Contents lists available at ScienceDirect

Journal of Economic Psychology

journal homepage: www.elsevier.com/locate/joep

Brief Report

Moral hypocrisy and the dichotomy of hypothetical versus real choices in prosocial behavior

Marek Vranka^{*}, Petr Houdek

Faculty of Business Administration, Prague University of Economics and Business, náměstí Winstona Churchilla 4, Prague 130 67, Czech Republic

ARTICLE INFO

JEL: C91 D91 APA PsycInfo 3000 Keywords: Experiment Prosociality Hypothetical bias Charity

ABSTRACT

We have examined how much money participants take for themselves from an amount designated either for a well-known charity or for a state's public budget. For a third of the participants, the decision was real – they were paid the chosen amount afterward, and the donation to a charity or public budget was lowered by this amount. For the rest, the decision was hypothetical, with no consequences. In a follow-up study, a different sample of participants was tasked with estimating behavior in both conditions. As expected, participants took more money from the public budget than the charity. However, when the decision was hypothetical, they took less money only from the public budget. Participants who could take money from the charity did not take less in the hypothetical than in the real condition. This was unexpected also for participants in the follow-up study, who significantly underestimated the amount of money taken from charities in the hypothetical condition. The results highlight limited generalizability of findings regarding moral and prosocial choices that use only hypothetical or vignette scenarios and suggest that interactions between positive self-presentation and monetary incentives are more contextdependent than expected.

1. Introduction

While many profess a commitment to societal welfare and altruism, do their actions – especially when it comes to their own money – align with these declarations? According to previous research on prosocial behavior and virtue signaling (Andreoni & Bernheim, 2009; Dana et al., 2006; Gneezy et al., 2012), people tend to express prosocial preferences, especially when it is not costly for them and behave selfishly otherwise. This moral hypocrisy allows people to pursue their self-interests unfettered by the constraints that real virtues or social norms impose; or, as Batson et al. (2006) put it, people have "motivation to appear moral yet, if possible, avoid the cost of actually being moral" (p. 321).

In our study, we employ a variant of the Taking Game (Flage, 2024) and show that there are distinctions even in the hypothetical display of virtue. Most of the experimental literature uses behavior toward third parties as an operationalization of participants' social preferences (Chua et al., 2022; Gerlach et al., 2019; Jacobsen et al., 2017; Leib et al., 2021). In the context of the Taking Game, in which a participant in a role similar to a dictator in the Dictator Game can take for herself money assigned to a different party, it was, for example, shown that participants are less likely to take from a charity than from other participants (Flage, 2024). However, not all institutions promoting societal welfare may be perceived equally. For example, participants might view taking money from a well-known charity as more morally compromising than depriving a public budget. We explore this assumption by varying whether the

* Corresponding author. *E-mail address:* vranka.marek@gmail.com (M. Vranka).

https://doi.org/10.1016/j.joep.2024.102772

Received 4 April 2024; Received in revised form 23 September 2024; Accepted 10 October 2024 Available online 12 October 2024 0167-4870/© 2024 Published by Elsevier B.V.





potential victim of participants' selfishness is a government budget or a well-known charity organization.

Our second objective was to show how hypothetical and real choices differ in relation to the different kinds of victims. The choices of some participants were realized, which showed the difference between costless and real virtue. Although the literature is clear that real prosocial decisions can dramatically and negatively contradict the same choices made in hypothetical scenarios (FeldmanHall et al., 2012; Kettner & Waichman, 2016), the felt distinction between different prosocial causes can cause a reversal of the effect as individuals may express a higher tolerance for ethical breaches in hypothetical contexts than in real-life situations.

For instance, a person may answer in a survey that she sometimes lies to everyone; however, she would never lie to a particular virtuous person. Someone might indicate a willingness to skip work, but if the actual absence negatively impacted their respected coworkers, they would never act on their stated preference. Likewise, the admitted propensity to gossip might decrease when considering the potential harm to a specific trusted individual in real life. Along these lines, the research on an identifiable victim shows that a negative impact on a specific person affects people's emotions more strongly than does an impact described using impersonal statistics (Jenni & Loewenstein, 1997; Kogut & Ritov, 2005). Similarly, people may act more ruthlessly towards more abstract groups than toward specific individuals (Alós-Ferrer et al., 2021). In these and similar cases, the perceived moral or psychological costs of the transgression in question (List, 2007; Thielmann & Hilbig, 2019) might be higher, and so it can be expected that when making real decisions, people would actually behave more prosocially than when the situation was only hypothetical.

