You're heartless, I'm less: Moral judgment and social norm

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Are moral judgments to sacrificial dilemmas shaped by a latent social norm? The present research addresses this issue. We report a set of four studies which question the existence of a social norm in the longstanding deontism/utilitarian debate by relying on two original tools, namely substitution technique and self-presentation paradigm. Study 1 showed that American participants asked to answer like most Americans would do were more utilitarian than control participants who answered in their own name (Study 1). Study 2 showed that participants instructed to answer in a disapproval fashion were more utilitarian than both participants instructed to answer in an approval fashion and control participants. Importantly, no difference was observed between the approval and control conditions, suggesting that participants naturally align their moral judgments with a latent norm. Study 3a and 3b explored the effect of the activation of a deontic norm using the substitution instruction on subsequent impression formation. Although we replicated the effect of substitution instruction, we failed to show that activating a norm in a given individual shaped its evaluation of other people who do not align with this norm. Finally, we report a mini meta-analysis targeting the pooled effect and homogeneity among our studies.

Keywords: social norm, moral utilitarianism, substitution instruction, self-presentation paradigm

Introduction

Would you find it acceptable to kill an innocent man to save hundreds of others? Moral philosophers disagree on this question. Advocates of deontology find it unacceptable, as they view morality as intrinsically tied to the nature of an action regardless of its consequences—thus, killing an innocent person is nothing but immoral regardless of how many lives may be saved (Kant, 1785/1959). By contrast, advocates of utilitarianism, find it acceptable to kill an innocent person, on the basis that it will maximize the aggregate well-being—thus, killing an innocent person is acceptable if that action minimizes total possible harm (Mill, 1861/1998).

Most lay people are puzzled at the time of addressing such a situation, and this unsurprising: moral dilemmas are designed so that there is no clear, optimal response. Sometimes they judge actions consistent with a deontological principle; at other times, they judge actions consistent with a utilitarian principle (Greene et al., 2001). This inconsistency has sparked unprecedented interest these last decades among psychologists, philosophers and economists in studying the psychological processes underlying utilitarian and deontological judgments (e.g., Białek & Terbeck, 2016; Białek et al., 2014; Greene, 2015; Conway & Gawronski, 2013, Kahane, 2015; Moore et al., 2011; Nichols, 2002, Trémolière et al., 2017).

Although there are multiple psychological models of moral judgment, the dual-process theory of moral judgment (Greene, 2014; Greene & Haidt, 2002) stands as a prominent one in recent years. This theory, inspired by the popular dual-process model of thinking (Evans, 2008; Kahneman, 2011), describes moral judgment as an interplay of fast, effortless, intuitive processing and slow, working-memory dependent, deliberate processing. Data accumulate which suggest that deontic responses would be underpinned by intuitive processing, while utilitarian responses would be underpinned by more deliberative processing (Greene, 2007;

Greene et al., 2001, 2008; Koenigs et al., 2007); and this is especially the case for personal moral dilemmas (which require to directly inflict harm to someone) as compared to impersonal dilemmas (which require to divert a pre-existing harm).

Of interest is why the deontological response is the most intuitive one in the case where one has to actively hurt someone to save a greater number of people. Targeting the psychological underpinnings of moral judgments, Greene's dual-process theory proposes that people addressing a moral dilemma immediately experience a negative emotional reaction to the prospect of causing harm even if it serves a greater number of people. In the event that this emotional reaction is sufficiently powerful, it leads the decision-making process, resulting in a characteristically deontological moral judgment: a harmful action will be judged morally unacceptable. Some authors, however, have argued that negative affect alone is insufficient to produce judgments of "immorality". Rather, negative affect must be combined with an appraisal that the behavior causing a negative affect is *forbidden*, as proposed by the affect-backed normative theory (Bartels, 2008; Nichols, 2002; Nichols & Mallon, 2006). That is, social considerations intertwine with cognitive ones. A possibility for the intuitive nature of deontological responses in such dilemmas is that the latter activate a social norm according to which the prospect of hurting someone to aid others is unbearable. Should it be true, deontological responses to a moral dilemma should be given greater social value than utilitarian responses. Although this issue has been mostly overlooked in the literature, recent data suggest that characteristically deontic individuals are associated with positive considerations and are given greater social value: they are more averse to harm, they are negatively associated with antisocial personality traits (Bartels & Pizarro, 2011; Cushman et al., 2012; Djeriouat & Trémolière, 2014; Kahane et al., 2015), they are perceived as more moral (Uhlmann et al., 2013), more trustworthy, are preferred as social partners, and received higher transfers in economic games (Everett et al., 2016). Moreover, recent work suggests that

