

Discouraging self-selection to cheating-enabling environments



Petr Houdek¹, Štěpán Bahník², Marek Hudík³, and Marek Vranka⁴

Faculty of Business Administration, Prague University of Economics and Business

¹ petr.houdek@gmail.com, [@PokusyNaLidech](https://twitter.com/PokusyNaLidech), ² bahniks@seznam.cz, [@bahniks](https://twitter.com/bahniks), ³ marek.hudik@gmail.com, [@MarekHudik](https://twitter.com/MarekHudik), ⁴ vranka.marek@gmail.com, [@mVranka](https://twitter.com/mVranka)



INTRODUCTION

In the real world, people deliberately choose or avoid specific environments. In a previous experiment enabling self-selection of participants in two similar tasks, one of which allowed for cheating, we found that participants who chose the task where they could lie for financial gain cheated more than those who were assigned it at random [1]. In the present study, we investigated how a) informing participants about which choice is made only by a minority and b) introducing financial costs for entering the cheating-allowing task affect the interest in the task and the rate of cheating.

METHODS

Participants

The experiment was conducted with 501 participants (61% female, $Mdn_{age} = 22$) from our Czech laboratory subject pool consisting mostly of university students ($n = 352$).

Procedure

Participants had to guess whether the outcome of a die roll will be odd or even. There were two versions of the game – in the BEFORE version, they made their predictions before they see the outcomes, in the AFTER version they made their predictions in their mind, saw the outcome and then answered whether they had predicted correctly or not. They played 5 rounds of this game with 12 rolls in each round with increasing reward (5-60 CZK) for each correct prediction. In rounds 1 and 2, participants played AFTER and BEFORE versions of the game in a randomized order. The number of reported predictions in the AFTER version of the task served as a baseline measure of cheating. In rounds 3 and 4, participants chose in random order between the BEFORE and AFTER version, and between the BEFORE and AFTER version with a fee. In round 5, participants chose between the BEFORE and AFTER version. Before making their decision, a half of participants learned that “only 30 %” of participants participated in the AFTER version in a previous experiment while the other half learned that “only 25 %” of participants participated in the BEFORE version of the task. Finally, all participants played a lottery, answered socio-demographic questions, and filled several questionnaires (see Figure 1).

RESULTS

To test the effect of the presence of a fee on cheating, we performed a linear mixed-effect regression with the number of reported correct predictions as the dependent variable and the presence of a fee, round number, and their interaction as predictors for the 144 participants who chose the AFTER version of the task in both third and fourth rounds. The number of reported correct predictions did not differ significantly between the two rounds. Participants reported more correct predictions in the presence of a fee, $t(142.0) = 4.54, p < .001, b = 0.45, 95\% \text{ CI } [0.26, 0.65]$. Participants reported, on average, 10.48 correct predictions in the presence of a fee and 10.05 correct predictions in its absence. The average reward in the presence of the fee was 310.5 CZK and 288.2 CZK in its absence. The increased cheating therefore almost fully compensated the 25 CZK fee.

To test the effect of the information about the share of participants who chose the AFTER or BEFORE version of the task, we conducted a logistic regression with the choice of the version in the fifth round as the dependent variable and the information condition as a predictor. The model included the number of choices of the AFTER version in third and fourth rounds as a covariate. Contrary to our prediction, participants who received the information that a low proportion of participants had chosen the AFTER version were *more* likely to choose the AFTER version of the task, $t(498) = 2.41, p = .016, OR = 1.09, 95\% \text{ CI } [1.02, 1.17]$. The AFTER version of the task was chosen by 66.7% of participants who were informed that a low proportion of participants had chosen the AFTER version, and 56.6% of participants who were informed that a low proportion had chosen the BEFORE version.

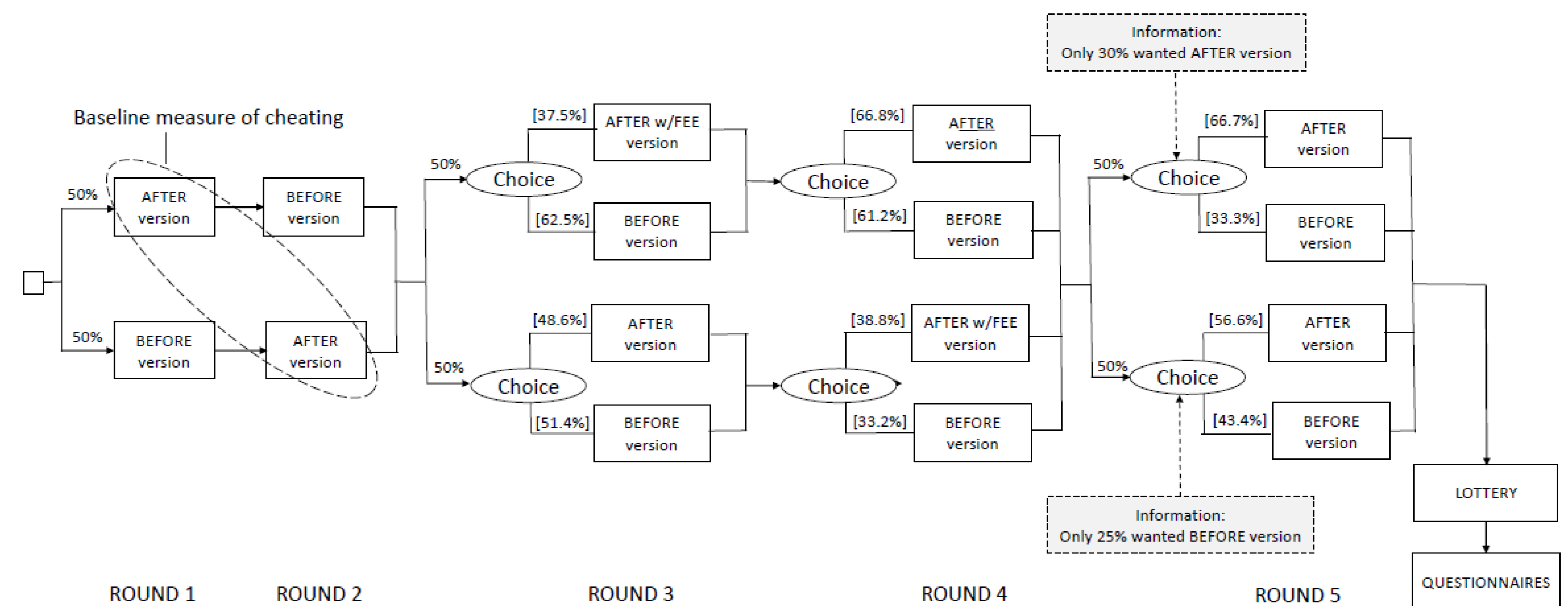


Figure 1. Schema of the design of the study.

SUMMARY

Introduction of financial costs for entering the cheating-allowing task led to a decrease in interest in the task; however, it also led to more intense cheating.

An intervention aimed to discourage participants from choosing the cheating-enabling environment based on social proof did not have the expected effect; on the contrary, it backfired.

REFERENCES

[1] Houdek, P., Bahník, Š., Hudík, M., & Vranka, M. A. (2020). Selection Effects on Dishonest Behavior.