

Wait, Wait, Don't Tell Me:

How Statistical Versus Summary Information May Reduce the Desirability Bias

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CURRENT STUDIES

It is a common belief that more information leads to better decision-making (e.g. political elections and gambling). What if this is not the case? The desirability bias is the increased perceived likelihood for desired outcomes. These studies manipulated the type of information (statistical versus summary) in order to measure changes in wishful thinking for various MLB and NFL games. Both studies found significant wishful thinking effects that were mitigated with statistical information and unchanged for summary information, despite the fact that the ultimate conclusions on who should win the game were identical.

THE DESIRABILITY BIAS + INFORMATION

Wishful thinking – the tendency to predict desirable outcomes (Krizan & Windschitl, 2007).

Factors that do not decrease WT:

- Accuracy incentives (Simmons & Massey, 2012)
- Experience and Feedback (Massey et al., 2011)
- Expertise (Olsen, 1997)
- Amount of Information (Smith et al., 2016)

People may be less influenced by their preferences if they must work towards a conclusion, rather than the solution being provided for them.



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 Olsen, R. A. (1997). Desirability bias among professional investment managers: Some evidence from experts. *Journal Of Behavioral Decision Making*, 10, 65–72.
 Simmons, J. P., & Massey, C. (2012). Is optimism real? *Journal of Experimental Psychology: General*, 141, 630–634.
 Smith, C. L., Smith, A. R., Windschitl, P. D., Stuart, J. O., & Rule, S. (2016, November). More isn't always better: Receiving additional information increases the desirability bias. Poster presented at the annual conference for the Society of Judgment and Decision Making, Boston, MA.

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STUDY 1

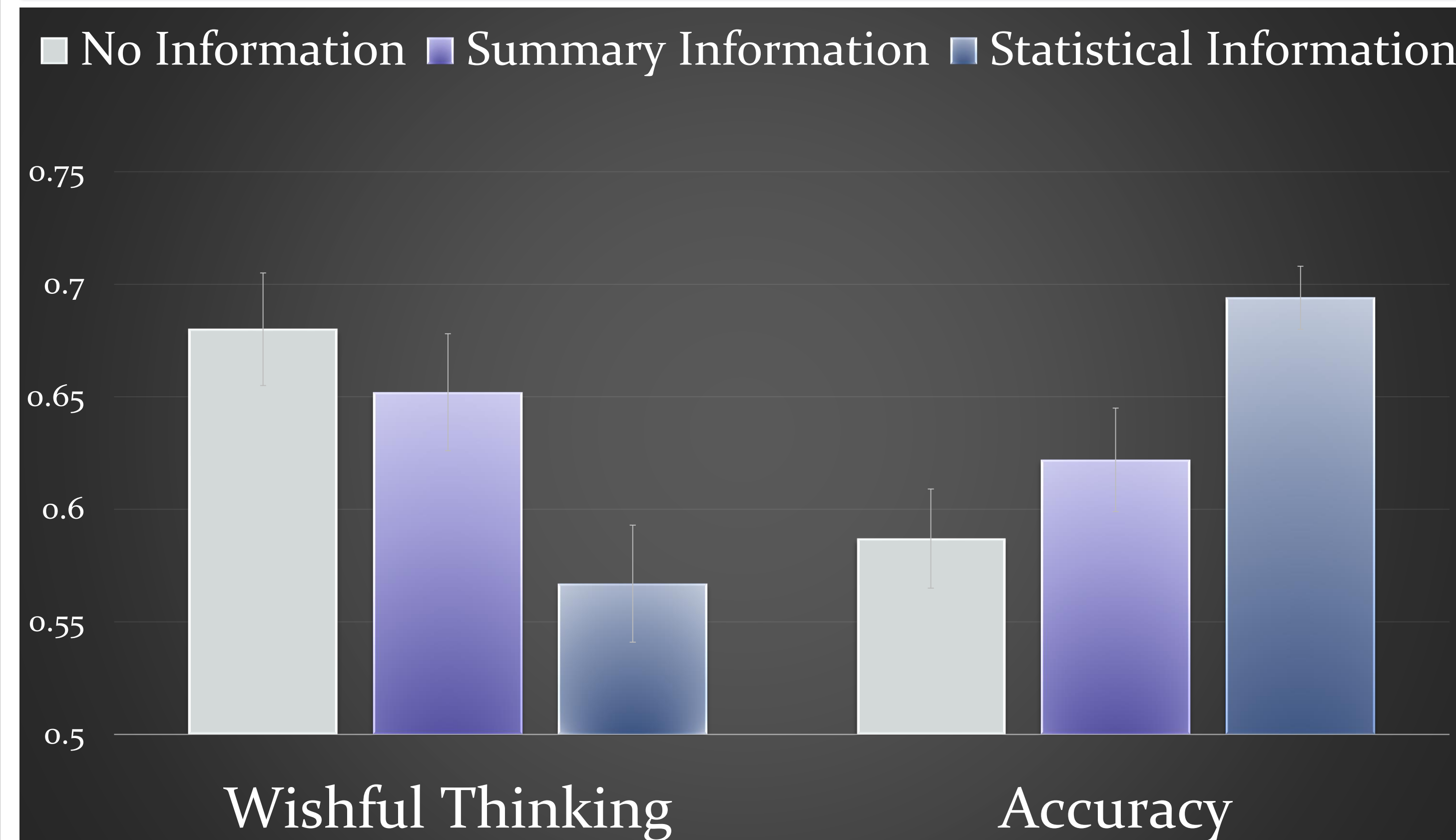
Information Conditions:

No Information: “Who do you think is going to win the game between the Yankees and the Cubs?”