concerns about self and social perception also play a significant role at the time of addressing sacrificial dilemma. Lay people seem aware of what impressions their dilemma judgments convey to others—i.e., they hold accurate meta-perceptions—and they strategically shift public judgments to present themselves as warm (by rejecting harm) or competent (by accepting harm) when the circumstances favor these characteristics (Rom & Conway, 2018). In addition, people tend to side with the majority when they are given the response from others (Kundu & Cummins, 2013), and this is especially true when the decision is to reject harm (Bostyn & Roets, 2017). Finally, it was shown that participants who addressed moral dilemmas in front of mirrors—a classic manipulation of self-awareness—tended to reject harm more than those in a control condition (Reynolds et al., 2019). Taken together, these findings suggest that deontological decisions in moral dilemmas may partially reflect self-awareness and concerns about one's image.

Beyond the domain of moral judgment, extensive research (see Leary, 2019, for a review) has shown that people engaged in social interactions adopt strategies which are most likely to make themselves look good in the eyes of others (also known as self-presentation strategies; Goffman, 1959). This tendency underlies one of the most prevalent families of self-presentation strategies (Jones & Pittman, 1982), namely, the desire for self-promotion. In a nutshell, theorists in the field have based their understanding of self-presentation strategies on social norms (see, for instance, Baumeister, 1982; Jellison & Green, 1981; Tedeschi, 1981; Tedeschi & Reiss, 1981). According to these authors, people promote the explanation of a given event in the way that is most valued by social norms of judgment. It can then be assumed that in a desire for self-promotion, people addressing moral dilemmas would answer according to the most normatively valued way, which may take them away from the utilitarian response.

The current research

Addressing this issue, we will rely on two paradigms likely to account for a self-promotion strategy. The first one uses a *substitution technique*, which consists in asking individuals to respond in place of a large group they belong to (e.g. most Americans; see Piermatteo et al., 2014). There is evidence that participants express more counter-normative responses when answering on behalf of others than when answering according to standard instructions (i.e. in their own name; Guimelli & Deschamps, 2000). The effect triggered by the substitution instruction is proposed to be one of implicit social comparison: individuals tend to discredit the answers provided in place of others in order to promote themselves (Chokier & Moliner, 2006; Chokier & Rateau, 2009). That is, people tend to ascribe less praiseworthy judgments, decisions, and behaviors to others than to themselves.

The second one is the self-presentation paradigm, first proposed by Jellison and Green (1981; see Gilibert & Cambon, 2003), which has proven a highly effective tool in determining if a particular self-presentation strategy can be used to achieve positive evaluations (see, for example, Bonetto et al., 2020). A common protocol requires participants to present themselves to give either a good impression (a condition capturing pro-normative responses) or a bad impression (a condition capturing counter-normative responses; e.g., Dubois, 2000; Gilibert & Cambon, 2003; Darnon et al., 2009; Zouhri & Rateau, 2015; Bastart et al., 2018). Comparing the responses to these two conditions to that in a standard, control condition where no self-presentation instruction is given, provides indication about whether responses in the standard condition are influenced by a latent social norm.

