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# Working Paper Unwillingly informed: The prosocial impact of third-party informers

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# MEMORANDUM

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# Unwillingly Informed: the Prosocial Impact of Third-Party Informers

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#### Abstract

While people often avoid learning about negative social consequences of their actions in order to behave selfishly, many social situations involve another person who is in a position to impose this information. How does the presence of a potential informer affect information, behavior, and welfare in social decisions with moral wiggle-room? We introduce a third-party informer into the moral wiggle-room game. Almost half of the dictators tried to avoid information only to have it imposed upon them by the informer. These unwillingly-informed dictators frequently revised their behavior to benefit the recipient, even at their own expense. Given an opportunity to reward informers, most dictators chose to do so, but those who had bad news thrust upon them by the informer were more likely to withhold the reward. Interestingly, a subtle change in the choice interface—separating the dictator's ignorance and allocation choices in two separate screens—caused a substantial reduction in the share of dictators choosing ignorance.

 ${\bf Keywords:}$  will ful ignorance, information avoidance, unethical behavior, online experiment

JEL Classification: D83, C72, C91

# 1 Introduction

Although humans are social creatures who often engage in prosocial behaviors such as giving to charity or consuming ethically or sustainably produced goods, when the benefit of an action is uncertain, surprisingly many of us avoid easy opportunities to resolve this uncertainty and then revert to selfish behavior. The moral wiggle-room game of Dana, Weber, and Kuang (2007) demonstrates this apply and a large body of experimental findings now reinforces the prevalence and relevance of this kind of self-serving information avoidance in social decisions.<sup>1</sup> However, precisely because we are such social creatures, our interactions frequently unfold in situations much richer than the simple two-person environment modeled in the game introduced by Dana, Weber, and Kuang (2007)—henceforth DWK. Ignorance may not be such a viable strategy when people around us can impose the information which we wish to avoid or at the very least point out our attempts to avoid it. Knowing that you are an aspiring vegetarian, your lunch companion might say, "you know that soup is made with chicken stock, right?" or "aren't you going to ask what's in that soup?" Avoiding clicking on articles with headlines like "Fast fashion: how clothes are linked to climate change" does not stop others from discussing such articles in your presence.

When socially provided information hinders our efforts to create and exploit moral wiggle-room, it can lead to better social outcomes. We behave differently when informed, even if unwillingly so, and social context can reinforce the feeling of social obligation. By ignoring the rich social context in which many of our interactions unfold, existing studies of information avoidance in social decisions may paint an unduly pessimistic portrait of human behavior.

We conducted an experiment to examine the impact of a third-party informer in social decisions with moral wiggle-room. We adapted the DWK moral wiggle-room

<sup>&</sup>lt;sup>1</sup>See, for example, Matthey and Regner (2011); Grossman (2014); Van der Weele et al. (2014); Feiler (2014); Exley (2016); Grossman and Van der Weele (2017); Momsen and Ohndorf (2020) and Momsen and Ohndorf (2023); and Serra-Garcia and Szech (2022).

game by adding a third party that can impose on the dictator the information that she might otherwise avoid, namely, how her choice affects a recipient. Specifically, we examined whether the presence of a potential informer influences dictators' allocation and information choices and how these choices ultimately affect the recipient's payoff.

We describe the design of our experiment in Section 2. We use the moral-wiggleroom game of DWK as our primary experimental tool because it provides a simple environment for studying information acquisition and allocation choices when the social benefit of a costly action is uncertain. In this game, a dictator may optionally reveal information about how her choice will affect a recipient before making her allocation decision. We adapt this game by introducing a third party, the informer, who is aware of the decision the dictator faces and is asked whether he would like to provide the recipient's missing payoff information to the dictator.<sup>2</sup> If either the dictator or informer chooses to reveal, then the dictator makes her final allocation choice with full information. If neither does, then the dictator chooses an allocation while remaining ignorant of the consequences for the recipient.

We use a within-subjects design to assess how the informer affects allocation choices. In the *Informer* treatment, the dictator first plays the standard moral wiggleroom game before learning about the informer. After this, the informer decides whether or not to reveal the recipient's payoffs. The informer's decision is then implemented, and the dictator is allowed to revise her initial allocation choice. While this design may bias subjects towards making the same initial and final allocation choice, it has the advantage of allowing us to know the dictator's information preference in the absence of the informer and the within-subject impact of the informer on the chosen outcome.

Our results, presented in Section 3, show that the informer makes a big difference and this happens almost exclusively through the impact they have on the dictator's information. Almost half of the dictators were unwillingly informed, meaning that they

 $<sup>^{2}</sup>$ The instructions did not use descriptive labels for any of the roles. The dictator was called Person 1, the recipient Person 2, and the informer Person 3.

did not reveal the recipient's payoffs themselves but had that information imposed on them by the informer, and one-third of these subsequently changed their initial choice. However, this switching behavior depended sharply on the content of the new information. Two-thirds of the subjects who learned that their initial choice gave the recipient the lower payoff changed their selection so as to increase the recipient's payoff, in most cases at their own expense. In contrast, 99% of those learning that their initial choice was good for the recipient ended up keeping it. Dictators whose information was not affected by the informer—because they self-informed or were allowed to remain ignorant—almost never revised their initial choice.

The recipient fared significantly better with the informer present, with their final payoff being 15% higher on average than the one the dictator initially chose. For recipients of unwillingly informed dictators, which comprise almost half our sample, the informer's intervention raises the average payoff by 41%. However, this effect was primarily driven by dictators revising their allocation decision. Comparing across two separate treatments that vary only in whether the dictator knows about the informer when making her information choice, we find dictators generally behaved no differently in terms of information acquisition when aware about a potential informer. Instead, dictators tended to respond directly to the information provided by the informer.

Our secondary concern is with the dictator's response to being informed. Some individuals may avoid information for strategic reasons, such as maintaining a positive self- or social image (Nyborg, 2011, Grossman, 2014, Grossman and Van der Weele, 2017, Exley and Kessler, 2023). If social obligations are a burden that avoiding information helps us shirk, we may not like it when someone around us bursts our ignorance bubble. If socially-imposed information spoils our image-management strategy or ruins an excuse, it might actually harm us. How do we respond to such harms? When our friend points out what is in the soup we have ordered, we may quietly seethe, lash out, or simply decline their lunch invitation next time. On the other hand, we may be grateful to them for keeping us informed or holding us accountable or at least we might act that way. In the *Informer - Bonus* treatment, the dictator has a chance to express her attitude towards the informer by increasing the informer's payoff after the resolution of the moral wiggle-room game. Most dictators granted this costless reward, but those who had bad news thrust upon them by the informer were three to four times more likely to withhold it.

Our third main question concerns the potential informer's behavior. Do they anticipate any sort of negative emotional or reciprocal response from a dictator whose ignorance they spoil? Does this deter the provision of information? We find that informers are not particularly sensitive to the bonus incentive, choosing to inform 69% of the time in the *Informer* treatment, compared to 71% of the time in the *Informer* - *Bonus* treatment. Informers' responses to a closing questionnaire indicate that only a small number of them considered the bonus incentives when making their informing decision and some of those did not anticipate dictators' desire to remain ignorant.<sup>3</sup>

Although many studies have examined information avoidance in social decisions, we are only aware of three studies that explore the role of third parties. Soraperra et al. (2023) construct a competitive market in which advisers equipped with ethically relevant information offer their services to decision makers faced with an allocation choice. They find that information-averse decision makers seek advisers that suppress information, so the presence of potential informers does not substantially affect ignorance and generosity levels in a competitive environment. Our study offers a complementary counterpoint that when potential informers are not subject to competitive forces, as in many social environments, their presence significantly reduces ignorance on the part of decision-makers, thus improving upon the resulting social outcomes. Both studies show how dictators may prefer to be able to avoid information, as dictators in our *Informer - Bonus* treatment are less likely to reward informers who impose bad news. However, we also find that informers are not particularly sensitive to sanction

<sup>&</sup>lt;sup>3</sup>See Appendix D for the breakdown of informer reasoning.

or expression on the part of the dictator, possibly highlighting the contrast between competitive versus non-competitive environments.

Mol, Soraperra, and Van der Weele (2023) focus more on the information-provision decision using a game in which an informer may choose in advance to provide a dictator with missing information about a charity recipient's payoff. Dictators cannot directly acquire information themselves; in some treatments, however, they can express a preference for information or ignorance, including a variant in which they can withhold a bonus as punishment. Mol, Soraperra, and Van der Weele (2023) find that informers' decisions are largely driven by their own information preferences, although some conform to dictators' requests. In contrast, our study sheds more light on how dictator behavior is affected by the informer and how the informer's presence impacts the recipient, while using a workhorse experimental instrument allowing us to compare results to similar studies.

The study most similar to ours is that of Lind, Nyborg, and Pauls (2019), who were motivated by similar questions to ours and examined dictators choosing an allocation between themselves and a charity. However, they found very low levels of information avoidance regardless of whether or not an informer was present, limiting their ability to explore the informer's impact on the dictator's information and behavior. This and other studies such as Grossman (2014), Moyal and Schurr (2022), and Exley and Kessler (2023) highlight the fact that information avoidance is sensitive to choice architecture in a way that is not yet fully understood.

Some of the results of our current study, discussed below, further reinforce this sensitivity, as do some of our own findings from pilot studies. To bolster our ability to study ignorance, we used several rounds of pilots to identify a decision environment in which information avoidance was prevalent enough to allow us to study the impact of a third-party informer. We describe these measures in Section 2; in Appendix A.1, more detail is presented, including results of a pilot study that replicated the experiment and results of DWK in our decision environment.

Our main finding is that the informer directly impacts the dictators' information and thus has a major impact on social outcomes. However, one ancillary finding warrants further discussion, as it shows how the choice architecture can dramatically affect the dictator's information choice. In two treatments, we elicited the dictators' information and outcome choices on separate screens, as opposed to the single screen used by DWK and our other treatments, in order to identify informers' effect on dictators' information avoidance (see Section 2). As noted above, we find no significant difference in the ignorance rate across these two treatments, indicating that knowledge about the presence of informers did not affect ignorance rates. However, the level of ignorance that we find in both of these treatments are dramatically lower than what we see in our main treatments using single decision screens.

