

# I Won (as far as I remember)!

## Broad Implications of the Incongruity Effect

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Despite the low odds of winning and high potential cost, many people choose to gamble. Why?

Potential losses seem to impact our decision making more than possible wins (Lieberman, Idson & Higgins, 2005), and we tend to avoid situations that result in losses (Kahneman & Tversky, 1982).

Many researchers attribute high affinities towards gambling to personality differences in thrill seeking (Chiu & Storm, 2010), but could there be an underlying distortion in our subjective experience?

### Methods

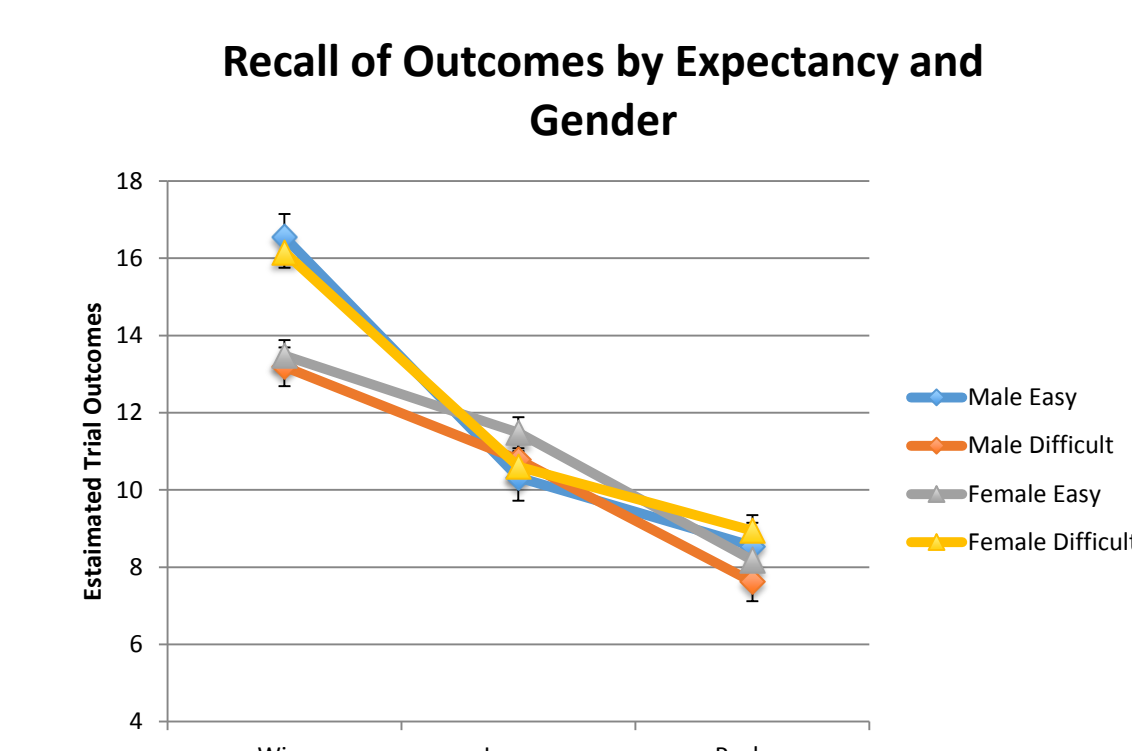
Over two experiments, participants took part in a digital card game and completed one of two memory tests.

**Participants.** 106 (62% female,  $M_{age} = 31$ ) in Experiment 1 and 192 (52% male,  $M_{age} = 32$ ) in Experiment 2 were recruited from Amazon's Mechanical Turk.

**Procedure.** Before beginning the card game, participants were told that this game was either **harder** or **easier** to win compared to other casino card games. Regardless, every person won, lost, and pushed the same number of times (10).

