

How the Number of Alternative Outcomes Influences Wishful Thinking

WISHFUL THINKING

Wishful thinking – the tendency to predict an outcome based on preference for that outcome (Krizan & Windschitl, 2007).



Krizan, Miller, & Johar (2010)



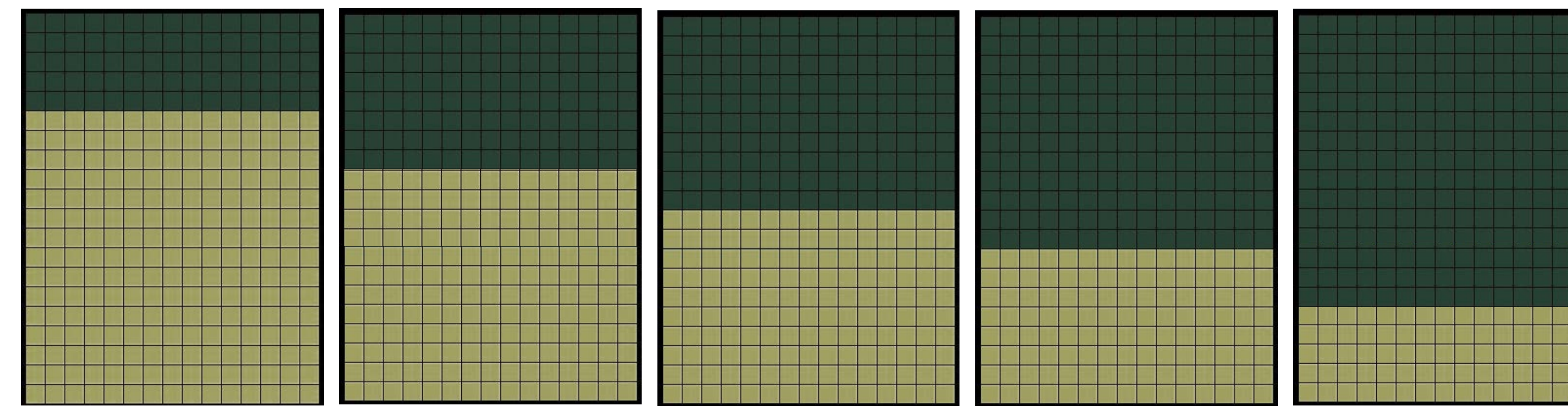
Simmons & Massey (2012)



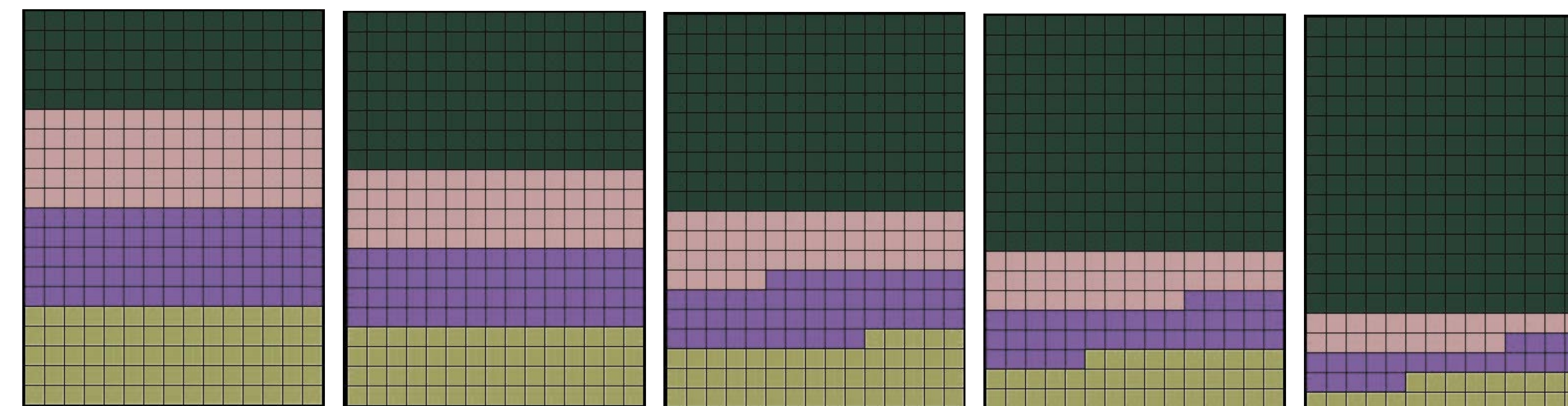
Marks (1951)

