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Do I Have More Free Will Than You Do?
An Unexpected Asymmetry in Intuitions About Personal Freedom

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The present research explores the relationship between moral evaluations and intuitions about the causes of human behavior, in particular freedom of the will. Two studies test for a self-serving bias in intuitions about free will. Study 1 explores whether individuals may seek to exculpate themselves from wrongdoing by denying free will, while justifying blame of others by endorsing free will. Study 2 explores whether individuals may justify personal failures by denying free will, while taking credit for personal successes by endorsing free will. In neither study do the data show the predicted differences between conditions. However, an unexpected finding is reported. By pooling the data from both experiments and collapsing across conditions, it is shown that participants give greater endorsement of free will whenever actions are described from a first-person, instead of third-person, perspective—a tentative "I have more free will than you do" effect. Possible explanations for these findings are discussed, as are avenues for further research on this topic.

Key Words: free will, perspective, blame, self-serving, self-other

According to common wisdom, people either believe in free will or they do not. That is, intuitions about free will are taken to be relatively robust and stable, not susceptible to major alteration without serious philosophical reflection. Yet recent work in experimental philosophy has shown that beliefs involving free will may not be so fixed after all. Nichols and Knobe (2007), for instance, have found that people's beliefs about the compatibility of moral responsibility with determinism—often presumed to hinge on one's conception of free will—seem to change drastically depending upon how a particular case is framed. Specifically, if a violent, immoral act is described in gory detail, participants tend to hold the actor morally responsible, even if the actor is said to inhabit an explicitly deterministic universe. But if the same act, occurring in the same universe, is described in a more abstract or theoretical way, participants will deny that the actor could be morally responsible—presumably due to a lack of free will. These findings suggest that factors which are arguably irrelevant from a normative ethical perspective, such as the emotional salience of an action, may dramatically sway folk judgments about moral responsibility.

If this is the case, what about people's intuitions about free will itself? Recent research suggests that certain considerations, such as the moral valence of a given action, may directly influence an individual's belief about freedom—at least with respect to that action. For example, in one study, participants interpreted immoral actions as being less forced, and therefore more free, than comparable neutral or non-moral actions (Phillips & Knobe, 2009). In other words, the freedom that participants attributed to actors behaving in much the same way varied on the basis of whether the behavior elicited a negative moral reaction in the perceiver.

One possible explanation for this finding and other findings like it is that people tend first to evaluate a morally-valenced action as being *blameworthy* (or not), and then bring their corresponding intuitions about freedom and responsibility in line with this initial judgment, whether consciously or unconsciously. According to this account—termed the "motivational bias hypothesis"—first we blame, then we justify (Knobe, 2009). This blame-based conception of free will is not an entirely new idea, but rather has a long history in philosophical thought. According to Nietzsche, "the doctrine of the will has been invented essentially to justify punishment through the pretext of assigning guilt" (1889/2003, p. 64).

The notion is also consistent with seminal work in social psychology by Jones and Davis (1965). Their studies showed that people pay more attention to others' socially undesirable behavior than to their socially desirable behavior, and are likelier to make dispositional inferences in cases involving the former compared to the latter. Simply put, when people do "bad" things, others are more likely to think of them as personally responsible for their behavior than when they do "good" things.

Whatever the case when it comes to judging others' behavior, these types of findings lead one to a related question about how intuitions about freedom might differ if one is the actor rather than the observer of a morally-valenced action. If people may be motivated to assign blame to others, but to avoid blame for themselves, it would follow that individuals will endorse free will differently when they are the ones being judged (see Bargh & Earp, 2009). In another classic work of social psychology, Jones and Nisbett (1972) argued for a "pervasive tendency for actors to attribute their actions to situational requirements, [and for] observers . . . to attribute the same actions to stable personal dispositions," explicitly stating that "this tendency often stems in part from the actor's need to justify blameworthy action" (p. 80). Indeed, countless studies (for reviews, see Malle, 2006; Zuckerman, 1979) have since shown that people tend to make self-serving inferences about the causes of their behavior, allowing them to take credit for the good things they do, while blaming the situation for the bad things they do.