Our primary contribution is to shed light on how third parties can affect information avoidance and social outcomes in social decisions; however, the finding of choice architecture having such a large impact on ignorance warrants further study. In Section 4, we discuss how our findings may contribute to the broader understanding of social preferences and on the use of experimental methods to study social decision-making.

# 2 Experimental Design

In this section, we describe the design of the experiment. Section 2.1 describes the basic structure and treatments of the experiment, Section 2.2 lays out the main hypotheses that we test, and Section 2.3 describes how we implemented the design. We preregistered the experiment and analysis in AEARCT-0011289.<sup>4</sup>

The basic experiment consists of two parts. Subjects first play the moral wiggleroom game and then answer a questionnaire. In the moral wiggle-room game, a dictator unilaterally chooses between two options that determine her own payoff and that of

 $<sup>^{4}</sup>$ We preregistered a total of eight treatments, but only report four of them in the main body of this paper. We report the remaining four preregistered treatments in Appendix A, including our justification for relegating them.

another subject with whom she has been randomly and anonymously paired. While the dictator knows her own payoff for each option, the payoffs for the recipient are initially hidden. She knows that forgoing the higher payoff option could increase the recipient's payoff, but it also could decrease it. However, the dictator can—but does not have to—click a button to costlessly reveal which is the case before choosing an allocation.

We used the same payoffs used by DWK and featured in many subsequent studies<sup>5</sup>, featuring two equally likely payoff states, which are presented to subjects as tables, as shown in Table 1. In either state, choosing option A gets the dictator six experimental currency units (ECUs), while option B only yields 5.<sup>6</sup> In the conflicting-interests state, choosing B brings the recipient's payoff up from 1 to 5 ECU, while in the aligned-interest state it lowers their payoff from 5 to 1 ECU. Thus, the dictator initially is uncertain whether sacrificing their own payoff will help or harm the recipient, but she can resolve this uncertainty with the click of a button.

	Conflictin	ng Interest	Aligned	Interest
Dictator chooses	Dictator gets Recipient gets		Dictator gets	<b>Recipient</b> gets
A	6	1	6	5
В	5	5	5	1

**Table 1**: The two payoffs tables featured in the moral wiggle-room game (the conflicting and aligned states) matched those used by DWK and were equally likely.

## 2.1 Treatments

We conducted four treatments, each of which features a variation of the basic game. Instructions and screenshots for all treatments are in Appendix E.

<sup>&</sup>lt;sup>5</sup>For example, Grossman, 2014; Grossman and Van der Weele, 2017; Lind, Nyborg, and Pauls, 2019.

<sup>&</sup>lt;sup>6</sup>The exchange rate was 1 ECU = 0.50 USD.

## Informer

In the *Informer* treatment, dictators first play the standard moral-wiggle room game without any mention of a potential third-party. However, before the payoffs are realized, dictators are told about the existence and role of the informer. Without knowing the realized payoff state, the informer is asked whether, in the event the dictator did not choose to reveal the payoff tables, they would want to override the dictator's decision in order to reveal the recipient's payoffs. The dictator is then given a chance to revise her outcome choice. If she already self-informed or the informer chose to impose that information, she does so while seeing the recipient's true payoffs. If neither the dictator or the informer chose to reveal the payoffs, the dictator remains ignorant while making this revised choice. Regardless of the informer's decision.

We use this treatment to study the informer's impact on the chosen allocation. For the informer to have a nontrivial role, the dictator must be able to choose an outcome after being informed. This requires either revising an initial choice or by inserting the informer's turn between separate information and allocation choices made by the dictator. We chose the former over the latter for three reasons. First, isolating the information choice in the informer treatment would require doing the same in a control treatment, and we were concerned that this would result in ignorance levels in the control treatment that were too low to allow us to meaningfully study the impact of the informer, as was the case in Lind, Nyborg, and Pauls (2019). Second, since most studies using the moral wiggle-room game adhere to the original integrated interface, isolating the information choice would make it more difficult to compare our findings to those of other studies. Finally, while the within-subjects design may bias dictators towards making the same initial and final choice, it has the advantage of allowing us to know the dictator's information preference in the absence of the informer and the within-subject impact of the informer on the chosen outcome. Furthermore, consistency bias would work against our hypotheses, rendering any results we do find even more interesting. Thus, we proceed by comparing the dictator's interim outcome choice, made before she was aware of the informer, with her final choice.

## Informer - Info First

To examine the impact of the informer's presence on the dictator's own information choice, we conducted a treatment in which the dictator was aware of the informer from the very start of the game. We could not use the *Informer* treatment for this purpose because dictators in that treatment do not learn about the informer until after they have already made their information choice.

When making her information choice in this *Informer - Info First* treatment, the dictator knows that the informer might impose information on her anyway. After the dictator's information choice, the informer chooses whether or not to impose information, contingent on the dictator avoiding it. Finally, the dictator makes her allocation choice, either with or without knowledge of the recipient's payoffs, as determined by both her and the informer's decisions. This procedure required splitting the dictator's information and allocation choices between two separate screens. <sup>7</sup> We call this the *Informer - Info First* treatment both because the dictator learned about the informer before making her choice and because her information choice came first, separated from the outcome choice by the informer's turn.

## Hidden Information - Info First

We designed the *Hidden Information* — *Info First* treatment as a control treatment for *Informer - Info First*. We compared ignorance rates across these two treatments to identify the impact of the informer on the dictator's information choice. The *Hidden Information* — *Info First* treatment is like the DWK hidden information treatment (and our pre-registered DWK replication treatment presented in Appendix A.1) in that

<sup>&</sup>lt;sup>7</sup>If we had used the standard integrated interface instead, dictators would have had to choose an outcome before the informer's turn. Having the dictator make a second, revised choice like in the *Informer* treatment would hardly make sense when dictators already know about the informer before the initial choice.

there is no informer, but as in the Informer - Info First treatment, the information and allocation decisions are on different screens, first the information decision, then the allocation decision on a separate screen.<sup>8</sup>

### Informer - Bonus

We designed the *Informer* — *Bonus* treatment to study the dictator's reciprocal response to being informed. The treatment is similar to *Informer*, except that the dictator makes one additional choice following the final allocation choice. In addition to revising her choice after the informer's turn, the dictator can also choose whether or not to increase the informer's payoff by 1 ECU. She does this knowing what the informer's choice was, and the cost is paid by the experimenters. Choosing to give this bonus could be regarded as a reward from the dictator or simply generosity, while withholding it could be regarded as a mild form of punishment. We examine this choice as a function of the dictator's own information choice, the informer's choice, and the content of the information imposed by the informer. We also compare the behavior of the informer in this treatment with their behavior in the regular Informer treatment to see if and how they react to the possibility of a reciprocal response from the dictator.

## 2.2 Hypotheses

Here, we present condensed versions of the hypotheses that we preregistered on the AEA RCT Registry in March 2022.<sup>9</sup> Our first hypotheses are about how the informer's presence changes the dictator's behavior.<sup>10</sup>

<sup>&</sup>lt;sup>8</sup>The 'Information First' label for this treatment refers only to the fact that the dictator makes the information choice first, since there is no informer to tell her about.

 $<sup>^{9}</sup>$ The hypotheses appear in a different order here and with different numbers, but the questions are the

same. <sup>10</sup>We also wondered whether the mere mention and description of a of a third-party potential informer might impact the dictator's behavior, regardless of whether he can actually impose information upon her. We also conducted two Hypothetical Informer treatments, as described in our preregistration materials, that parallel the regular Informer and Informer - Info First treatments, but in which it is commonly known that the informer's choice will not actually be implemented, and thus, the informer cannot actually influence the dictator's information. We describe the design and report the results of these treatments in Appendix A.2.

**Hypothesis 1** Dictators behave more prosocially when there is a potential informer.

We expected the overall outcomes to be more prosocial, leading to higher payoffs for the recipient when the informer is present. Part of why this might happen is simply because dictators end up with more information when it can be imposed by a third party because some dictators who avoid information will end up informed regardless. Lacking ignorance as an excuse to act selfishly, more of these will choose prosocially. We evaluated this hypothesis by comparing dictators' interim outcome choices in the *Informer* and *Informer - Bonus* treatments, made before knowing of the informer's existence, with their final choices. In particular, we expected unwillingly informed dictators to revise their decisions to behave more prosocially.

Another reason why dictators may behave more prosocially is because they are less likely to even try to avoid information when an informer is present. This could be the case if the introduction and presence of the informer reinforce social obligations or make the dictator feel like her information choice is more judged or scrutinized, or merely draw her own attention to that choice. To investigate how the informer affects information acquisition, we compared the ignorance rates between the *Hidden Information - Info First* and *Informer - Info First*. Our second hypothesis posits that the possibility of having information imposed on the dictator makes her less likely to avoid it in the first place.

**Hypothesis 2** Dictators are less likely to avoid information when a potential informer is present.

Turning our attention to the dictator's response to the informer's behavior, we have a third hypothesis. Based on the premise that some dictators choose without revealing, and thus presumably prefer ignorance, we expected that they would not like it when the informer imposes information. We tested the following hypothesis by comparing reward rates across the specified subgroups of dictators in the *Informer - Bonus* treatment.

**Hypothesis 3** Unwillingly informed dictators are less likely to reward the recipient than those who self-inform or are allowed to remain ignorant.

Finally, informers may demure from imposing information either to respect the wishes of information avoiders, or to forestall a negative response. Our fourth hypothesis supposes the latter.

**Hypothesis 4** Informers are less likely to impose information in the Informer -Bonus treatment than they are in the Informer treatment.

## 2.3 Implementation

We ran the experiments online from March to June 2024 recruiting Englishspeaking subjects in the United States above the age of 18 on the recruitment/payment platform Prolific. We configured the recruitment process to retrieve an even 50-50 split of male and female subjects and screened out subjects to ensure participation in only one session of the experiment. The recruitment website redirected subjects to the experiment website, which was created using the LIONESS web platform (Giamattei et al., 2020).

