

# THE EMPIRICAL CASE FOR ACQUIESCING TO INTUITION

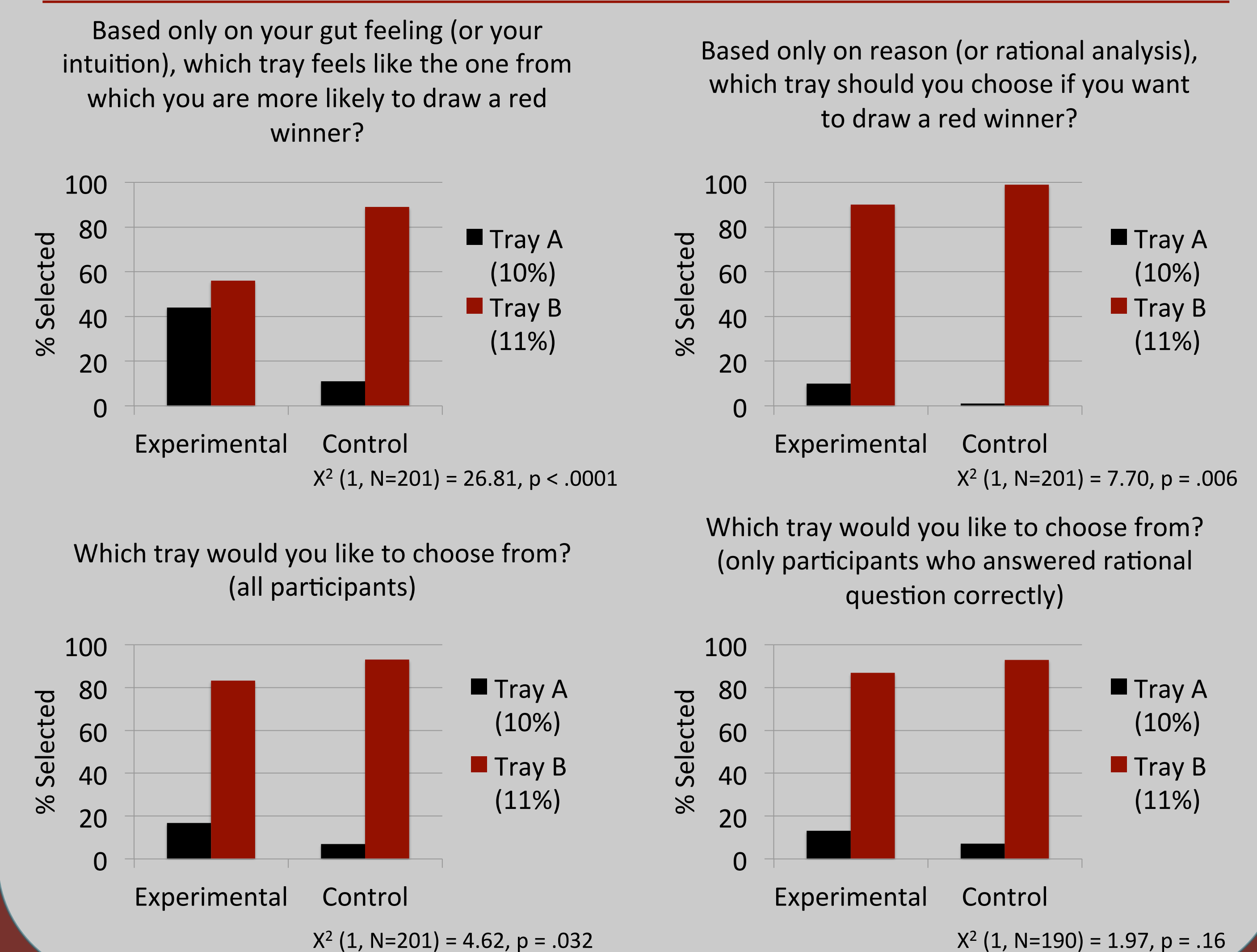
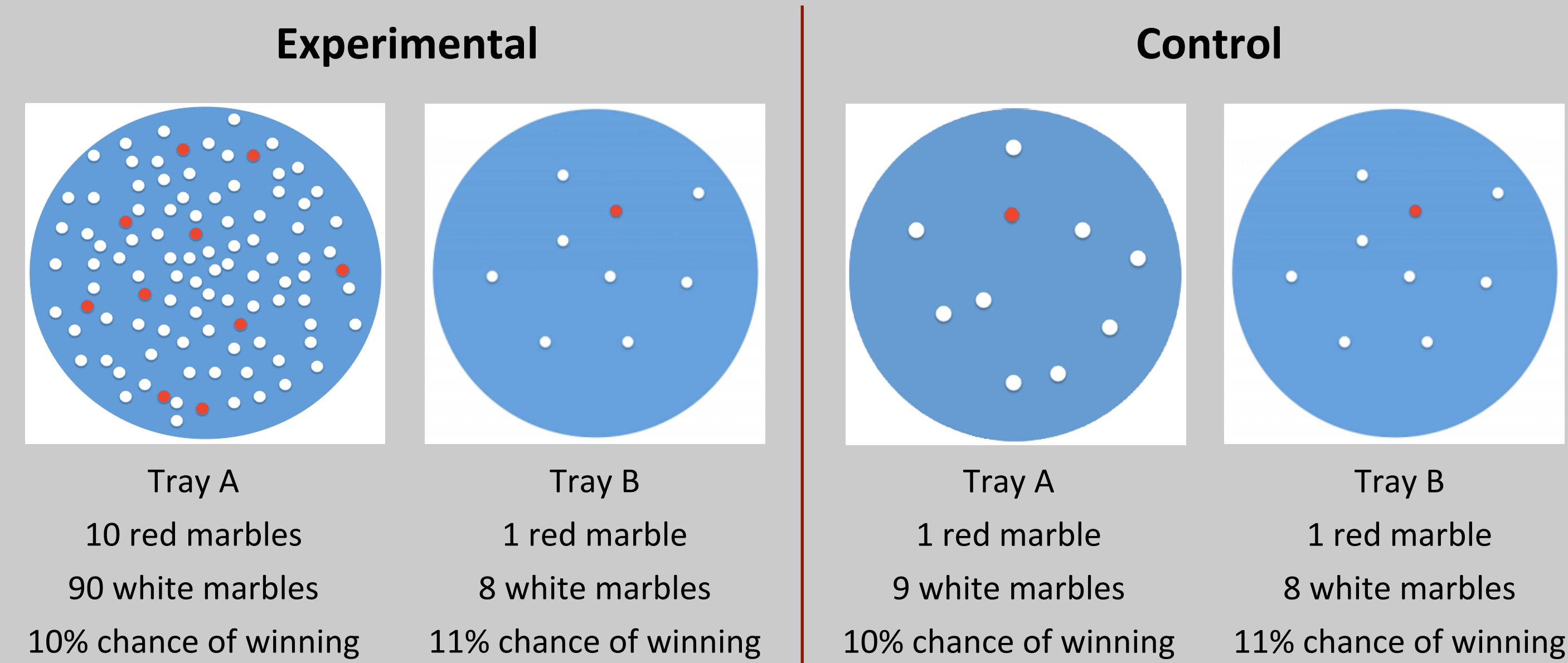
Daniel K. Walco & Jane L. Risen  
University of Chicago Booth School of Business

