

# **“Effect of Pain of Paying on Risk-taking”**

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## **Abstract**

Making payments is considered as a neutral, rational act in economics. Yet it's far from the truth. Humans are more biased by loss than gain (Kahneman & Tversky, 1979). Due to this irrational bias we study emotions experienced associated with the act of paying and its impact on consumer behavior. Payments cause *Pain of Paying* (Zellermayer, 1996), which greatly determines consumer decisions about purchase of goods and services. In this paper, we tried to study the effect of early/delayed reward on the Risk-taking amongst individuals,

*Keywords: Pain of Paying, Risk-taking*

## Method

### Participants

In this experiment, all of the 32 participants consisted of college students, aged 17-22 years old.

### Assessments and Measures

The participants were separated into two groups, a control group and a test group, following a *Posttest-Only Control Group Design*. Both groups had 16 participants and were given the same task, playing a risk-based game Balloon Analogue Risk Test (BART) with a few modifications. The game they played, BART(PoP), is a variation of the original BART game with variable reward.

- The control group shall be made to play the game first; giving them money at the end based on their winnings.
- The test group shall be given a median reward prior to playing; making them pay back money to match their winnings.

### **Hypothesis**

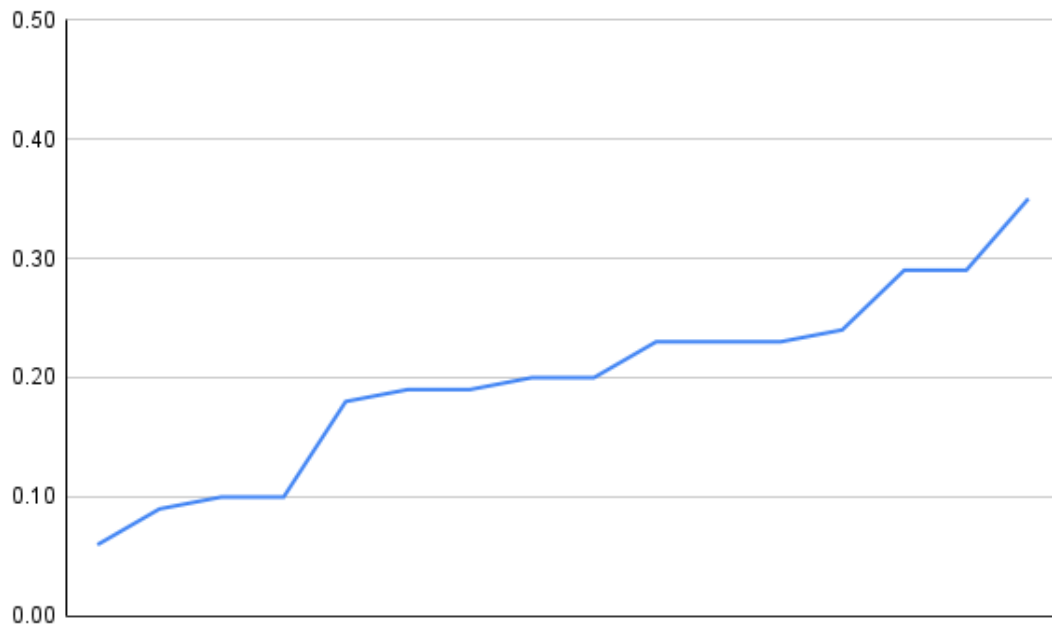
The players in the test group would be more risk averse than the control group, in order to avoid the pain of paying the money back that they lose by playing unsafely. This stems from the idea of “frame” discussed in Prospect Theory.

The control group would be starting from zero, thus anything they win, by being risky, is a gain.

Conversely, the test group would be starting with the reward upfront, thus anything they “lose” by being risky would be a loss.

## Results

The players in the control group (C) earned an average of \$ 0.21, with the same median reward. The standard deviation for this group was 0.205.



*Fig1. Scores of the players in the Control group (C)*

Meanwhile, the players in the test group (T) earned an average of \$ 0.29, with the same median reward. The standard deviation for this group was 0.26.