Subjects were told that the experiment consisted of two parts. Part 1 consisted of the experimental design described above, while Part 2 was a questionnaire. A total of 581 Dictators and 394 Informers (N = 975) participated across our four treatments and fully completed Part 1.<sup>11</sup> We paid all subjects that completed Part 1 a fee of \$3, which corresponded to the minimum amount that any subject could earn. Subjects earning more than this were paid the difference via the bonus payment function on Prolific. We built a hidden 14.5-minute timer into the program, which was sufficient to allow virtually all subjects to complete Part 1. Subjects who completed both parts

<sup>&</sup>lt;sup>11</sup>Not counting any subjects who failed the comprehension checks or did not complete Part 1, a total of 1010 Dictators and 394 Informers (N = 1404) were recruited across all treatments, including those reported in the appendix. Observation totals were guided by the power analysis presented in our registered pre-analysis plan.

of the experiment early were shown the timer and were required to remain in the program until the timer had fully elapsed.<sup>12</sup>

Before Part 1, subjects answered a series of comprehension and attention checks. Any subjects who failed the checks were dropped out of the study. In the Informer and Informer - Bonus treatment, subjects were matched in two person lobbies, with one participant being assigned the role of the dictator and the other the informer. No subjects were assigned the role of recipient in this part. However, when subjects completed the game and moved on to the questionnaire in Part 2, those who had been dictators were told that their compensation for Part 2 would come from being the recipient to the dictator choice of another subject with whom they had been anonymously matched. In this manner, each dictator from Part 1 played both roles, being matched with a recipient in Part 1 who was one of the other dictators, being notified only in Part 2 of their additional role as a recipient. Informers were paid a flat fee of 5 ECUs for both parts of the experiment. The Part 2 questionnaire asked subjects to explain their decisions and describe their experience, along with a battery of questions on subjects' political party affiliation, concerns on the COVID-19 pandemic, concerns on climate change, an evaluation of the social appropriateness of various decisions that could be made by the dictator, and a self-assessment of their concern for self-image. In addition, we retrieved general, self-reported demographics information from the Prolific database. Finally, in the Informer - Info First treatment, which was included to study dictators' information choice rather than allocation choices or informer behavior, the informer decisions were simulated using the distribution of informer decisions from the *Informer* treatment.<sup>13</sup>

<sup>&</sup>lt;sup>12</sup>After initial subjects complete the experiment, Prolific updates the advertised hourly compensation rate to reflect the average hourly rate as determined by the actual time it took the initial subjects to complete the experiment. If the actual duration deviates from the initial estimated duration by a large amount, this shows up as a markedly different advertised pay rate. This could affect the composition of subjects that self-select as participants because different treatments may take different amounts of time to complete, introducing a potential selection bias across treatments. We built the timer into the program to mitigate these risks and achieved the desired effect of stabilizing the advertised compensation rate between and within treatments.

 $<sup>^{13}</sup>$ Effectively, the dictators in these treatments were randomly matched with one of the informers from the *Informer* treatment as a cost cutting measure.

# **3** Results

Before presenting our main analysis, we provide a basic description of our subjects and the data generated by their choices. In Section 3.1, we present our analysis of dictator allocation and information choices. Section 3.2 presents our analysis of the dictator's decision whether or not to reward the informer, and our analysis of the informer's willingness to impose information is in Section 3.3.

Table 2 reports the means and standard deviations (in parentheses) of four key demographics: age, sex, race/ethnicity, and student status.<sup>14</sup> Our sample is qualitatively well balanced across treatments for all four of these categories although ANOVA analyses reveal some statistically significant differences between treatment groups.<sup>15</sup> About two-thirds of our subjects self-identity as 'White' and the average subject is in their mid-thirties and not a student, in contrast to the typical subject from a typical subject from a university subject pool.

	Total		Treatments						
		Inf.	Inf. Bonus	Hid. Info - IF	Inf IF				
Age	36.33	37.86	35.13	34.93	36.28	3.64			
	(12.27)	(12.67)	(11.90)	(11.52)	(12.29)	[0.013]			
Female	0.50	0.51	0.51	0.49	0.48	0.16			
	(0.50)	(0.50)	(0.50)	(0.50)	(0.50)	[0.925]			
White	0.65	0.62	0.66	0.66	0.71	1.23			
	(0.48)	(0.49)	(0.47)	(0.48)	(0.45)	[0.296]			
Student	0.14	0.10	0.19	0.15	0.06	6.02			
	(0.34)	(0.31)	(0.39)	(0.36)	(0.23)	[0.000]			
n	972	391	370	106	105				

 Table 2: Subject demographics

Notes: Using subjects' Prolific ID, we link demographic data to our data. The table shows the mean of (self-reported) characteristics, with standard errors in parentheses. F is the F-test from ANOVA analyses of equality between treatments with p-values in square brackets.

<sup>&</sup>lt;sup>14</sup>Prolific collects this data via self-reports when individuals join their participant database and links it to their anonymous Prolific ID. We converted the responses in the sex, race, and student categories to indicators for female, white, and student.

<sup>&</sup>lt;sup>15</sup>The Informer Bonus and Hidden Info - IF in particular seem to have a large fraction of subjects in the upper decile of the age distribution. If we disregard this decile, differences are less significant between groups (p = 0.09). Excluding this decile does not affect our main results in any manner worthy of note, We did not use Hidden Information as the control for this purpose because the dictator's choice interface is different in that treatment. as demonstrated in Appendix C.

## 3.1 Dictator Behavior in the Moral Wiggle-Room Game

First, we look at the dictator's allocation choice, focusing on within-subject comparisons. The *Informer* and *Informer - Bonus* treatments both feature an initial and revised choice. To study the effects of the informer, we looked at how dictators change their allocation decision between their initial and revised choice. We pool the data from these two treatments when examining allocation choices because the only difference between them was the bonus decision made after the completion of the moral wiggle-room game in the *Informer - Bonus* treatment. Following our analysis of the allocation choices, we turn to the dictator's information choice in the two info-first treatments.

Table 3 shows how the informer affected the recipient's payoffs in the *Informer* and *Informer - Bonus* treatments. The first row shows the average interim payoff, which is what the recipient would have received from the dictator's initial choice before the introduction of the informer. We compare this to the average final payoff, shown in the second row, with the third row showing the difference between these two.

	Pooled	Bo	Bonus		gly informed
		Ν	Y	Ν	Y
Interim	3.74 $(1.86)$	3.73 (1.87)	3.74 $(1.86)$	4.28 (1.54)	3.07 (2.00)
Final	(4.30) $(1.52)$	4.37 (1.47)	4.24 (1.58)	4.28 (1.54)	4.33 (1.50)
Difference	0.57 [0.000]	0.63 [0.000]	0.49 [0.000]	0.00 [1.000]	1.25 [0.000]
n	367	189	178	201	166

**Table 3**: Average recipient payoffs in the *Informer* and*Informer - Bonus* treatments

Notes: Standard errors shown in parenthesis below average payoffs. Square brackets show p-value for a t-test for difference in means between interim and final payoffs. The notation 0.000 means that the p-value is less than 0.001.

The average interim recipient payoff for the two pooled treatments, shown in the first column, is 3.74, meaning that 68% of the recipients received a payoff of 5 instead of 1. After the informer is introduced, the recipient's average payoff climbs to 4.30, an increase of 15% and also corresponding to a 15 percentage point increase in the share of recipients getting the higher payoffs. The 0.57 difference between interim and final payoffs is highly significant (t = 7.45, p < 0.001). The second and third columns of the table shows the data from the *Informer* and *Informer - Bonus* treatments, respectively. When looked at separately, each of the individual treatments exhibits a similar significant increase from the interim to final payoffs.

To better understand the informer's impact on the recipient, we next zero in on when and how the dictator revised her initial choice. Of the 367 dictators in the *Informer* and *Informer - Bonus* treatments, only 56 of them (15%) revised their choice. This switching can be almost entirely attributed to dictators who had information imposed on them by the informer. We label these 166 dictators the unwillinglyinformed in the fifth column. Virtually none of the 201 dictators, presented in the fourth column, switched: of the 127 who self-informed and the 74 who were allowed to remain ignorant, exactly one from each category changed their initial choice. We conclude from this that the informer's impact on the recipient comes primarily through imposing information on those who would otherwise avoid it, some of whom subsequently choose more prosocial outcomes.

We dig into the switching behavior of the unwillingly-informed dictators in Table 4. It shows that of those who switched, their revised choice almost always benefited the recipient, even at their own cost. Of the 131 initially choosing the higher payoff for themselves (option A), only those who learned that their sacrifice would help the recipient ended up switching, with a full 66% of these 64 dictators doing so. Thus, the majority of selfish-acting information-avoiders were prompted to behave more prosocially by simply providing them the information they were avoiding.

**Table 4**: Percent of unwillinglyinformed dictators who switched their initial allocation choice, by initial choice and payoff state

	Payoff state				
Initial choice	Conflicting	Aligned			
А	66 (64)	0(67)			
В	5(19)	69(16)			

Notes: Number of subjects with each combination of initial choice and payoff state in parenthesis. A Pearson test for identical proportions in each cell yields  $\chi^2(3) = 80.24$  (p < 0.001).

Unsurprisingly, we also see this prosocial shift when it carries no personal cost. Consistent with the use of ignorance as an excuse to behave selfishly, only a minority of information-avoidant dictators choose the lower paying option, B. Of the 35 who did so and had the information imposed by the informer, we see a dramatic shift to the benefit of the recipient. Nineteen of these subjects learned that their sacrifice was helping the recipient and only one of these changed their mind about doing so. In contrast, 69% of the 16 who learned that increasing their own payoff would also help the recipient went ahead and made this change.

The shift in outcome choices due to the informer's intervention has a major impact on the recipient's payoffs. While the informer's impact on the recipient's payoffs is apparent in the paragraphs above, it stands out even more clearly among the recipients paired with unwillingly-informed dictators. Average payoffs for this group are shown in the fourth column of Table 3. Among this group, the introduction of the informer increases the average recipient payoffs from 3.07 to 4.33 (t = 8.44, p < 0.001), an increase of 41%. This corresponds to a jump in the number of recipients getting the higher payoff from 52% to 83%. In contrast, there is no noticeable change in the recipient payoffs among the rest of the dictators, who either self-informed or were allowed to remain ignorant, as shown in the fifth column of the table. Finally, although not all of the informers chose to impose information, we consider the counterfactual scenario in which they did, meaning that *all* dictators ended up with full information, whether self-chosen or externally imposed. We extrapolate the switching behavior of the unwillingly-informed dictators, summarized in Table 4, to the 82 dictators who were allowed to remain ignorant. In that counterfactual, average recipient payoff is 4.51, corresponding to 88% receiving the higher payoff.<sup>16</sup> This constitutes an increase of 21% over the interim payoffs that arise when the dictator can remain ignorant at will.