## ABSTRACT

Will people follow their intuition even when they explicitly recognize that it is not rational to do so? Dual-process models of judgment and decision making often assume that the correction of errors necessarily follows the detection of errors (e.g. Kahneman & Frederick, 2002). But this assumption may not always hold. People can explicitly recognize that their intuitive judgment is wrong, but nevertheless maintain it, a phenomenon known as *acquiescence* (Risen, 2016a; 2016b). In three studies, we test acquiescence using the criteria offered by Risen (2016a): People can **1) have a faulty intuitive belief about the world, 2) acknowledge the belief is irrational, but 3) follow their intuition nonetheless – even when doing so is costly.**

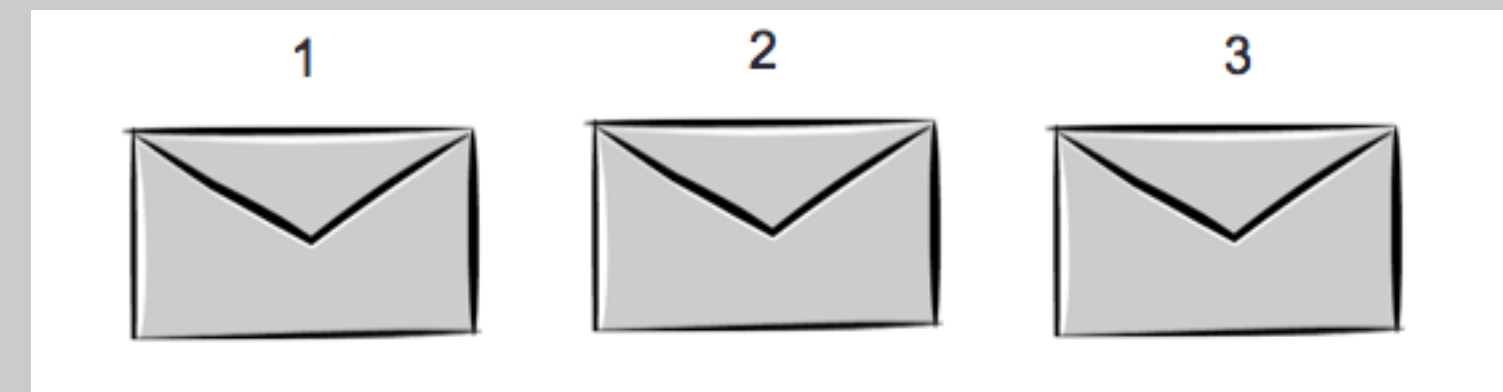
## STUDY 1: RATIO BIAS

Participants were given a choice between two lotteries, and then played their chosen lottery for a chance to win a \$3 bonus.