CURRENT STUDY

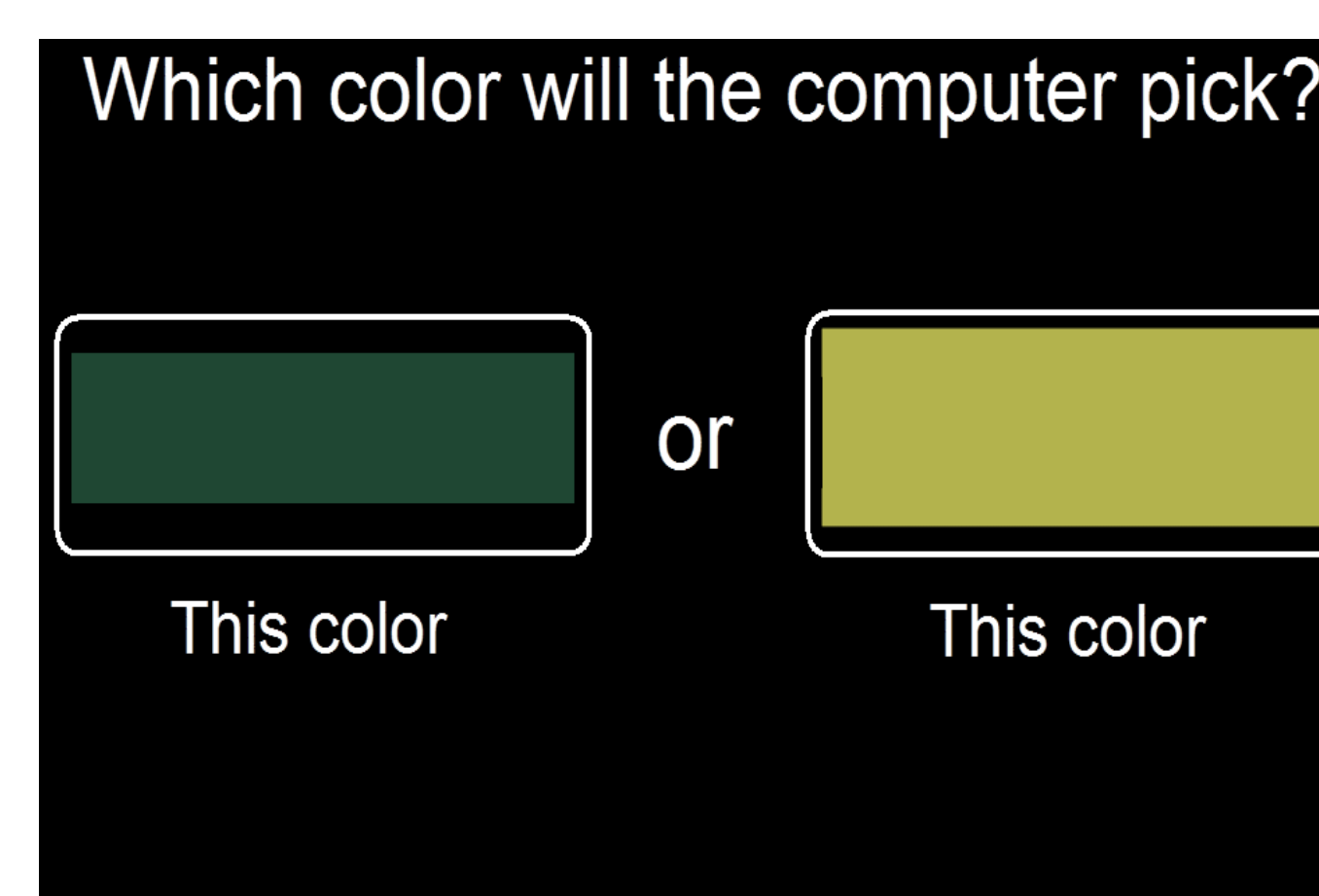
Dichotomous Outcomes



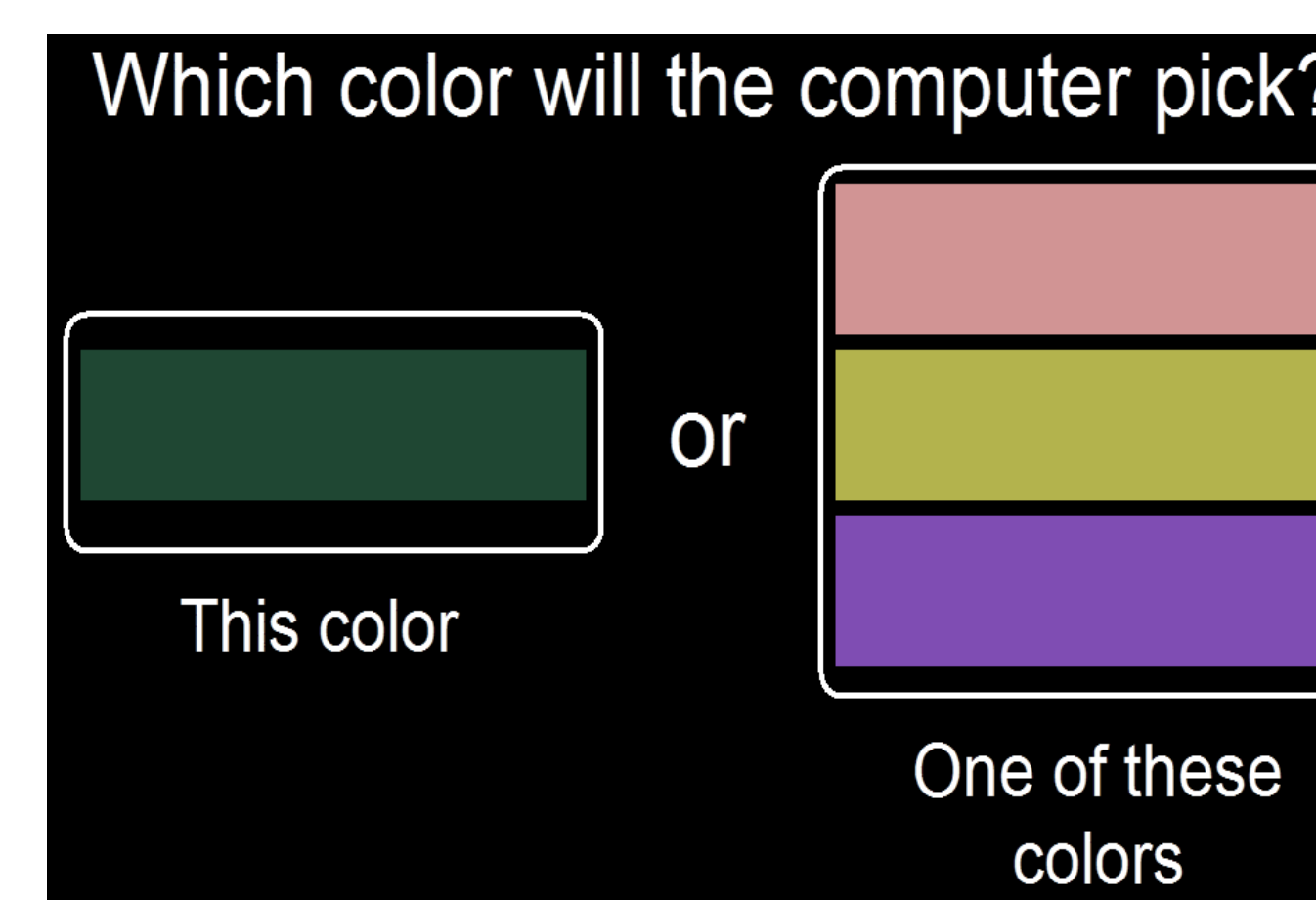
Polychotomous Outcomes



Dichotomous



Polychotomous



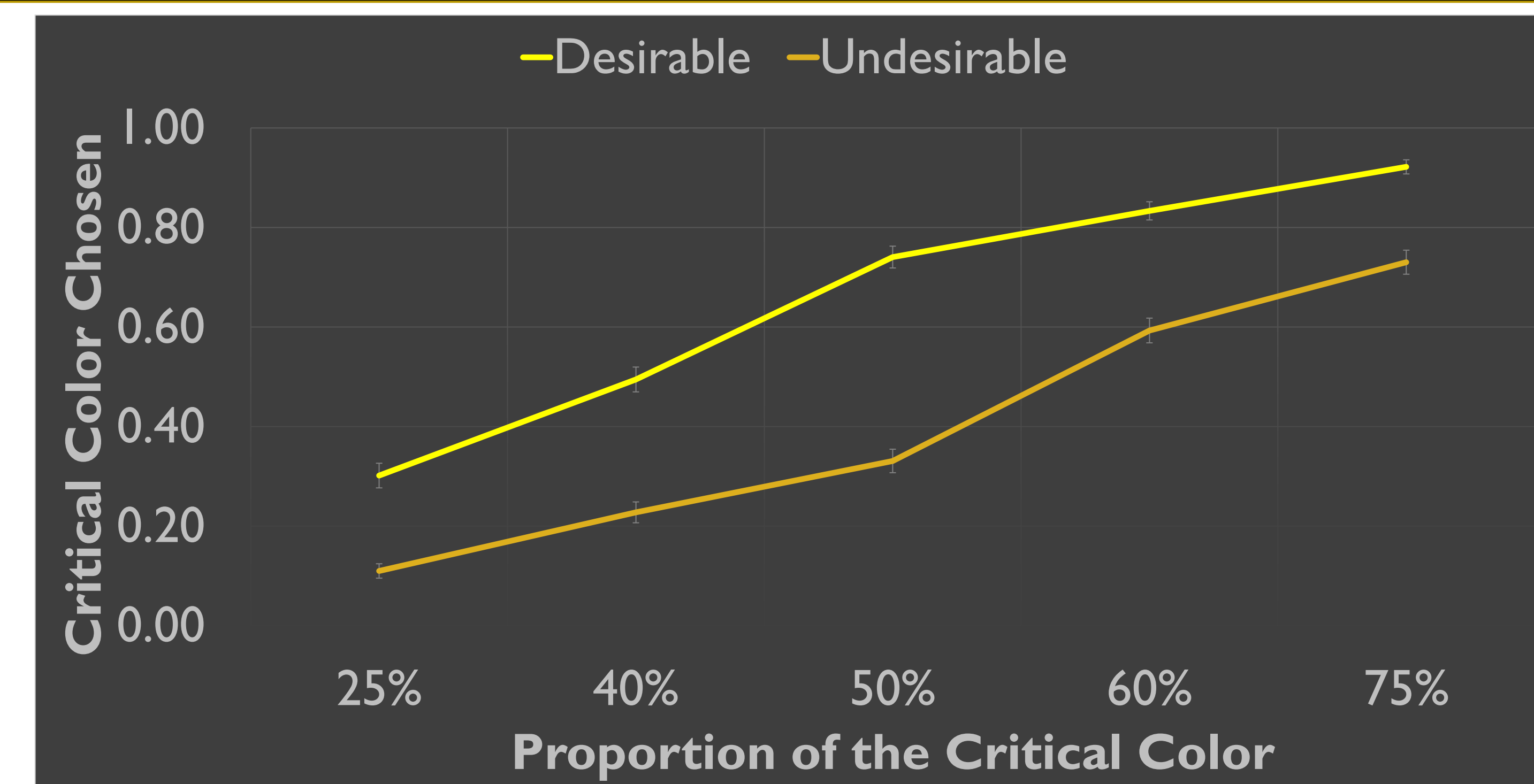
Procedure

- Participants were asked to predict which color they believed the computer would choose from the grid of different colored squares.
- They were told that if the computer picked a certain color, they would either win points or lose points. Their prediction did not determine allocation of points.
- Across the 20 trials, the frequency of each of the colors and the point information for each of the colors changed.
- The participants either saw the dichotomous grids or the polychotomous grids.
- Outcome measure:** The number of times the participant predicts the color associated with either winning or losing points (critical color).

