

You may work with one partner on this assignment, submitting one report with both names, provided that both students contribute substantially to the work. Word-processed reports are preferred to hand-written ones. Please copy/paste relevant computer output into your report as appropriate.

Praising Intelligence or Effort?

Psychologists investigated whether praising a child's intelligence, rather than praising his/her effort, tends to negative consequences such as undermining their motivation (Mueller and Dweck, 1998). Children participating in the study were given a set of problems to solve. After the first set of problems, half of the children were randomly assigned to be praised for their intelligence, while the other half was praised for their effort. The children were then given another set of problems to solve and later told how many they got right. They were then asked to write a report about the problems for other children to read, including information about how many they got right. Some of the children misrepresented (i.e., lied about) how many they got right, as shown in the following table:

	Praised for intelligence	Praised for effort	Total
Misrepresented their score (lied)	11	4	15
Did not misrepresent (did not lie)	18	26	44
Total	29	30	59

- a) For each group, determine the proportion who lied.
- b) Do these proportions differ in the direction conjectured by the psychologists (as indicated in the first sentence above)? Explain.
- c) Describe how you could use index cards to conduct a simulation analysis for determining whether the difference between these proportions is statistically significant. Include the following information in your description:
 - i) how many cards you would use
 - ii) how many would be marked how
 - iii) how many you would deal out
 - iv) which kinds of cards you would count
 - v) what you would compare the results to, after you conducted a large number of repetitions
- d) Describe the null model underlying your simulation analysis.

It can be shown that the p-value for this study is .0298.

- e) Provide a complete, detailed interpretation (in one or two sentences) of what this p-value measures in this context (i.e., what is it the probability of?)
- f) Based on this p-value, is the observed difference between the groups statistically significant at the $\alpha = .05$ level? Explain how you know.

g) Summarize your conclusion. Be sure to address whether it's valid to draw a cause-and-effect conclusion between the communication medium and lying about the size of the pot in this bargaining game.