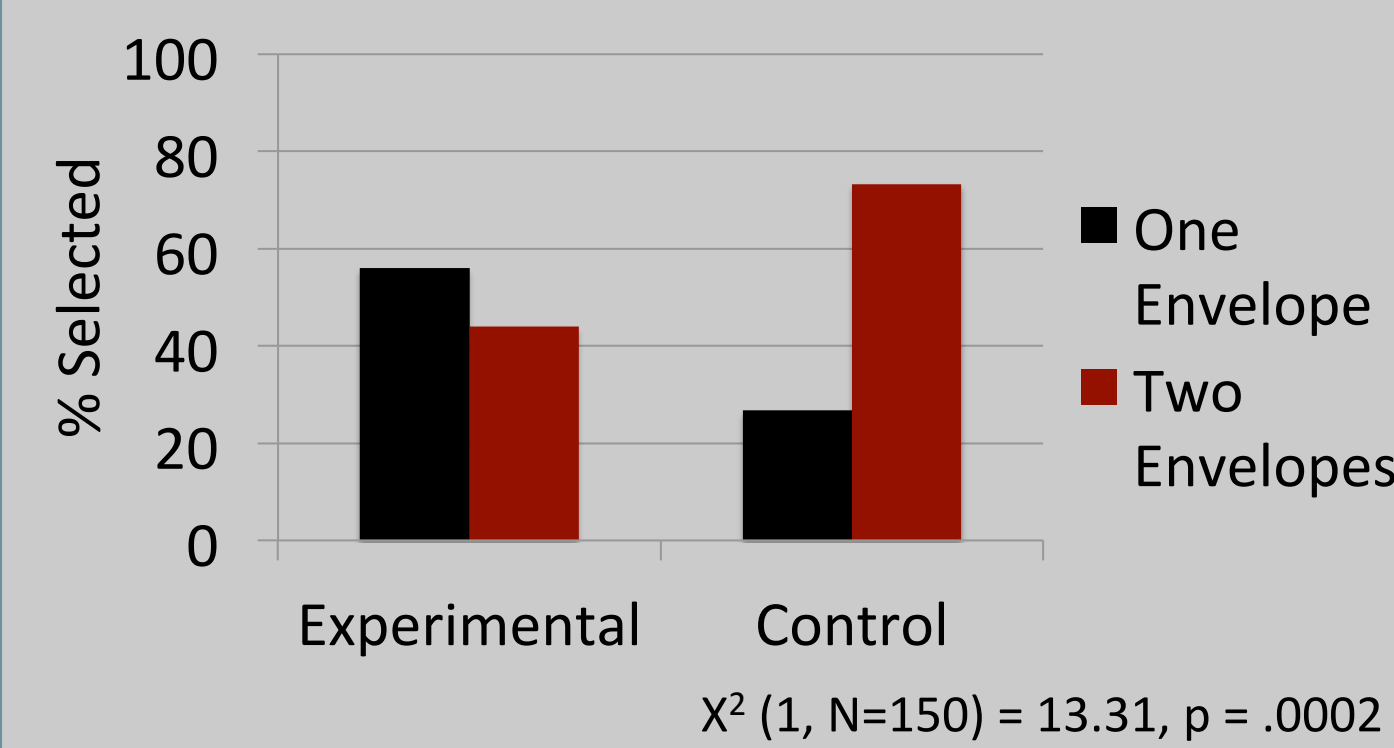
## STUDY 2: ENVELOPES

- Participants were given three envelopes and were asked to arrange them on a table in front of slips of paper labeled 1, 2, and 3.
- They were told that one envelope contains \$5, while the other two were empty.