Applied directly to the concept of free will, these convergent actor-observer discrepancies predict (1) that people may justify blaming others by attributing more free will to them when their actions seem wrong, and (2) that people may seek to excuse their

own immoral behavior by denying that they were free to have done otherwise. Accordingly, this paper's theoretical expectations are as follows: when individuals perform a good action, they will attribute the cause of their behavior to their own will (the person); but when they do something bad, they will attribute their behavior to factors over which they have no control—e.g., their genes, their upbringing, and the immediate situation. But when individuals perceive others performing good and bad actions, their free will attributions will flip—the others' bad actions are caused by their own free will, while their good actions are determined by what's expected of them socially.

Two studies test for such a self-serving bias in intuitions about free will. Study 1 explores whether individuals may seek to exculpate themselves from wrongdoing by denying free will, while blaming others by endorsing free will. Study 2 explores whether individuals may justify personal failures by denying free will, while taking credit for personal successes by endorsing free will.

Study 1

This study examines whether moral evaluations influence belief in free will. In particular, it asks whether the direction of change varies depending upon whether one is the actor or observer of a moral versus immoral act. If belief in free will is selective and self-serving, participants made to feel as though they have done something immoral should respond that behavior is due more to genetic and situational causes, and less to free will. Conversely, when it is another individual who acts immorally—and there is thus a motivation to blame that individual—endorsements of free will are expected to increase. In the words of Nietzsche, "men were considered 'free' only so that they might be considered guilty—could be judged and punished" (Nietzsche, 1889/2003, p. 64). While this account suggests that people believe in free will in order to blame or condemn others, selective belief in free will might also function such that individuals can take credit for their own moral triumphs. Therefore, it is predicted that participants made to feel that they themselves have acted morally will also attribute more of human behavior to free will and less to genetic or environmental factors.

Methods

Participants

The participants in this study were undergraduates at a university in the Northeast of the United States (N= 50; 32 female, 18 male; ages 18-27, M= 19.36; SD= 1.69), recruited in high-traffic locations on campus.

Procedure

The independent variable in this study is based on a priming manipulation used by Zhong and Liljenquist (2006). Participants were asked to copy out by hand a passage that described either a moral or immoral behavior, and that was written from either the first-person or third-person perspective. This method has been used in previous research as a way of inducing moral guilt and moral judgment in a controlled manner. Participants in the *first-person, morally good* condition copied out the following passage:

> *Two years ago, when I was a junior partner at a prestigious law firm, I was coming up for promotion against another junior partner, Chris. For several months, Chris had been working on a major case for the city that would make or break his career at the firm. However, he could not locate a key zoning document, without which it was unlikely that he would have sufficient evidence to successfully argue his case. Late one evening, as I was rummaging through a corner filing cabinet, I happened to come across the zoning document that Chris was in desperate need of. I pulled it from the cabinet and placed it without a note on Chris' desk, knowing that he would be so relieved when he arrived to work the next morning.*

Participants in the *first-person, morally bad* condition copied out an identical passage, except that the final sentence read:

> *I pulled it from the cabinet and walked over to the office shredder, knowing that my promotion would now be secured.*

Participants in the *third-person, morally good* and *third-person, morally bad* conditions copied identical passages except that they were written from the third-person perspective about a character named Gary.

Following this priming task, participants answered a question about the role of free will in human behavior, which was embedded in other unrelated opinion questions to avoid experimental demand. Specifically, participants were given a circular chart (see Appendix) and were asked to graphically indicate their response to the following question: "How much do each of the following contribute to causing typical human behavior?: A) genes/environment/early learning B) immediate situation/circumstances C) free will." After completing this dependent variable measure and several filler measures, participants answered basic demographic questions and were probed for knowledge of the hypothesis.