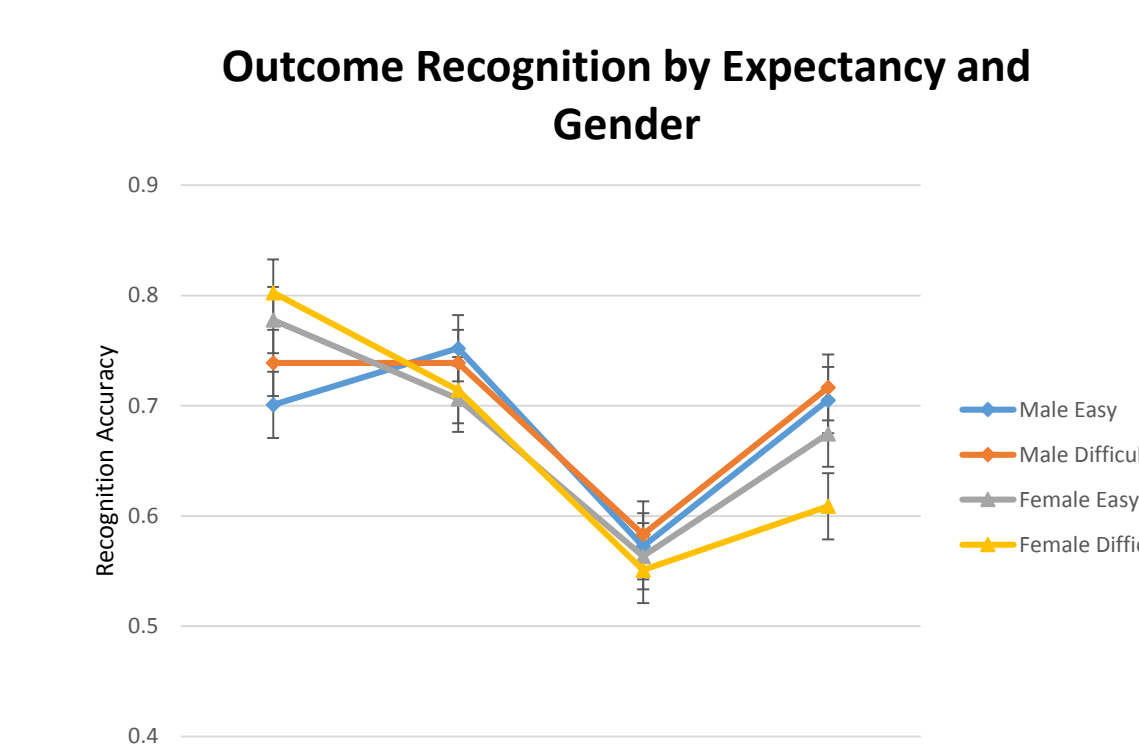
### Results

#### Experiment 1

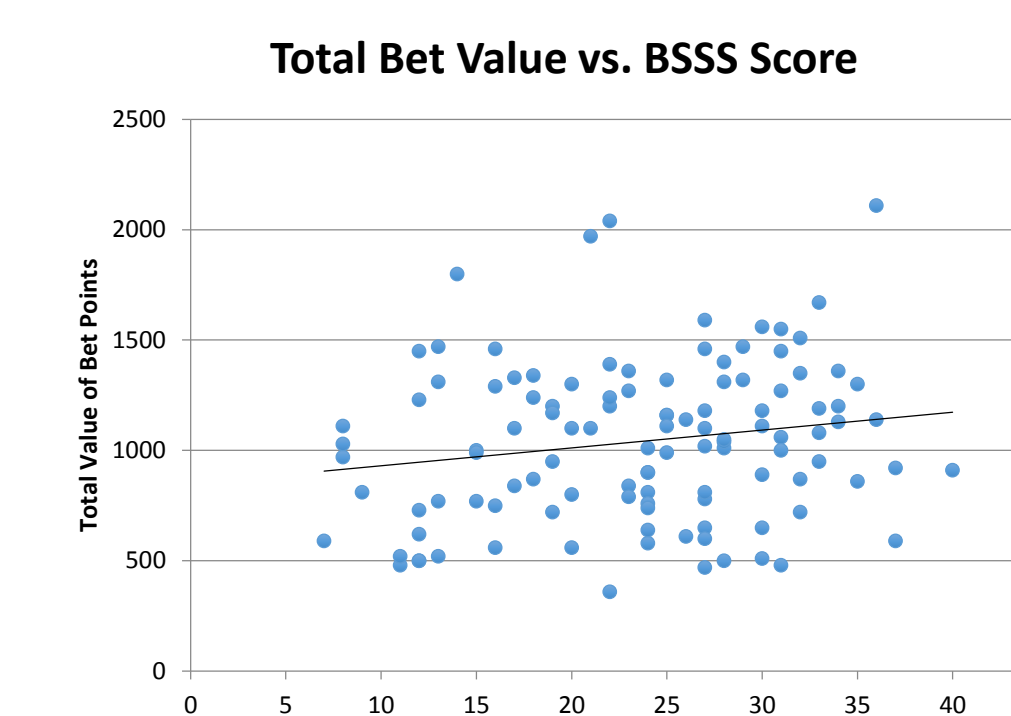


Main effect of trial outcome  $F(2,119) = 59.9, p < .05, \text{part } \eta^2 = .502$   
Gender x trial outcome interaction  $F(2,119) = 3.53, p < .05, \text{part } \eta^2 = .056$ .