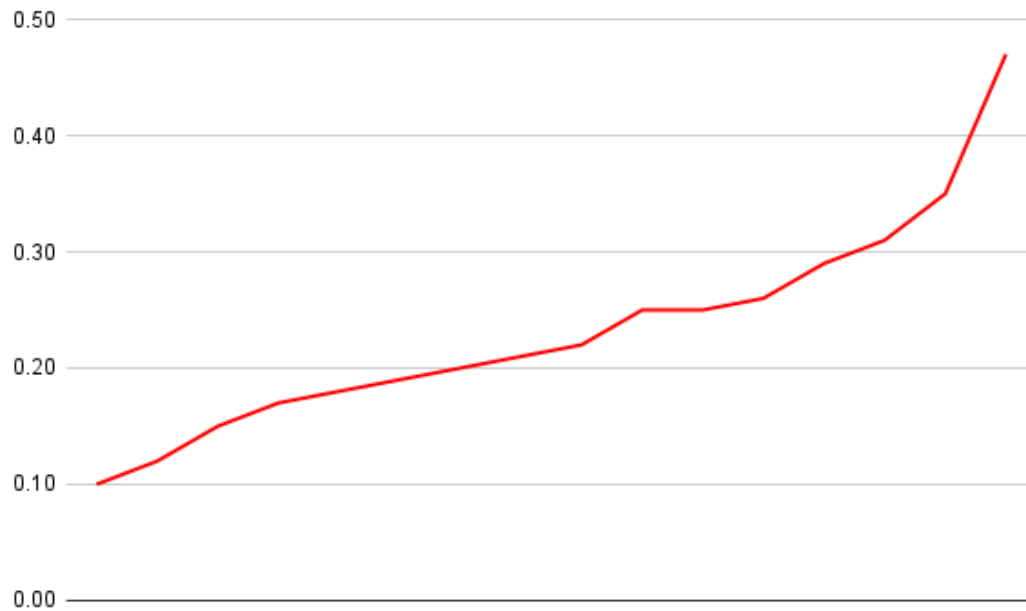


Fig2. Scores of the players in the Test group (T)

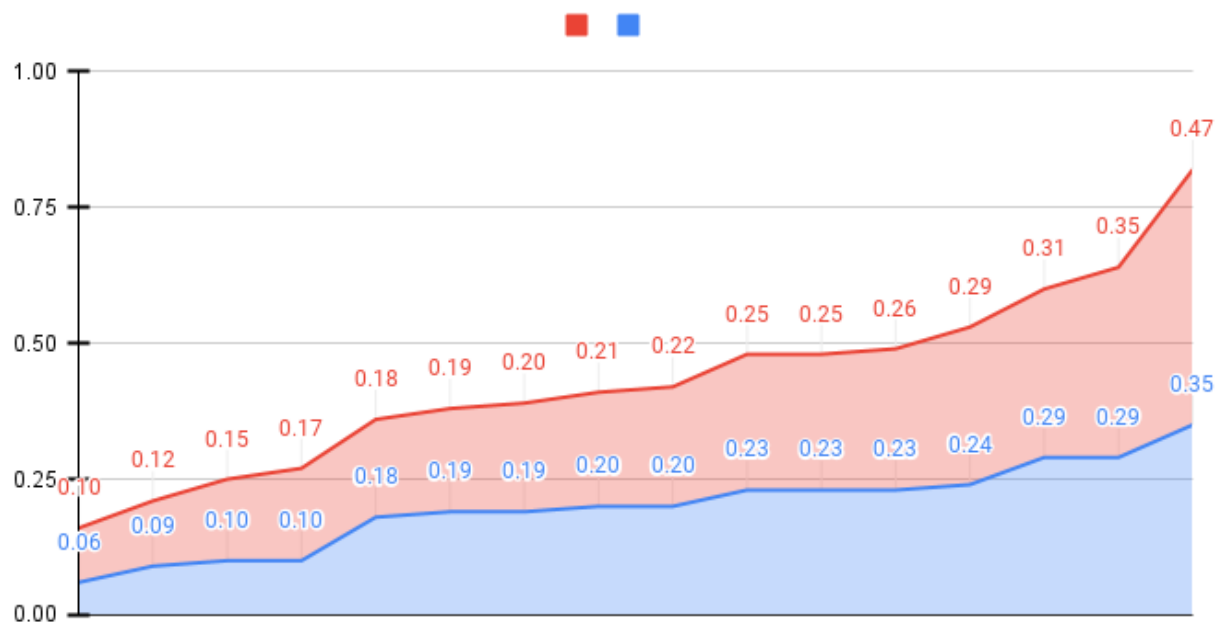


Fig3. Scores of the players in the Control group (in blue) vs Test group (in red)

### Conclusion

The original hypothesis is contradicted with a sizable margin. After further reading, one possible reason emerges in the *Priming effect*, particularly the positive priming effect of money. It might be possible that early reward for participants in the Test group primed them to take more risk compared to those in the Control group.

### References

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