

Writing a *Summary of Statistical Findings*

Here are several examples from *The Statistical Sleuth*:

- There is substantial evidence that mean left hippocampus volume is different for individuals with schizophrenia than individuals without schizophrenia (two-sided p -value = 0.0061, from a paired t -stat=2.236 on 14 d.f.). It is estimated that the mean volume is 0.20 cm^3 smaller for those with schizophrenia, with an associated 95% confidence interval from 0.07 to 0.33 cm^3 .
- There is suggestive, but inconclusive, evidence of a difference between the mean humerus length of survivors and the mean humerus length of those that perished (two-sided p -value = 0.08 from a two-sample t -stat=1.778 on 57 df). The mean length for those that survived is estimated to be 0.01008 inches greater than those that perished, with an associated 95% confidence interval from 0.001 inches less than to 0.021 inches greater.
- There is convincing evidence that seeding increased mean rainfall (one-sided p -value = 0.0070, t -stat=2.55 on 50 d.f.). The mean volume of rainfall produced by a seeded cloud is estimated to be 3.1 times as large as the volume that would have been produced in the absence of seeding, with an associated 95% confidence interval from 1.3 to 7.7 times.

My Guidelines:

1. Use two sentences
2. Use the language of the research problem and not just generic statistics-speak
3. One sentence should describe the degree of EVIDENCE which should be backed up by including the p -value, test statistic, and degrees of freedom in parentheses. (Refer back to Section 2.5.1)
4. One sentence should interpret the point estimate in the words of the problem and include a corresponding confidence interval. Don't forget the units on the estimate and confidence interval.
5. Do NOT use the word significant (or any form of the word) and do not use arbitrary p -value cutoffs