Results

Contrary to hypotheses, expressed belief in free will did not differ between conditions. An independent-samples t-test was conducted to compare the number of pie chart slices (out of 20) that were attributed to free will between the moral and immoral conditions, in both the first-person and third-person perspective conditions. Based on these analyses, participants were no more likely to endorse free will as a cause of behavior when they wrote about themselves behaving morally (M = 5.46), compared to immorally (M = 5.17) $t(23)$ = -.284, p = .78, nor did participants attribute more to free will when writing about another individual behaving immorally (M = 4.00), compared to morally (M = 4.25) $t(22)$ =.202, p = .84. The self-serving free will hypothesis predicted an interaction between the perspective condition (first-person vs. third-person) and the valence condition (moral vs. immoral), such that belief in free will would be lowest for the immoral act in first person condition, but highest for the immoral act in the third person condition. Based on a univariate ANOVA, no such interaction was found: F (1, 45) = .144, p = .74. There was a moderate trending towards a significant main effect such that participants in the first-person conditions attributed more

of typical human behavior to free will ($M = 5.32$), than participants in the third-person conditions [$M = 4.13$, $t(48) = 1.515$, $p = 0.136$], regardless of the moral valence of the passage.

Discussion

There are several possible interpretations of these results. While the null result could be taken as evidence that belief in free will is in fact highly robust and consistent across situations, alternative explanations are more plausible. Because Study 1 did not include a manipulation check, it is unclear whether participants were indeed made to feel as though they had acted immorally. It should be noted that the original Zhong and Liljenquist (2006) study from which the priming materials in the present experiment were adapted likewise did not include a manipulation check; and the purpose here was to replicate, not validate, their materials. Copying the morally negative passage from a first-person perspective was meant to induce moral guilt; however it is possible that participants continued to think about the agent in the passage as another individual. In other words, the pronoun manipulation may have failed to tap into the actor-observer distinction as intended.

Also, it is possible that the moral valence of the passage was not salient enough to reveal the hypothesized effect. It is conceivable that the action described in the morally bad condition was insufficiently "immoral." Perhaps participants interpreted this behavior as a standard course of action in the competitive environment described. A more dramatic difference between the valence of the moral and immoral passages might be necessary to obtain the expected shift in free will intuitions. Hence future research may benefit from the use of a stronger manipulation, and the inclusion of manipulation checks to confirm that the relevant actions are indeed perceived as moral and immoral, and that participants internalize the action when describing it from a first-person perspective. On a related side note, it may be worth mentioning here that at least two recent studies have failed to replicate the findings of Zhong and Liljenquist (2006) using the very same materials used in the present experiment—see Gámez, Díaz, and Marrero (2011) and Fayard, Bassi, Bernstein, and Roberts (2009)—possibly for some of the reasons just outlined. That is, the priming manipulation's effectiveness in the original study, widely-cited though it is, may be inconsistently reproducible. Nevertheless, at the time the present research was conducted, there was no reason to think that the Zhong and Liljenquist (2006) priming experiment, reported in the reputable journal *Science*, was at all dubious. As more labs attempt to replicate their findings using their original materials, a clearer picture will emerge.

In addition to these concerns about the effectiveness of the priming task, it is possible that the manipulation, even as intended, would not reveal a self-serving bias. While the action described in the *morally bad* condition may be perceived as a moral transgression, it is not necessarily a failure of personal will. Therefore, even if participants fully internalized the action by taking the perspective of the speaker, and were motivated to exculpate themselves, reduced endorsement of free will does not clearly accomplish this goal. The self-serving effect of free will may be restricted to contexts in which the concept of will is directly implicated. Accordingly, Study 2 was designed to focus on actions more clearly involving the concept of will.

