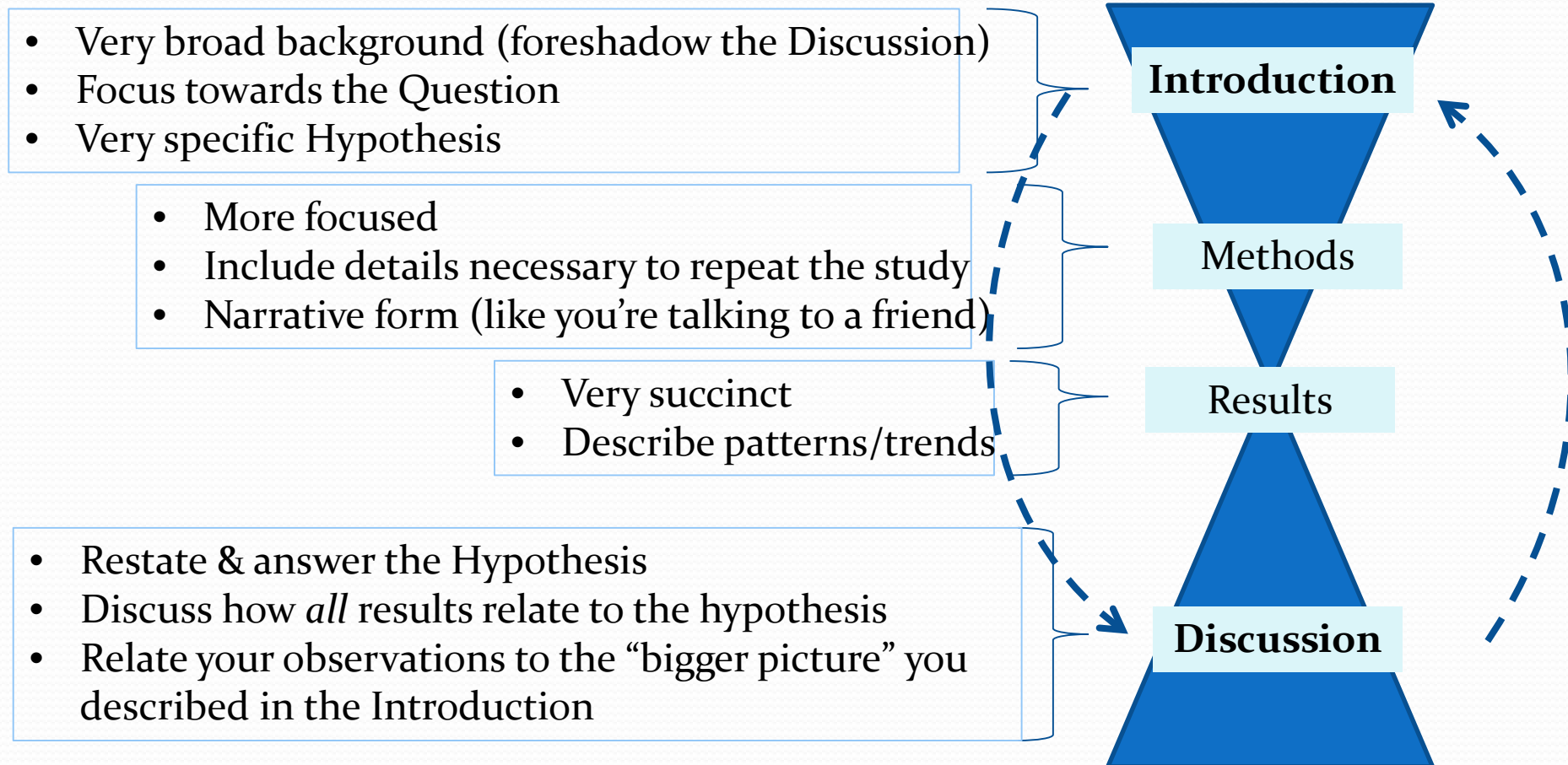


What to include in your paper

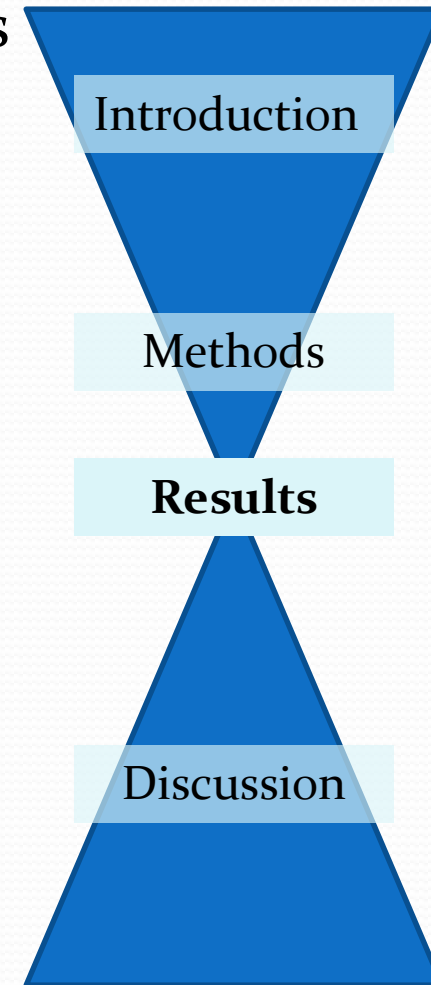
- Title
- Introduction
- Materials & Methods
- Results
- Discussion & Conclusions
- Literature cited

Science is storytelling!



Results

- Do not make any interpretations of the results
- Include text-based *descriptions* of graphs
 - Trends over time (*direction*)
 - Compare *within* and *between* treatment categories
- Do not restate values that are observed in the figure.
- Do not use the word ‘correlation’ when you haven’t done a regression/correlation statistical analysis!
- Do not use the word ‘significant’ unless referring to statistical testing results!



Introduction

- Reasons for conducting a project
 - I have observed that squirrels eat lots of human food
 - I wonder if squirrels choose foods similar to their ancestral diet.
- Relevant background info
 - Squirrels are more abundant where humans live (Katz, 2002).
 - Squirrels in urban areas forage for human food (Jones, 2015).
 - It is important to understand how squirrels forage in urban areas, as unhealthy diets may lead to higher rates of disease or mortality (Peterson *et al.*, 2008).

