

Lecture 2 - Reading a Scientific Article

Argument, Data, and Politics: POLS 3312

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Reading a Scientific Article

- What is a scientific article?
- How do you read a scientific article?
- Activity
- Discussion of article

What is a scientific article on politics?

- A scientific article on politics is a report of original research
- It is published in a peer-reviewed journal
 - Peer review is not replication
 - Peer review is intended to ensure that the research is sound, the article is well-written, and that it contributes in an interesting way to the progress of the discipline
 - Peer review is sometimes biased, but double blind and multiple reviewers are the standard to minimize bias
- It is written by a political scientist for other political scientists
 - This does not mean it was written by someone with an advanced degree in political science
 - Peer review is blind to credentials

How do you read a scientific article?

- Read the abstract
- Read the conclusion
- Read the introduction
- Read the literature review selectively
- Read the theory

- Read the research design
- Read the results
- Read the conclusion again

What are you looking for?

- What is the research question? The puzzle
- What is the contribution to the literature?
- what is the theory?
- What is the research design?
- What are the main findings?

Research question

- What is the puzzle?
- what is the outcome the author is trying to explain? (dependent variable, DV, Y variable)
- This should be early in the abstract and the introduction

What is the contribution to the literature?

- What is the current state of the literature?
- What does the author take as settled?
- What is the current debate this is intended to address?
- Does the author offer a new theory, new data, or a new method?

What is the theory?

- What are the dependent variables (DVs, Y variables)?
- What are the independent variables (IVs, X variables)?
- What are the testable, falsifiable hypotheses?
- Are there any mediating or moderating variables? Any conditions?

What is the research design?

- What is the unit of analysis?
- What is the scope? (Time, geogrphy, population of interest, etc.)
- What is the method of data collection?
- What is the method of data analysis?

Results

- What are the main results?
- What are the main tables and figures?
- Significance and effect sizes
- Is the theory confirmed or disconfirmed?

Conclusion and discussion

- What are the main findings? What is unresolved?

- What are the implications for the literature?
- What are the implications for policy?
- What are the implications for future research?

Scavenger Hunt Activity



Journal Article Scavenger Hunt

Every scientific primary research article contains the following items
– can you find them all?

School where scientists did the work: _____

Date when article was received: _____

Date when article was published: _____

Main question being asked: _____

One method that was used: _____

Page of Figure or Table #1: _____

Main conclusion of the paper: _____

Reference #3 (first author's name): _____

BONUS QUESTION: What happens to an article between the time it is submitted for publication and the time it is published?

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Figure 1: Scavenger Hunt

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