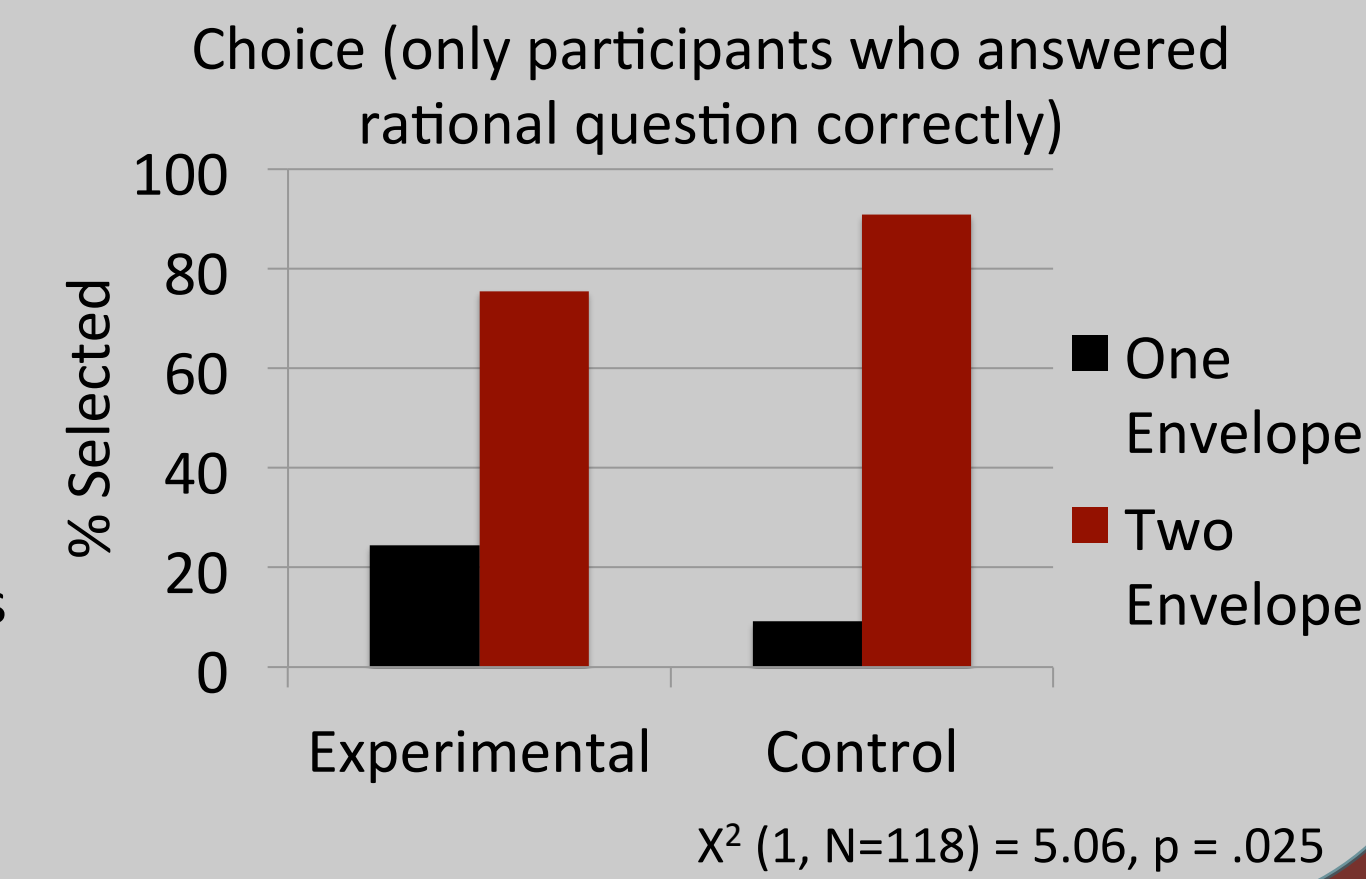
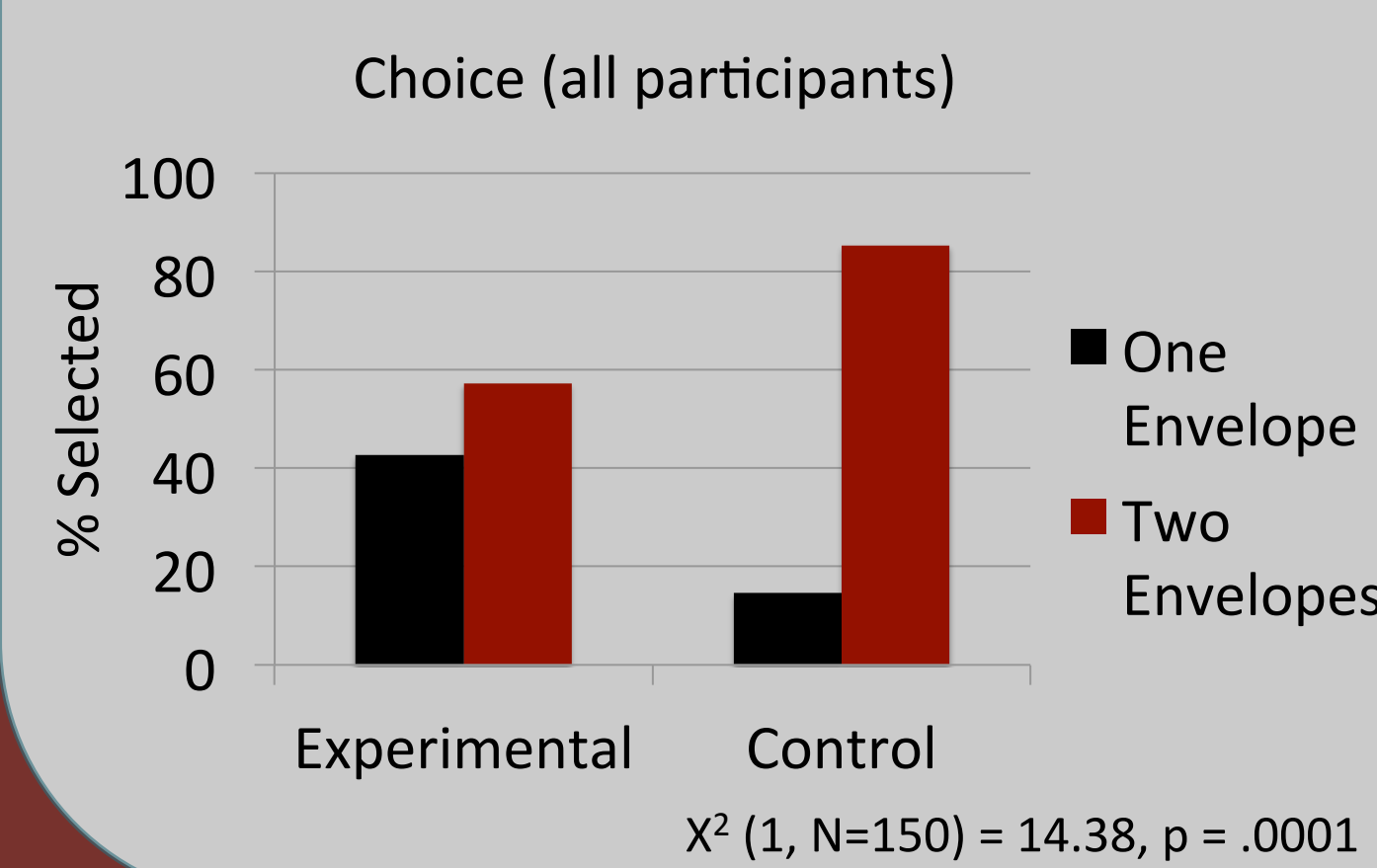
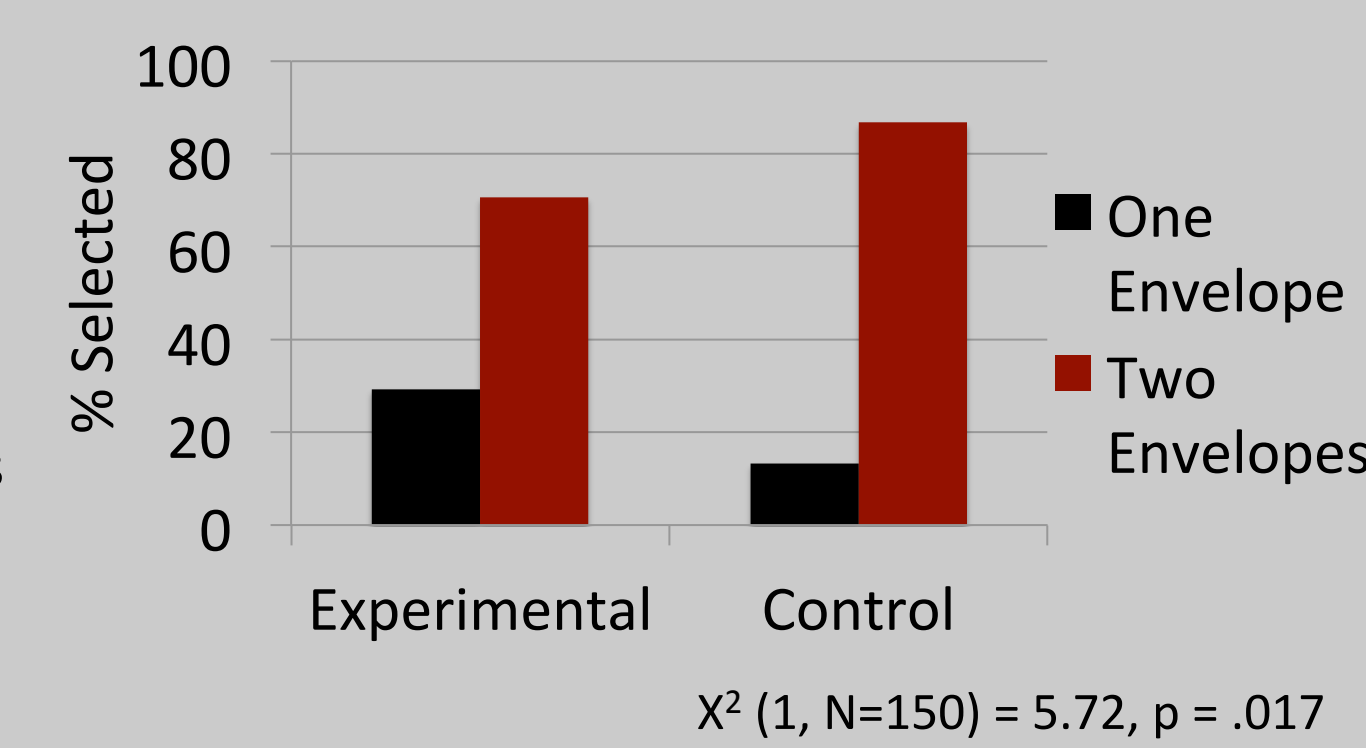