Applying these paradigms to moral dilemmas will afford original cues about the possibility that people's judgements are rooted in latent social norms, making it possible, thus, to derive straightforward predictions. We expect that participants will be more deontological when they respond according to a standard instruction than when they respond according to a

substitute instruction (Study 1). Following the same rationale, we expect that participants will also be more deontological when they respond according to pro-normative rather than counter-normative instructions (Study 2). Should a valued social norm tend to favor deontological responses over utilitarian ones, we further expect no difference between control participants (who are given no specific instruction) and participants who respond according to pro-normative instructions. Finally, we will explore the effect of the substitution instruction on subsequent impression formation. If substitution instructions activate a deontic standard, then it is likely to influence subsequent interpersonal judgments. Specifically, it was suggested that participants who responded to moral dilemmas under a substitution instruction should be more likely than others to devalue an individual who responded in a utilitarian manner (Study 3a). They should also adhere less to a utilitarian political discourse and figure than to a deontological one (Study 3b).

Data availability statement

Full material and data are available as supplementary material on OSF (temporary anonymized link: https://osf.io/fdxh6/?view_only=90f8c4cf21c64a7ca5ff590235ea0054)

Sample size determination

Apriori power analyses were conducted using Gpower (Erdfelder et al., 1996). **Study 1:** The analysis indicated that a sample size of 176 would be sufficient to detect a significant effect of our predictors with a power of 0.95 and an alpha of 0.05, based on an effect size (d) of 0.5.

Study 2 The analysis indicated that a sample size of 252 would be sufficient to detect a significant effect of our predictors with a power of 0.95 and an alpha of 0.05, based on an effect size (f) of 0.25. **Study 3a.** Testing the effect of substitution instruction on formation impression, we target an effect size slightly lower than $d = 0.5$, expecting a sample size

comprised between 176 ($d = 0.5$) and 272 ($d = 0.4$). **Study 3b.** The analysis indicated that a sample size of 327 would be sufficient to detect a significant effect of our predictors with a power of 0.95 and an alpha of 0.05, based on an effect size (f) of 0.25. For all studies, the expected threshold was exceeded in a few hours of data collection, in which case all the participants were kept in the study (but see exclusion criteria section).

Exclusion Criteria

For all our studies, we excluded participants who scored lower than 3.5 (out of 7 on a scale ranging from not at all acceptable to Totally acceptable) on a control filler scenario (see Method of Study 1). Robustness analyses (displayed as supplementary material) showed that the effects remain unchanged when excluding in addition participants who spent less than 120 seconds taking the questionnaire, or else when including all the participants, but for Study 3b in the letter case, which is only marginal when taking exclusion criteria into account and becomes significant when using full sample).

Study 1 Substitution Instructions

Participants and design

We recruited 197 participants on the Mturk online data collection platform. Among the initial sample, 11 participants met the exclusion criterion and were removed from further analyses, leaving a final sample of 186 participants (98 females, 86 males, 1, non-binary, 1 not wishing to answer, Mean age = 38.12, SD = 12.83).

Material

Moral dilemmas: We used four moral dilemmas borrowed from Strohminger et al. (2011). These dilemmas each pit a utilitarian response (e.g., killing someone to save a greater number

of people) against a deontological response (e.g., it is not morally acceptable to kill someone even if it would save more people). Here is an example of a dilemma:

Marc is on a cruise ship when there is a fire on board, and the ship has to be abandoned. The lifeboat is carrying one more person than it was designed to carry. As a result, the lifeboat is sitting dangerously low in the water—it is already beginning to fill with water. The only one way to stop the boat from sinking is to throw the person sitting closest to him, a stranger, overboard. According to you, is it morally acceptable for Marc to throw the stranger overboard in order to save himself and the remaining passengers?

Participants answered using a visual analogical scale (VAS) ranging from 1 (not at all acceptable) to 7 (totally acceptable), and a mean score was calculated for each participant.

