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Inconvenient Truths:
Determinants of Strategic Ignorance in Moral Dilemmas

Joël van der Weele*

April 23, 2014

Abstract

People often have incomplete information about the consequences of their actions for the payoffs of others. In an experimental allocation game I investigate how the choice to learn about such consequences depends on the costs and benefits of altruistic actions. The results show an asymmetric pattern: while the size of others’ potential benefit has little effect, ignorance and selfish behavior go up when information is more ‘inconvenient’, i.e. the fair/efficient alternative is more costly to the decision maker. Thus, in situations of payoff uncertainty, subsidizing fair choices affects prosocial behavior both directly and by increasing the willingness to confront negative consequences of one’s actions.

JEL-codes: D83, C72, C91.

Keywords: strategic ignorance, prosocial behavior, dictator games.

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“It is difficult to get a man to understand something when his income depends on his not understanding it.”

H.L. Mencken (1880-1956)

1 Introduction

People often have imperfect knowledge how their actions affect other individuals, and this uncertainty influences decisions in social and economic domains. For example, De Pelsmacker and Janssens (2006) show that uncertainty about the benefits of fair-trade products affects buying behavior, and argue that informing consumers is a key challenge for fair-trade sellers. Similarly, the demand for eco-labeled products depends on the consumers’s perception and information about the label in question (Loreiro, McCluskey, and Mittelhammer, 2001).

While consumers themselves can take action to become more informed about the consequences of their decisions, people generally appear to be reluctant to acquire information that may upset their living patterns or require them to spend additional money. For example, Ehrich and Irwin (2005) show that many consumers fail to inquire into ethical issues associated with cheap products, even though they will use the information when it is given to them. Dana, Weber, and Kuang (2007, DWK hereafter) study an experimental situation in which a ‘dictator’ chooses to find out free of charge whether an action that carries a small cost to the dictator will help a randomly matched recipient. Many dictators choose to ignore this information, and simply choose the action that gives them the most money. In the context of climate change, Norgaard (2006) concludes that subjects in her Norwegian sample avoid information about the reality of climate change in order to preserve established living patterns.

Such ‘strategic ignorance’ raises the question what determines information acquisition and ignorance of socially relevant information. While Andreoni and Miller (2002) have shown that costs and benefits of altruism matter for altruistic decisions under certainty, it is unknown how these factors affect information management under uncertainty. In this paper, I aim to fill this gap with an experiment based on the design in DWK described above. To understand how the choice for ignorance depends on the personal costs of altruism, I vary the cost to the dictator of implementing the fair allocation. If people feel pressure to behave prosocially under full information, higher costs of prosocial behavior may make information more ‘inconvenient’ and increase ignorance. In addition, by varying the size of the gain to others that may result from a prosocial choice, I investigate whether information acquisition depends on the potential benefits of altruism.

The results show that information management by dictators is asymmetrically affected by the costs and benefits of altruism. A decrease in the personal cost of implementing a fair allocation lowers the percentage of subjects who choose ignorance by 25% percentage points, and also leads informed subjects to behave more prosocially. Since these effects multiply each other, they
translate into a substantial increase in payoff’s recipients and efficiency. By contrast, increasing
the potential losses or gains of recipients has little effect on ignorance or prosocial behavior, and
results in more unequal allocations. In the last section, I discuss the relevance of these findings
for policy and organizational design.

To my knowledge, this study provides the first systematic evidence how the decision to
acquire or avoid information about altruistic decisions depends on the costs and benefits of
such decisions. The study relates to several strands of literature. First, it extends a growing
literature on strategic ignorance in economics (see Grossman and van der Weele, 2013, and
references therein) by showing how ignorance depends on underlying payoffs. Second, the paper
relates to research in social psychology on “moral disengagement”, the deactivation of cognitive
mechanisms that inhibit unethical behavior (Bandura, 1999; Detert, Treviño, and Sweitzer,
2008; Shu, Gino, and Bazerman, 2011), and “motivated cognition”, the biasing of beliefs to
support and justify favored actions (Kunda, 1990). While the psychological literature focuses
on subconscious changes in attitudinal self-reports and information processing, the present study
shows that strategic ignorance need not be subconscious, but, depending on the circumstances,
is likely to be willfully and consciously chosen.

2 Experimental Design

The experimental setup is a generalization of the “hidden information treatment” in DWK. In
all treatments subjects are randomly paired in groups of two, consisting of a ‘dictator’ (Player X)
and a ‘recipient’ (Player Y). Both players are paid according to the decision of the dictator. The
recipient is passive and does not make any decision. The experiment features neutral language,
and all payoffs are denoted in terms of experimental currency (EC), where 10 EC = 1 euro.