Study 2

Although in Study 1 participants did not appear to decrease attributions of free will after being made to feel immoral, it is possible that belief in free will could provide a self-serving function. Study 2 explores a different context in which free will could be selectively endorsed so as to exculpate oneself for negative actions or take credit for positive ones. In this study, participants are again primed with behaviors that are oppositely valenced across the two conditions, but rather than a moral and immoral act, they are an act of failed will versus the successful exercise of restraint. In contrast to the manipulation of first study, the passages in Study 2 include behaviors that reflect strength or weakness of will directly, i.e., "willpower." Because the will is directly implicated in the described behavior, intuitions about free will could plausibly be more sensitive to these manipulations. Intuitively, denial of free will would be a most effective exculpation strategy if the offense were directly rooted in personal will. It is therefore predicted that although the moral-immoral distinction did not generate the hypothesized shift in intuitions, manipulating success-of-will and failure-of-will may.

Method

Participants

The participants in this study were undergraduates at a university in the Northeast of the United States ($N = 41$; 19 female, 22 male; ages 18-23, $M = 19.72$, $SD = 1.34$), recruited in high-traffic locations on campus.

Procedure

The experimental design for Study 2 was identical to that of Study 1, except for the specific passage copied. In study two, participants were assigned to a *successful* or *unsuccessful* will condition, and again into a *first-person* or *third-person* condition. Participants in the *first-person, successful* will condition copied the following passage:

> *Two years ago, I realized that I had gained too much weight in college. I had been eating unhealthy foods in the dining hall and not exercising nearly enough. At my annual doctor's appointment, I found out that my cholesterol had increased and that I would be at risk for heart problems if I kept up my eating habits. At that point, I decided to start living a healthier lifestyle, particularly in terms of eating. I have been on a fairly strict diet, avoiding excess fats and eating large portions of vegetables, fruits, and healthy fats. I still have some weight to lose, but am making progress with my new diet. Yesterday, my roommate arrived home with almost 1/4 of a chocolate ice cream cake left over from her birthday party. I knew that it was very unhealthy and swore I wouldn't touch it. As I sat working on my problem set at 1:30am, I thought the cake looked very tasty, but I did not eat it.*

Participants in the *first-person unsuccessful* will condition

copied out an identical passage, except that the final sentence read:

> *But as I sat working on my problem set at 1:30am, I decided that the cake looked too tasty to pass up and ate the entire thing.*

Again, participants in the *third-person, successful will* and *third-person, unsuccessful will* condition copied out identical passages except that they were written in the third-person.

Results & Discussion

As before, the hypotheses are not supported by the data. Contrary to predictions, participants were no more likely to endorse free will as a cause of behavior when they wrote about exercising restraint from a first-person perspective ($M = 5.50$), compared to when they wrote about failing to exercise restraint from that perspective ($M = 5.71$) $t(15) = .132$, $p = .89$, nor did participants attribute more to free will when writing about failed restraint from a third-person perspective ($M = 4.09$), compared to successful restraint from that perspective ($M = 4.08$) $t(21) = .007$, $p = .99$. In this study, there were no clear intuitions about whether there would be an actor-observer asymmetry. However, it was predicted that there should be a difference based on the valence of the action, which was not found. Again, there was a moderate trending towards a significant main effect such that participants in the first-person conditions attributed more to free will ($M = 5.59$), than participants in the third-person conditions [$M = 4.09$, $t(38) = 1.649$, $p = .107$], regardless of the moral valence of the passage.

While Study 2 failed to support the stated hypothesis, there are again several possible interpretations of these results. Failure to internalize the actions of the passage is again a plausible methodological problem. As with Study 1, a manipulation check was not included: both studies were conducted partially concurrently, and both were modeled strictly on the design of the original Zhong & Liljenquist (2006) experiment from which the study materials were adapted. Further, given that existing research reveals that differing values generate different folk judgments about intentionality (Tannenbaum, Ditto, & Pizarro, 2009), it seems plausible that a diversity of attitudes towards dieting may create variance in judgments about free will, swamping out a potential effect. Again, a manipulation check should be used in future research to confirm that participants do indeed interpret the valence of the passages as predicted and that they take on the perspective of the speaker in the first-person condition.

