Translucency - Experiment 1 (#45400)

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1) Have any data been collected for this study already?
No, no data have been collected for this study yet.

2) What's the main question being asked or hypothesis being tested in this study?
According to Capraro and Halpern (2019), people cooperate in strategic interactions because they have an internalised belief that there is a probability α (translucency) that they might be detected if they defect. We will provide a first test by testing whether participants are sensitive to explicit instructions about the possibility that their choices might be detected in a prisoner's dilemma.
We predict, according to Capraro and Halpern's (2019) theory, that when the direction is asymmetric-defection increases in levels of translucency should increase cooperation levels.
Shafir and Tversky (1992) conducted a sequential PD and found that knowing the other participant's strategy, whether it be cooperation or defection, leads to more defection. Hence, when the direction is symmetric, both actions are more likely to lead to the other participant responding with defection; hence, to avoid giving an advantage to the other participant by cooperating, participants should defect despite the risk that their defection will be detected. Therefore, we predict that increases in levels of translucency should decrease cooperation levels. We also predict that participants will cooperate more when the direction is asymmetric-defection condition than symmetric.
These predictions are based on Capraro and Halpern's (2019) theory and on findings about people's actual behaviour in sequential PDs. However, if people are sensitive to translucency, they are likely to be influenced by their beliefs about what the other participant would do if they saw their choice, not necessarily by actual behaviour. Hence, our predictions can become more precise once we run the control condition (the 'typical PD' without translucency) because we can obtain answers to the question, "If the other player were able to see your choice before making theirs, what do you think they would choose?" that would reveal these beliefs. If people believe that when they cooperate, detected cooperation will be met with cooperation, then increases in levels of translucency should lead to more cooperation when the direction is symmetric. Otherwise, if people believe that when they cooperate, detected cooperation will be met with defection, then increases in levels of translucency should lead to less cooperation when the direction is symmetric.

3) Describe the key dependent variable(s) specifying how they will be measured.
Participants' choices (cooperation or defection) in an online prisoner's dilemma.

4) How many and which conditions will participants be assigned to?
The experiment will involve a single-shot, normal form, double-choice PD. It will be a 2 (levels of translucency, the probability that the other participant will detect one's choice: 20% vs. 80%) × 2 (directions of translucency: asymmetric-defection where only defection can be detected vs. symmetric where any choice can be detected) + 1 'typical' PD condition (a 'control' condition with no mention of detection to serve as a baseline) between-participants experiment. Hence, there will be a total of five conditions: typical PD, 20% translucency when participants defect, 80% translucency when participants defect, 20% translucency no matter which choice participants make, 80% translucency no matter which choice participants make.

5) Specify exactly which analyses you will conduct to examine the main question/hypothesis.
Binomial logistic regressions to test the relation between the level of translucency and the direction of translucency in determining choices (i.e., cooperation levels).

6) Describe exactly how outliers will be defined and handled, and your precise rule(s) for excluding observations.
We will exclude from our analysis: Participants who experienced technical issues that mean that the task did not work or display as intended; participants who provided unintelligible answers to the open questions; participants who made their choice faster than humanly possible (below 50 ms); participants who report demographic information that is either impossible or which does not match their information on Prolific and they cannot provide an explanation why this is the case.

7) How many observations will be collected or what will determine sample size? No need to justify decision, but be precise about exactly how the number will be determined.
Until we have 160 participants with usable data.

8) Anything else you would like to pre-register? (e.g., secondary analyses, variables collected for exploratory purposes, unusual analyses planned?)
Participants will also have to answer questions about their experience with economic games, their reasoning for their choices, and their belief about the other participant's choice. The control condition will be run first, and then the four experimental conditions will be run.