The experiment took place at the Frankfurt Laboratory for EXperimental economics (FLEX).
Subjects were recruited amongst the subject population of the Goethe University Frankfurt from
all areas of study, using the online system ORSEE (Greiner, 2003). They received a show-up
fee of Ε4, and made their decisions on individual computer terminals. Programming was done
in z-Tree (Fischbacher, 2007), screenshots containing the instructions and the experiment can
be found in Appendix B.

In the Baseline treatment, the dictator is facing the following situation. She can choose
between two actions $A$ and $B$, resulting in a payoff for the dictator of 100 or 60 EC respectively.
Both players were told that before the start of the experiment a computer randomly determined
the payoffs of the recipient associated with the dictator’s actions. Table 1 replicates the presen-
tation of the possible payoffs given to the subjects in the instructions (see also the screenshots
in Appendix B). Players were told that Game 1 and Game 2 were equally likely to be chosen
by the computer. In the remainder of this paper, I will refer to Game 1 as the “Conflicting
Interests Game” (CIG), since the dictator faces a trade-off between his own and the recipients’
payoff, and to Game 2 as the “Aligned Interests Game” (AIG), since \( A \) implements the highest payoffs for both players.

<table>
<thead>
<tr>
<th>Player X chooses</th>
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<th>Player Y receives</th>
</tr>
</thead>
<tbody>
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</tr>
<tr>
<td>B</td>
<td>60</td>
<td>60</td>
</tr>
</tbody>
</table>

(a) Game 1

<table>
<thead>
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<th>Player Y receives</th>
</tr>
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<tbody>
<tr>
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<td>60</td>
</tr>
<tr>
<td>B</td>
<td>60</td>
<td>10</td>
</tr>
</tbody>
</table>

(b) Game 2

Table 1: The experimental games. Each game has been chosen with 50% probability.

The dictator makes two choices. First, she has to decide whether to find out which game is being played. She faces a screen with a payoff matrix that shows her own payoffs, but where Player Y’s payoffs are replaced by a question mark. The screen features two buttons saying “Reveal game” or “Don’t reveal”. If the dictator decides to reveal the game she moves to the next screen where the full matrix is shown, as well as two buttons for choosing \( A \) and \( B \). If she decides to not reveal, the question marks remain on the next screen. Thus, ignorance is not a default option as in DKW, but has to be chosen actively.\(^1\) Once the information decision is made, the subject proceeds to choose \( A \) or \( B \). There are no costs attached to remaining ignorant or acquiring information. To mimic most real-world information decisions, and in keeping with the previous experiments on this topic, the decisions in the experiment are made anonymously. Most importantly, the recipient does not learn the dictator’s decision to reveal, and the dictator knows this.

**Treatments.** The experiment features three treatment variations. The *Cheap Fairness* treatment is designed to test whether people are more or less likely to acquire information when it is cheaper to act prosocially. This treatment is equivalent to the *Baseline* treatment, except that the payoff of Player X associated with action \( A \) is now 70 EC (instead of 100), so that the dictator has to give up less to implement an equal distribution in the CIG.

The remaining two treatments are designed to test whether subjects are more or less likely to remain ignorant when the expected loss to the other party of a self-interested choice increases. In the *Increased Loss* treatment, I vary the potential effect of self-interested behavior on the recipient. Payoffs are equivalent to the *Baseline* treatment, except that the worst possible outcome for Player Y is \(-20\) EC (instead of 10), i.e. the recipient may lose part of her show-up fee.

In the *Likely Loss* treatment, payoffs are the same as in the *Baseline* treatment, but the CIG is now likely to be selected with a probability of 0.8 instead of 0.5. This probability is explicitly mentioned a few times throughout in the instructions.

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\(^1\)Grossman (2014) finds that changing from the default of ignorance to an active choice roughly halves the ignorance rate.
3 Results

In the Baseline treatment, 31% of the subjects remained ignorant, as indicated by the light grey area in Figure 1 (descriptive statistics of the four experimental treatments are presented in Table 3 in Appendix A). In the Cheap Fairness treatment, this drops to 6% ($P = 0.014$, 2-tailed Fisher exact test (FET)). There is a small drop in the ignorance rate to 17% in the Increased Loss treatment ($P = 0.253$, FET) and to 29% in the Likely Loss treatment ($P = 1.00$, FET).

