability and competence) in information gathering. *European Journal of Social Psychology*, 41, 135–143.
- Choi, I., & Nisbett, R. E. (1998). Situational salience and cultural differences in correspondence bias and the actor–observer bias. *Personality and Social Psychology Bulletin*, 24, 949–960.
- Critcher, C., Inbar, Y., & Pizarro, D. A. (2011). *When impulsivity illuminates moral character: The case of rashness*. Manuscript under review.

- Ditto, P. H., & Jemmott, J. B., III (1989). From rarity to evaluative extremity: Effects of prevalence information on evaluations of positive and negative characteristics. *Journal of Personality and Social Psychology*, 57, 16–26.
- Fiske, S. T. (1980). Attention and weight in person perception: The impact of negative and extreme behavior. *Journal of Personality and Social Psychology*, 38, 889–906.
- Fiske, S., Cuddy, A., & Glick, P. (2007). Universal dimensions of social cognition: Warmth and competence. *Trends in Cognitive Sciences*, 11, 77–83.
- Fiske, S. T., & Taylor, S. E. (1991). *Social cognition*. New York: McGraw-Hill.
- Gasparino, C. (2009, January 22). *John Thain's \$87,000 rug*. The Daily Beast. Retrieved from <http://www.thedailybeast.com>
- Gilbert, D. T. (1998). Ordinary personology. In D. T. Gilbert, S. T. Fiske, & G. Lindzey (Eds.), *The handbook of social psychology* (pp. 89–150). (4th ed.). New York: McGraw Hill.
- Gintis, H., Bowles, S., Boyd, R. T., & Fehr, E. (2005). *Moral sentiments and material interests: The foundations of cooperation in economic life*. Cambridge, Mass: MIT Press.
- Grafen, A. (1990). Biological signals as handicaps. *Journal of Theoretical Biology*, 144, 517–546.
- Greene, J. D., Nystrom, L. E., Engell, A. D., Darley, J. M., & Cohen, J. D. (2004). The neural bases of cognitive conflict and control in moral judgment. *Neuron*, 44, 389–400.
- Haidt, J. (2001). The emotional dog and its rational tail: A social intuitionist approach to moral judgment. *Psychological Review*, 108, 814–834.
- Haidt, J. (2007). The new synthesis in moral psychology. *Science*, 316, 998–1002.
- Haidt, J., Koller, S., & Dias, M. (1993). Affect, culture, and morality, or is it wrong to eat your dog? *Journal of Personality and Social Psychology*, 65, 613–628.
- Hamlin, J., Wynn, K., & Bloom, P. (2007). Social evaluation by preverbal infants. *Nature*, 450, 557–559.
- Hills, A. & Michaels, A., (2002, September 18). Paw taste condemns Kozlowski: Report says Tyco bought \$15,000 dog umbrella stand for chief's apartment. *Financial Times*, First section, pp. 1.
- Hsee, C. K., Loewenstein, G. F., Blount, S., & Bazerman, M. H. (1999). Preference reversals between joint and separate evaluation of options: A review and theoretical analysis. *Psychological Bulletin*, 125, 576–590.
- Hume, D. (1739/1888). *A treatise of human nature*. Oxford: Oxford University Press.
- Johnson, C. (2003, October 28). Tyco trial turns to 'birthday bash'. *The Washington Post*, E01.
- Jones, E. E., & Davis, K. E. (1965). A theory of correspondent inferences: From acts to dispositions. In L. Berkowitz (Ed.), *Advances in experimental social psychology*, Vol. 2. (pp. 219–266) New York: Academic Press.
- Kasof, J. (1993). Sex bias in the naming of stimulus persons. *Psychological Bulletin*, 113, 140–163.
- Kelley, H. H. (1967). Attribution theory in social psychology. In D. Levine (Ed.), *Nebraska symposium on motivation* (pp. 192–238). Lincoln: University of Nebraska Press.
- Lapsley, D. K., & Lasky, B. (2001). Prototypic moral character. *Identity*, 1, 345–363.
- Lieberman, M. D., Jarcho, J. M., & Obayashi, J. (2005). Attributional inference across cultures: Similar automatic attributions and different controlled corrections. *Personality and Social Psychology Bulletin*, 31, 889–901.
- McKenzie, C. R. M., & Mikkelsen, L. A. (2007). A Bayesian view of covariation assessment. *Cognitive Psychology*, 54, 33–61.
- Mikhail, J. (2007). Universal moral grammar: Theory, evidence, and the future. *Trends in Cognitive Sciences*, 11, 143–152.
- Miller, J. G. (1984). Culture and the development of everyday social explanation. *Journal of Personality and Social Psychology*, 46, 961–978.
- Moore, A. B., Clark, B. A., & Kane, M. J. (2008). Who shalt not kill? Individual differences in working memory capacity, executive control, and moral judgment. *Psychological Science*, 19, 549–557.
- Nelson, J. D. (2005). Finding useful questions: On Bayesian diagnosticity, probability, impact, and information gain. *Psychological Review*, 112, 979–999.
- Nelson, J. D., McKenzie, C. R. M., Cottrell, G. W., & Sejnowski, T. J. (2010). Experience matters: Information acquisition optimizes probability gain. *Psychological Science*, 7, 960–969.
- Norenzayan, A., Choi, I., & Nisbett, R. E. (2002). Cultural similarities and differences in social inference: Evidence from behavioral predictions and lay theories of behavior. *Personality and Social Psychology Bulletin*, 28, 109–120.
- Pizarro, D. A., & Tannenbaum, D. (in press). Bringing character back: How the motivation to evaluate character influences judgments of moral blame. In P. Shaver & M. Mikulincer (Eds.), *The social psychology of morality: Exploring the causes of good and evil*. New York: APA books.
- Pizarro, D., Uhlmann, E., & Salovey, P. (2003). Asymmetry in judgments of moral praise and blame: The role of perceived metadesires. *Psychological Science*, 14, 267–272.
- Ross, M., & Fletcher, G. J. O. (1985). Attribution and social perception. In G. Lindzey, & E. Aronson (Eds.), *The handbook of social psychology*, Vol. 2. (pp. 73–114) New York: Random House.
- Spence, M. (1973). Job market signaling. *The Quarterly Journal of Economics*, 3, 355–374.
- Uhlmann, E. L., Tannenbaum, D., Heinze, J., Srinivasan, M., & Diermeier, D. (2011). *The role of misanthropic social judgments in reputational crises*. Unpublished manuscript, HEC Paris.
- Uleman, J. S., Saribay, S. A., & Gonzalez, C. (2008). Spontaneous inferences, implicit impressions, and implicit theories. *Annual Review of Psychology*, 59, 329–360.
- Walker, L. J., & Hennig, K. H. (2004). Differing conceptions of moral exemplarity: Just, brave, and caring. *Journal of Personality and Social Psychology*, 86, 629–647.
- Walton-Moss, B. J., Mangello, J., Frye, V., & Campbell, J. C. (2005). Risk factors for intimate partner violence and associated injury among urban women. *Journal of Community Health*, 30, 377–389.
- Willis, J., & Todorov, A. (2006). First impressions: Making up your mind after 100 ms exposure to a face. *Psychological Science*, 17, 592–598.