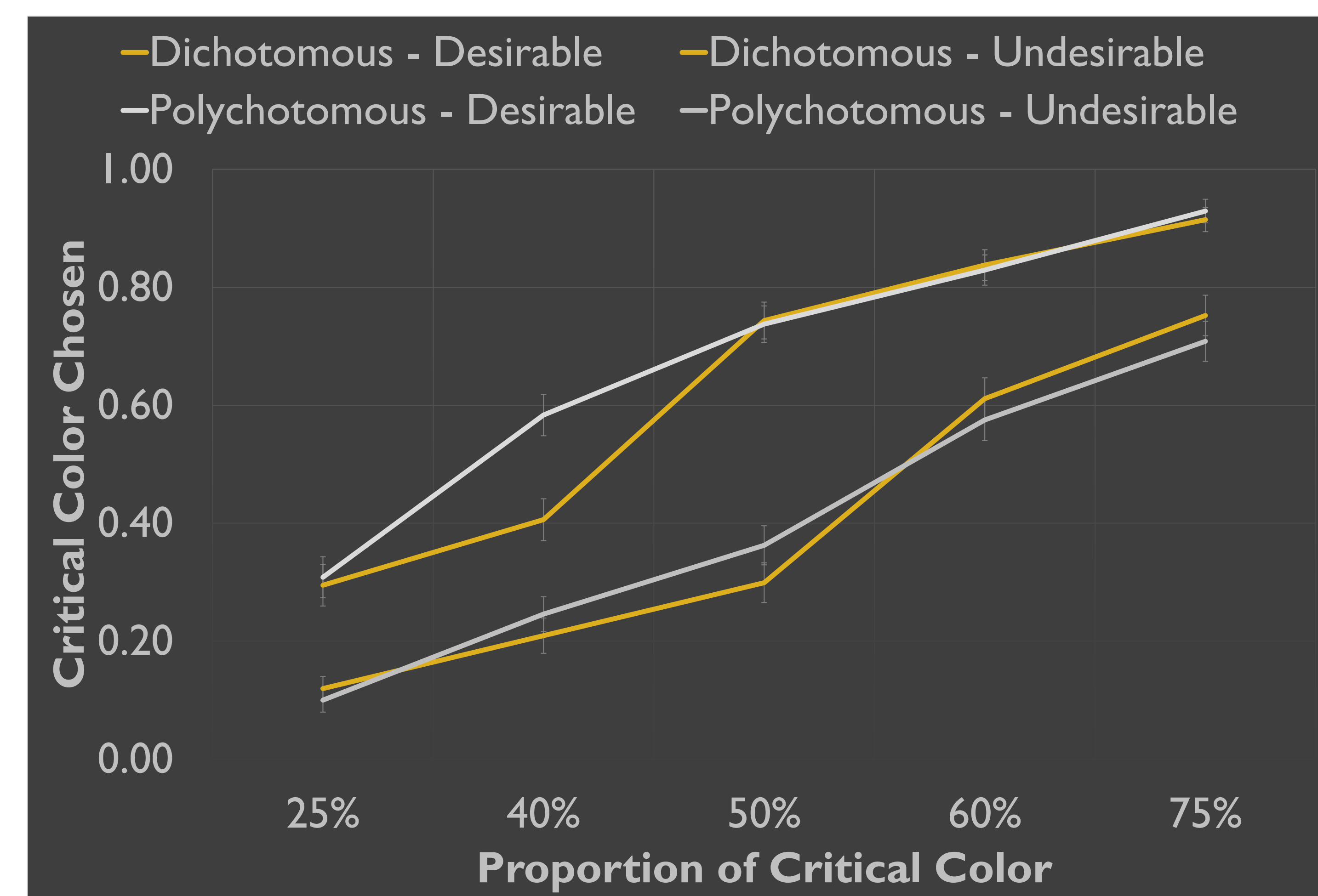
Hypothesis

- Because there are more decision strategies for the polychotomous condition, it was hypothesized that there would be *more* wishful thinking in the polychotomous versus the dichotomous condition.

RESULTS



- Overall, people predicted the desirable color more than the undesirable color (wishful thinking; $p < .001$).
- People were sensitive to the proportion of the colors ($p < .001$).
- There was more wishful thinking when there was more uncertainty ($p < .001$).



- Significant wishful thinking differences in the 40% condition ($p = .029$).
- Otherwise, equal amounts of wishful thinking across outcome conditions ($p = .357$).

Conclusions:

- There was significant wishful thinking and people were sensitive to the proportions of the colors.
- There was more wishful thinking when there was more uncertainty.
- People are NOT more biased when there are more outcomes.