The above analyses illustrate the impact that socially-provided information can have on dictator behavior and how much better the recipient may fare when another person is present to limit the dictator's information avoidance. Our findings offer very strong support for Hypothesis 1 and are summarized in the following result.

# Result 1: Information provision improves prosocial allocations via the channel of imposing information on avoidant dictators, who then act more prosocially.

Next, we turn attention to the dictator's information choice. While the informer clearly affected the dictator's outcome choice through the provision of information, introducing the informer could have also helped the recipient by reducing the amount of information avoidance in the first place since self-informed dictators tend to choose more prosocially. Indeed, with ignorance rates in the *Informer* and *Informer - Bonus* treatments averaging 65%, there is room for a large effect. However, recall that to identify the impact of the informer without confounds, we need to compare across the two information-first treatments.

<sup>&</sup>lt;sup>16</sup>The counterfactual revised choices of the 240 info-avoiders are as follows. In the conflicting-interests payoff state,  $(\frac{42}{64}) \cdot 92$  A-choosers switch to B and  $(\frac{18}{19}) \cdot 22$  B-choosers stick with B, so 81.2 out of 114 (71%) counterfactually choose B. In the aligned-interests payoff state,  $(\frac{67}{67}) \cdot 108$  of the A-choosers stick with A and  $(\frac{11}{16}) \cdot 18$  of B-choosers switch to A, so 120.4 out of 126 (96%) counterfactually choose A. This leads to a counterfactual total of 201.6/240 (84%) of information-avoiders choosing the higher recipient payoff and 120 + 201.6 = 321.6 out of 367 (88%) of dictators overall choosing the higher payoff. This corresponds to an average recipient payoff of 4.51.

	Total	Treatments					
		Inf.	Inf. Bonus	Hid. Info - IF	Inf IF		
D avoids info	$\begin{array}{c} 0.53 \\ (0.50) \end{array}$	$0.61 \\ (0.49)$	$0.70 \\ (0.46)$	$0.30 \\ (0.46)$	$0.32 \\ (0.47)$		
I imposes info	0.71 (0.45)	0.70 (0.46)	$0.69 \\ (0.46)$		$0.74 \\ (0.44)$		
$n \ (dictators)$ $n \ (informers)$	$\begin{array}{c} 578\\ 394 \end{array}$	189 202	$\begin{array}{c} 178 \\ 192 \end{array}$	106 0	$\begin{array}{c} 105 \\ 0 \end{array}$		

**Table 5**: Share of dictators avoiding information and of informersimposing it, by treatment

Notes: Standard errors in parentheses. The Hidden Info - IF treatment does not have any informers and Informer - IF uses simulated decisions based on informer decisions in Informer.

Fig. 1: Comparison of ignorance rates across the two *Info First* treatments and between those treatments and the non-*Info-First* treatments.



(a) Ignorance rates for the Hidden information (Information first) and Informer (Information first) treatments



(b) Average ignorance rates in the Noninformation first and Information first treatments.

Notes: Bars indicate 95% confidence intervals.

Panel (a) of Figure 1 shows the ignorance rates for these two treatments and reveals that the informer has little impact in this respect. The ignorance rate in the *Hidden Information - Info First* treatment is 0.30 and is almost identical to the 0.32 found in the *Informer - Info First* treatment (Z = 0.34, p < 0.73). The lack of support in our data for Hypothesis 2 is summarized in the following result and leads us to conclude that the informer's impact is limited to the more direct channel of changing the dictator's information.

# Result 2: The known presence of a potential informer does not impact the dictator's information acquisition choice.

However, we must note that these ignorance rates are drastically lower than those from the other treatments. We illustrate this by pooling the two *Info First* treatments together and displaying the resulting ignorance rate in panel (b) of the figure, next to the ignorance rate from the pooled *Informer* and *Informer - Bonus* treatments, which we collectively call the non-*Info-First* treatments. Changing the architecture by separating the dictator's information and outcome choices lowered the average ignorance rate from 65% to 31% (Z = 7.87, p < 0.001). We discuss this finding further in Section 4.

## 3.2 Dictator's decision to reward the informer

Hypothesis 3 posits that unwillingly-informed dictators are less likely to reward informers than those who self-inform or are allowed to remain ignorant. We explore this hypothesis by examining that rate at which dictators *withheld* the bonus in the *Informer - Bonus* treatment. Figure 2 shows average bonus-withholding rate broken down by whether or not the informer changed the dictator's information and by the content of that information. Panel (a) compares those who had information thrust upon them, whom we call the unwillingly informed, to the rest of the dictators, all of whom either self-informed or remained ignorant. Neither group was very prone to withhold the bonus, but the unwillingly informed were slightly more so. Ten percent of the 84 dictators in that group did so, compared to only 4% of the 94 remaining dictators. While the withholding rate among the unwillingly informed is more than double that among the others, both rates are quite low and the sample relatively small, so the difference in proportions is not statistically significant (Z = 1.40, p < 0.16; Fisher's exact = 0.23).



Fig. 2: Bonus withholding rates, dictators in the Informer - Bonus treatment.

(a) Unwillingly informed versus self-informed and ignorant



(b) Unwillingly informed of bad news versus self-informed, ignorant, and unwilling informed of good news

When we consider the *content* of the imposed information, however, the contrast is more stark. Forty-three of the unwillingly informed dictators learned that helping the recipient would lower their own payoff (conflicting-interests payoff state). We describe these as unwillingly-informed of bad news, and 14% of them withheld with the bonus. Contrasted with the 4% withholding rate among the remaining 135 dictators, we find that having bad news thrust upon them by the informer made the dictator between three and four times more likely to withhold the reward. This difference is solidly significant in a statistical sense (at the 3% level for two-sided test of proportions and 4% level for Fisher's exact test). Thus, our next result offers qualified support for Hypothesis 3.

Result 3: Dictators respond negatively to being unwillingly informed of bad news.

# 3.3 Informer Behavior

Were informers less likely to impose information when the dictator could respond? As shown in Table 5, they had a high propensity to supply information in general, with 69% and 71% doing so in the *Informer* and *Informer Bonus* treatments, respectively. A Fisher exact test fails to reject the null hypothesis that informers behave the same in both treatments, so we find no support for Hypothesis 4.

To understand the thinking and motives of informers, we asked them about their beliefs in the questionnaire. Interestingly, informers did not seem to foresee the substantial prevalence of willful ignorance; the vast majority of them (84-87%) thought that dictators had revealed the information themselves. In line with this, it turned out that only a small subset of informers in the Informer Bonus treatment, about 8%, reported concerns about the bonus as a reason for their choice. More detail is provided in Appendix D.

Result 4: Informers appear to be insensitive to the threat of punishment.

# 4 Conclusions

We introduced into the moral wiggle-room game a third party with an active role: an informer who can intercede. In our experiment, informers' intercessions hampered dictators' attempts to avoid information, leading dictators to make much more prosocial choices. This substantially increased recipients' payoffs. However, the informers' impact came exclusively through the actual imposition of information on dictators who had not themselves requested information; the presence of informers did not deter dictators' own ignorance choices.

Dictators' persistence in avoiding information, even in the presence of informers, suggests a preference for ignorance. So do dictators' reward decisions: Compared to all other informers, those who imposed unfavorable news on initially ignorant dictators were less likely to be rewarded by the dictator. This is consistent with some dictators using ignorance as an excuse for selfish behavior, disliking that the informer spoiled their attempt to do so. Dana, Weber, and Kuang (2007) demonstrated how people bypass social obligations by creating and exploiting excuses to behave more selfishly. In doing this, they highlighted the tension between our self-interest and the motivations that steer us towards the social interest. This seems to contrast with one of the main lessons emerging from the broader study of social preferences, namely that humans are social creatures who willingly incur private costs for the sake of some social benefit. Our findings show that the social context—in which many of our decisions unfold—can act as a check on the naked exploitation of moral wiggle room. We may look for excuses to behave selfishly, but others may not let us lean on those excuses.

When using experimental methods to understand social preferences and social behavior, simple, abstract instruments like the moral wiggle-room game in controlled laboratory settings allow researchers to crystallize key features of the decision environment or behavioral phenomenon and obtain internally valid answers to research questions. However, the very same simplified and controlled approach may strip away crucial elements of the social context, sacrificing external validity. In our experiment, introducing just a minimal degree of social context led to very different outcomes compared to standard two-person implementations of the moral wiggle-room game.

Our findings show that providing unwelcome information can make behavior more prosocial. The extrapolation exercise described in Section 3.1 suggests that interventions preventing the use of ignorance as an excuse for selfish behavior can have a large social return. However, we have not explored how reactions to such information provision may depend on its source and the context in which the information is provided. For example, as shown by Soraperra et al., 2023, a market for information can yield different outcomes; similarly, it could matter whether the information is provided by a friend, the government, or in a hierarchical organization.

Interestingly, we observed that an apparently minor change in our choice architecture - presenting dictators' information and allocation choices in two separate screens instead of one - resulted in a sharp decrease in willful ignorance. This large impact entirely overshadows the effect with which we were initially concerned, that of the informer's presence. One possible explanation is that dictators are pushing the boundaries of a conditional norm saying that ignorance is innocence–unless one's ignorance has been actively chosen. If so, any design change increasing the salience of the information choice should be expected to reduce ignorance rates. This would echo the findings of Grossman (2014), who found ignorance rates to be substantially lower when getting information is an active choice rather than the default. Also, our own preregistered pilot studies indicated that the exact wording and/or design of the computer interface can substantially affect ignorance choices.<sup>17</sup>

In an anonymous game, looking for excuses to act selfishly would not make sense for a Homo Oeconomicus type. Rather, such behavior seems to indicate that the subject does indeed care about obeying some context-dependent social and/or moral norm but is pushing the boundaries of the norm-relevant context. Understanding willful ignorance thus partly amounts to understanding such norms and their context dependency. The substantial benefits for recipients caused by third-party informers' presence in our experiment are encouraging, suggesting further exploration of the relationship between norms and information avoidance as a promising avenue of policy-relevant research.

