Design: Willingness to control ambiguity

Task

Participants are endowed with 10€ each. There is an urn which contains 10 balls of which each can either be red (losing) or green (winning). The distribution of red and green balls in the urn is unknown. Participants are asked to indicate how many green balls they think are in the urn. Each participant may then exercise control over the composition of the ambiguous urn. To do so, she indicates her willingness to pay (WTP) to replace some balls randomly drawn from the urn with green balls. In treatment 1, exactly one ball can be replaced. In treatment 2, five balls can be replaced simultaneously. She does not learn about the colors of the replaced balls. We randomly draw a price for the replacement between 0 and 10€. If the participant's willingness to pay is larger than the price, she pays the price from her endowment and the replacement takes place. If the WTP is lower than the price, replacements do not take place and the participant will draw from the unmodified urn. Finally, one ball is drawn from the urn. If it is red, the participant receives 0€. If it is green, she wins 10€. The experiment ends with a demographics questionnaire which should include age, gender, field of studies (with checkbox for non-student), general willingness to take risks (7 point Likert scale) and a dropdown field to select nationality (or country of birth).

Note: When run in the lab, there will be three urns. One unmodified, one where 1 ball will is replaced and one with 5 balls replaced. The experimenter will draw one ball from each urn and then input the resulting color draws on a special "experimenter input page". In the meantime, participants wait and witness the draws. After the draws have taken place, the experiment continues with participants being informed about their individual outcomes on screen.

Page Sequence

1. Instructions
2. Set willingness to pay
    a. In treatment 1 for replacing one ball
    b. In treatment 2 for replacing five balls
3. Information whether or not replacements take place
4. Urn draw input by experimenter
5. Result of random draw from urn
6. Demographics

Requirements

- Implement both treatments 1 and 2
- make treatment selectable in session config
- if no treatment is selected in the session config, randomly select treatment for participants
- find a smart way to implement the experimenter input for the three urns. If necessary, write a short comment on how to make sure the experimenter screen is only shown on the experimenter's computer