- Experimental:** Participants guessed which envelope had the money, and they wrote their name on the chosen envelope. Before opening, they were asked if they wanted to exchange their envelope for both of the other two envelopes.
- Control:** Participants were offered a choice between one randomly chosen envelope, or both of the other two envelopes.

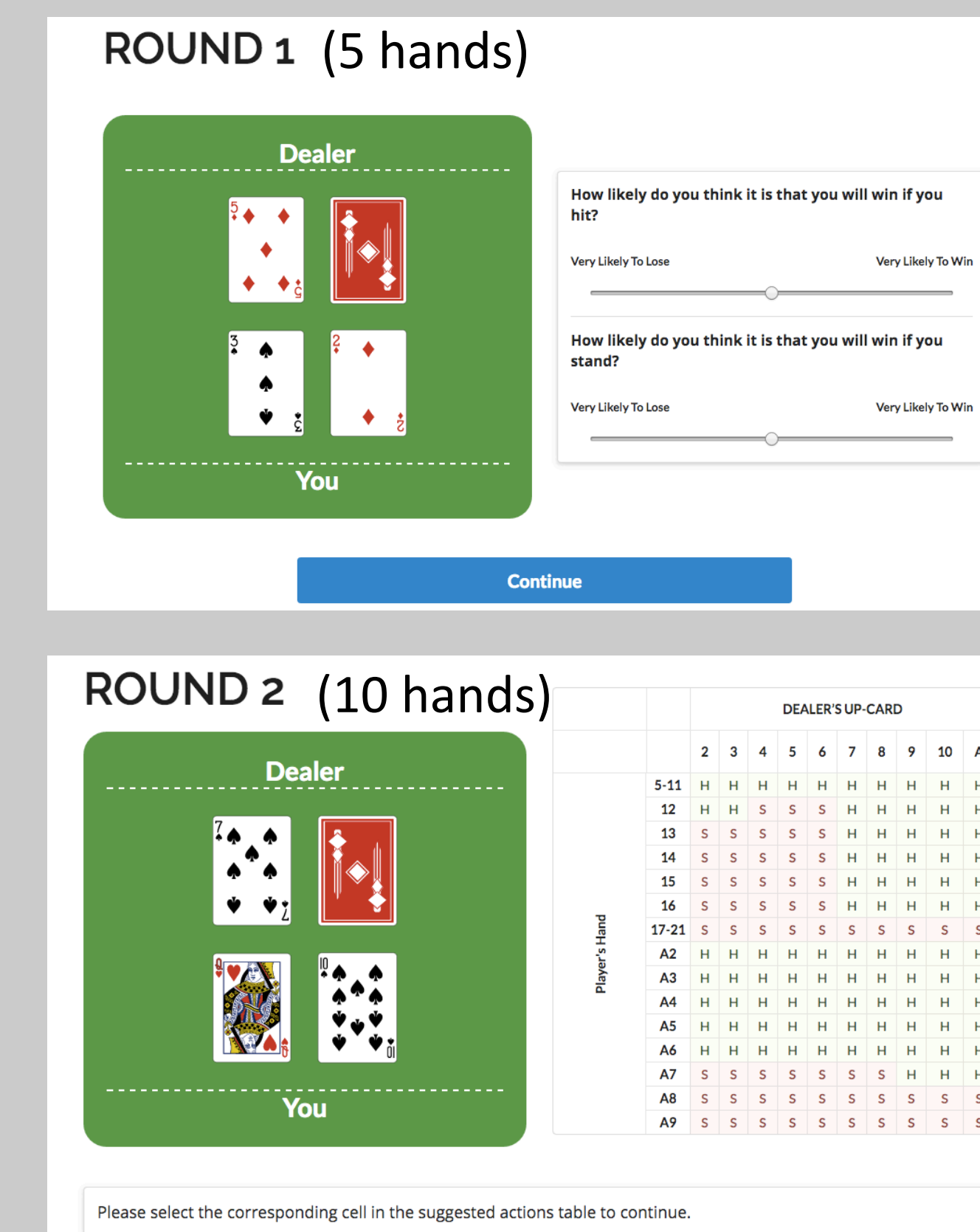
Imagine that you choose Envelopes 2 and 3. The experimenter is about to open the envelopes. Based on your gut feeling (or your intuition), where do you feel the money is most likely to be located?



