I Didn't Know Either - the Dynamics of Strategic Ignorance

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Abstract

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Introduction

An extensive literature highlights the use of willful ignorance as moral wiggle-room to protect one's self-image when choosing to behave selfishly (Dana, Weber, and Kuang, 2007; Grossman, 2014; Grossman and Van der Weele, 2017; Exley and Kessler, 2023). Although the literature is highly suggestive that people care about their own, internalized self-image, people frequently compare themselves with others when evaluating their own conduct. In the context of willful ignorance, an ignorant person could claim "I am not a bad person for not knowing because there are many others who also did not know." Accordingly, the use of ignorance to mitigate guilt or shame implies different social norms, contingent upon individuals' beliefs about how others may choose to acquire undesirable information. Given the richness of our social environments and the tendency to copy the behavior of others (Tomasello, Kruger, and Ratner, 1993) or to follow social norms (Akerlof, 1980), it is likely the case that the degree to which we exploit moral wiggle-room is a function of how we perceive others to behave, with the caveat that such beliefs may be inherently self-serving. Studying the role of beliefs about social norms offers both a broader understanding of the moral wiggle-room phenomena and potential mechanisms for addressing willful ignorance.

Contributions

The main goal of this study is an exploration of the interaction between beliefs about social norms and the tendency to exploit ignorance for selfish gains. We present an experiment that studies norming behavior within the moral wiggle-room paradigm, using a design that exogenously manipulates subjects' prior beliefs about social norms.

As it has been well documented that people form self-serving biases in how they perceive norms (Babcock and Loewenstein, 1997; Bicchieri, Dimant, and Sonderegger, 2023), this study incorporates both beliefs and constructed norms, in an effort to understand 1) how social beliefs about willful ignorance are formed, 2) how ignorance may be adopted in response to descriptive versus prescriptive norms, and 3) how individuals behave when updating their beliefs relative to the actualized behavior of others.

Experimental Design

To maintain compatibility with the previous literature, this study will use the moral wiggle-room game as the primary decision-making instrument as it captures the key features of an information avoidance environment while maintaining compatibility with a number of other studies (Vu et al., 2023).

The overall experimental design is as follows. In the first section, subjects are briefed about the moral wiggle-room game (Dana, Weber, and Kuang, 2007). Upon successfully answering a series of comprehension tests, subjects are then first asked to elicit their beliefs on the proportion of subjects in a similar, but separate experiment who had chosen not to reveal. Then subjects are asked to elicit their beliefs on what proportion of other subjects believe that it is socially appropriate to reveal.

The first set of experimental manipulation involves the framing of the belief elicitation. In three treatment arms, we tell subjects that they will actively play the moral wiggle-room game, while in the remaining three treatments, we surprise the subjects by asking them to play the game after eliciting their beliefs about how other subjects had behaved in the game. Subjects are incentivized for accuracy, earning a greater bonus if their answer is closer to true reveal rate.

In the second section, subjects are then tasked with playing the role of the dictator in a modified moral wiggle-room game. Before making their decision, in the norm treatments, consisting of a low ignorance (30%) and high ignorance rates (70%) environments, dictators are informed about the reveal rate that they had been asked to predict. I exogenously vary the real reveal rate by re-using the results from a separate study.[1]

Lastly, in the third section, subjects are then asked to evaluate the social appropriateness for revealing and not revealing followed by a questionnaire battery consisting of The Conformity Scale (Mehrabian and Stefl, 1995) and a general demographics questionnaire.

Using the between subjects design, our main outcome of interest is the ignorance

[1] I re-use the ignorance rate from another experiment in which the choice architecture drastically altered the ignorance rate between treatment arms. Subjects are thus predicting the ignorance rates of one of such treatments arms. Although subjects will not see the same interface as used in the other experiments, we will present the experiment as being similar to those of the other study. See Grossman, Hua, et al. (2024).

rate across the different treatment arms. In addition, using the within subjects design, we look at how a mismatch between priors and beliefs can influence the propensity for dictators to exploit or avoid ignorance.