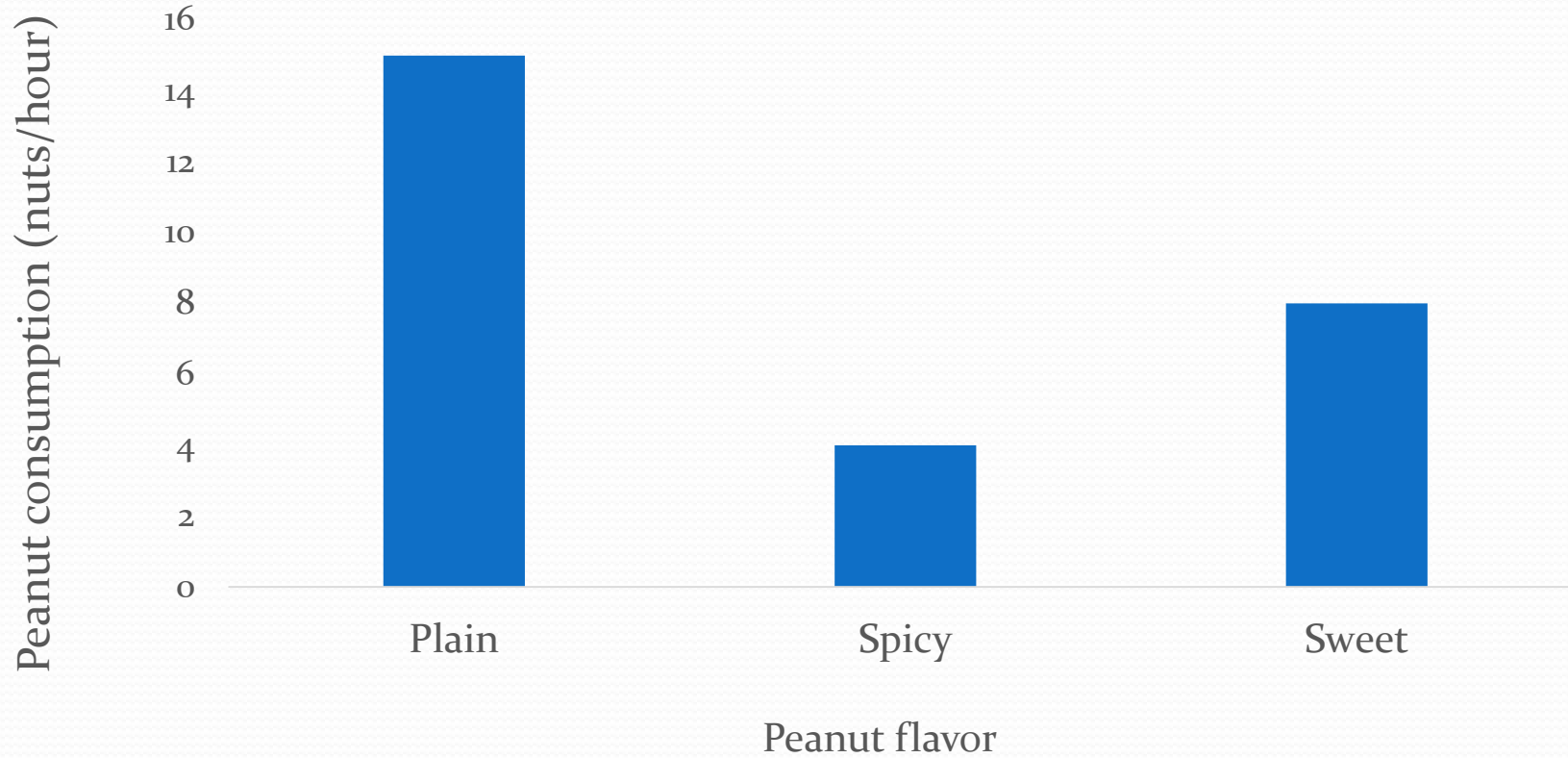
Question & Hypothesis

- Do squirrels have a preference for plain peanuts over other peanut types?



- I hypothesize that because plain peanuts are more similar to squirrels' natural diet, they will strongly prefer plain peanuts when offered a variety of peanut types.
- Subject Response Treatment Factor Prediction Mechanism

What do we expect?