Summary Information: Based on the percentage of games each team has won this season, the team batting average, and the team on-base percentage, the Yankees are favored to win by at least 1 run.

Statistical Information:

| | Yankees | Cubs |
|----------------------------|---------|------|
| % of games won this season | .532 | .432 |
| Team batting average | .290 | .240 |
| On base percentage | .897 | .317 |



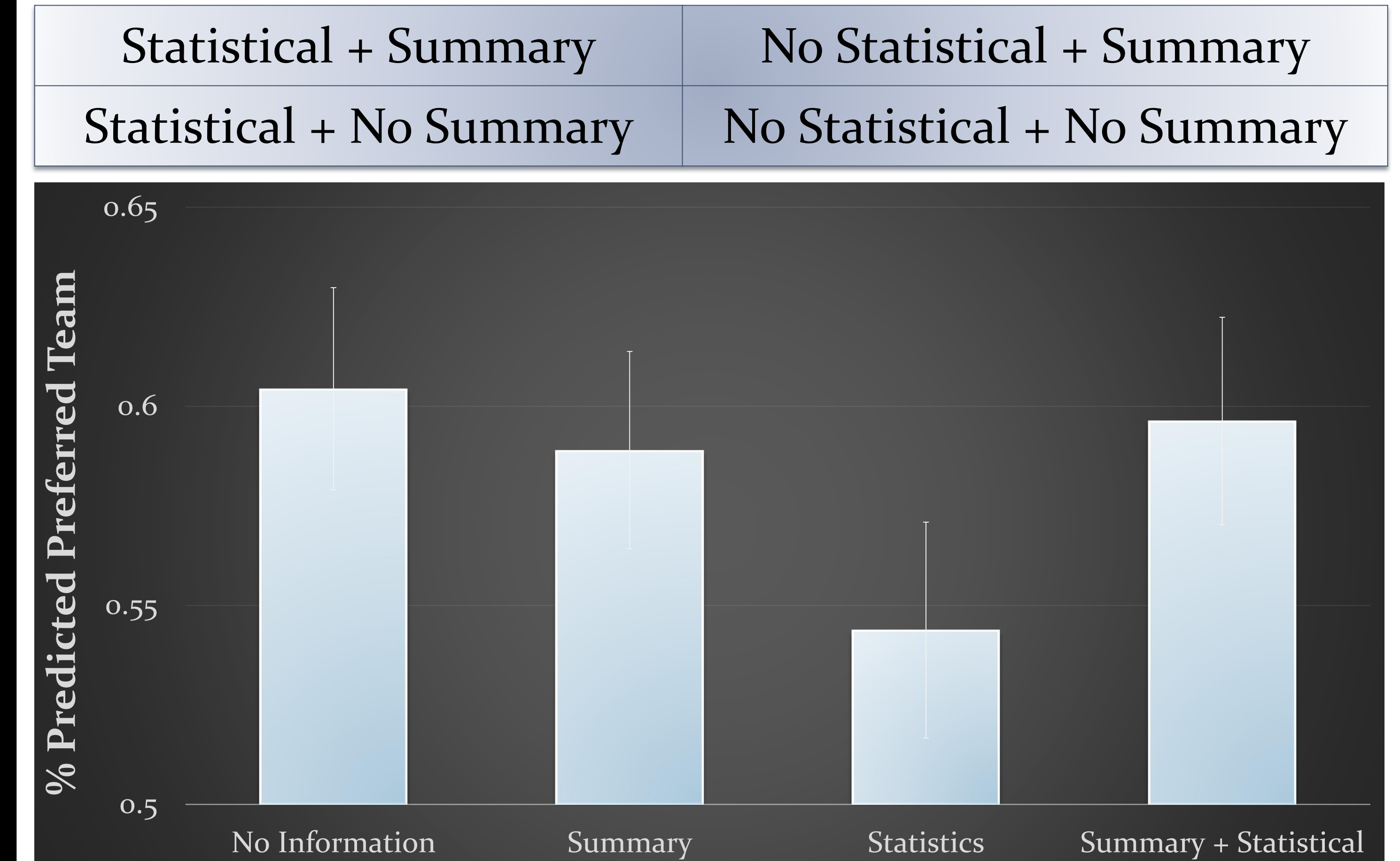
Wishful Thinking:

- Overall, people predicted their preferred team 62.6% of the time.
- Statistical Info showed less wishful thinking than no info ($p = .003$) and summary info ($p = .037$)

Accuracy:

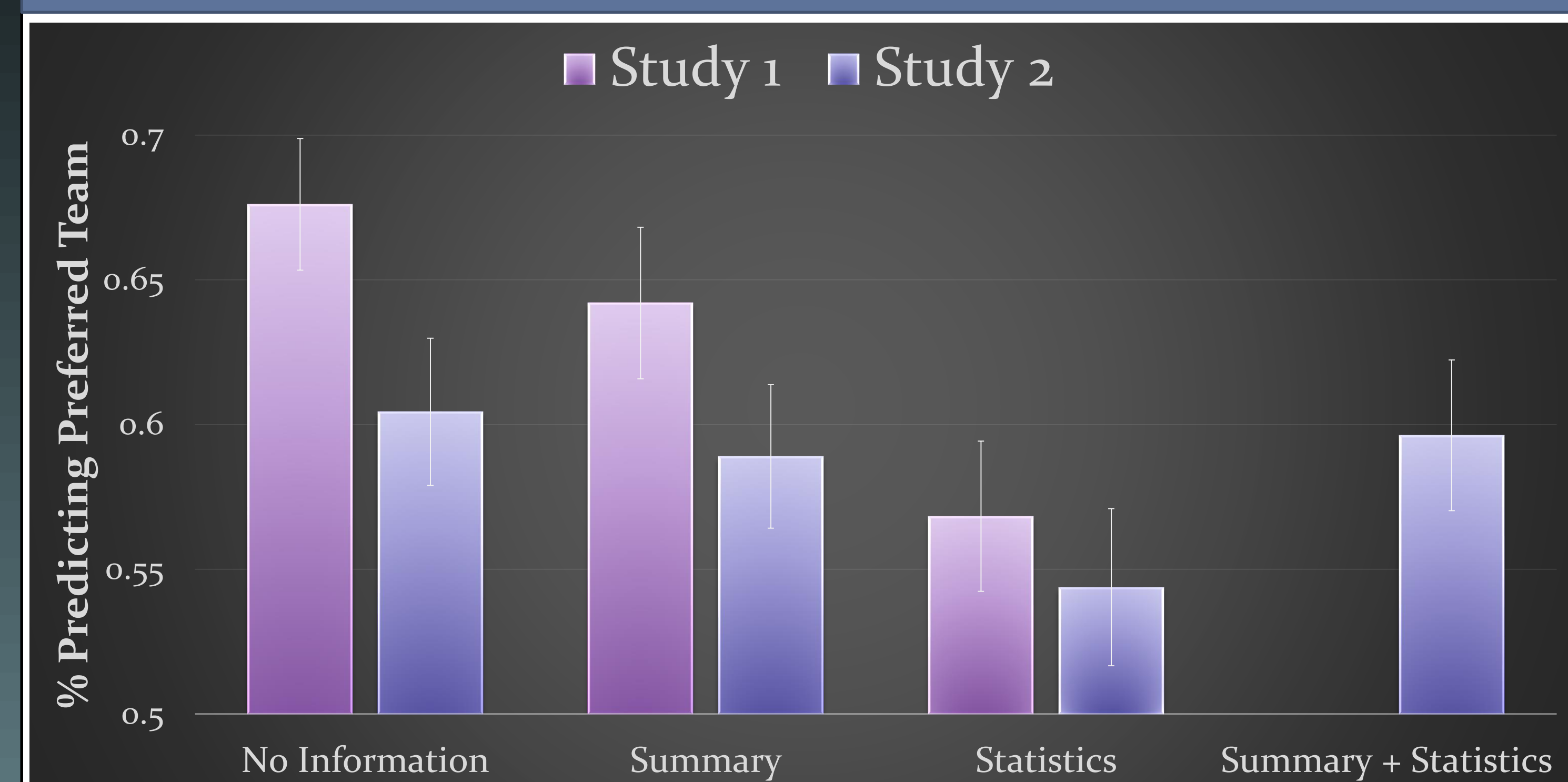
- Statistical Info showed greater accuracy than no info ($p = .001$) and summary info ($p = .01$).

STUDY 2



- Overall, people predicted their preferred team 58% of the time (wishful thinking)
- Statistics condition did not exhibit significant wishful thinking ($p = .111$) while other conditions did (all $ps < .01$)
- However, statistics condition showed only slightly less wishful thinking than the other conditions ($p = .193$)

STUDY 1 VS. STUDY 2



CONCLUSIONS

- Summary info certainly does not decrease wishful thinking
- Statistical info appears to decrease wishful thinking
 - Although not a significant decrease in Study 2.
- Different types of information provided should be explored (diagnostic versus non-diagnostic)
- Future studies should look into a self-driven approach versus a provided conclusion in a different context