One final analysis should be reported. Given the trend, exhibited in both studies, toward a significant main effect of perspective, a comparison of first- and third-person means from Studies 1 and 2 (combined) was carried out. With increased power from the larger sample size, the amount of behavior attributed to free will became significantly higher in the first-person condition ($M = 5.43$) than in the third-person condition: $M = 4.11$, $t(87) = 2.249$, $p = .027$. This unexpected finding will be discussed in the following section.

General Discussion

Although the data fail to show the predicted effects, the obtained results raise several points of interest. First, the responses to the dependent measure used in this study are interesting in their own right: all but five participants out of ninety-one marked that *some* portion of human behavior is caused by free will, as distinct from "genes/environment/early learning" and "immediate situation/circumstances." Of additional interest is the fact that despite this common endorsement of free will, participants' intuitive definitions of free will varied considerably. In a follow-up survey, responses to the question, "What does free will mean to you?" ranged from "no coercion" to "actions for which you could have done differently" to "our will to do whatever we want, whenever we want." While this variance is interesting on its own, it may also signal a problem with the experimental design. Since the overarching question of this research is whether belief in free will is selective and self-serving, it may be problematic that participants have such diverse conceptions of what it means to be free. However, the dependent measure seems to tap into a libertarian free will concept, resembling something like agent causation. It is interesting that nearly all participants express the belief that some percentage of human behavior is caused by something distinct from genetic and environmental factors, early learning, and so on.

A further potential limitation concerns the scope of the dependent measure. Specifically, participants were asked how much free will contributes to causing "typical human behavior." This broad phrasing was chosen on purpose, to see whether the hypothesized motivations to blame others or to excuse one's own behavior might have a global effect on one's intuitions about free will *in general*, as opposed to a narrowly-tailored effect on one's intuitions about the freedom of the immediate action in question. The reasoning was that if an interaction effect were obtained in the broad case, one could expect to see it, *a fortiori*, in the narrow case. One interpretation of the data, then, is that the broad effect simply does not obtain. However, this would not rule out the possibility of an interaction between perspective and valence conditions for intuitions about the freedom of the specific act. Future studies would do well to test the narrow, and perhaps more conservative, hypothesis.

Despite failing to elicit the predicted response, one could argue that the dependent measure used in this study represents a significant methodological contribution to research on folk intuitions about free will. First, by asking about the *extent* to which free will is a cause of behavior rather than measuring binary or scaled endorsement of belief in free will, we create room for greater variance in responses. Given that ceiling effects are likely to occur for a binary measure of belief in free will, the variable used here may prove useful in future studies in that it may be sensitive to more nuanced or subtle shifts in folk intuitions.

Moving beyond limitations, however, the most interesting point that emerges from these two studies is that, collapsing across the moral-immoral and strength-weakness of will conditions, post-hoc analyses revealed a significant effect of perspective on belief in free will. Although this had not been the primary interest of this study, such a finding is consistent with the broader claim that intuitions about free will are not stable, but rather vary depending on motivation, context, and framing. Further research would be required to explain the psychology underlying this distinction, although it seems to fit comfortably with the work of Emily Pronin (2008), who points out a basic asymmetry between the kinds of information we have about ourselves and our own behavior compared to others. Together with her colleagues, Pronin

has found, for example, that we perceive others as susceptible to social conformity and external influence whereas introspective access to our own beliefs and motivations causes us to perceive ourselves as relatively immune to such social influences (Pronin, Berger, & Molouki, 2007). We have introspective access to our own thoughts and feelings, but only "extrospective" access to others in the form of their behavior. It is possible that an awareness of the different thoughts, feelings, deliberations, considered choices, and so on, within our own heads, gives rise to a feeling of personal choice and agency—free will. When evaluating others, however, we lack awareness of their internal states and have access only to actual behavior, giving an impression of greater determinacy. At present, it can only be said that the main effect observed, although inconsistent with some of the specific hypotheses this research was designed to test, does support the general prediction that actor and observer perspectives generate different free will attributions. Future research may shed light on this unexpected finding, and on the speculative explanation we have provided.