As our study compares real and hypothetical decisions, we also inform the literature about "hypothetical bias" in the realm of prosocial behavior. Although in some situations, the hypothetical and actual choices are consistent (e.g., Kogler et al., 2013), a wealth of studies have shown that hypothetical and actual choices differ on several dimensions (List & Gallet, 2001). In hypothetical choices, perceptual processes are more prominent, whereas, in real choices, judgments are dependent more on the alternative implications; these distinctions, in turn, may lead to the occurrence of different preferences or biases (Vlaev, 2012).

2. Methods

The experiment was conducted in the CEBEX laboratory in Prague in November 2015 as the first part of multipart session using networked computers running a custom-written program. Participants from a subject pool consisting mainly of undergraduate students from universities in Prague (N = 192, 62 % female, $Med_{age} = 22$) worked in anonymous groups of three, each person seated at a PC separated from others by dividers.

At the beginning of the task, each participant received 100 tokens (= 10 CZK \approx 0,4 USD), and the government budget or the charity organization (depending on the experimental condition) received 500 tokens. One participant in each group was randomly chosen, and they were informed that they could take any amount from the 500 tokens for themselves and asked how much they wanted to take. The two remaining members of each group were asked how much they would take if they were chosen, that is, their choice was only hypothetical. Afterward, participants completed questionnaires about their socio-demographic characteristics and perceptions of the



amount taken

Fig. 1. Distribution of amounts taken hypothetically (left column) or actually (right column) either from the charity (upper row) or from the governmental budget (lower row). Median amounts of tokens taken clockwise from the upper left cell are 200, 100, 500, and 300. When the choice is real, the number of participants who take nothing from charity and everything from the governmental budget doubles compared to the hypothetical condition.

government budget and the charity organization.

In addition, in January 2017, we invited a separate sample of Charles University undergraduate students (N = 121, 62 % female, $Med_{age} = 21$) to participate in an online survey. We presented them with the exact materials from the task described above (see Online Appendix for full wording of all materials). We asked them to estimate the number of tokens taken in both conditions either from the charity or the government budget by participants in the main study.

3. Results

Based on the results of ANOVA, participants were overall more likely to take money from the government budget (M = 341.9 tokens) than from the charity (M = 197.6); F(1, 188) = 38.54, p < 0.001. This is likely related to the fact that although 78 % of the participants viewed the charity positively, only 37 % viewed the governmental budget in that way. There was also a difference between what participants said they would do and what they actually did; however, it was qualified by a significant interaction; F(1, 188) = 8.00, p = 0.005. Participants did not always behave more selfishly in the real choice condition. As Fig. 1 shows, only when they could take money from the government budget they took more in the real (M = 401.3 tokens) than in the hypothetical (M = 312.2) condition; t(64.78) = -2.89, p = 0.005, d = -0.62. When taking money from the charity, participants took nominally even fewer tokens in the real (M = 164.1) than in the hypothetical condition (M = 214.4); however, the difference was not significant; t(61.48) = 1.33, p = 0.190, d = 0.29.

This unexpected behavior was unforeseen even by participants in the follow-up study: although they predicted the number of tokens taken from the charity in the real condition almost exactly (M = 166.2), they believed that others would take even fewer tokens when the decisions were only hypothetical (M = 138.8), thus significantly underestimating the number of tokens taken in the hypothetical condition; t(119.82) = 2.85, p = 0.005, d = 0.50.

Additionally, female participants took significantly less (M = 231.6) than male participants (M = 326.1) across all conditions, F (1,184) = 13.3, p < 0.001. However, gender did not significantly interact with any remaining factors and its addition did not change any results of the analyses in our study.

4. Discussion

The recent *meta*-analysis on Taking Games (Flage, 2024) showed that participants are generally less likely to take money from others when the decision is hypothetical and when the other party is a charity organization. Our main results are in line with this. However, our study highlights the not-so-obvious relationship between hypothetical and real choices and the specific targets of prosocial behavior.