Subjects in the *Known* treatments will know if they will be participating as a dictator in the moral wiggle-room game while subjects in the *Unknown* treatments will be surprised with playing the moral wiggle-room game after eliciting their beliefs about the reveal rate in the separate study. Across both *Known* and *Unknown* conditions, dictators will make a decision under: no norm, low ignorance norm, and high ignorance norm information, with no information about the reveal rate, a 70% reveal rate, and a 30% reveal rate. Across all manipulations, the study is formatted in a 2 by 3 experimental design. The 6 treatments are thus:

1. *Known - No Info*
2. *Unknown - No Info*
3. *Known - 30% Ignorance*
4. *Unknown - 30% Ignorance*
5. *Known - 70% Ignorance*
6. *Unknown - 70% Ignorance*

Low and high ignorance rates of 30% and 70% are selected as they provide a clear majoritarian norm. Low and high ignorance treatments for both *Known* and *Unknown* conditions serve to examine how self-serving biases may be collapsed once information is revealed. However, depending on the actual beliefs of dictators, if such beliefs drastically understate ignorance rates, it may be necessary to run a 10% ignorance environment using results from Lind, Nyborg, and Pauls, 2019. A 10% ignorance environment will be considered if less than 20% of subjects report a belief that ignorance rates are higher than 30%. This is necessary for testing how subjects would behave if their belief about ignorance rates are higher than the actual rate as both 30% and 70% ignorance environments would be considered relatively high ignorance rates relative to beliefs.[2]

[2]In a nonincentivized pilot of 46 subjects, the median belief on ignorance rate was 23%. Thus, with a low ignorance environment of 30%, most subjects would still underreport the ignorance rate.

Hypotheses

Hypothesis 1: Self-serving Beliefs When dictators anticipate having to exploit moral wiggle-room, they will report higher ignorance rates for social norms.

Hypothesis 2: Norm Following Low (high) ignorance environment will lead to lower (higher) propensity to not reveal.

Hypothesis 3: Norm Sensitivity If a dictator's priors are below (above) the norm rates, then they will be more (less) likely to choose to be ignorant.

Hypothesis 4: Exculpatory Beliefs Given a mismatch in priors, dictators are more likely to adopt ignorance when their beliefs about ignorance rates are lower than the norm rate.

Hypothesis 5: Self-justifying Beliefs Ignorant dictators will be more likely to rate a selfish ignorant action as appropriate than an informed dictator. Similarly, an informed dictator will be more likely to rate a prosocial reveal choice more favorably than an ignorant dictator.

Procedures

Subjects will be recruited using the Prolific recruitment platform, and the experimental interface will be programmed using the LIONESS web platform (Giamattei et al., 2020).

Proposed Analysis

Using the between subjects design, our main outcome of interest is the ignorance rate and elicited belief regarding the ignorance rates across the different treatment arms. In addition, using the within subjects design, we look at how a mismatch between priors and beliefs can influence the propensity for dictators to rate the social appropriateness

of information avoidance. An analysis plan of the proposed hypotheses is presented below.

Question	Hypothesis	Analysis Plan	Interpretation of Outcomes
Do people form self-serving beliefs about norms on information avoidance?	**Hypothesis 1: Self-serving Beliefs** When dictators anticipate having to exploit moral wiggle-room, they will report higher ignorance rates for on descriptive norms.	One sided test of proportions comparing dictators' predicted ignorance rate beliefs when told they will be playing the moral wiggle-room game in the *Known* treatments over the *Unknown* treatments	If elicited beliefs about ignorance rates are higher in the *Known* treatments, then this provides evidence that people form self-serving beliefs about the behavior of others when exploiting moral wiggle-room.
Are people sensitive and responsive to norms regarding information avoidance?	**Hypothesis 2: Norm Following** Low (high) ignorance environment will lead to lower (higher) propensity to not reveal.	Chi-square test comparing (30% and 70%) ignorance environment with (reveal, not reveal) decisions. A 10% ignorance environment be considered.	If reveal rates are higher in low (30%) ignorance environment, then this provides evidence for a information seeking norms. Similarly, if reveal rates are lower in high (70%) ignorance environment, then this provides evidence for information avoidance norms.
Do people exploit the relative potential to pool with ignorant actors based on their beliefs about the proportion of other, ignorant actors?	**Hypothesis 3: Norm Sensitivity** If a dictator's priors are below (above) the norm rates, then they will be more (less) likely to choose to be ignorant.	Likelihood ratio test comparing: 1) Logistics regression with distance of priors to norm rates as independent variable and 2) Logistics regression with binary variable (above or below) as independent variable. Both using reveal decision as the outcome variable.	If dictators' decision to acquire (avoid) information is sensitive to whether or not the their beliefs about the reveal rate is lower (higher) than the descriptive norm, then this provides evidence that dictators hold an internalized measure of the social appropriateness of willful ignorance with which they may exploit given updated information on the behavior of others.