A fifth, control scenario, was also used, to check whether participants paid sufficient attention to the survey. This fifth scenario was a modification of the Crying dilemma, and featured no conflict between the utilitarian and the deontological response (e.g. Is it morally acceptable to give a baby a pacifier to save many people?). These five scenarios were used in our four studies.

Substitution Instructions: This method features two conditions (see Piermattéo et al., 2014). Participants in the control condition showed the following instructions: *“In this questionnaire, we are interested in your personal answers. There is no correct or incorrect answer. Once the participant had read the moral scenario, the following question was displayed: According to you, is it morally acceptable for [the agent to do the action]”*. Participants in the substitution condition showed the following instructions: *“In this questionnaire, we are not interested in*

your own personal answers. Rather, we would like you to indicate what most Americans would answer according to you. There is no correct or incorrect answer. According to most Americans, is it morally acceptable for [the agent to do the action]”.

We also used an additional attention check at the end of the experiment, for which participants were asked to answer the following question: *When filling out the questionnaire, were you asked to indicate what YOU thought about the morality of the action or what MOST AMERICANS thought about the morality of the action?*

Results

We conducted an independent t test, with substitution condition as the independent variable and utilitarianism responses as the dependent variables. The analysis showed that participants in the substitution condition ($M = 4.56$, $SD = 1.33$, $N = 93$) were significantly more utilitarian than participants in the control condition ($M = 3.90$, $SD = 1.59$, $N = 93$), $t(184) = -3.05$, $p = .003$, *Cohen's d* = -0.45, 95%CI [-1.076, -0.231].

A similar analysis conducted with the responses to the filler dilemma showed no difference between participants in the substitution condition ($M = 6.36$, $SD = 1.09$) and participants in the control condition ($M = 6.52$, $SD = 0.81$), $t(184) = 1.24$, $p = .22$, *Cohen's d* = 0.17, 95%CI [-0.992, 0.435].

The present results show that participants provide more utilitarian responses when they put themselves in other people's shoes. In terms of social comparison, a promising avenue worth investigating is that participants in the substitution condition seek to depreciate others in order to self-valorize. Should it be true, assigning a more utilitarian response to others would be a sign that people value a more deontic response more. Study 2 addresses this possibility. To this end, we rely on another manipulation, targeting how people subjectively value deontism/utilitarianism.

Study 2 Moral Judgment and self-presentation

Participants and design

We recruited 336 participants on the Mturk online data collection platform. Among the initial sample, 62 participants met the exclusion criteria and were then removed from further analyses, leaving a final sample of 274 participants (129 females, 138 males, 1 not wishing to answer, 6 missing, Mean age = 38.22, SD = 12.55).

Material

The moral dilemmas were the same as the ones used in Study 1. We now detail the novelty:

Norm of internality. We relied on the procedure of Jellison and Green (1981; see Gilibert & Cambon, 2003). Three conditions were designed. A first condition (*moral approval*), required participants to answer the moral dilemmas as if they wanted to give the best impression of themselves (the instruction reads: “*Of importance is that we ask you answer in the manner that you would if you were attempting to get the person who was going to read it to like and approve of you*”). A second condition, (*moral disapproval*), required participants to answer the moral dilemmas as if they wanted to give the worst impression of themselves (the instruction reads: “*Of importance is that we ask you answer in the manner that you would if you were attempting to get the person who was going to read it to dislike and disapprove of you*”). A third, control condition, asked the participants to answer the problem, without any specific instructions.

