

Analysis Plan: A Replication of the Disjunction Effect in the Prisoners' Dilemma

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1 Introduction

In this study is a (qualitative) replication of the disjunction effect in the prisoners' dilemma (PD) documented by Shafir and Tversky (1992). In a between-subjects design, participants play a one-shot PD either in simultaneous-move form or as second-movers in a sequential PD. I test the null hypothesis that cooperation among simultaneous-movers is no higher than in the highest-cooperation group of second-movers (those facing either cooperation or rejection) against the one-sided alternative hypothesis that it is higher than in both of these groups, as was found by Shafir and Tversky (1992).

2 Sample and Design

Participants will be recruited through Amazon Mechanical Turk. Requirements are a HIT approval rate of at least 95%, at least 500 HITs completed, and current residence

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in the US. A total sample of 520 participants will be recruited.

Subjects will play a one-shot Prisoners' Dilemma (PD). There are three treatment conditions: subjects play either a simultaneous-move PD, or as second-movers facing either cooperation or defection. There will be 220 simultaneous-movers, 220 second-movers facing cooperation, and 80 second-movers facing defection. The reason for this distribution is that the analysis will likely not focus on the latter group, since cooperation will likely be significantly lower among second-movers facing defection than among those facing cooperation.

3 Analysis

The main test is a one-sided z-test of proportions. As noted in the previous section, this will most likely be a test of the null hypothesis that cooperation among simultaneous-movers is no larger than among second-movers facing cooperation, against the one-sided alternative that it is. I will also compare beliefs and motives across treatment groups.