![Figure 1: Ignorance and self-interested behavior by treatment. “Remained ignorant” is the fraction of subjects choosing “Don’t Reveal”. “Chose A in CIG” is the fraction of subjects who knew they played the CIG and chose A. The total height of the bar measures all subjects whose behavior is not compatible with a desire to implement a fair outcome. The total number of observations in each treatment is at the bottom of the bar.](image)

A more complete measure of the pursuit of self-interest compares the share of subjects who do not behave in a way consistent with a desire to implement a fair outcome. To this end, we add to the ignorance rate those who knew they played the CIG and chose $A$, as a fraction of all dictators (the dark grey areas in Figure 1). In the Baseline treatment, 53% behaves in a way inconsistent with a desire for an equal distribution. This drops to 22% in the Cheap Fairness treatment ($P = 0.012$, FET). The levels in the Increased Loss treatment (47%) and the Likely Loss treatment (56%) are not significantly different from the Baseline.

Table 2 summarizes dictators’ choices and the resulting payoffs. Comparing the Baseline with the Cheap Fairness treatment shows that an increase in the cost of prosocial behavior delivers a ‘double whammy’: it increases the ignorance rate fivefold and it doubles self-interested behavior by informed dictators in the CIG. As a result, the payoffs of the recipient in the Baseline treatment are only about half those in the Cheap Fairness treatment, and efficiency, defined as the percentage of $B$ choices amongst the dictators in the CIG, drops by 40 percentage points.

Second, while the ignorance rate in the Increased Loss treatment decreases relative to the
Table 2: Behavior and average payoffs in euros. The first row shows the choices of ignorance as a proportion of all choices, the second row reports the choices of A as a percentage of the subjects who acquired information and learned they were in the CIG. The middle two rows show average payoffs (net of the €4 show-up fee) of those who played the CIG, either knowingly or not. The final row shows the number of B choices as a percentage of all choices in the CIG. The last two columns include data from all treatments.

*Baseline*, the rate of choosing A amongst informed dictators actually shows a slight increase. Thus, the increased loss associated with the A choice is met by only a small overall increase in prosocial behavior, resulting in a lower payoff for the recipient and increased inequality. In the *Likely Loss* treatment we see roughly the same ignorance level as in the *Baseline* and a small increase in prosocial behavior conditional on being informed, leading to somewhat higher efficiency. Note however that this does not compensate for the higher probability of being in the CIG, so ex-ante the recipient has lower expected payoffs compared to the *Baseline*.

Finally, when we compare behavior by the informed and the uninformed dictators over all treatments (the final two columns of Table 2), we see that 49% of informed dictators choose action B. By contrast, all subjects who remained ignorant - except one - chose A. Inequality therefore increases with ignorance: whereas informed dictators earn about 2.6 times as much as the recipient, ignorant dictators earn almost 10 times as much. Moreover, the ignorant dictator earns 22% more on average than the informed dictator.

**Discussion**

Andreoni and Miller (2002) have shown that altruistic actions respond in predictable ways to the price of altruism. The results in this paper show that the price of altruism also affects whether people want to learn the consequence of altruistic or prosocial actions. Subjects in the experiment are more motivated to look the other way if prosocial or altruistic behavior is costly, consistent with a desire to avoid more ‘inconvenient’ facts. By contrast, the size of the benefits of altruism for others has no significant effect on individual information acquisition.

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2In addition, all those who informed themselves and played the AIG choose A. This indicates that there was a low amount of ‘noise’ in the experiment and that all subjects understood the game well.
**Underlying motives.** Since ignorance is chosen explicitly and consciously, one may wonder whether it stems from a ‘rational’ decision making process. Models of rational decision making that depend exclusively on preferences over monetary outcomes predict that people always weakly prefer to have more (free) information, as this allows them to make more informed decisions. Such models, including well-known models of social preferences like those of Fehr and Schmidt (1999), are therefore consistent with the data if enough individuals are indifferent between information and ignorance, implying that they will choose A in both the CIG and the AIG. Unfortunately, an explanation based on indifference provides little insights in the source of treatment effects, nor can it explain some of the other results found in the literature (DWK, Grossman, 2014).