Results

We conducted an independent measure analysis of variance with condition as the independent variable, and utilitarian responses as the dependent variable. The analysis showed a main effect of condition, $F(2, 267) = 10.21, p < .001, \eta_p^2 = 0.08$. Post-hoc Tukey tests showed that participants in the disapproval condition gave more utilitarian responses ($M = 4.92, SD = 1.31$) as compared to both participants in the approval condition ($M = 3.81, SD = 1.74$), $p < .001, 95\%CI [0.513, 1.414]$, and participants in the control condition ($M = 4.04, SD = 1.70$), $p = .002, 95\%CI [0.286, 1.472]$. No significant difference was observed between participants in the approval condition and participants in the control condition, $p = .57, 95\%CI [-0.307, 0.776]^1$.

So far, the results of studies 1 and 2 clearly suggest that substitution instructions trigger a similar effect as pro-normative instructions aimed for people to exhibit the best possible self-image. In both cases, people are more deontic than control participants (Study 1) and participants subject to contra-normative instructions (Study 2). That is, these instructions seem to they activate a deontic norm. In the next studies, not only we aim to replicate these seminal results found with substitution instructions, but we will further explore the effect of this activation on subsequent impression formation. This questioning derives from the recent work showing that people rate deontic-like targets as warmer than utilitarian-like targets (Rom et al., 2017).

Study 3a Substitution and Formation Impression

Participants and design

We recruited 264 participants on the Mturk online data collection platform. Among the initial sample, 19 participants met the exclusion criteria and were then removed from any further

¹ It is worth noting that, unlike Study 1, we do not run the analysis for the filler scenario, as the approval/disapproval procedure makes such an analysis irrelevant in this case.

analysis, leaving a final sample of 245 participants (117 females, 127 males, 1 not wishing to answer, Mean age = 36.69, SD = 12.30).

Material and procedure

Participants first addressed the four moral dilemmas and the filler scenario, either in the control or the substitution condition, as manipulated in Study 1. We then used a procedure inspired by the judges' paradigm used by Jellison and Green (1981). Participants were instructed that they will be presented with the responses given by another randomly selected participant from a sample from another study (the instructions read: "*You will now be presented with the responses given by a participant randomly selected from a previous study. It is very important that you consider its responses carefully. After considering all her/his responses, you will be asked to evaluate that participant on several dimensions based on its responses.*"). These presumed responses, each displayed on a separate frame one at a time, were actually designed by the experimenters, so as to have this fake participant largely look utilitarian. His/her responses were designed based on the following rule: utilitarian response mean of this fake participant was set at approximate +1.5 standard deviation from sample mean of control participants from Study 1 ($\text{mean}_{\text{Study1}} = 3.4$, $\text{SD}_{\text{Study1}} = 1.47$). Therefore, we set that participant's mean at 5.6 (out of 7), using the four following values, one for each of the four moral dilemmas: 5.8, 4.9, 5.4, 6.3.

After considering the fake participant's responses, participants relied on a VAS ranging from 1 (Not at all) to 9 (very much) to evaluate this pseudo participant on nine dimensions: how much she/he finds this person *admirable, friendly, good, likable, nice, popular, similar*, how much she/he would *enjoy the person's company*, and *have for a friend* (see Jellison & Green, 1981).

Results

An independent t test, with substitution condition as the independent variable and utilitarianism responses as the dependent variables, showed that participants in the substitution condition ($M = 4.80$, $SD = 1.18$) gave significantly more utilitarian responses than participants in the control condition ($M = 4.18$, $SD = 1.61$), $t(243) = -3.45$, $p = .001$, *Cohen's d* = -0.44, 95%CI [-0.976, -0.264].

A similar analysis conducted with the responses to the filler dilemma showed no difference between participants in the substitution condition ($M = 6.24$, $SD = 0.92$) and participants in the control condition ($M = 6.32$, $SD = 0.93$), $t(243) = 0.50$, $p = .50$, *Cohen's d* = 0.09, 95%CI [-0.154, 0.312].