Do people pursue ignorance norms as a means to mask selfish behavior?	**Hypothesis 4: Exculpatory Beliefs** Given a mismatch in priors, dictators are more likely to adopt ignorance when their beliefs about ignorance rates are lower than the norm rate.	Using the reveal choice as the outcome, conduct a piece-wise logistics regression with a binary variable for underestimating norm and binary variable for overestimating norm.	If dictators only follow or are more likely to follow the norm when their belief about reveal rates are higher than the actual reveal rates, then this would provide evidence that people may exploit norms for their selfish gains, beyond the tendency to match the norm.
Are beliefs about prescriptive norms sensitive to one's own actions?	**Hypothesis 5: Self-justifying Beliefs** Ignorant dictators will be more likely to rate a selfish ignorant action as appropriate than an informed dictator. Similarly, an informed dictator will be more likely to rate a prosocial reveal choice more favorably than an ignorant dictator.	Difference of means test on the appropriate comparison pairs, looking at ignorant dictators versus informed dictators within each treatment.	In the *Known* and *Unknown* treatments without norm information, if ignorant dictators are more likely to rate ignorance as socially acceptable, this would provide evidence that beliefs are self-justifying, i.e. forming beliefs that others think the selfish action is acceptable. In the treatments with low and high ignorance norms, if ignorant dictators more favorably rate choosing to not reveal, then this provides evidence that subjects' beliefs about prescriptive norms are sensitive or responsive to descriptive norms.

References

Akerlof, George A. (1980). "A Theory of Social Custom, of Which Unemployment May be One Consequence". In: *The Quarterly Journal of Economics* 94.4, pp. 749–775. ISSN: 00335533, 15314650. URL: http://www.jstor.org/stable/1885667 (visited on 12/07/2024).

Babcock, Linda and George Loewenstein (Mar. 1997). "Explaining Bargaining Impasse: The Role of Self-Serving Biases". In: *Journal of Economic Perspectives* 11.1, pp. 109–126.

Bicchieri, Cristina, Eugen Dimant, and Silvia Sonderegger (2023). "It's not a lie if you believe the norm does not apply: Conditional norm-following and belief distortion". In: *Games and Economic Behavior* 138, pp. 321–354. ISSN: 0899-8256.

Dana, Jason, Roberto A. Weber, and Jason Xi Kuang (2007). "Exploiting moral wiggle room: experiments demonstrating an illusory preference for fairness". In: *Economic Theory* 33.1, pp. 67–80. ISSN: 09382259, 14320479. URL: http://www.jstor.org/stable/27822583 (visited on 04/25/2024).

Exley, Christine L and Judd B Kessler (Aug. 2023). "Information Avoidance and Image Concerns". In: *The Economic Journal* 133.656, pp. 3153–3168. ISSN: 0013-0133. DOI: 10.1093/ej/uead058. eprint: https://academic.oup.com/ej/article-pdf/133/656/3153/51918010/uead058.pdf. URL: https://doi.org/10.1093/ej/uead058.

Giamattei, Marcus et al. (2020). "LIONESS Lab: a Free Web-Based Platform for Conducting Interactive Experiments Online". In: *Journal of the Economic Science Association* 6, pp. 95–111.

Grossman, Zachary (2014). "Strategic ignorance and the robustness of social preferences". In: *Management Science* 60.11, pp. 2659–2665.

Grossman, Zachary, Tony Hua, et al. (2024). *Strategic Ignorance in the Presence of a Potential Informer*.

Grossman, Zachary and Joël J. Van der Weele (2017). "Self-image and willful ignorance in social decisions". In: *Journal of the European Economic Association* 15.1, pp. 173–217.