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# Declarations

• Competing interests

<sup>&</sup>lt;sup>17</sup>See also Van der Weele et al. (2014), Thunström et al. (2016), Felgendreher (2018), Momsen and Ohndorf (2020), Feiler (2014), Moyal and Schurr (2022), and Exley and Kessler (2023).

The authors have no relevant financial or non-financial interests to disclose.

• Ethics approval and consent to participate

This study was reviewed and approved by the Institutional Review Board (IRB) of the University of California - Merced, protocol ID: UCM2021-42. Informed consent was obtained from all individual participants of the study.

• Data availability

All data will be made available as part of the online supplementary materials.

• Code availability

All code will be made available as part of the online supplementary materials.

• Author contribution

All authors contributed equally to the analysis, interpretation, and writing of

the paper. Grossman, Lind, and Nyborg developed the design, while Hua was

responsible for programming and implementing the experiments.

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# A Additional preregistered treatments

## A.1 DWK replication treatments

Lind, Nyborg, and Pauls (2019) did not find much information avoidance, even *without* an informer present, which made it difficult to identify the impact of the third-party informer. To proceed with our investigation, we first needed to identify a decision environment in which the kind of information avoidance documented by DWK would prevail. In this appendix, we describe the design of a preregistered replication experiment that we conducted before the *Informer* treatments reported in the main body of this paper. We explain the steps we took during the pilot process to arrive at the ultimate design and then we report the results of the DWK replication treatments. Because we found non-trivial levels of information avoidance and our results were otherwise comparable of DWK and similar replications, we concluded that the decision environment was suitable for investigating the impact of the informer and proceeded with our main treatments.

## Pilots and design

Because having to actively choose ignorance can reduce participants' propensity to do so (see Grossman (2014)), we favored layout and defaults that avoided presenting the information decision as an active choice. We also avoided highlighting the information choice more than absolutely necessary to avoid provoking extra scrutiny or reflection upon the information choice. We also aimed for brief and simple instructions that minimized the cognitive effort on subjects' part, making it easier to 'close one's eyes' for those who may want to do so.

We initially preregistered our study in April  $2022^{18}$ . In that initial plan, we pointed out that since our research questions can only be explored in a context where strategic ignorance does prevail, our study would proceed in two stages: First, we would explore in Stage 1 whether there is indeed strategic ignorance in our context, using the treatments without informers, the *Baseline* and *Hidden Information* treatments. These treatments correspond to the *Baseline* and *Hidden Information* treatments in Dana, Weber, and Kuang (2007). For strategic ignorance to be considered present, some dictators must not reveal information in

<sup>&</sup>lt;sup>18</sup>See https://www.socialscienceregistry.org/versions/141944/docs/version/document

*Hidden Information*, and the fraction of dictators choosing in a manner inconsistent with a preference for the fair outcome—meaning either avoiding information or acting selfishly conditional on knowingly being in the conflicting-interests payoff state—must be significantly larger than the share of dictators choosing selfishly in the *Baseline* treatment. If strategic ignorance turned out to be sufficiently prevalent to allow exploration of our primary research questions, then we would proceed to Stage 2. If not, the design would be modified and tested again, aiming to trigger strategic ignorance, before proceeding to Stage 2.

In the spring and summer of 2022, we collected Stage 1 data according to the previous preregistered plan. The experiments were programmed using zTree unleashed (Fischbacher, 2007; Duch, Grossmann, and Lauer, 2020) and were run using the recruitment/payment platform Prolific. Using a total sample of 232 subjects and hence 116 pairs (55 in *Baseline* and 61 in *Hidden Information*), we found that although some dictators did choose not to reveal information in the *Hidden Information* treatment, and a larger share of dictators facing the conflicting-interest payoffs chose the selfish option in the *Hidden Information* treatment than in the *Baseline* treatment, the latter difference was not statistically significant (p = 0.15). Consequently, according to our initial plan, we revised our Stage 1 design and procedures before proceeding to Stage 2.

We registered the updated version of our experiment on the Social Science Registry.<sup>19</sup> It featured four main changes aimed at favoring higher levels of information avoidance. First, we introduced attention checks and timers to reduce noise from inattentive subjects (possibly also bots). Second, we adapted the experimental design to further favor passive information avoidance by having the information and allocation choices made on the same screen, as in DWK. In the previous Stage 1 pilot attempt, the information choice was made before the allocation option choice, on a separate screen; thus, to stay ignorant the dictator had to actively choose to proceed without asking for information (a feature copied from Lind, Nyborg, and Pauls, 2019). This anticipated the need in the *Informer* treatments to leave room for an informer to provide information to an information-avoidant dictator.

Third, we changed our choice of programming tool. Combining subject interaction in z-Tree Unleashed and the Prolific platform turned out to be more complicated than expected,

<sup>&</sup>lt;sup>19</sup>See https://www.socialscienceregistry.org/trials/11289

introducing impractical experimental routines and long time lags between recruitment and experiment. This may have contributed to a major attrition problem – losing about 50 percent of subjects between the recruitment stage and the experiment itself. Since attrition might not be random with respect to our main variables of interest, the high attrition rate could be one reason for the apparently low or missing prevalence of strategic ignorance. Instead, we used LIONESS (Giamattei et al., 2020) instead of z-tree Unleashed (Fischbacher, 2007; Duch, Grossmann, and Lauer, 2020).

Fourth, instead of exploring the effects of dictators' option to punish informers (reducing the informer's payoff by 2 dollars) we explore the effects of dictators' option to reward informers by a bonus of 0.50 dollars. This was due to our belief that the previous sanction opportunity may have been too harsh, possibly causing Dictators not to use it at all. We did not conduct any *Informer* treatments in Stage 1, so this design change was not motivated by empirical results in Stage 1. Only the new Stage 1 data, collected in the Spring of 2023, is included in our analysis.

#### Results of the DWK replication treatments

We ask two main questions of the replication-treatment data. First, is there a sufficient amount of information avoidance to allow us to investigate the impact of the informer in subsequent treatments; second, does the behavior in this sample resemble that found in the original DWK experiment and in other replications, such as that of Grossman, 2014. We had two hundred and twenty-six subjects participate as dictators in our DWK replication treatments and their choices provide clear 'yes' answers to both questions. Based upon these findings we decided to proceed with Stage 2 of our preregistered experiment and conduct the treatments with the informer.

Of the 109 dictators in the *Hidden Information* treatment, 60 chose not to reveal the payoffs, amounting to an ignorance rate of 55%. This leaves plenty of room for an intervention such as introducing an informer to have a measurable impact on information avoidance. Furthermore, this level of information avoidance is sufficient to negatively affect social outcomes. In the *Hidden Information* treatment, 36 (62%) out of the 58 recipients who were paired with dictators facing the conflicting-interests payoffs ended up with the lower payoff. However, only 29 (25%) out of the 117 recipients in the *Baseline* treatment received the lower payoff. One additional fact worth mentioning is that the average recipient payoff in the *Hidden Information* treatment was 3.53, which is very similar to the average interim recipient payoffs (3.73 and 3.74) recorded in the *Informer* and *Informer - Bonus* treatments, respectively.

Table 6: The results of the replication treatments are comparable to those of DWK and Grossman (2014)

	Replication	Grossman $(2014)$	DWK
Baseline			
n	117	26	19
Inconsistent with pref for $(5,5)$	25	35	26
Hidden Info			
n	109	39	32
Inconsistent with pref for $(5,5)$	60	60	53
Ignorance	55	45	44
(5,5) given revealed and in CI game $(N)$	79(24)	54(13)	75(8)
-maximizing given ignorant $(N)$	88 (60)	89(19)	86(14)

Note: This table fully reproduces Table 2 from Grossman, 2014 and adds the results from our replication experiment, which are displayed in the first column. Apart from numbers showing sample size (n), all numbers are percentages.

We turn to Table 6 to compare the results of our DWK replication treatment with both the original DWK results and those of the Grossman, 2014 replication (*Baseline* and *Default* NR treatments. It fully reproduces Table 2 from Grossman, 2014 in the second and third columns, for comparison with the results from our replication experiment, which are displayed in the first column. We report the percentage of subjects exhibiting five behaviors: selfish choice in the *Baseline* treatment, then—in the *Hidden Information* treatment—choosing in a way inconsistent with a desire the ensure a higher payoff for the recipient, not revealing the payoffs, choosing unselfishly conditional on revealing and seeing the conflicting-interests payoffs, and choosing the higher payoff conditional on remaining ignorant. The values of these measures in our data closely track those of DWK and Grossman, 2014, with a sample more than four times as large.<sup>20</sup>

<sup>&</sup>lt;sup>20</sup>The one exception to this is the fact that the giving rate while knowingly facing the conflicting-interests payoffs is lower in Grossman, 2014 than in the other two experiments.

## A.2 Hypothetical Informer treatments

Acknowledging the fact that the mere presence of a third party may affect the dictator's information choice, we planned, preregistered, and ran two treatments in which the third party's presence and role was announced, but their decision to inform was not implemented. We call these the *Hypothetical Informer* treatments and we ran both a regular and an *Info First* version. This appendix presents the design of these treatments and the results. Given that in our main treatments we found that the informer's impact came only through his imposition of information and that the informer did not affect the dictator's information choice, it is no surprise that we found no treatment effects in the *Hypothetical Informer* treatments. For the very same reason, we relegated discussion of these treatments to this appendix. In both treatments, the informer decisions were simulated using the distribution of informer treatments, the informer treatment.

#### Hypothetical Informer

The Hypothetical Informer treatment is identical to Hidden Information in the sense that the dictator freely chooses her own information without any interference. Just like in the Informer treatment, however, after the dictator makers her initial choice she is told about the existence of another participant with a third role. This role and its description to the dictator exactly matches that of the *Informer* treatment in just about every respect. Specifically, the informer is told about the dictator's decision and is asked if they want to provide the information about the recipient's payoffs to the dictator, should the dictator choose not to seek it herself. The informer's decision is shared with the dictator after the fact. However, the key difference is that the informer's decision is never actually implemented. Thus, the dictator has a chance to revise her decision after learning about the informer, their role, and whether or not they chose to inform. But dictators who chose not to inform themselves stay ignorant, regardless of what the informer chose. All of this is common knowledge. We hypothesized that merely introducing the presence of this third party and describing their hypothetical role as an informer could sway the dictator's behavior, much in the say that subtle changes in choice architecture have been noted to sway dictator's information choices, ostensibly by increasing the salience of their information choice and the sense of scrutiny surrounding it.