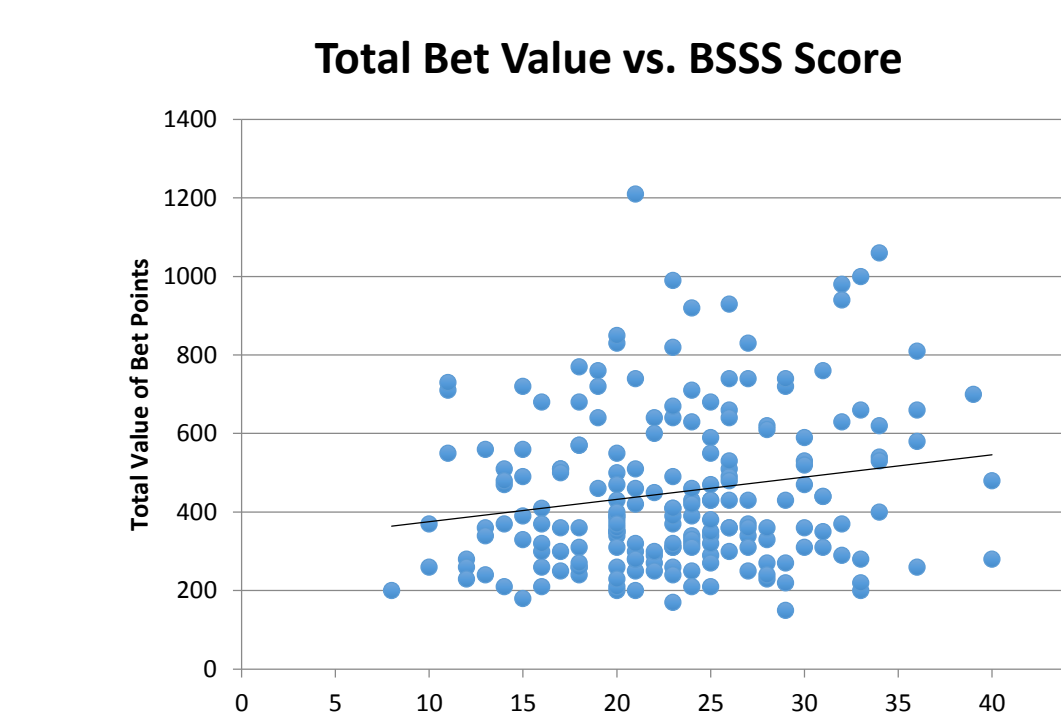
#### Experiment 2



Main effect of trial outcome  $F(3,184) = 17.5, p < .05, \text{part } \eta^2 = .222$   
Gender x trial outcome interaction  $F(3,184) = 2.82, p < .05, \text{part } \eta^2 = .044$