Collect Raw Data

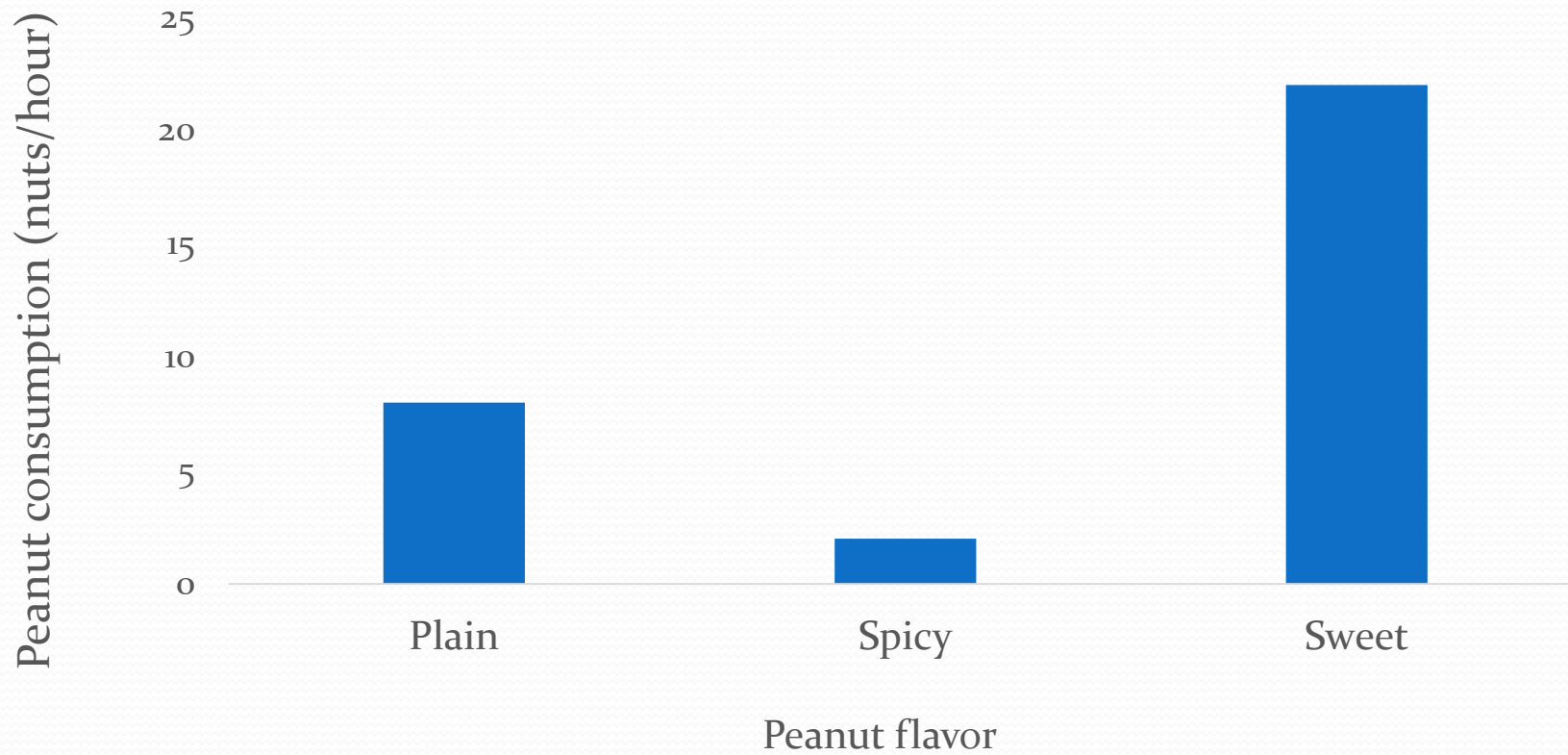
	Plain	Spicy	Sweet
Station 1	8	2	23
Station 2	7	4	19
Station 3	9	3	19
Station 4	11	0	25
Station 5	5	1	24

Does this data go in the Results or an Appendix?

Compute Data

- Use formulas (=average)
- Use the same program (ex: Microsoft Office, R, or Google Docs)
 - Don't mix & match (especially with Google Docs!!)
- Whatever you use, save your final report as a pdf!
 - This prevents formatting issues between programs

What do I find?



What to include in your discussion

1. Re-state the study scope and its main finding(s)
 - Restate hypothesis and predictions.
 - Could you reject your null hypothesis?
2. *Interpretation* of ALL your results with respect to your hypothesis.
3. Short reflection on major shortcomings of study that could have changed the outcome (not required).
 - “Human error” should be explicitly defined – what did *all* the humans do that could *change the outcome*?
4. Comparison of your findings with the literature (demonstrate knowledge of other, similar studies)
5. Overall importance or impact of your findings (broader impacts on how your study contributes)
6. Suggest new tests that could answer new questions or hypotheses generated by your conclusions.

SAVE YOUR REPORT AS A PDF!!!!!!!!!!!!!!