We used the *Hypothetical Informer* treatment to evaluate any changes to dictator's outcome choices stemming from the mere introduction of a potential informer. Just as with the regular informer treatments, we compare within subjects the initial outcome choice to the revised outcome choice.

#### Hypothetical Informer - Info First

The Hypothetical Informer - Info First treatment parallels the Hidden Information - Info First in that it separates the dictator's information choice from the outcome choice and disposes with the revised outcome choice. However, as in the Hypothetical Informer treatment, the informer's decision is never implemented and this is common knowledge. Just as with the Info First treatments reported in the main text, we compare between subjects the ignorance rates in this treatment to that of the Hidden Info - Info First control treatment.

Screenshots of the hypothetical informer treatments are presented below.

#### Dictator Decision with Hypothetical Informer

Dictator decision screen - present on Hypothetical Informer

Which role will you have? You have been assigned the role of Person 1, the one who DOES choose between A and B.

Before you make your decision, here is some new information: a third participant, Person 3, has also been matched with your pair. Person 3 was given a description of the choice you faced and asked the following question: "In the case that Person 1 did not reveal which table is being used for their pair, would you prefer to overturn their decision, making sure that they actually have this information when they make their choice between A and B?" Person 3's payoff is independent of their choice.

The question is a purely hypothetical one, however; Person 3 is not actually able to provide any information to you. Thus, you will get to know which table is used only if you requested this information yourself. Person 3's payoff is independent of their choice.

Below you will choose whether or not to reveal the payoff table, After that, you will be informed about Person 3's decision. If you requested the information, you will then be told which table is actually being used. We will then ask you to choose between options A and B.

Please click "Continue" to move on and make your decision. If you wish to reveal which payoff table is being used, click "Reveal" first.



#### Dictator Information with Hypothetical Informer (Info-First)

Dictator instructions - present on Hypothetical Informer - Info-First

Although you just made your decision, here is some new information: a third participant, Person 3, has also been matched with your pair. Person 3 was given a description of the choice you faced and asked the following question: "In the case that Person 1 did not reveal which table is being used for their pair, would you prefer to overturn their decision, making sure that they actually have this information when they make the choice between A and B?"
The question is a purely hypothetical one, however; Person 3 is not actually able to provide any information to you. Thus, you will get to know which table is used only if you requested this information yourself. Person 3's payoff is independent of their choice.
On the next screen, you will be informed about Person 3's decision. If you requested the information or if Person 3 decided to make sure that you have it, you will be told which table is actually being used.
We will then ask you to choose between options A and B even if you already did so on the previous decision screen. Your previous choice will then be filled out by default, and you can revise or keep that choice as you see fit. Payoffs to both you and Person 2 will be based on your final choices on the next screen.

#### Results of the Hypothetical Informers treatments

We ran the *Hypothetical Informer* treatment with 98 dictator participants and the *Hypothetical Informer - Info First Treatment* with 110 dictator participants.

First, we examine the extent to which a hypothetical informer affects information avoidance. Recall from Table 5 that the ignorance rates in the *Hidden Information - Info First* and *Informer - Info First* treatments were 0.30 and 0.32, respectively. The *Hypothetical Informer* - *Info First* treatment featured a similarly low ignorance rate with only 23 (21%) out of 110 dictators avoiding information. Although the non-*Info First* treatments are not designed for comparing the information choice, we also note that the 58% of the 98 dictators in the *Hypothetical Informer* treatment remained ignorant, which is very close to the 55% in the *Hidden Information* treatment and the 61% in the *Informer* treatment. We conclude from this that the hypothetical informer has little impact on information choice, which is unsurprising given the lack of an impact from the actual informer.

Next we consider the impact of the hypothetical informer on recipient payoffs. The average interim recipient payoff in the *Hypothetical Informer* treatment was 3.90, slightly above the 3.74 we found in the treatments with an effectual informer. The introduction of the hypothetical informer had only a trivial impact. Only one of the 98 dictators changed their decision after learning about the hypothetical informer, which resulted in an average final payoff of 3.94 for the recipient.<sup>21</sup> We conclude that a hypothetical informer does not have a significant impact on the dictator's choices nor on social outcomes. Dictators only respond when information is actually imposed.

 $<sup>^{21}</sup>$ This one dictator chose to reveal and was in the conflicting-interests payoff state. They switched their choice from A to B, increasing the recipient's payoff.

Result: Hypothetical informers do not affect ignorance rates, nor do they lead to any impact on recipient payoffs.

# **B** Supplemental Summary and Analysis

In this appendix, we present the demographic data that was automatically collected by Prolific and the additional data we collected using the questionnaire embedded in our experiment. Table 7 provides summary statistics on all available demographic variables. As Prolific routinely expires transitory variables, many subjects did not have their current employment status available. As a result, we caution the reader to use care when interpreting the role of employment in our subsequent regression analysis.

	Base. n=117	Hid. Info n=109	Hyp. Inf. n=97	Inf. n=391	Inf. Bonus n=370	Hid. Info (IF) n=104	Hyp. Inf. (IF) n=110	Inf. (IF) n=105	Total n=1,403
Age	37.14 (11.83)	34.37 (14.04)	35.49 (10.83)	37.86 (12.67)	35.13 (11.90)	34.82 (11.30)	38.14 (13.35)	36.28 (12.29)	36.32 (12.38)
Sex									
Female	55 (54.5%)	50 (45.9%)	50 (51.5%)	198 (50.6%)	189 (51.1%)	51 (49.0%)	55 (50.0%)	50 (47.6%)	698 (50.3%)
Male	46 (45.5%)	59 (54.1%)	47 (48.5%)	189 (48.3%)	175 (47.3%)	52 (50.0%)	55 (50.0%)	55 (52.4%)	678 (48.9%)
Not Consented	0 (0.0%)	0 (0.0%)	0 (0.0%)	4 (1.0%)	6(1.6%)	1(1.0%)	0 (0.0%)	0(0.0%)	11 (0.8%)
Ethnicity									
White	75 (74.3%)	73 (67.0%)	68 (70.1%)	243 (62.1%)	246 (66.5%)	70 (67.3%)	81 (73.6%)	75 (71.4%)	931 (67.1%)
Black	6(5.9%)	7 (6.4%)	10(10.3%)	46 (11.8%)	33 (8.9%)	10(9.6%)	5(4.5%)	5(4.8%)	122 (8.8%)
Asian	9 (8.9%)	18(16.5%)	8 (8.2%)	40 (10.2%)	41 (11.1%)	6 (5.8%)	10(9.1%)	11(10.5%)	143 (10.3%)
Mixed	3 (3.0%)	11(10.1%)	7 (7.2%)	38(9.7%)	27 (7.3%)	9 (8.7%)	11(10.0%)	7 (6.7%)	113(8.1%)
Other	5(5.0%)	0(0.0%)	3(3.1%)	15(3.8%)	12 (3.2%)	5 (4.8%)	2(1.8%)	5(4.8%)	47 (3.4%)
Not Consented	3 (3.0%)	0 (0.0%)	1 (1.0%)	9(2.3%)	11 (3.0%)	4 (3.8%)	1(0.9%)	2(1.9%)	31(2.2%)
Student Status									
Not Student	48 (87.3%)	48 (75.0%)	53 (72.6%)	229 (83.6%)	199 (72.4%)	58 (77.3%)	66 (84.6%)	69(92.0%)	770 (79.5%)
Current Student	7 (12.7%)	16(25.0%)	20 (27.4%)	41 (15.0%)	70 (25.5%)	16(21.3%)	12(15.4%)	6(8.0%)	188 (19.4%)
Not Consented	0 (0.0%)	0 (0.0%)	0 (0.0%)	4(1.5%)	6 (2.2%)	1(1.3%)	0 (0.0%)	0 (0.0%)	11(1.1%)
Political Party									
Democrat	39 (33.3%)	42 (38.5%)	37 (38.1%)	135 (34.5%)	130 (35.1%)	39(37.5%)	34(30.9%)	35 (33.3%)	491 (35.0%)
Republican	10(8.5%)	11 (10.1%)	13 (13.4%)	44 (11.3%)	61 (16.5%)	17 (16.3%)	19(17.3%)	19(18.1%)	194 (13.8%)
Independent/Other	68 (58.1%)	56 (51.4%)	47 (48.5%)	194 (49.6%)	162 (43.8%)	48 (46.2%)	56 (50.9%)	51 (48.6%)	682 (48.6%)
Not Consented	0 (0.0%)	0(0.0%)	0 (0.0%)	18(4.6%)	17(4.6%)	0 (0.0%)	1(0.9%)	0 (0.0%)	36(2.6%)
Employment Status									
Full-Time	22 (18.8%)	30 (27.5%)	21 (21.6%)	116(29.7%)	107 (28.9%)	33 (31.7%)	30 (27.3%)	40 (38.1%)	399(28.4%)
Part-Time	9 (7.7%)	16(14.7%)	7 (7.2%)	44 (11.3%)	39(10.5%)	10(9.6%)	11(10.0%)	6 (5.7%)	142 (10.1%)
Not Employed	11 (9.4%)	12(11.0%)	12 (12.4%)	51 (13.0%)	56 (15.1%)	9 (8.7%)	17 (15.5%)	14(13.3%)	182 (13.0%)
Other	1(0.9%)	4 (3.7%)	6 (6.2%)	19(4.9%)	15(4.1%)	5 (4.8%)	5 (4.5%)	3 (2.9%)	58 (4.1%)
Not Consented	74 (63.2%)	47 (43.1%)	51 (52.6%)	161 (41.2%)	153 (41.4%)	47 (45.2%)	47 (42.7%)	42 (40.0%)	622 (44.3%)

Notes: Parentheses indicate standard deviation or percentage based on category.