We then explored how much having participants answered via substitution shaped their moral evaluation of another fake participants who qualified as a utilitarian one. Because the nine statements in the formation impression task showed excellent reliability (Cronbach's $\alpha = .97$), we built a composite mean score. A subsequent analysis showed no effect of substitution on evaluation between participants in the substitution condition ($M = 4.10$, $SD = 1.53$) and control participants ($M = 3.77$, $SD = 1.77$), $t(236) = -1.57$, $p = .12$, *Cohen's d* = -0.20, 95%CI [-0.750, 0.084].

Our results replicate the phenomenon observed in Study 1, with participants being more utilitarian when answering as they think most of people would do, compared as with how they would judge themselves. Our results, however, do not show any effect of substitution instruction on participants' evaluations of other people who do not align with their view. Before drawing conclusions, we report a conceptual replication which varied in its outcome. Study 3b also has the benefit to propose a more ecological task, in which

participants are instructed to evaluate politicians based on their morality in the face of the Covid-19 issue.

Study 3b Conceptual replication

Participants and design

We recruited 402 participants on the Mturk online data collection platform. Among the initial sample, 25 participants met the exclusion criteria and were then removed from any further analysis, leaving a final sample of 377 participants (165 females, 212 males, Mean age = 38.10, SD = 12.88). Our protocol followed a 2 (condition: substitution vs. control) x 2 (politician: utilitarian vs. deontic) between-subject design.

Material and Procedure

Participants first addressed the four moral dilemmas and the filler scenario, either in the control or the substitution condition, as manipulated in Study 1 and 3a. They were then presented with a new evaluation task.

The new evaluation task displayed a fictitious politician who gave some points of view, capturing either a deontic or utilitarian perspective, about how the medical resources should be distributed in regards to the Covid-19 context. Statements from the utilitarian-like politician read as follows: *In the context of the current crisis linked to the Coronavirus epidemic, a politician has stated that it is imperative to favor medical care equipment for people who have the greatest chance of survival, who represent most of citizens, even though it requires retiring medical care in the few people with lower chances of survival.* Statements from the deontic-like politician read as follows: *In the context of the current crisis linked to the Coronavirus epidemic, a politician has stated that it is totally unbearable to favor medical care equipment for people who have the greatest chance of survival, even if they represent*

most of citizens, if it requires retiring medical care in the few people with lower chances of survival.

Participants were instructed to answer to indicate to *what extent they agreed with this candidate's proposal* and *how willing they would be to publicly support this politician*, using a VAS ranging from 1 (Totally Disagree) to 7 (Totally Agree).

Results

An independent t test, with substitution condition as the independent variable and utilitarianism responses as the dependent variables, showed that participants in the substitution condition ($M = 4.59$, $SD = 1.32$, $N = 181$) were more utilitarian than participants in the control condition ($M = 4.25$, $SD = 1.54$, $N = 196$), $t(373) = -2.32$, $p = .021$, *Cohen's d* = -0.24 , 95%CI $[-0.631, -0.052]$.

A similar analysis conducted with the responses to the filler dilemma showed no difference between participants in the substitution condition ($M = 6.37$, $SD = 0.88$) and participants in the control condition ($M = 6.47$, $SD = 0.83$), $t(375) = 1.08$, $p = .28$, *Cohen's d* = -0.12 , 95%CI $[-0.078, 0.269]$.

We then explored how much having participants answer via substitution shaped their moral evaluation of another fake participants who qualified as a utilitarian one. Because scores to the two evaluation questions highly correlated ($r = .82$, $p < .001$), we built a composite mean score. A subsequent independent measures ANOVA was performed with condition and type of politician as the independent variables, and evaluation as the dependent variable. The analysis showed no main effect (all F s < 0.88 , all p s $> .35$), nor a significant condition x politician type interaction, $F(1, 373) = 0.01$, $p = .92$, $\eta_p^2 < 0.001$, suggesting no effect on the variables on evaluation.

Again, we found a consistent effect of the substitution instruction on utilitarianism. We failed, just as it was the case in Study 3a, to observe an effect of this manipulation on impression formation.

