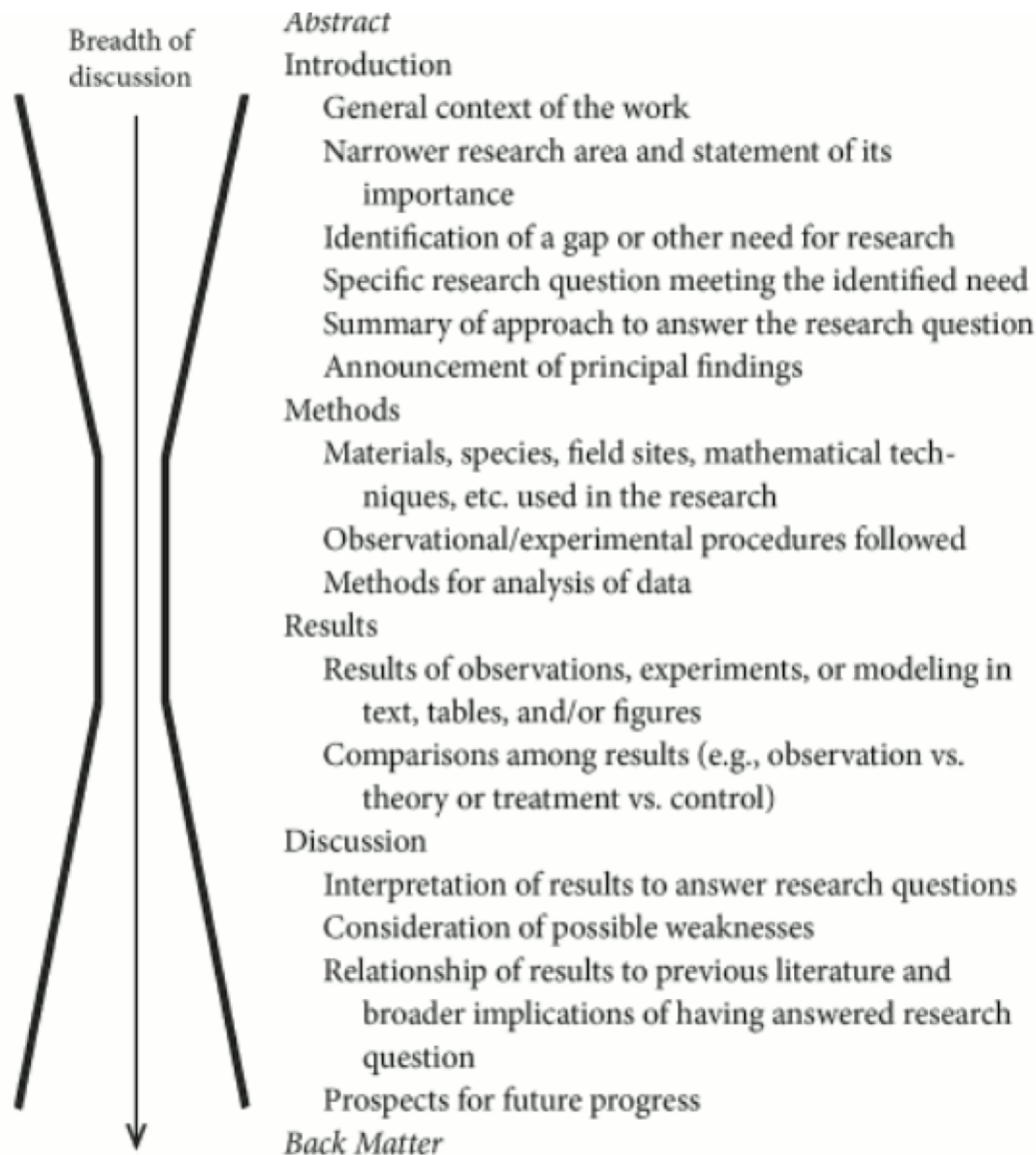


Discussion



"I didn't just jump to conclusions. I hopped and skipped first."

Discussion



Elements of the Discussion

- We listed four “elements” of a Discussion
 - Actually, I think it would have been better to split one of them
 - so today, five “elements”.
1. Interpretation of results to answer research question
 2. Consideration of possible weaknesses
 3. Relationship of results to previous literature
 4. Broader implications of answering research question
 5. Prospects for future progress

1. Interpretation of results to answer research question

- This is the key part - usually find it at beginning of *Discussion*
- Often occurs again at the end ("*Conclusions*")
- Some limited repetition of results often needed, but don't get carried away (looking to summarize and point out critical results)
- Should you point out when results were unexpected?
 - Unexpected results are memorable
 - Unexpected results are (often) honest
 - Unexpected results can be dissatisfying if unexplained

2. Consideration of possible weaknesses

- Need to be honest about the limitations of your work
- But this is often overdone - don't leave the reader with no reason to care!
- We use *hedging* to express limitations.
 - It *is likely* that...
 - It *is possible* that...
 - An *alternative explanation is* that...
 - *If correct*, our interpretation implies...

3. Relationship of results to previous literature

- You've answered your question. How does that fit into the broader field?
 - Support or contradict previous work?
 - Suggest a consensus in the field?
 - Suggest conflict in the field?
 - Raise new questions?

4. Broader implications of answering research question

- This can continue from “relationship to previous literature” - how does your work *move the field forward*?
- Are there economic, ecological, human-health implications (possibly in the distant future)?
- This is where you reward a reader who wasn't already interested in your study system or in your narrow question

5. Prospects for future progress

- Not “more research is needed” - too vague!
- What particular next steps are suggested by your work?
- Note that this doesn’t mean your work is incomplete - it means it’s valuable because it points new directions.

Conclusions?

- Do you need a *Conclusions* section?
- Journals vary, but I'm not a big fan.
 - A *Conclusions* is often a short repetition of the *Discussion*:
 - It might reiterate research question and answer
 - It might state significance of the answer
 - It might identify directions for future research
 - If your Discussion is complex enough that this is needed, ask yourself: should you simplify the Discussion instead?
 - However, wrapping up the Discussion is this kind of mini-summary isn't a bad idea.

Today's workshop

Discussion markup

- I will provide a paper.
- Annotate/highlight text serving each of these five functions:
 - (1) Interpret results to answer research question
 - (2) Consider possible weaknesses
 - (3) Relate to previous literature
 - (4) Consider broader implications
 - (5) Consider prospects for future progress
- Also, highlight hedges. Are they excessive?
- What is the function of the last 3 sentences – summary, major conclusion, or something else?
- What change would you make to the Discussion?