

# Tuesday Warm-Up (INTD262)

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## 1 Chapter 5 of *The Scientific Attitude*

1. Recall the fascinating story about psychological research, in which the author shares that 67 percent of psychologists who were asked to share their data did not share it<sup>1</sup>. (a) Were the rates of error higher or lower in the studies for which the authors did not share data? (b) In whose favor were the errors?
2. **The Wisdom of Crowds.** “Recent research in behavioral economics has shown that groups are often better than individuals at finding errors in reasoning.” (a) Why do you think this is the case? (b) Can you give an example of the wisdom of crowds thus far in our study of Latin American science? (c) Run the Wason card-selection task at your table with the following cards: 8, A, 11, and Q. Do you find this task easier to understand when working with a group? (d) Discuss the notion of *authority* as it relates to the wisdom of crowds.
3. Define the term *confirmation bias*.
4. **Let us do some p-hacking.** (a) Define the term p-hacking. (b) Go to the following link: <https://projects.fivethirtyeight.com/p-hacking/>. (c) Choose a political party (1) (Republican or Democrat), and then manipulate the degrees of freedom (2), noticing the effect on the data (3). (d) Make the economy bad when Democrats are in office, and make the results statistically significant. (e) Make the economy bad when Republicans are in office, and make the results statistically significant. (f) What recommendations do we find in the text to prevent p-hacking?

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<sup>1</sup>Robert Trivers. *The Folly of Fools: The Logic of Self-Deceit in Human Life*. New York, Basic Books (2011).