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Bad Methods Drive out Good: The Curse of Imagination in Social Psychology Research

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Abstract

We agree with Doliński (2018, this issue) that behavior is disappearing as an object of study of contemporary social psychology and it has been increasingly replaced by verbal declarations of imagined behaviors, which are analyzed as dependent variables. We read this as a case of a methodological version of Gresham's law: "bad methods drive out good". We notice a complementary trend on the side of manipulations of independent variables. Instead of manipulating real situations, researchers frequently instruct their participants to imagine these situations. In effect, social psychology drifts to studying imaginary behaviors in imagined situations and this poses a serious threat for the validity of our findings. We present one study comparing responses to imagined and actually experienced situations (concerning moral judgment and trust) and find that these two types of situation produce divergent responses. We conclude that imagined situations cannot be a source of knowledge about responses in situations that people really experience.

Keywords

moral judgment; trust; imaginary situations; Gresham's law in psychological research

It is well known that when good (more valuable) and bad (less valuable) money are in circulation, the former tends to disappear and the latter remains in circulation. This is called Gresham's law, though it was known to both Aristophanes and Copernicus, and extends far beyond economy. Cheap, easy, and low labor-intense methods substitute methods that

are time-consuming, high labor-intense, and tough to obtain. Analyzing a recent issue of JPSP, the flagship journal of our discipline, Doliński (2018, this issue) discovers that only 6% of studies published there measured real behaviors as a dependent variable, with the rest using verbal responses. That is, instead of measuring what people are doing, social psychology measures what people say they are doing. As pointed out by Doliński, "there are mountains of evidence" that these two are not the same, for example, because people frequently do not know what they are doing.

Whereas Doliński identifies Gresham's law on the side of dependent measures, we suspect that a similar phenomenon can also be found on the side of manipulations of independent variables. Specifically, researchers can assign their participants to real situations like having power, experiencing anger or cooperating with another person, but they can also use low-effort substitutes of these situations, like asking for a recall of a past situation of having power, imagining they are angry or imagining that they are cooperating with somebody. To answer this question, we analyzed the same JPSP issue. We found that out of a total of 290 studies, 37% introduced the participants to a real situation or stimulus, 40% used a low effort substitute like imagination or recall, and 23% ignored the situation altogether (correlational studies). So, the issue with behavioral manipulations is not as acute as the one with behavioral measures, yet it remains a serious problem, because merely imagined situations may produce effects that are a far cry from effects of situations actually experienced.

Study Comparing Imaginary and Experienced Situations

To check whether imagined situations produce effects similar to those of situations actually experienced, we performed an imagery replication of a recent behavioral study (Bocian, Baryla, & Wojciszke, 2016). In that study participants observed a target person solving tasks for money and paid her for the tasks as well as evaluated her moral character and showed their trust in her by allotting money in a trust game. The behavioral study involved two between-participant factors: whether the target person (a confederate) cheated in the tasks or not and whether the payment for the tasks was shared with the observer (i.e., the participant) or not. The behavioral study found that cheating decreased judgments of the target's moral character, though this decrease was significantly smaller when the observers profited from cheating– in this situation they judged the target as still moral (self-interest bias in morality perception). Cheating also decreased trust, but only when the observers did not profit from cheating, suggesting that people trust cheaters who operate in their (observers) interests. In the present study we wanted to check whether these results would be replicated when observers only imagined the situations.

Method

Participants and Design

Participants were 127 students (M_{age} = 28.2; 102 women) randomly assigned to a 2 (cheating – not cheating) x 2 (observer's interests involved – uninvolved) design. Eleven students were excluded from the analysis because they failed to pass an attention check manipulation.[1]