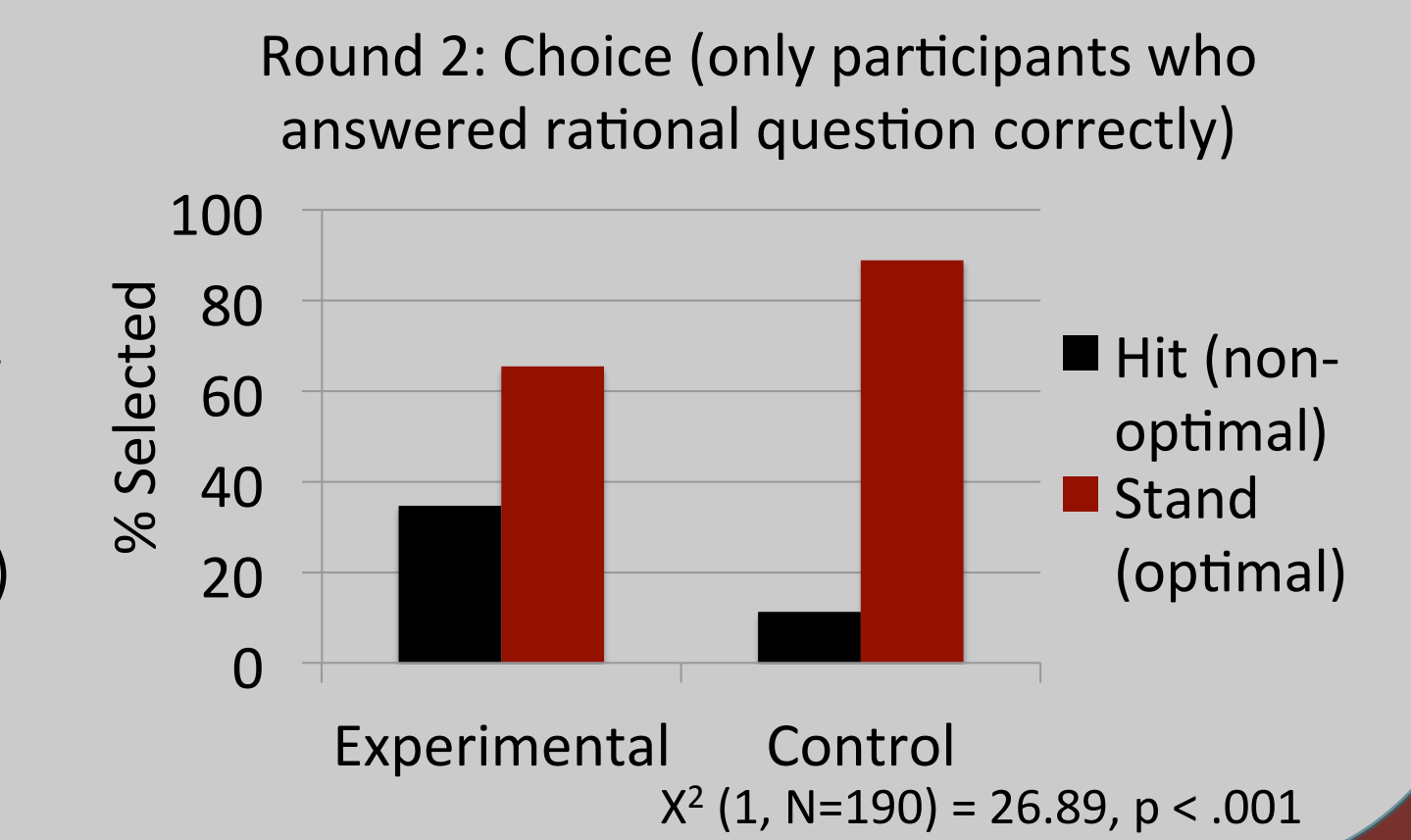
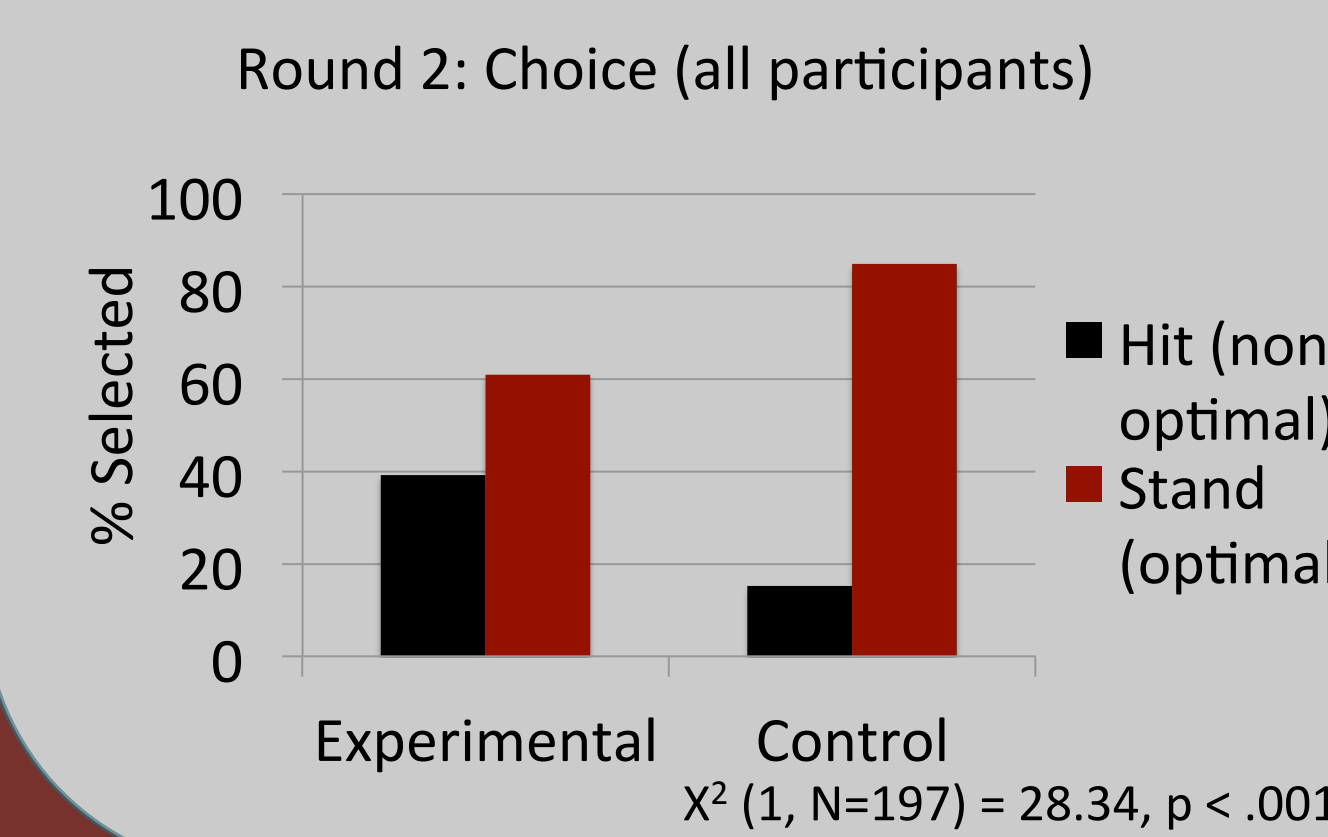
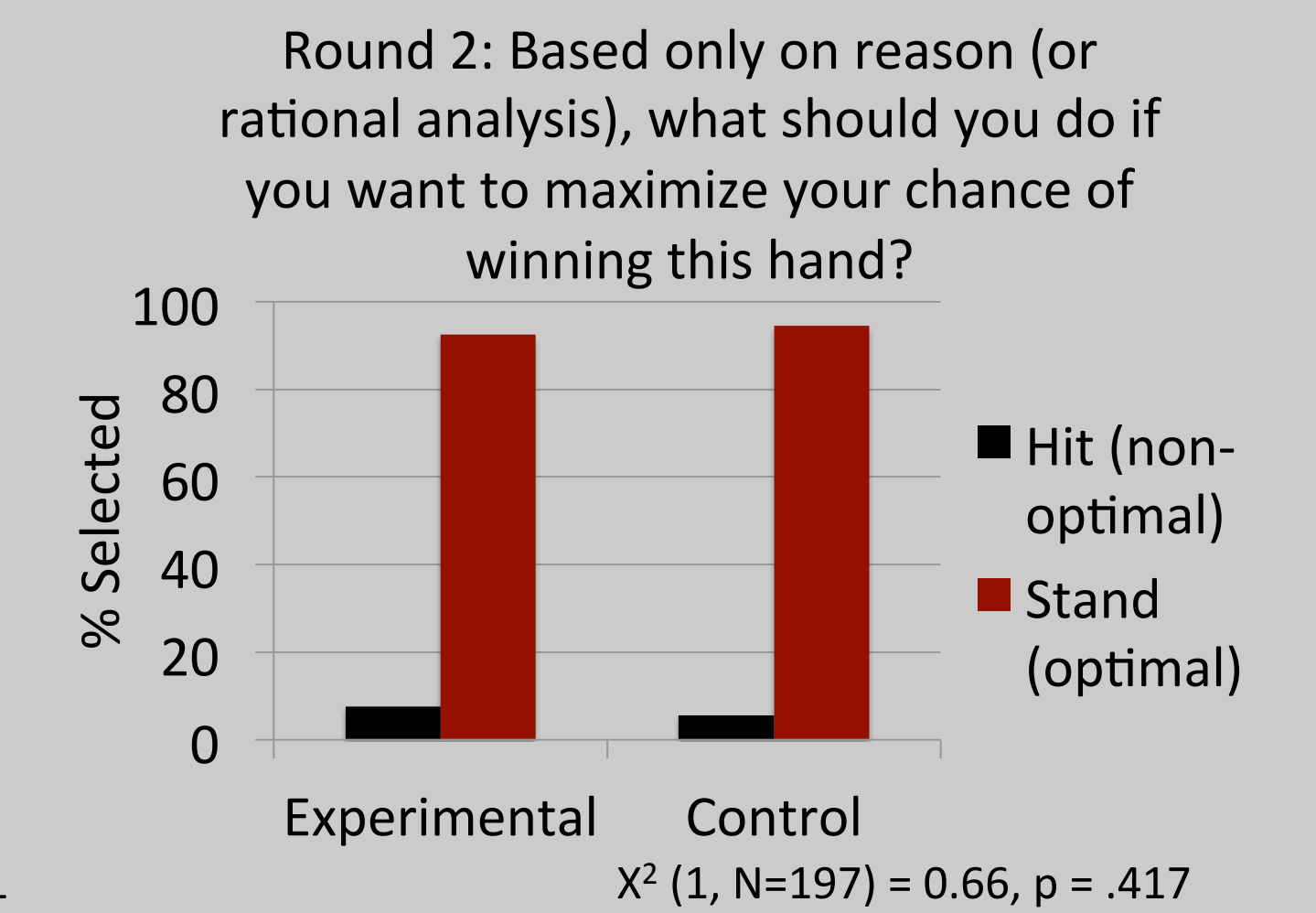