An alternative explanation is that ignorance serves as an ‘excuse’ for selfish behavior, either towards others or towards oneself. Specifically, Grossman and van der Weele (2013) argue that willfully chosen ignorance is a compromise between material interests and a desire to maintain a (self-)image as an altruistic or fair-minded individual. The results found in this paper are in line with the comparative statics of their image model.³

A questionnaire that was administered after the experiment lends some credibility to both image based and outcome-based models. Dictators were asked: “Did you reveal the payoffs of Player Y? Why (not)?”⁴ In line with the image model, ignorance seems to be partly driven by conscience, self-image and social image concerns: 4 of those who chose to remain ignorant answered that they did so not to have a bad conscience (“schlechtes Gewissen”), and 2 subjects chose ignorance to avoid “having to be nice”. Moreover, there are 7 informed subjects who chose the selfish action in the CIG and report (falsely) that they had been ignorant. Apparently, these subjects claim ignorance to excuse their selfish actions towards the experimenter, which supports the idea that ignorance is seen to be image-enhancing. By contrast, outcome-based models predict that uninformed dictators are indifferent. Suggestive of this idea is the finding that the majority (54%) of subjects who choose ignorance says that they do not care much about the payoffs of Player Y and/or that more information would not have mattered for their decision.

In line with both kinds of models is the fact that a substantial proportion (37%) of those who reveal explicitly say they did so out of fairness considerations, and their subsequent choices are consistent with this. Finally, many participants who informed themselves (34%) cite curiosity as a reason. A common response is “I intended to play A in any case, but I revealed because I was interested in what Player Y would earn.” This suggests that people may have something

³Explicit proofs to this extent appear in Van der Weele (2012). In particular, the theory predicts that the drop in ignorance in the Cheap Fairness treatment occurs because obtaining a good self-image is now cheaper, and information therefore less threatening. The model also predicts a drop in ignorance in the Increased Loss treatment, since dictators now feel more guilty when choosing self-interestedly. The results of the current study show such a drop although this result is not significant.

⁴About 11% of the subjects only replied yes/no without explanation. Percentages in this section are taken over those who provided some kind of explanation.
resembling a preference for information.

Implications. Outside the lab, the choice for information or ignorance is likely to be less explicit than in the experiment. This makes it harder to show that ‘one could have known’, and easier to use ignorance as an excuse, either to oneself or to others. As a consequence, I conjecture that strategic ignorance is at least as prevalent as in the lab. If so, the results have important implications for corporate governance and policy making in contexts with payoff uncertainty.

First, the results of the Increased Loss and Likely Loss treatments suggest that potentially large negative consequences for others do little to deter strategic ignorance. This may help explain why large-scale frauds in organizations like Enron and state-sponsored atrocities carried out with the involvement of many may nevertheless remain ‘secret’ for a long time (Cohen, 2001). In the corporate sphere, such secrets may be discouraged by making managers directly responsible for the quality of the information they have (and report) about the organization. In fact, one of the provisions in the Enron-inspired Sarbane-Oxley Act places the responsibility for the accuracy of information in financial reports with the executives.

Second, the results of the Cheap Fairness treatment show that in the presence of payoff uncertainty, incentive schemes that reward prosocial actions will have a multiplier effect: not only do they influence behavior of informed agents, they also make individuals more perceptive towards opportunities for doing good. In the consumer domain, this is an argument for subsidies that lower the price of ‘ethical’ (e.g. fair-trade or eco-labeled) goods as it makes people more willing to learn about the social benefits of such products. Conversely, subsidies for socially or environmentally damaging products such as gasoline may make people less willing to learn about alternatives like electric cars. Similarly, as pointed out be H. L. Mencken in the opening quote, organizational incentive schemes that reward on the basis of narrow performance criteria may induce strategic ignorance towards ethical violations that distract from these criteria.

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5 An interesting example of such processes comes from beliefs about climate change. Norgaard (2006) conducts participatory sociological research, media analysis and in-depth interviews to study attitudes to climate change in Norway, a country that derives much of its wealth from oil revenues. She finds that non-responsiveness to climate change stems in large part from self-interested denial, and that not-knowing serves to maintain Norwegian global economic interests.
References


**Appendix A: Summary Statistics**

<table>
<thead>
<tr>
<th>Treatment</th>
<th>N</th>
<th>Chose ignorance</th>
<th>Chose B</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Ignorance</td>
<td>AIG</td>
</tr>
<tr>
<td>Baseline</td>
<td>36</td>
<td>31% (11/36)</td>
<td>0% (0/11)</td>
</tr>
<tr>
<td>Cheap Fairness</td>
<td>32</td>
<td>6% (2/32)</td>
<td>0% (0/2)</td>
</tr>
<tr>
<td>Increased Loss</td>
<td>30</td>
<td>17% (5/30)</td>
<td>0% (0/5)</td>
</tr>
<tr>
<td>Likely Loss</td>
<td>34</td>
<td>29% (10/34)</td>
<td>10% (1/10)</td>
</tr>
<tr>
<td>Total</td>
<td>132</td>
<td>21% (28/132)</td>
<td>4% (1/28)</td>
</tr>
</tbody>
</table>

Table 3: Dictators’ decisions.