In summary, failure to find the hypothesized differences between conditions along both the moral-immoral and personal failure-success dimensions lends itself to several conceivable interpretations. It is possible that belief in free will is simply not rooted in, or sensitive to, the desire to blame or take credit for actions. It is also plausible that the primary function of belief in free will is indeed to facilitate responsibility attributions, but that the relevant intuitions are not modulated by specific situational motivations to assign blame or receive praise. Belief in free will might serve as a basis for responsibility judgments but nonetheless be a fixed, motivationally impermeable concept. However, given the prevalence of motivated reasoning in a variety of related areas (Kunda, 1990; Haidt, 2001; Alicke, 2000; Ditto, Pizarro, & Tannenbaum, 2009), this interpretation does not seem particularly plausible. Existing research has documented that people locally differentiate their concepts of freedom and constraint based on the moral valence of an action (Phillips & Knobe, 2009) and future research should continue to explore whether such selectivity exists in more global intuitions about freedom.

Conclusions

In conclusion, consider this quote from an essay by Joshua Knobe and John Doris (forthcoming, p. 1):

> Much of the agenda for contemporary philosophical work on moral responsibility was set by P. F. Strawson's (1962) 'Freedom and Resentment.' In that essay, Strawson suggests that we focus not so much on metaphysical speculation about the nature of freedom and determinism as on understanding the actual practices surrounding the assignment of praise and blame. If progress can be made on empirical questions regarding how this practice works and what role it serves in people's lives, it is hoped, progress can be made on the apparent philosophical paradoxes surrounding the notion of moral responsibility.
>
> It is worth saluting this shift in emphasis from the millennia-old, seemingly intractable debates about free will to current philosophical and psychological work on the empirical questions surrounding *belief* in free will, and how it may be influenced by context, motivation, and other factors. It will also be interesting to see how answering these questions may shine light on our everyday practices of praise and blame; and it is hoped that the two studies presented in the current paper add a small drop to the emerging stream of research on this topic. Specifically, these studies have introduced a useful tool in measuring folk beliefs about free will, as well as opened a door for future study designs which may avoid some of the pitfalls and limitations of the present research. The emphasis has been on actor-observer discrepancies in general endorsements of free will, which were hypothesized to vary according the moral valence of behavior (Study 1) or the success or failure of will entailed by certain actions (Study 2). While these hypothesized differences between conditions were not supported by the data, there was an unexpected general effect of perspective on free will endorsements collapsed across studies, according to which those in the first-person conditions attributed more of typical human behavior to free will. This tentative *"I have more free will than you do"* effect merits further exploration.

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Appendix

Figure 1. Prompt and circular chart used to record participant responses. Figure 2. Participants were shown an example (on a dummy question) in which letters corresponding to each type of answer (A, B, or C) were written into the chart.

Figure 1

"How much do each of the following contribute to causing typical human behavior?: A) genes/environment/ early learning B) immediate situation/circumstances C) free will."

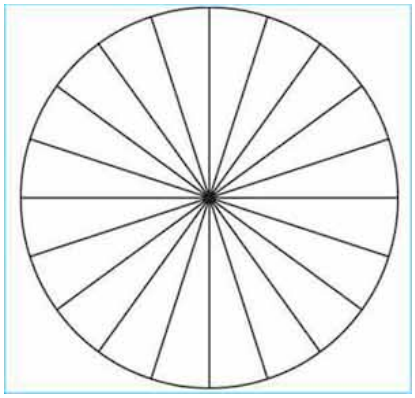

Figure 2