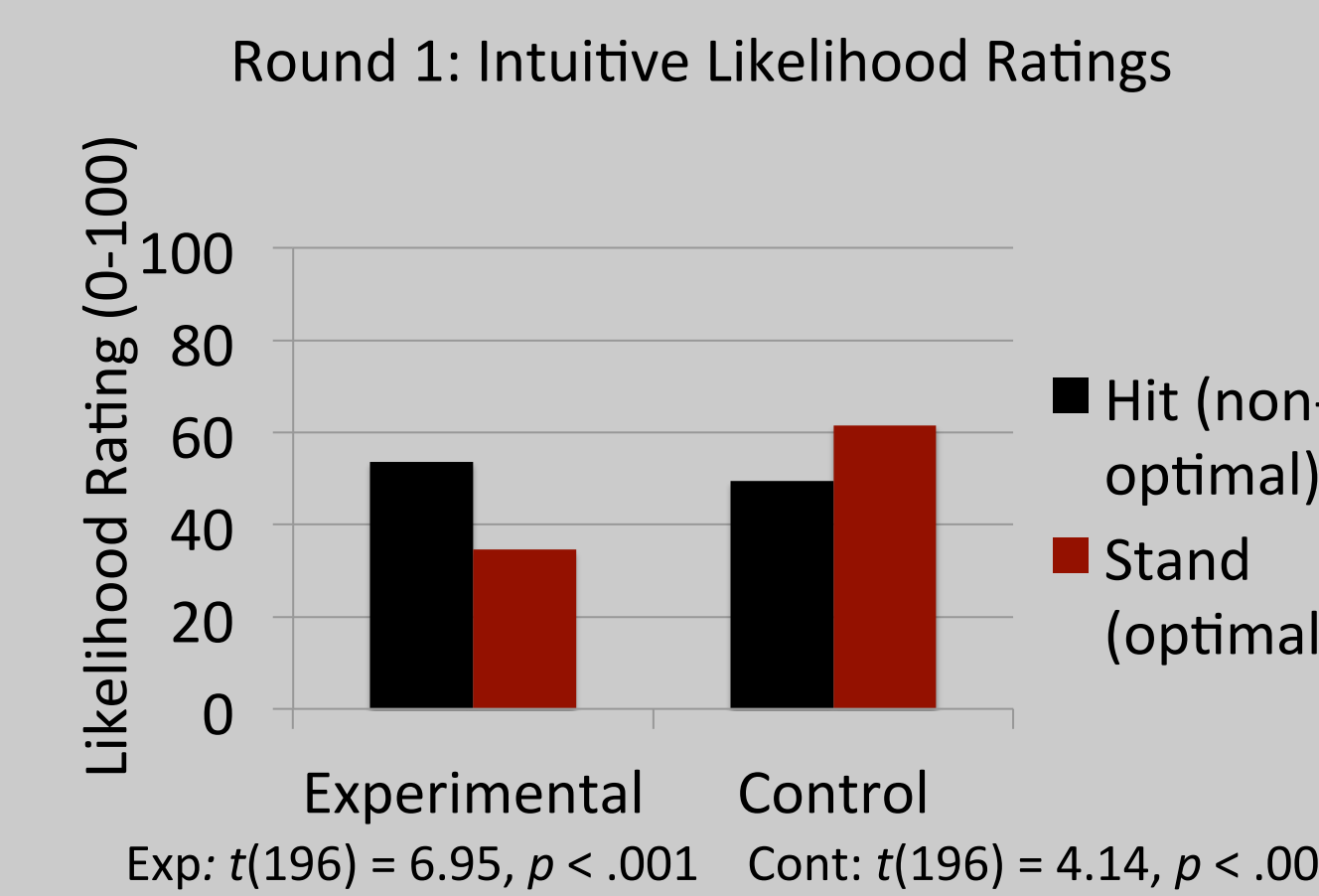
Based on rational analysis, with which envelope(s) are you most likely to win?



