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 (Liberman, 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
  - $F(2,119) = 59.9$, $p < .05$, part $\eta^2 = .002$
- Gender x trial outcome interaction
  - $F(2,119) = 3.65$, $p < .05$, part $\eta^2 = .006$

Experiment 2

- Main effect of trial outcome
  - $F(2,114) = 17.5$, $p < .05$, part $\eta^2 = .222$
- Gender x trial outcome interaction
  - $F(2,114) = 2.82$, $p < .05$, part $\eta^2 = .044$

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.