Procedure and Measures

The procedure was identical to that of Bocian et al. (2016) with the exception that instead of being actually involved in a situation, the present participants only imagined themselves to be in one of the four situations covered by the design. The study involved two roles – an actor and an observer with the participants always allotted to the role of an observer looking at the actor (a confederate) who was to solve ten simple mathematical equations, e.g. 53 – 12 + 10 – 15 + 6 – 19 = ?, for a money reward. The observers (imagined that they) paid the actor $.50 for each solved task and in the interest-involved condition they also (imagined that they) paid the same sum for themselves. In the cheating condition observers additionally imagined that after four equations the actor took a smartphone out of her handbag and cheated on the next equations by solving them with a calculator. Next, observers filled several 1–7 rating scales evaluating the actor's work (efficiently, quickly, accurately, lazily) which served as fillers for the three items evaluating moral character (honestly, fairly, properly, Cronbach's α = .88). Finally, the participants imagined playing a one-shot trust game with the actor. They (imagined that they) were given 10 Polish zlotys as compensation for participation and could invest any part of this money. The experimenter served as a banker who was obliged to triple the money invested jointly by the observer and the actor. However, the money would be finally divided between the observer and the actor by the latter. The amount of money invested by the observer was a measure of (imagined) behavioral trust.

Results

The results concerning moral judgment are illustrated in Figure 1. The left panel, concerning real experience of cheating and interest involvement is borrowed from Bocian et al. (2016, Figures 1a and 1b), while the right panel comes from the present imagination study. The experience study brought a significant main effect of cheating – moral character was evaluated as lower when the actor cheated than when she remained honest and an interaction between cheating and self-interest involvement. The interaction meant that the decrease in judgments of moral character was significantly lower when the observer's own interest was involved. The present imagination study revealed only the strong main effect

[1] There was no change in the results due to exclusion.

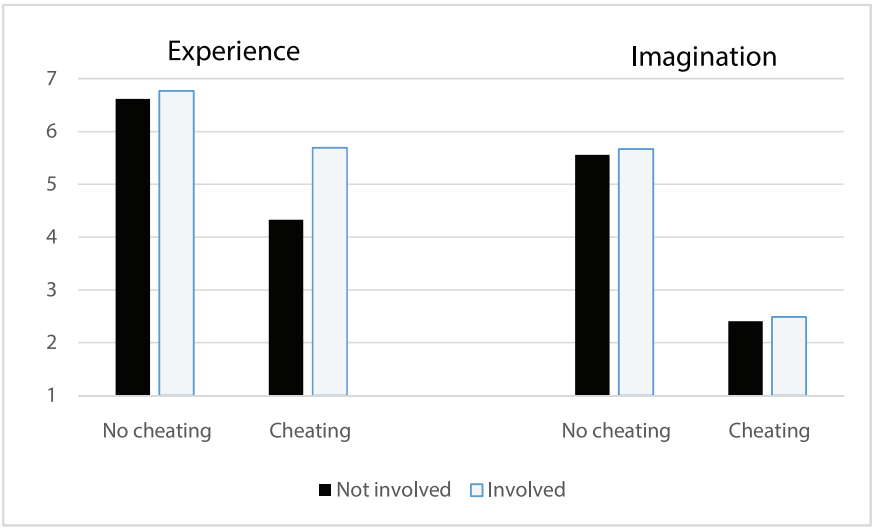

Figure 1. Judgments of moral character of a person who cheated or not, when the perceiver's interest was involved or not, among the participants who experienced (left panel) or merely imagined (right panel) the situation.

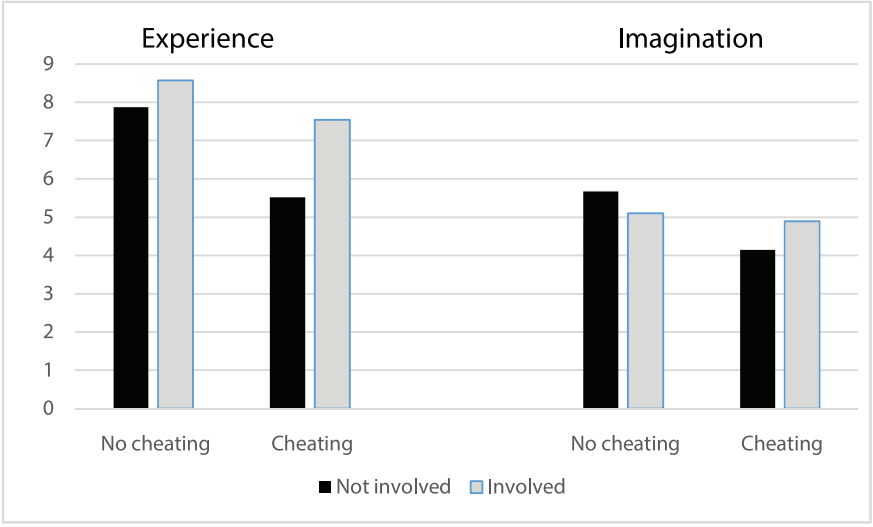

Figure 2. Trust in a person who cheated or not, when the perceiver's interest was involved or not, among the participants who experienced (left panel) or merely imagined (right panel) the situation.

