

Experiments, Hypothesis and Results

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SKKU-Summer

June 2017

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- So how do we study preferences?

Eliciting Preferences

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- Buy me a pizza: I will pay you back.
- According to induced-value theory, in the first case, I have induced you to attach pounds 15 for each pizza you may buy.
- In the second case, it is not clear what value you attach to each pizza you buy.

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- Behavioral Economists try and induce preferences using the clear financial incentives from decision-makers/subjects.

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 - An extra unit of m can raise the subject's utility.
 - The convention in experimental economics is that cash best satisfies this assumption.

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- Some examples:
- Not revealing other players' payoffs (avoids other-regarding preferences)
- Not revealing the aims of the experiment (avoids experimenter demand effects)

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- Neutral language is also a context!
- Context can help subjects understand the experiment faster...
- ... but it can also introduce unexpected effects!

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- Others claim that the putative control inherent to the lab may prove counterproductive if the task is artificial to the subjects, and emphasise the importance of experience with the environment of interest in determining the external validity of any findings (Harrison and List, 2004).
- Experiments can still be useful tests for theories as long as the assumptions of the theories are met in the experimental design.

See Figure 1

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 - Ethical issues (no informed consent)

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- That is, the instructions you give to participants must outline the structure of payoffs accurately.
- Two main reasons for this:
 - If you are interested in studying the role of incentives, then why lie about them?
 - Public good problem: once subjects know they've been lied to, they won't believe the experimenters again (and they will spread the word!)

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 - If the decision maker is risk averse then utility function is concave. example
- The question we can ask if by inducing decisions it is possible to derive an estimate of how the utility function looks?

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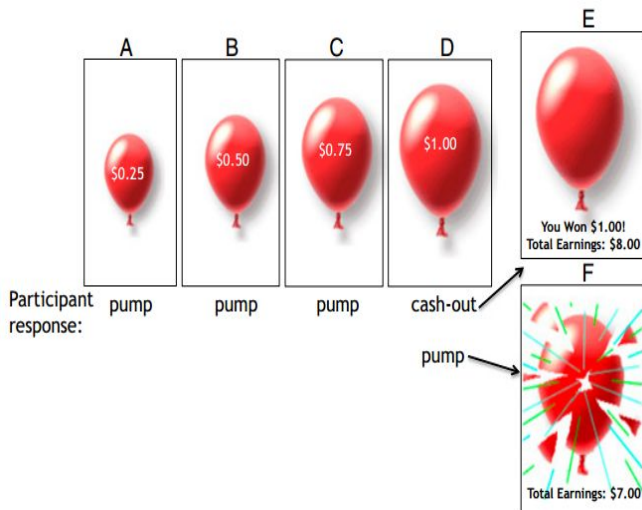
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 - Subjects are presented with 90 different balloons
 - Average number of pumps in balloons that did not explode is measure of risk aversion

Balloon task



See Figure 2

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- Does it extend to other domains?

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- They show using simple questionnaire items that risk aversion is highly domain-specific
- Individuals who take risks in a social domain do not necessarily do so in a financial domain.

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- The level of p is such that $\$$, making the expected value of investing higher than not investing.
- Therefore, a risk-neutral/risk-seeking subject should invest $\$X$. The more risk averse one is, the less money one should invest.

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- At some point in the sequence, the subject will want to switch from one to the other.

See Figure 3.

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Using Holt and Laury method

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Testing for time preference

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- A standard approach is to assume a utility function , where δ is a discount factor
- Standard economic theory assumes $\delta = \frac{1}{1+r}$, where r is a constant scaling factor/parameter measuring time preference.
- Some time we also write where r is the interest rate.

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 - Assuming that we know the utility function-

Eliciting Time Preferences: Coller and Williams (1999)

See Figure 5

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- Anderson et al. (2008) See Figure 6

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- Ownership of the good it seems makes the good more valuable to the owner - endowment effect..

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- So the one of the papers find that only 10% members of the group want to trade.

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- Willingness to pay was average \$ 2.21, and willingness to accept (WTA) was average \$ 5.78

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- Length of ownership may increase endowment effect.

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- In the lab (in malls in New Jersey)
 - they asked a randomly selected sub-group of 101 participants the question " "Your car is having some trouble and requires \$X to be fixed. You can pay in full, take a loan, or take a chance and forego the service at the moment... How would you go about making this decision?"

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 - they asked a randomly selected sub-group of 101 participants the question "Your car is having some trouble and requires \$X to be fixed. You can pay in full, take a loan, or take a chance and forego the service at the moment... How would you go about making this decision?"
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Stress, Cognitive Bandwidth and Time Preferences

- Often people make a reference that poor people can live better - they do not spend money "wisely"
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 - The other group was asked a more benign question
 - After the questions all the participants were asked to solve a series of puzzles (Ravens matrices and spatial compatibility task)

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- See Figure 7

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framesubtitleGneezy and Rustichini (2000)

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- No fine was introduced in the four other day-care centers, these were the control groups

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- So what happened? How would you test for the reason why behaviour changed?