Lind, Jo Thori, Karine Nyborg, and Anna Pauls (2019). "Save the planet or close your eyes? Testing strategic ignorance in a charity context". In: *Ecological Economics* 161, pp. 9–19.

Mehrabian, Albert and Carol A. Stefl (1995). "Basic temperament components of loneliness, shyness, and conformity". In: *Social Behavior and Personality: An International Journal* 23.3, pp. 253–263. DOI: 10.2224/sbp.1995.23.3.253.

Tomasello, Michael, Ann C. Kruger, and Hilary H. Ratner (1993). "Cultural learning". In: *Behavioral and Brain Sciences* 16.3, pp. 495–552. DOI: 10.1017/S0140525X0003123X.

Vu, Lam et al. (2023). "Ignorance by choice: A meta-analytic review of the underlying motives of willful ignorance and its consequences". In: *Psychological Bulletin* 149.9-10, pp. 611–635. DOI: 10.1037/bul0000398. URL: https://doi.org/10.1037/bul0000398.

A Appendix

A.1 Moral wiggle-room Game

The moral wiggle-room game (MWRG) is a binary dictator game in which a dictator chooses between two possible allocations, A or B, between themselves and a receiver. There are two possible states of the world, the Conflicting Interest Game (CIG) and the Aligned Interest Game (AIG). In the full information condition, dictators know which state of the world they are in.

Conflicting Interest Game (CIG)

		Player 1 Gets	Player 2 Gets
Player 1 Chooses	A	6	1
	B	5	5

Aligned Interest Game (AIG)

		Player 1 Gets	Player 2 Gets
Player 1 Chooses	A	6	5
	B	5	1

In the hidden information condition, dictators are again assigned to either the CIG or AIG, but the payoffs are hidden. Thus, dictators do not know which state of the world they are in. However, dictators may reveal the state of the world by clicking on a "REVEAL" button.

Hidden Payoffs Game

		Player 1 Gets	Player 2 Gets
Player 1 Chooses	A	6	?
	B	5	?

REVEAL

The MWRG captures strategic ignorance on the part of dictators. In the canonical game, dictators are told that no one will observe their decision on whether or not to reveal the state of the world. Thus, strategic ignorance is applied against one's self, sometimes interpreted as self-image concerns with regards to an internalized impartial spectator.

A.2 Belief Elicitation

Question 1 Subjects in a another session participated in a similar experiment to the one we had just described. What proportion or percentage of people in that session do you think **decided to reveal**?

You will receive 2 ECUs if your prediction is closer than the majority of participants.

Enter a value between 0 to 100, corresponding to the percentage of subjects who you think **reveal**.

Your answer _____.

Question 2 Subjects in another session were asked if they believed that people should reveal the payoff tables before making their decision. What proportion or percentage of people in that session do you think believed it is okay to **not reveal**?

You will receive 2 ECUs if your prediction is closer than the majority of participants.

Enter a value between 0 to 100, corresponding to the percentage of people in this experiment who believed it is okay to **not reveal**.

Your answer _____.

A.3 Treatment

In a similar experiment, 30% of subjects revealed the payoff table. You had predicted that X% of subjects would reveal.

Hidden Payoffs Game

		Player 1 Gets	Player 2 Gets
Player 1 Chooses	A	6	?
	B	5	?

REVEAL

A.4 Social Appropriateness Rating

Directions: How socially appropriate do you think other people believed it was to **reveal** the payoff table, in order to show Person 2's payoffs? If your response matches the most common response of the other participants in this study, you will receive 1 extra ECU.

Socially Inappropriate ◯ ◯ ◯ ◯ Socially Appropriate

Directions: How socially appropriate do you think other people believed it was to **not reveal** the payoff table, in order to show Person 2's payoffs? If your response matches the most common response of the other participants in this study, you will receive 1 extra ECU.

Socially Inappropriate ◯ ◯ ◯ ◯ Socially Appropriate

Directions: How socially appropriate do you personally believe it is to **reveal** the payoff table, in order to show Person 2's payoffs?

Socially Inappropriate ◯ ◯ ◯ ◯ Socially Appropriate

Directions: How socially appropriate do you personally believe it is to **not reveal** the payoff table, in order to show Person 2's payoffs?

Socially Inappropriate ◯ ◯ ◯ ◯ Socially Appropriate