

# Class 25

## Effect sizes and $p$ -hacking

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November 27, 2017

# Statistical errors and $p$ -hacking

# Issues with statistics in modern science

- Over-reliance of  $p$ -values when determining an experiment's worth
- Data dredging/ $p$ -hacking
- Lack of transparency regarding statistical analysis
- Poor statistical practices among researchers
- Lack of reports about experiments that fail to reject the null hypothesis
- Ignoring or underemphasizing effect size

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- **FiveThirtyEight Applet** (<http://53eig.ht/HackingScience>)