 Table 7: Summary statistics of for expanded demographic variables

	Base. n=117	Hid. Info n=109	Hyp. Inf. n=97	Inf. n=391	Inf. Bonus n=370	Hid. Info (IF) n=104	Hyp. Inf. (IF) n=110	Inf. (IF) n=105	Total n=1,403
Dict. Ignorance Rate	. (.)	0.55(0.50)	0.57(0.50)	0.61 (0.49)	0.70(0.46)	0.31(0.46)	0.21 (0.41)	0.32(0.47)	0.50(0.50)
Inf. Supplied Info	. (.)	. (.)	0.75(0.43)	0.71(0.46)	0.69(0.46)	. (.)	0.72(0.45)	0.74(0.44)	0.72(0.45)
Recip. Mean Payoff	4.01 (0.00)	3.53(0.00)	3.89(0.00)	4.37(0.00)	4.24(0.00)	4.08(0.00)	4.24(0.00)	4.43(0.00)	4.18(0.24)

Notes: Parentheses indicate standard deviation.

 Table 8: Summary statistics for decision variables across all treatments

Before presenting our regression analysis of key outcome variables on demographic factors, we present a comprehensive summary of these outcome variables across treatments. Table 8 provides summary statistics for the dictator's choice to remain ignorant, the informer's decision to impose information, and the mean payoff for recipients across all treatments, including those treatments not discussed in the main text (*Baseline*, *Hidden Information*, *Hypothetical Informer*, *Hypothetical Informer*—*Info First*).

We ran probit regressions of each of four key behaviors on the demographic and questionnaire variables. The four behavioral variables are indicators for whether the dictators revealed the information, whether they switched decisions when given the opportunity to revise, whether informers chose to impose information on the dictator, and whether dictators chose to withhold the bonus. Overall, the more detailed demographic analysis does nothing to undermine our main conclusions and provides little additional insight. For the sake of transparency, however, we report these regression results in Table 9, with each column corresponding to one of the behavioral indicators.

In column 1 the dependent variable is the dictator's reveal decision. The coefficient on the indicator for Republican political affiliation is highly significant, with a value of -0.47, which suggests that self-identified republicans are slightly less likely to reveal the payoff table. While this is potentially interesting, it may also be spurious and we do not see this as providing any particular insight in the questions at the heart of our study. None of the other demographic nor questionnaire variables appear to have a significant impact on the reveal decision. The column 2 regression is related to dictators revising their choices. The regression results reinforce the findings reported in the main text, namely that switching occurs when information is supplied but less frequently under the aligned-interest payoffs. In column 3, the dependent variable is the informer's decision. It shows at most a weak link between having some form of employment and choosing not to impose information, but this link may be tenuous due to a high level of unclassified subjects. The dependent variable in column 4 is the decision to withhold the bonus. No covariate explains this act at the 5% significance level, although we note that student status is significant at the 10% level.

	()	(-)	(-)	( .)
	(1)	(2)	(3)	(4)
	Revealed	Switched	Imposed	Withheld
	0.000	0.000	0.050	0.001
Student	-0.200	-0.366	-0.258	0.621
	(0.139)	(0.287)	(0.248)	(0.378)
			0.001	
Female	-0.173	-0.0547	-0.291	-0.425
	(0.0981)	(0.210)	(0.161)	(0.367)
3371 .	0.0000	0.100	0.140	0 1 4 9
white	0.0630	-0.109	-0.146	-0.142
	(0.108)	(0.230)	(0.169)	(0.360)
A mo	0.00191	0.00267	0 00926	0.0194
Age	-0.00101	-0.00207	-0.00630	(0.0124)
	(0.00434)	(0.00930)	(0.00692)	(0.0150)
Prolific Studies Completed	0.0000408	0.0000165	-0.0000952	0 0000874
r tollife Studies Completed	(0.0000346)	(0.0000705)	(0.0000502)	(0.00000117)
	(0.0000040)	(0.0000100)	(0.0000015)	(0.000111)
Democrat	-0.0953	-0.191	-0.00698	-0.249
2 0110 01 00	(0.114)	(0.245)	(0.177)	(0.407)
	(0111)	(0.210)	(01111)	(0.101)
Republican	-0.470**	0.0868	-0.153	-0.0168
	(0.165)	(0.370)	(0.254)	(0.586)
	()	()	()	()
Employed	0.00963	-0.203	-0.361*	0.149
	(0.0955)	(0.207)	(0.155)	(0.327)
		× /	× /	~ /
Covid	-0.0258	-0.146	0.0293	0.0770
	(0.0619)	(0.140)	(0.103)	(0.233)
Climate	-0.0260	0.0922	0.120	-0.203
	(0.0616)	(0.130)	(0.103)	(0.229)
	0.0110	0.0101	0.00405	0.0000
Self-Image Rating	0.0119	-0.0131	0.00405	-0.0332
	(0.00994)	(0.0194)	(0.0167)	(0.0307)
Lef Courselie d Lefe		1		
mi. Supplied mio		1.(((		
		(0.443)		
Aligned Interest		1 199***		
Anghed_Interest		-1.133		
		(0.223)		
Constant	0.00953	-1 149	0.898	-0.603
Compositio	(0.305)	(0.020)	(0.642)	(1.327)
$-P_{euedo}R^2$	0.0189	0.225	0.042)	0 101
n 500010	790	320	21/	162
10	120	543	014	100

Table 9: Summary Regressions on Key Decisions

Standard errors in parentheses \* p < 0.05, \*\* p < 0.01, \*\*\* p < 0.001



Fig. 3: The distribution of age by treatment

# C Robustness check: removing age outliers

We noted in Section 3 that our data featured some degree of age imbalance across treatments. In particular, the average age in the *Informer* and *Informer - Info First* treatments was slightly higher than in the other two treatments, to the point that the we can reject the hypothesis of equality of age across treatments. Here we argue that this difference is driven by outliers on the high end of the age range and that this age imbalance does not drive our main results.

Figure 3 shows the age distribution by treatment. All treatments peak close to age 30, although the *Informer* and *Informer - Info First* treatments peak slightly higher than the other two treatments. Most notable, though, is the fact that the *Informer* treatment has a thicker upper tail. We proceed by re-examining our main results while excluding the upper tails of all distributions and focusing only on subjects below age 55. We find that all of our main results hold up for this restricted sample and conclude that our results are not driven by age imbalance across treatments.

Table 11 replicates Table 3 from the main text for subjects below the age of 55. In the two treatments featured in the table, this excludes 39 out of 367 subjects. The table shows

	Pooled	Bo	Bonus		gly informed
		Ν	Y	Ν	Y
Interim	3.76 (1.85)	3.80 (1.84)	3.71 $(1.88)$	4.34 (1.49)	3.03 (2.01)
Final	4.32 (1.51)	4.41 (1.42)	4.22 (1.59)	4.32 (1.51)	4.32 (1.51)
Difference	0.56 [0.000]	0.61 [0.000]	0.51 [0.000]	-0.02 [0.319]	1.29 [0.000]
n	328	170	158	182	146

**Table 10**: Average recipient payment for dictators underthe age of 55

Notes: This table replicates Table 3 for subjects below the age of 55.

average recipient payoffs both interim and final, by treatment and broken down by whether or not the corresponding dictator was unwillingly informed. Focusing on the last two columns, we see that when the dictator is unwillingly unformed of the payoff state, the recipient's average payoff increases from 3.03 to 4.32 ECU. However, there is no corresponding increase for the recipients of dictators who were not unwillingly informed.

Table 11 replicates Table 5 from the main text for subjects below the age of 55. It summarizes the information choices of the dictator and informer across all four treatments. In the info-first treatments, the dictator chooses ignorance 29 and 34 percent of the time, respectively. As with the full sample, there is no evidence that the presence of the informer reduces the dictator's propensity to avoid information. Furthermore, as in the full sample, the is a large gap between the ignorance rates in the info-first treatments and the other treatments. Finally, the overall rate at which the informer chose to impose info is 71%, which exactly matches the rate observed in the full sample. Furthermore, there is little difference across treatments in this behavior.

	Total		Tre	eatments	
		Inf.	Inf. Bonus	Hid. Info (IF)	Inf. (IF)
D avoids info	0.53	0.59	0.71	0.29	0.34
	(0.50)	(0.49)	(0.46)	(0.46)	(0.48)
I imposes info	0.71	0.70	0.68		0.76
	(0.46)	(0.46)	(0.47)		(0.43)
N (dictators)	518	170	158	96	94
N (informers)	422	170	158	0	94

Table 11: Main decisions for subjects under the age of 55  $\,$ 

Notes: This table replicate Table 5 for subjects below the age of 55.

# **D** Informer Beliefs and Choice Reasoning

Once informers had made their main decision, we asked informers two questions about their beliefs. The first question was whether they believed that the dictator had revealed the payoff table and the second was whether they thought that the dictator would want the informer to provide that information. We did not include analysis of subjects' responses to these questions in the main text because informer behavior did not differ much between treatments and the analysis adds little insight. However, we report the analysis here for completeness and the raw data is available upon request.

Table 12 summarizes these results by treatment. The vast majority of informers believed that dictators had revealed the table ahead of time (between 84% to 87%), notably higher than the percentage of dictators who had sought information. This suggests that people may hold a different standard for culpability when not tempted by moral wiggle room.

Question	Informer	Informer - Bonus
Do you think they chose to find out the table?	168/193 (87%)	155/185 (84%)
If Person 1 did not reveal which table was actually being used,	78/194 (40%)	90/185~(48%)
did you think that they wanted you to reveal the table for them?		

Table 12: Informer answering "yes" in the questionnaire, by treatment

We also had two undergraduate research assistants code the informer responses according to the following categories: a concern for the bonus being withheld (only in *Informer Bonus*), procedural concern for informed decision making, a desire to help the recipient, respecting the dictator's choice, believing that the dictator wanted information, and a catchall other category which includes no responses. For each response to each question, each coder assigned a value to an indicator variable for the response belonging to each category.

The results reported below are the average value across all respondents for each category and across both undergraduate coders. The category with by far the most representation among informers' responses is "More information is better," which is consistent with large numbers of informers choosing to impose the information. However, the second most prevalent category is "Respected dictator's choice," which may indicate a sensitivity to the fact that the information may be have been unwelcome. Only 8% of responding informers were concerned about the bonus being withheld (a minority of those informers believed that the bonus would have been withheld if they did not supply information). This low share is natural, given that informers did not foresee the high share of ignorant dictators; apparently, they did not realize that information may be unwanted to the extent that dictators avoided it. Overall, informer responses are consistent with the finding of Mol, Soraperra, and Van der Weele (2023) that informers' decisions are largely driven by their own information preferences, with some awareness of dictator preferences.