Meta-analysis

A meta-analysis of the individual studies was performed to observe the overall general effect of the substitution instruction on moral utilitarianism and to explore possible heterogeneity issues in the observed effect sizes. The analysis showed that the manipulation significantly impacted participants' utilitarian judgments ($p < .001$; see Table 1 and Figure 1). Of importance is that the global heterogeneity is very low (Cochran $Q = 2.12$, $p = .35$, percentage of the variability in effect estimates due to heterogeneity $I^2 = 16.14$), supporting the overall homogeneity of the effect sizes among our studies.

Table 1. Summary results for the random effect meta-analysis.

Estimate	SE	Z	p	95%CI	Heterogeneity assessment			
					Cochran Q	Cochran Q <i>p</i>	T ²	I ² (%)
-0.35	0.08	-4.52	< .001	-0.501, -0.198	2.12	.35	0.003	16.14

Figure 1. Forest Plot of the effect sizes (Cohen's d) along with their 95% CI.

General Discussion

Does a norm emerge in the utilitarian/deontology debate, and does activating this norm shape people's moral judgments and subsequent evaluation of those people who do not share this norm? In four studies, we showed that although sacrificial dilemmas are assumed to pit two suboptimal responses against each other, people seem not blind to a socially acceptable response.

Our results showed that people were more utilitarian when answering under substitution instructions (Studies 1, 3 and 4). Of importance is that the participants' own responses align with a "norm", in that their personal responses are consistent with the responses that would make people like and approve of them (Study 2). Further, we explored if substitution instruction impacted on participants' subsequent evaluation of people (Study 3 and 4). Results, however, showed no effect on subsequent evaluation. Finally, we report a

meta-analysis of the effect of the substitution instruction on moral utilitarianism, which showed a great homogeneity in the effect sizes of our studies (Studies 1, 3a, and 3b).

Substitution instruction shape people's personal responses but leaves evaluation of others unaffected. How to reconcile these results? A possibility, although it is speculative, is that a deontism-skewed moral judgment may be seen an ideal but neither a prescriptive nor proscriptive norm, and people may be aware of this: in some situations, they may expect and accept other attitudes and behaviors. That is, the triggered norm does not induce subsequent prohibition of attitudes and behaviors that differ from this norm. An alternative possibility may come from the material we used, and the measure that may not be that impacting. For instance, in Study 3b, participants may have considered that the two politics hold albeit different but appealing ideas.

Based on work examining the role of basic psychological processes in the conduct of moral dilemma judgments, this research indicates that higher-order social processes also play a role. Participants appear to have accurate insight about the normative expectations that underlie their dilemma judgments. They thus strategically modify their judgments to match these expectations, depending on whether or not situations promote a process of self-valuation.

We believe that the present results contribute to ethical reflection: instructions can have an important impact on people's moral judgments, and possibly in high stakes situations. If it is possible to experimentally shape moral judgments by using such simple manipulations, therefore one has to worry about the possibility that judgments might be as easily biased in real life situations.

Caution, however, is warranted in interpreting the present data. First, and unsurprisingly, most people are not pure deontic nor utilitarian, and asserting that deontism is the norm would therefore be a mistake. Second, the results reported inform only personal

dilemmas but are silent regarding the existence of the same norm for impersonal dilemmas. This possibility seems highly unlikely: if deontism was a generalized norm, people should give consistent responses to personal and impersonal dilemmas. Literature clearly shows that it is not the case, and that people are more utilitarian when addressing impersonal moral dilemmas than personal ones (Greene et al., 2001; Moore et al., 2011).

We see the present study as a first step in studying the effect of substitution instructions on moral judgments. Further research will be needed to examine possible the generalizability of this effect to other categories of moral judgment (e.g. third-party evaluations of moral transgression) as well as possible variations in the observed process. It will also be necessary to examine further the conditions under which a substitution effect on moral judgment and behavior can be observed.

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