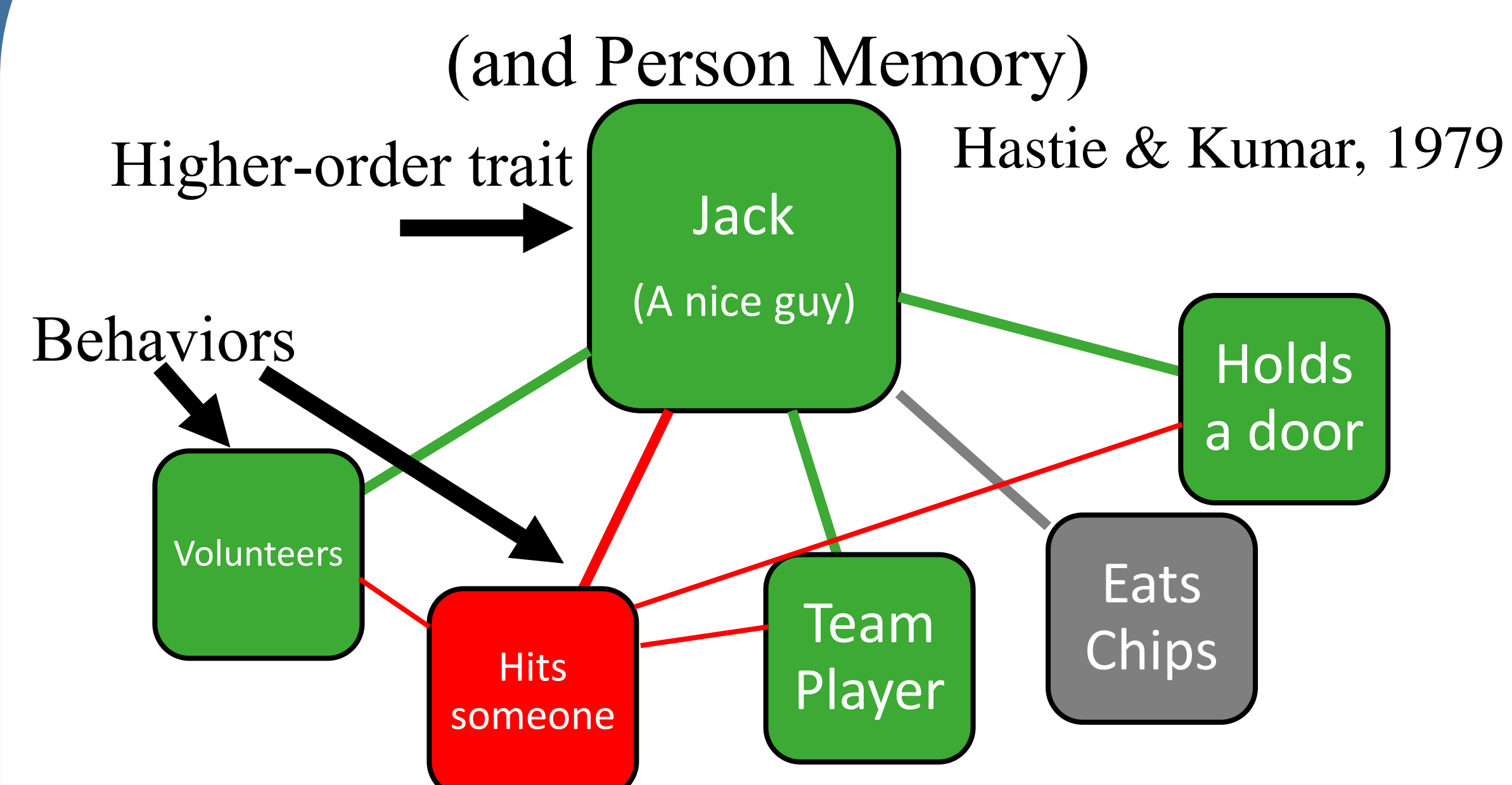


Adj  $R^2 = .123$   
• Gender  $pr = .293$   
• Expectancy  $pr = -.178$   
• BSSS  $pr = .098$