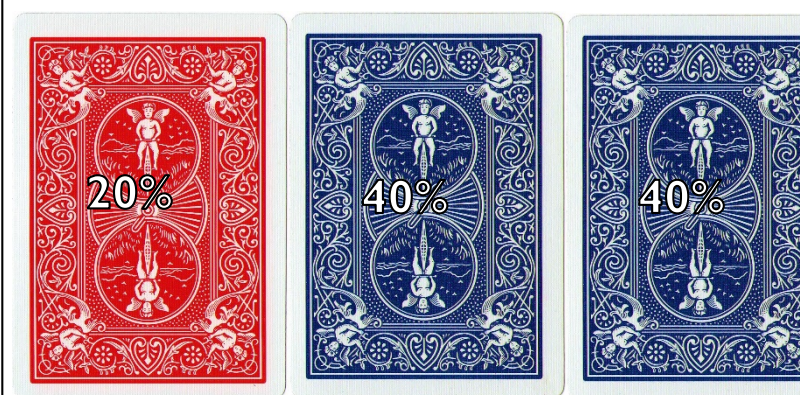
BEYOND DICHOTOMOUS OUTCOMES

- Overchoice:** The decreased ability to make decisions as the number of outcomes increase (Schwartz, 2004).
- Alternative Outcomes Effect:** People's belief about the probability changes as the distribution of the outcomes changes (Windschitl & Wells, 1998).
- The Dud-Alternative Effect:** Unlikely alternative outcomes increase perceived probability of focal outcome (Windschitl & Chambers, 2004).

RATIONALE

Objective Likelihood

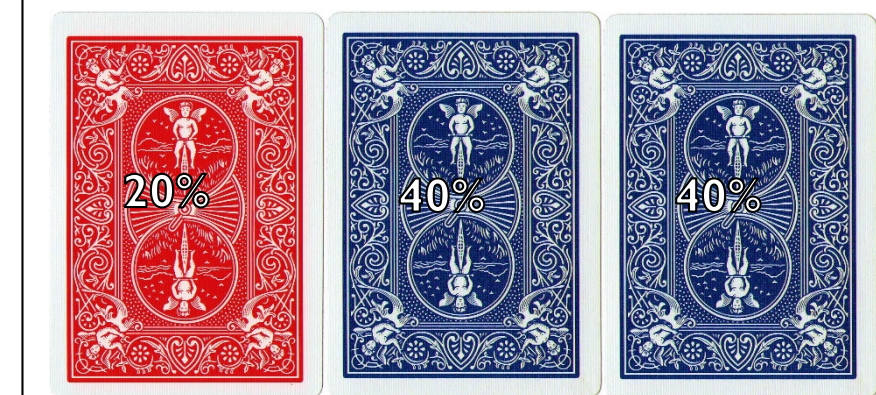
Evaluate objective likelihood of event based on information available



= 20%

Number of Options

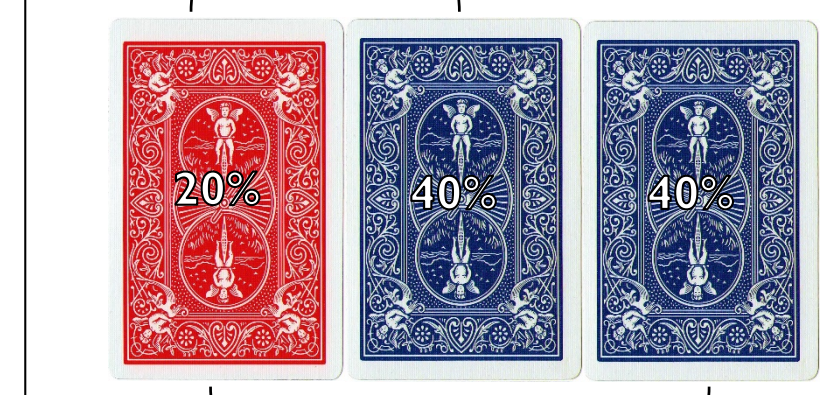
Weighting each option as equally likely



= 1/3

Pairwise Comparisons

Compare focal outcome with each alternative in turn



= 50%

People may be motivated to use a different decision strategy depending on preference for one outcome over others

REFERENCES

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