Participants tended to take more from the government budget than a charity, confirming the critical role of the target consideration for balancing moral and selfish motivations. Research on personal characteristics and social preferences has similarly shown that higher entitlement and agency lead to more intense resource-taking (Faillo et al., 2019; Fanghella et al., 2023). Moreover, the differences between hypothetical and real choices suggest that participants may not consistently strive to maximize their moral and prosocial image in every context. In line with the results of Kettner and Waichman (2016), participants exhibited more restraint in hypothetical than real taking from the government budget. However, we observed no difference when participants had the opportunity to take from the charity. The proportion of participants who took nothing from the charity was in fact twice as large in the real (40 %) than in the hypothetical condition (20 %). This trend was unexpected even for participants in the follow-up study who underestimated the extent of funds taken in hypothetical scenarios involving charities.

There are several possible explanations for the lack of difference between the amounts taken from the charity in real and hypothetical conditions. One is that the overall high generosity toward charities among our participants led to a threshold effect (Cochard & Flage, 2024) that prevented us from observing a difference between conditions. Another possibility is that participants facing decisions with real consequences experienced higher psychological costs (Thielmann & Hilbig, 2019) associated with taking from charities, which discouraged them from taking more, effectively negating the difference between conditions. The latter explanation aligns with Zhao et al. (2016), who observed that individuals often underestimate their generosity in economic games. Our study also suggests this propensity for participants to be more selfless than anticipated in specific scenarios. Moreover, our findings highlight the limits for extrapolating results derived solely from hypothetical situations, as stressed by FeldmanHall et al. (2012). Follow-up research may focus more on factors explaining when selfishness in societal contributions in the abstract is compatible with evidence on prosociality in reality, with regard to the effects of psychological costs and their relation to experienced guilt or compassion.

Overall, the results show that when deciding between selfish gain and other-regarding concerns, it matters who "the others" are and how the prosocial preferences are demonstrated, which the most common models of prosocial preferences do not account for (Bolton & Ockenfels, 2000; Charness & Rabin, 2002), although there is rich literature showing how prosocial preferences are context-dependent and vary based on whether they are measured in the laboratory or in the field, against an individual or a group, whether they are contributing or withdrawing funds, etc. (Alós-Ferrer et al., 2021; Galizzi & Navarro-Martinez, 2019). In our study, participants could choose to take from a public good in the form of a charity or the government. Future research may explore the dynamics of decisionmaking when individuals could instead contribute to various public causes.

Although gender did not significantly interact with other factors in our study, we observed that female participants tended to take less than male participants. This finding aligns with previous research on gender differences in Taking Games (Chowdhury et al., 2017). However, it contrasts with recent studies (Austermann et al., 2024; von Blanckenburg et al., 2023) showing no gender differences. One possible explanation for these discrepancies might lie in a higher sensitivity of women to prosocial goals (Cao et al.,

M. Vranka and P. Houdek

2023). Future studies with larger samples could further explore these gender-related patterns.

Nevertheless, it is crucial to recognize the limitations inherent in our methods. The relatively low amount offered for taking could be a factor, as a larger incentive might lead to different effects on participants' behaviors (Bechler et al., 2015). However, the evidence for the effect of the stakes' size is mixed, with some studies showing no (Hopp, 2022) or only a limited effect (Enke et al., 2023; Raihani et al., 2013). Employing a university sample, while convenient, may not adequately capture the full spectrum of diversity in age, education, and socioeconomic status representative of the broader population. In addition, while our sample size was sufficient for preliminary findings, future studies will benefit from a larger participant pool to strengthen the robustness and explore, for example, gender, personality, or political values correlates of the differences between real and hypothetical behaviors and charity and government contributions (Grebitus et al., 2013; Zhao & Smillie, 2015).

Declaration of Competing Interest

The authors declare that they have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

Acknowledgments

The work on this project was supported by the Czech Science Agency (GACR) project No. 22-29520S, "Behavioral Organizational Politics: Experiments in Prosocial Political Behavior." *Data Availability Statement*: Data and analytic script are available at https://osf. io/6qj2f/

Appendix A. Supplementary data

Supplementary data to this article can be found online at https://doi.org/10.1016/j.joep.2024.102772.