of cheating, $F(1, 112) = 241.87$, $p < .001$, $\eta_p^2 = .68$, but not a trace of the interaction involving self-interest, $F<1$. This suggests that an imaginary study is enough to uncover that cheating decreases judgments of moral character. However, mere imagination does not

allow to discover that moral judgments fall prey to the observer's interest – that cheating is perceived as much less immoral when in the service of the observer's interest.

The second variable of interest was trust (the amount of money invested). The experience data presented in the left panel of Figure 2 yielded a cheating by interest interaction, such as that cheating decreased trust, but only when the observer's own interest was not involved. When own interest was involved, trust was equally high independently of whether the actor cheated or not. As can be seen in the right panel, no part of this subtle pattern emerged in the imaginary study – none of the effects was significant. Moreover, the grand mean for imagination (M = 4.87, SD = 3.11) was much lower than the grand mean for experience (M = 7.31, SD = 3.08). This suggests that people underappreciate (in their imagination) how much they are actually ready to trust in others when they personally meet them in a situation.

Discussion

The present study suggests that imagining a situation is not a satisfactory way to ascertain how the actually experienced situation influences judgment and behavior. Our imaginary study replicated the main effect of cheating. However, it totally failed to capture the self-interest bias in judgments of moral character– that judgments of others' immorality are much less decreased (up to remaining positive) by immorality when it serves the observer's self-interest. And that observers truly believe in these biased judgments up to trusting a cheater with their money. It is unclear how many "imaginary" studies are needed to establish a discrepancy between effects of imagined and real situations. It is also unclear what else we can do other than performing such imaginary replications to solve the problem of low-effort manipulations.

The problem is that social psychology drifts to studying imaginary behaviors in imagined situations and this poses a serious threat for the validity of our findings. This problem may be even more serious than replacing "real behaviors" with clicking computer keyboards. To help somebody by giving information she needs, to cheat on taxes, to aggress verbally against somebody who deserves it or not, to find a romantic partner, to seduce somebody, to show public appreciation, to cheer up somebody who is in bad shape, to smash somebody's reputation, to support Greenpeace, to sign a petition against a government proposal, to molest somebody sexually. All these are real behaviors and they vary tremendously because their goals and effects vary. Still, they all have a common feature –they can rely on the internet in order to be performed. Although some authors assume that clicking computer keys disqualifies the activity as behavior (Baumeister, Vohs, & Funder, 2007; Doliński, 2018, this issue), we do not think this is the case, especially as so much of human activity is performed on computers. It does not matter whether a behavior involves punching the keyboard, or hammering the nail, or throwing a stone. What matters then? Maybe we need a theoretically driven definition of behavior.

Supplementary Materials

Data for this article are available at PsychArchives: https://doi.org/10.23668/psycharchives.789

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Competing Interests

The authors have declared that no competing interests exist.

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References

Baumeister, R. F., Vohs, K. D., & Funder, D. C. (2007). Psychology as the science of self-reports and finger movements: Whatever happened to actual behavior? *Perspectives on Psychological Science*, *2*(4), 396–403. https://doi.org/10.1111/j.1745-6916.2007.00051.x

Bocian, K., Baryla, W., & Wojciszke, B. (2016). When dishonesty leads to trust: Moral judgments biased by self-interest are truly believed. *Polish Psychological Bulletin*, *47*(3), 366–372. https://doi.org/10.1515/ppb-2016-0043

Doliński, D. (2018). Is psychology still a science of behaviour? *Social Psychological Bulletin*, *13*(2), Article e25025. https://doi.org/10.5964/spb.v13i2.25025