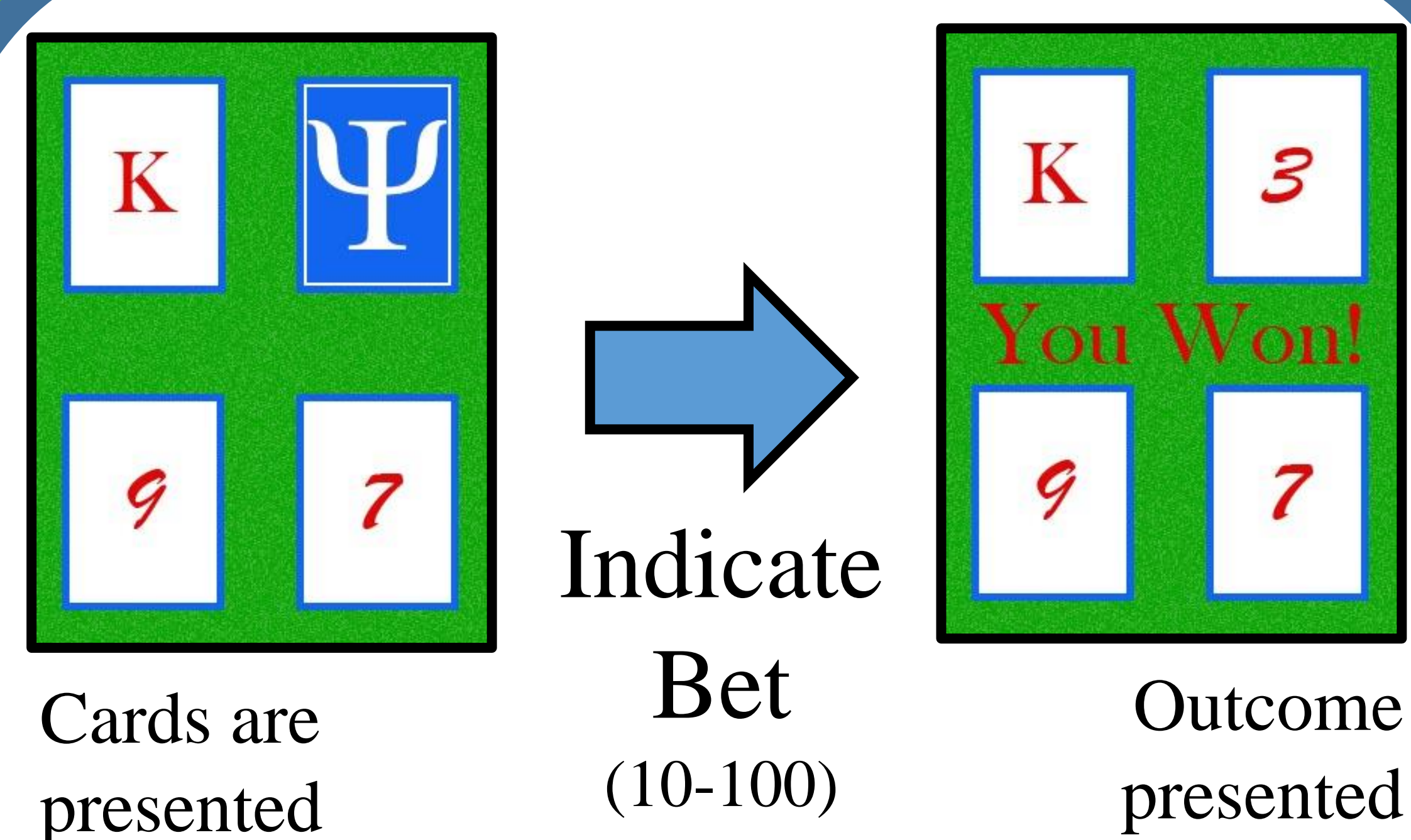
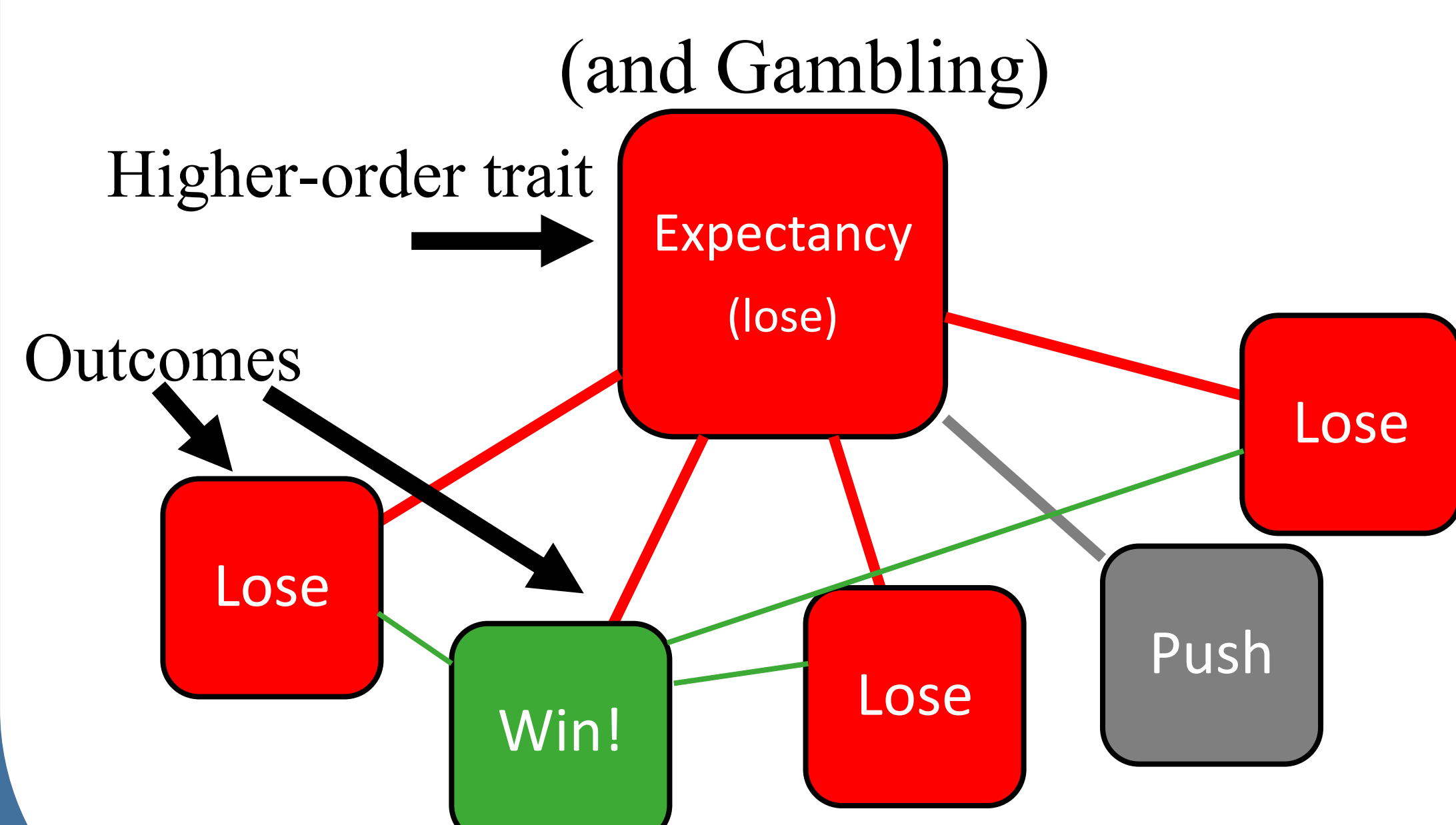


Adj  $R^2 = .217$   
• Gender  $pr = -.013$   
• Expectancy  $pr = -.123$   
• BSSS  $pr = .178$

### The Incongruity Effect



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Brief Sensation Seeking Scale (BSSS; Hoyle et al., 2002)

Past gambling experience and attitudes towards the game

Recall memory task (Exp 1)

Recognition memory task (Exp 2)

### Conclusions

- Participants were able to recognize past gambling experiences, but they overestimated their wins.
- Low saliency trials (pushes) were estimated to occur fewer times than wins or losses and were poorly recognized.
- Sensation seeking was not a strong predictor of gambling behavior ( $pr = .098$  exp1,  $pr = .178$  exp2).

### Future directions

- Include stakes to increase ecological validity.
- Be more explicit about the expected outcomes of the game.