References

- Alós-Ferrer, C., García-Segarra, J., & Ritschel, A. (2021). Generous with individuals and selfish to the masses. Nature Human Behaviour. https://doi.org/10.1038/ s41562-021-01170-0
- Andreoni, J., & Bernheim, B. D. (2009). Social image and the 50–50 norm: A theoretical and experimental analysis of audience effects. *Econometrica*, 77(5), 1607–1636. https://doi.org/10.3982/ECTA7384
- Austermann, C., Von Blanckenburg, K., Iseke, A., & Tebbe, E. (2024). Stereotypical behavior vs. expectations: Gender differences in a dictator game. Journal of Economic Psychology, 103, Article 102742. https://doi.org/10.1016/j.joep.2024.102742
- Batson, C. D., Collins, E., & Powell, A. A. (2006). Doing business after the fall: The virtue of moral hypocrisy. Journal of Business Ethics, 66(4), 321-335. https://doi.org/10.1007/s10551-006-0011-8
- Bechler, C., Green, L., & Myerson, J. (2015). Proportion offered in the Dictator and Ultimatum Games decreases with amount and social distance. *Behavioural Processes*, 115, 149–155. https://doi.org/10.1016/j.beproc.2015.04.003
- Bolton, G. E., & Ockenfels, A. (2000). ERC: A theory of equity, reciprocity, and competition. American Economic Review, 90(1), 166–193. https://doi.org/10.1257/
- Cao, Y., Capra, C. M., & Su, Y. (2023). Do prosocial incentives motivate women to set higher goals and improve performance? Journal of Economic Psychology, 99, Article 102659, https://doi.org/10.1016/i.joep.2023.102659
- Charness, G., & Rabin, M. (2002). Understanding social preferences with simple tests. Quarterly Journal of Economics, 117(3), 817–869. https://doi.org/10.1162/ 003355302760193904
- Chowdhury, S. M., Jeon, J. Y., & Saha, B. (2017). Gender differences in the giving and taking variants of the dictator game. Southern Economic Journal, 84(2), 474–483. https://doi.org/10.1002/soej.12223
- Chua, S. L., Chang, J., & Riambau, G. (2022). Lying behavior when payoffs are shared with charity: Experimental evidence. *Journal of Economic Psychology*, 90, Article 102512. https://doi.org/10.1016/j.joep.2022.102512
- Cochard, F., & Flage, A. (2024). Sharing losses in dictator and ultimatum games: A meta-analysis. Journal of Economic Psychology, 102, Article 102713. https://doi.org/10.1016/j.joep.2024.102713
- Dana, J., Cain, D. M., & Dawes, R. M. (2006). What you don't know won't hurt me: Costly (but quiet) exit in dictator games. Organizational Behavior and Human Decision Processes, 100(2), 193–201. https://doi.org/10.1016/j.obhdp.2005.10.001
- Enke, B., Gneezy, U., Hall, B., Martin, D., Nelidov, V., Offerman, T., & Van De Ven, J. (2023). Cognitive biases: Mistakes or missing stakes? Review of Economics and Statistics, 105(4), 818–832. https://doi.org/10.1162/rest_a_01093
- Faillo, M., Rizzolli, M., & Tontrup, S. (2019). Thou shalt not steal: Taking aversion with legal property claims. Journal of Economic Psychology, 71, 88–101. https://doi.org/10.1016/j.joep.2018.08.009
- Fanghella, V., Faure, C., Guetlein, M.-C., & Schleich, J. (2023). Locus of control and other-regarding behavior: Experimental evidence from a large heterogeneous sample. Journal of Economic Psychology, 95, Article 102605. https://doi.org/10.1016/j.joep.2023.102605
- FeldmanHall, O., Mobbs, D., Evans, D., Hiscox, L., Navrady, L., & Dalgleish, T. (2012). What we say and what we do: The relationship between real and hypothetical moral choices. *Cognition*, 123(3), 434–441. https://doi.org/10.1016/j.cognition.2012.02.001
- Flage, A. (2024). Taking games: A meta-analysis. Journal of the Economic Science Association, 1–24. https://doi.org/10.1007/s40881-023-00155-1
- Galizzi, M. M., & Navarro-Martinez, D. (2019). On the external validity of social preference games: A systematic lab-field study. *Management Science*, 65(3), 976–1002. https://doi.org/10.1287/mnsc.2017.2908
- Gerlach, P., Teodorescu, K., & Hertwig, R. (2019). The truth about lies: A meta-analysis on dishonest behavior. Psychological Bulletin, 145(1), 1–44. https://doi.org/10.1037/bul0000174
- Gneezy, A., Imas, A., Brown, A., Nelson, L. D., & Norton, M. I. (2012). Paying to be nice: Consistency and costly prosocial behavior. Management Science, 58(1), 179–187. https://doi.org/10.1287/mnsc.1110.1437
- Grebitus, C., Lusk, J. L., & Nayga, R. M. (2013). Explaining differences in real and hypothetical experimental auctions and choice experiments with personality. Journal of Economic Psychology, 36, 11–26. https://doi.org/10.1016/j.joep.2013.02.004