**Appendix B: Instructions and screenshots [NOT FOR PUBLICATION]**

Translated instructions for the Baseline treatment (original was in German). The instructions for the other treatments differ only in small and predictable details, and are omitted.
Welcome! You will participate in an economic experiment, funded by several research institutions. In what follows we will use male pronouns to shorten the text. We ask for your understanding.

Please read the instructions carefully. They contain everything you need to know for the experiment. If you have questions, please raise your hand and we will come to your seat to answer your question. During the experiment it is forbidden to talk to the other participants.

Every participant receives a show-up fee of 4 euros, which will be paid at the end of the experiment. During the experiment you can earn additional money. During the experiment we do not speak of money, but of points. Your payoffs will be represented in points, where

\[
1 \text{ Point} = 0.10 \text{ Euro}
\]

At then end of the experiment you will receive the money that you made during the experiment plus the 4 euro show-up fee in cash. The payment will be made privately, and no other participant will see how much you are paid.
During the experiment you are matched with another participant in a group of two. The other participant is assigned randomly by the computer. Neither before nor after the experiment do you learn the identity of the other participant. Nor does the other participant learn your identity. The choices in this experiment are made anonymously.

Each of you is assigned a role in the experiment. You are either player X or player Y. In each pair there is one player X and one player Y. The difference between these roles will be described below.

The game that you play in pairs, looks as depicted below. Player X will choose one of two options "A" or "B". Player Y will not make any choice. The payments both players receive depend only on the choice of player X.

The numbers in the table are the payments players receive. The payments in this table were chosen only to demonstrate how the game works. In the actual game, the payments will be different. For example, if player X chooses "B", then we should look in the bottom square for the earnings. Here, Player X receives 3 points and Player Y receives 4 points.

<table>
<thead>
<tr>
<th>Player X chooses</th>
<th>Player X receives</th>
<th>Player Y receives</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>
Please answer the following control questions. Your answers only serve to establish if you understood the game and do not influence the payments you will receive.

<table>
<thead>
<tr>
<th>Player X chooses</th>
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<th>Player Y receives</th>
</tr>
</thead>
<tbody>
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<td>2</td>
</tr>
<tr>
<td>B</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

In this example, if Player X chooses "B" then:
- Player X receives
- Player Y receives

In this example, if Player X chooses "A" then:
- Player X receives
- Player Y receives
Instructions

In the actual experiment you will play one of the two games pictured below. The payment of player X is the same in both games. The only thing that distinguishes both games is the income of Player Y, which has been swapped between the games. If Player X chooses "A" he receives the highest payment of 100 points in both games. In the first game, Player Y will then receive a payment of 10 points. In the second game Player Y will receive a payment of 60 points. If Player X chooses "B" he receives the lowest payment of 60 points in both games. In the first game, Player Y will then receive a payment of 60 points. In the second game Player Y will receive a payment of 10 points.

Which game you will actually be playing will not be revealed publicly. The payoffs of Player Y will initially be represented by a questionmark. The actual game is determined randomly by the computer before the start of the experiment. Both games have an equal probability (50%) of being played.

Before Player X chooses "A" or "B", he can find out which game is actually being played, by clicking a button "REVEAL GAME". Player X can also click a button "DON'T REVEAL", in which case he does not learn anything. This choice will be made anonymously, Player Y does not know whether Player X knows which game is being played. Player Y will not have a possibility to find out which game is being played.

While Player X makes his choice, Player Y will be asked to answer a few questions.
Please answer the following control questions. Keep in mind that both games are equally likely to be played.

Which option gives Player X his or her highest payment in both games?

- A
- B

If Player X chooses B, then Player Y receives

- 60 points
- 10 points
- either 50 or 10 points

<table>
<thead>
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<td>60</td>
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<tr>
<td>B</td>
<td>60</td>
<td>10</td>
</tr>
</tbody>
</table>
Summary:

If you are player X, you will decide in one of the two games below.

The actual game was randomly decided before the experiment by the computer. Each game has a 50% probability of being played.

You choose whether to find out which of the games is actually being played.

Subsequently you will choose "A" or "B".

At the end of the experiment we will pay both players privately.
Please choose if you wish to reveal which of the two games is actually being played. Player Y will not observe this decision.

<table>
<thead>
<tr>
<th>Player X chooses</th>
<th>Player X receives</th>
<th>Player Y receives</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>100</td>
<td>?</td>
</tr>
<tr>
<td>B</td>
<td>60</td>
<td>?</td>
</tr>
</tbody>
</table>
Please make your choice.

<table>
<thead>
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