## STUDY 3: BLACKJACK



- Experimental & Control hands (determined by pretest) were included both in Round 1 & Round 2 for all participants.
- Experimental hand (player – 13, dealer – 4):** players' intuitive strategy diverged from optimal strategy—that is, players believe they should hit, while the optimal strategy is to stand.
- Control hand (player – soft 18, dealer – 8):** the objective difference between hitting and standing was equal to that of our experimental hand, but players' intuitions were consistent with optimal strategy.



## GENERAL DISCUSSION

We provide the first clear empirical support for acquiescence. Study 1 provided suggestive evidence (fulfilling criteria 1 and 2), while Studies 2 and 3 demonstrated acquiescence by fulfilling all three criteria. Dual-process models of cognition often assume that the correction of errors necessarily follows the detection of errors. The present studies, however, demonstrate that a person can have a faulty intuitive belief about the world, explicitly acknowledge that the belief is in error, but follow the intuition nonetheless. Moreover, in each study there was an expected cost to following one's intuition, which means that acquiescence is more than just a "tie-breaker" – people deviated from what they knew was rational even though it incurred a cost.

We are currently investigating factors that might influence the likelihood of acquiescence, as well as possible interventions to improve decision-making.

## REFERENCES

Kahneman, D., & Frederick, S. (2002). Representativeness revisited. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and biases* (pp. 49–81). Cambridge: Cambridge University Press.

Risen, J. L. (2016a). Acquiescing to intuition: Believing what we know isn't so. *Manuscript under review*.

Risen, J. L. (2016b). Believing what we do not believe: Acquiescence to superstitious beliefs and other powerful intuitions. *Psychological Review*, 123, 182–207.