- Hopp, D. (2022). High incentives without high cost: The role of (perceived) stake sizes in dictator games. Journal of Behavioral and Experimental Economics, 97, Article 101843. https://doi.org/10.1016/j.socec.2022.101843
- Jacobsen, C., Fosgaard, T. R., & Pascual-Ezama, D. (2017). Why do we lie? A practical guide to the dishonesty literature. Journal of Economic Surveys.. https://doi.org/ 10.1111/joes.12204
- Jenni, K., & Loewenstein, G. (1997). Explaining the identifiable victim effect. Journal of Risk and Uncertainty, 14(3), 235–257. https://doi.org/10.1023/A: 1007740225484
- Kettner, S. E., & Waichman, I. (2016). Old age and prosocial behavior: Social preferences or experimental confounds? Journal of Economic Psychology, 53, 118–130. https://doi.org/10.1016/j.joep.2016.01.003
- Kogler, C., Kühberger, A., & Gilhofer, R. (2013). Real and hypothetical endowment effects when exchanging lottery tickets: Is regret a better explanation than loss aversion? Journal of Economic Psychology, 37, 42–53. https://doi.org/10.1016/j.joep.2013.05.001
- Kogut, T., & Ritov, I. (2005). The "identified victim" effect: An identified group, or just a single individual? *Journal of Behavioral Decision Making*, 18(3), 157–167. https://doi.org/10.1002/bdm.492
- Leib, M., Köbis, N., Soraperra, I., Weisel, O., & Shalvi, S. (2021). Collaborative dishonesty: A meta-analytic review. Psychological Bulletin, 147(12), 1241–1268. https://doi.org/10.1037/bul0000349
- List, J. A. (2007). On the interpretation of giving in dictator games. Journal of Political Economy, 115(3), 482-493. https://doi.org/10.1086/519249
- List, J. A., & Gallet, C. A. (2001). What experimental protocol influence disparities between actual and hypothetical stated values? *Environmental and Resource Economics*, 20(3), 241–254. https://doi.org/10.1023/A:1012791822804
- Raihani, N. J., Mace, R., & Lamba, S. (2013). The effect of \$1, \$5 and \$10 stakes in an online dictator game. PLOS One, 8(8). https://doi.org/10.1371/journal. pone.0073131
- Thielmann, I., & Hilbig, B. E. (2019). No gain without pain: The psychological costs of dishonesty. Journal of Economic Psychology, 71, 126–137. https://doi.org/ 10.1016/j.joep.2018.06.001
- Vlaev, I. (2012). How different are real and hypothetical decisions? Overestimation, contrast and assimilation in social interaction. Journal of Economic Psychology, 33 (5), 963–972. https://doi.org/10.1016/j.joep.2012.05.005
- von Blackenburg, K., Tebbe, E., & Iseke, A. (2023). Giving and taking in dictator games-differences by gender? A replication study of Chowdhury et al.(Southern Economic Journal, 2017). Journal of Comments and Replications in Economics (JCRE), 2(1), 1–7. https://doi.org/10.18718/81781.27.
- Zhao, K., Ferguson, E., & Smillie, L. D. (2016). Prosocial personality traits differentially predict egalitarianism, generosity, and reciprocity in economic games. Frontiers in Psychology, 7. https://doi.org/10.3389/fpsyg.2016.01137
- Zhao, K., & Smillie, L. D. (2015). The role of interpersonal traits in social decision making: Exploring sources of behavioral heterogeneity in economic games. Personality and Social Psychology Review, 19(3), 277–302. https://doi.org/10.1177/1088868314553709