

Risk Preferences in Choosing for Self and Others

The proposed experiment will take place in collaboration with Dr. Kunreuther and Dr. Jason Dana. The main goal will be to compare decisions under risk for self, with decisions taken for others (A chooses for B), and those taken by group representatives (A chooses, A & B split payoffs). This study has direct application on managerial decision making, as managers often make decisions affecting other, or groups that the managers belong to. Decisions by group representatives tend to follow similar patterns, compared to decisions for others so these two classes will be merged in my description of hypotheses. However, the literature is sparse, so it is possible that a pattern established for group decisions will not translate completely to decisions for other individuals.

In my meta-analysis of choices for self and others (Atanasov 2010), I found two significant moderators of differences in risk taking between choices for self & others: presence of losses and reciprocal link between choosers and beneficiaries. These findings are posed as Hypotheses 1 and 2 in Experiment 2. Meta-analyses, however, have drawbacks – the moderating effects are only discernible across studies. Methods vary from one study to another in ways that may be difficult to encode, which leaves the door open to extraneous variables to explain away the moderating roles of losses and reciprocal pairing. Thus, it would be important to test the influence of these moderators using the same paradigm in all conditions.

Main Hypotheses:

Hypothesis 1. In the absence of losses,¹ decisions for self & others do not differ in terms of risk preferences. However, in the presence of losses decisions for others tend to be more risk averse (or less risk seeking) than decisions for self.

Hypothesis 2. Reciprocal decisions² for others tend to be more risk-averse than choices for self, but non-reciprocal choices are similar in terms of risk preferences.

Participants and Methods

Participants will be recruited through Experiments@Penn, a website Jason Dana and Robert Kurzban use to recruit for PLEEP lab experiments. Participants will be assigned random participant numbers and paired. In the Self condition, the pairing will be immaterial, but the pairing language will be kept for control purposes. For Other and Group representative decisions, pairing will be material to payoff calculation. If an uneven number of participants sign-up, one participant is matched with two other participants. Participants will then be instructed to take the

¹ There are not enough studies in the literature entirely in the loss domain to clarify whether the presence of absence of gains play any role.

² Reciprocal here means that A chooses for B while B chooses for A.

Holt & Laury (2002) task (one-shot), with parameters similar to Chakravarty et al. (2010) divided by 200 (See Figure 1a and 1b) and rounded to the nearest five cent.

Table 1. Conditions and expected sample sizes for Experiment 2.

Condition	Decision Class		
	Self	Other	Group Reps
No Losses, Not Reciprocal	30 + 30*	30	30
No Losses, Reciprocal	NA	30	30
Losses, Not Reciprocal	30	30	30
Losses, Reciprocal	NA	30	30

* Thirty participants will face certain payoffs between \$0 and \$5. Another thirty participants will face $p=1/10$ payoffs between \$0 and \$50. For expected costs, see Appendix B:

The Holt & Laury (2002) task for eliciting risk preferences will be used. See Figure 1. Three factors are varied in the experiment were described in the hypothesis section: potential losses, reciprocal relationships and payment schedule (all participants vs. randomly chosen participants.)

The design will be entirely between subjects. Participants will make only one choice, not all three choices (self, others, group reps). Making many choices, only one of which affects others may diffuse responsibility. This is an important downside, because a leading explanation of why risk concerns increase when choosing for others is related to perceived responsibility.

Payment: Participants will be paid either \$5 (in gains-only condition) or \$7 (in loss condition). In addition, they will receive the Holt-Laury payoffs as shown in Figure 1a and 1b. All experiments will be advertised as paying between \$5 and \$10 for a 25-30 minute experiment.

Figure 1a. Holt & Laury payoffs, gains-only condition.

Decision	Option A	Option B	Your Choice	
			Choose A	Choose B
1	\$2.50 if lottery number is 0	\$5.00 if lottery number is 0	A	B
	\$2.10 if lottery number is 1-9	\$0.15 if lottery number is 1-9		
2	\$2.50 if lottery number is 0-1	\$5.00 if lottery number is 0-1	A	B
	\$2.10 if lottery number is 2-9	\$0.15 if lottery number is 2-9		
3	\$2.50 if lottery number is 0-2	\$5.00 if lottery number is 0-2	A	B
	\$2.10 if lottery number is 3-9	\$0.15 if lottery number is 3-9		
4	\$2.50 if lottery number is 0-3	\$5.00 if lottery number is 0-3	A	B
	\$2.10 if lottery number is 4-9	\$0.15 if lottery number is 4-9		
5	\$2.50 if lottery number is 0-4	\$5.00 if lottery number is 0-4	A	B
	\$2.10 if lottery number is 5-9	\$0.15 if lottery number is 5-9		
6	\$2.50 if lottery number is 0-5	\$5.00 if lottery number is 0-5	A	B
	\$2.10 if lottery number is 6-9	\$0.15 if lottery number is 6-9		
7	\$2.50 if lottery number is 0-6	\$5.00 if lottery number is 0-6	A	B
	\$2.10 if lottery number is 7-9	\$0.15 if lottery number is 7-9		
8	\$2.50 if lottery number is 0-7	\$5.00 if lottery number is 0-7	A	B
	\$2.10 if lottery number is 8-9	\$0.15 if lottery number is 8-9		
9	\$2.50 if lottery number is 0-8	\$5.00 if lottery number is 0-8	A	B
	\$2.10 if lottery number is 9	\$0.15 if lottery number is 9		
10	\$1.00 if lottery number is 0-9	\$1.00 if lottery number is 0-9	A	B

Figure 1b. Holt & Laury payoffs, gains & losses condition.

Decision	Option A	Option B	Your Choice	
			Choose A	Choose B
1	\$0.50 if lottery number is 0	\$3.00 if lottery number is 0	A	B
	\$0.10 if lottery number is 1-9	-\$1.85 if lottery number is 1-9		
2	\$0.50 if lottery number is 0-1	\$3.00 if lottery number is 0-1	A	B
	\$0.10 if lottery number is 2-9	-\$1.85 if lottery number is 2-9		
3	\$0.50 if lottery number is 0-2	\$3.00 if lottery number is 0-2	A	B
	\$0.10 if lottery number is 3-9	-\$1.85 if lottery number is 3-9		
4	\$0.50 if lottery number is 0-3	\$3.00 if lottery number is 0-3	A	B
	\$0.10 if lottery number is 4-9	-\$1.85 if lottery number is 4-9		
5	\$0.50 if lottery number is 0-4	\$3.00 if lottery number is 0-4	A	B
	\$0.10 if lottery number is 5-9	-\$1.85 if lottery number is 5-9		
6	\$0.50 if lottery number is 0-5	\$3.00 if lottery number is 0-5	A	B
	\$0.10 if lottery number is 6-9	-\$1.85 if lottery number is 6-9		
7	\$0.50 if lottery number is 0-6	\$3.00 if lottery number is 0-6	A	B
	\$0.10 if lottery number is 7-9	-\$1.85 if lottery number is 7-9		
8	\$0.50 if lottery number is 0-7	\$3.00 if lottery number is 0-7	A	B
	\$0.10 if lottery number is 8-9	-\$1.85 if lottery number is 8-9		
9	\$0.50 if lottery number is 0-8	\$3.00 if lottery number is 0-8	A	B
	\$0.10 if lottery number is 9	-\$1.85 if lottery number is 9		
10	\$1.00 if lottery number is 0-9	\$1.00 if lottery number is 0-9	A	B