Reason	Informer
More information is better	0.43
Wanted to help recipient	0.09
Respected dictator's choice	0.20
Believed dictator wanted information	0.09
Other	0.19

Table 13:	Informer	Treatment
-----------	----------	-----------

Reason	Informer
Worried about bonus	0.08
More information is better	0.37
Wanted to help recipient	0.09
Respected dictator's choice	0.19
Believed dictator wanted information	0.12
Other	0.14

 Table 14: Informer Bonus Treatment

# **E** Screenshots and Instructions

## General Instructions 1

#### First page of instructions - dictators and informers - present on every treatment

Thank you for participating in this experiment. It has two parts. First you will get instructions for Part 1 and complete it. Then you will get instructions for Part 2, which is entirely separate from Part 1, and complete it. Your earnings from the two parts will be added together to determine your final payment. All payment amounts will be stated in terms of Experimental Currency Units (ECUs), which will be converted to US Dollars at the end of the experiment at a rate of 2 ECUs = \$1.

Please do not leave your computer and please keep your attention on this browser tab until the experiment has been completed. Be aware that there will be timers and attention checks on subsequent parts of this experiment.

Part 1 instructions: You will be randomly paired with another Prolific participant. Everyone will remain anonymous to each other. One of you, Person 1, will choose between two options, A and B, that will determine how much each of you gets paid. The other person, Person 2, cannot do anything to impact this decision.

We will use a payoff table to show you the payment amounts that go with each option. Below is an example. The payoff table shows that if Person 1 chooses B, for example, then they get 3 ECUs and Person 2 receives 4 ECUs. You can see this by looking at the bottom row. This is just an example, though, When it is time for the actual choice, we will show you a payoff table with different numbers in it.

	Exp	mple Payoff	Table			
	Person 1 Chooses	Person 1 Receives	Person 2 Receives			
	A	:1	2			
	В	3	4			
Question: In this example, if Person 1 chooses A then what p	bayment does Person 2 receive?					
	button	appears in 17	seconds			
	Ren	naining time: (	01.59			

## General Instructions 2

#### Second page of instructions - dictators and informers - present on every treatment

So what is the actual payoff table for your pair? What are the actual payment amounts that go with Person 1's two options?

There are two possible payoff tables shown below. Your pair will use one of them, but Person 1 won't be told at first which one is being used. All they will know is that either one could be the actual payoff table, with each being equally likely.

However, Person 1 can click a button before making their choice and reveal which payoff table is actually being used. This is optional and not required. They could also just go ahead and choose one of two options, A or B. Person 2 will not be told whether or not Person 1 revealed the payoff table.

Please confirm your understanding by answering the questions below. You will not be able to participate if you do not answer these questions correctly. Immediately after you pass these questions, you will be paired with another participant. This may involve a short wait. Once you are paired, the experiment will continue with an attention check, so please pay attention to your screen.

Or	ne Possible Payoff Ta	ble	Anot	her Possible Payoff	Table
Person 1 Chooses	Person 1 Receives	Person 2 Receives	Person 1 Chooses	Person 1 Receives	Person 2 Receives
Α	6	1	A	6	5
В	5	5	в	5	1
i will get eithe	i will get 5 I will get 1 I vill get 1 Ir 5 or 1. I can't really s	ay which it is	Person 2 will get	Person 2 will get 6 Person 2 will get 5 Person 2 will get 1 either 5 or 1. I can't re	ally say which it is

#### Attention Check

## Attention check - dictators and informers - present on every treatment

This is an attention check. To participate, you must answer it correctly.

The question you are being asked now is very simple, when asked for a number, you must select '4828'.

Please choose a number.
429
15
900
и.
Click here to continue
Attempts left to answer the control questions. 1
Remaining time: 00.43

#### **Informer Instructions**

Informer instructions - informers only - present on Informer and Informer Bonus treatments

In addition to Person 1 and Person 2, there is a third role in this study, Person 3. Instead of being Person 1 or 2 and making the decision you just read about, you have been assigned the role of Person 3. Recall that Person 1 will not know which payoff table is being used, but they can reveal that information. While Person 1 is making their decision, all you have to do is answer the following question:

"In the case that Person 1 did not reveal which table is being used for their pair, would you prefer to overturn their decision, making sure that they actually have this information when they make their choice between A and B?"

This is the only thing that you have to do for Part 1 of this experiment at you will be paid 3 ECU regardless of how you respond. You will receive this additional payment as a bonus payment on Prolific. On the next page you will make your choice.

When you are done making your decision, Part 1 of the experiment will be over and we will give you instructions for Part 2.

Click here to continue

## Dictator Decision (Same Screen)

#### Dictator instructions - dictators only - present on all Same Screen treatments

Which role will you have? You have been assigned the role of Person 1, the one who DOES choose between A and B.

To make your choice, click the corresponding button below. If you wish to reveal which payoff table is being used, click "Reveal".

When you are done making your decision. Part 1 of the experiment is over. We will tell you what your Part 1 payment will be and then give you instructions for Part 2.

Option:	Person 1 Receives	Person 2 Receives	
A	6	?	
В	5	2	

#### Please select one of the options below, then click OK.

A
8
Reveal
Click here to continue

## Dictator Decisions 1 (Info First)

Dictator instructions - dictators only - present on Informer and Informer Bonus treatments Which role will you have? You have been assigned the role of Person 1, the one who DOES choose between A and B.

Before you make your decision, here is some new information: a third participant, Person 3, has also been matched with your pair. Person 3 was given a description of the choice you faced and asked the following question: "In the case that Person 1 did not reveal which table is being used for their pair, would you prefer to overturn their decision, making sure that they actually have this information when they make their choice between A and B?" Person 3's payoff is independent of their choice.

Below you will choose whether or not to reveal the payoff table. After that, you will be informed about Person 3's decision. If you requested the information or if Person 3 decided to make sure that you have it, you will then be told which table is actually being used. We will then ask you to choose between options A and B.

Please click "Continue" to move on and make your decision. If you wish to reveal which payoff table is being used, click "Reveal" first.

	Option:	Person 1 Receives	Person 2 Receives
	A	6	2
	В	5	?
Reveal			
		Continue	

## **Informer Decisions**

Informer instructions - informers only - present on Informer and Informer Bonus treatments

In the case that Person 1 did not reveal which table is being used for their pair, would you prefer to overturn their decision, making sure that they actually have this information when they make their choice between A and B?

## Dictator Decision 2 (Info First)

Informer instructions - dictators only - present on all Same Screen treatments

The actual payoff table being used is shown below.

Option:	Person 1 Receives	Person 2 Receives	
A	6	5	
в	5	1	
	Please select one of the options, the	click to continue.	
	Please select one of the options, then	click to continue.	
	Please select one of the options, then A B	click to continue.	

### **Dictator Informed**

## Dictator informed - present on Informer and Informer Bonus treatments

Although you just made your decision, here is some new information: a third participant, Person 3, has also been matched with your pair. Person 3 was given a description of the choice you faced and asked the following question: "In the case that Person 1 did not reveal which table is being used for their pair, would you prefer to overturn their decision, making sure that they actually have this information when they make their choice between A and B?" Person 3's payoff is independent of their choice.

On the next screen, you will be informed about Person 3's decision. If you requested the information or if Person 3 decided to make sure that you have it, you will be told which table is actually being used.

We will then ask you to choose between options A and B even if you already did so on the previous decision screen. Your previous choice will then be filled out by default, and you can revise or keep that choice as you see fit. Payoffs to both you and Person 2 will be based on your final choices on the next screen.

ntinue

# F Questionnaire

In part two of the experiment, subjects were asked to answer the following questionnaire: Demographics With what political party, if any, do you sympathize?

- Republican
- Independent/none
- Democratic

How worried are you about global climate change?

- Not at all worried
- Slightly worried
- Rather worried
- Very worried

In August 2020, how worried were you about the Covid-19 pandemic?

- Not at all worried
- Slightly worried
- Rather worried
- Very worried

How did you find out about this experiment?

- Prolific notification/assistant
- Browsing studies page on Prolific
- Friend or aquaintance told me about it
- Heard about it online (Reddit, Prolific user group, etc.)
- Other

Next we are asking you to evaluate a person playing the role of Person 1 on the basis of his or her possible decisions. How social (as opposed to antisocial) would you view Person 1 if he or she chooses as follows?

Does not find out he table and chooses A (\$6,\$?).

Very antisocial  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  Very social

Does not find out he table and chooses B (\$5,\$?).

Very antisocial  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  Very social

Does find out the table and has a choice between A (\$6,\$1) and B(\$5,\$5). Chooses A(\$6,\$1).

Very antisocial  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  Very social

Does find out the table and has a choice between A (\$6,\$1) and B(\$5,\$5). Chooses B(\$5,\$5).

Very antisocial  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  Very social

Does find out the table and has a choice between A (\$6,\$5) and B(\$5,\$1). Chooses A(\$6,\$5).

Very antisocial  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  Very social

Does find out the table and has a choice between A (\$6,\$5) and B(\$5,\$1). Chooses B(\$5,\$1).

Very antisocial  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  Very social

Here are some characteristics that could describe a person: fair, generous, kind. The person with these characteristics could be you or it could be someone else. For a moment, visualize in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act.

When you have a clear image of what this person would be like, please respond to the statements below by indicating how strongly you agree or disagree. For each statement, the responses are (from left to right):

# strongly disagree, disagree, disagree slightly, agree slightly, agree, strongly agree

Choose the response that best expresses your feelings.

1. It would make me feel good to be a person who has these characteristics.

strongly disagree  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  strongly agree

- 2. Being someone who has these characteristics is an important part of who I am. strongly disagree () () () () () strongly agree
- 3. A big part of my emotional well-being is tied up in having these characteristics.
- strongly disagree  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  strongly agree
- 4. Having these characteristics is an important part of my sense of self.

strongly disagree  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  strongly agree

5. I strongly desire to have these characteristics.

strongly disagree O O O O Strongly agree

6. The types of things I do in my spare time (e.g. hobbies) clearly identify me as having these characteristics.

strongly disagree  $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$   $\bigcirc$  strongly agree