Guideline for Analyzing Journal Articles

The purpose of this guideline is to help students analyze and critique journal articles that empirically apply one or more theories. The criteria and questions are listed in section one. Strategies for putting the criteria together are discussed in section two. When applying the guidelines, consider the strengths and the weakness in relation to each question and do not lose sight of the whole article. These guidelines are most appropriate for articles with empirical data.

Section One. Criteria and Questions for Analyzing Journal Articles

1. Research Question – (i) What question/s is the article trying to answer or objective(s) is the article trying to achieve? (ii) To what extent is the question/objective adequately justified as important to answer from the point of views of society and academia?

2. Contributions to the Literature – (i) What puzzle in the academic literature does the article attempt to help understand and what gap within that puzzle does the article attempt to help fill? (ii) How does the article contribute to understanding the puzzle and filling the gap in the academic literature? (iii) To what extent is the contribution to the academic literature justified as a significant advancement?

3. Main Argument(s) or Findings – (i) What main argument(s) is the author(s) trying to make? (ii) To what extent is the argument or finding stated clearly and explicitly? (iii) Does main argument adequately address the research question/objective? (iv) To what extent does the main argument advance the understanding of the puzzle and in filling the gap depicted in the scientific literature as claimed?

4. Research Design/Data Sources – (i) What is the research design/data sources (e.g. documents, surveys, interviews)? (ii) To what extent are all the steps of gathering and analyzing data described in a manner that is clear and transparent? (iii) To what extent are the research design and data gathering methods explicit enough to replicate? (iv) Are data limitations adequately addressed? (v) How appropriate are the research design and sources of data for addressing the research question/objective and contributing to the literature?

5. Tables and Figures – (i) How clear and informative are the tables and figures? (ii) Is there a detailed caption so the table and figure can be understood without searching the text? (iii) Do the variables names make sense? (iv) Are significant impacts clearly marked in the tables and figures? (v) To what extent are the tables and figures effective in expressing the basic argument of the article?

6. Theoretical Approach – (i) To what extent does the casual argument focus on effects or mechanisms or both? (ii) What concepts are serving as the independent and dependent variables? (iii) What causal process does the article make with the variables? (i.e., how are the variables related?) (iv) What is the theory and hypothesis(es) for the causal process and is the causal process described in article congruent with the causal process depicted in the theory? (v) Does the author adequately handle threats, such as rival explanations, to the causal process depicted in the article (this is called threats to internal validity)?

7. Operationalization – (i) To what extent are variables operationalized (measured) in a transparent and convincing manner? (ii) To what extent does variable operationalization (measurement) adequately represent the conceptual or theoretical definition of the variable? (iii) Are important variables not operationalized? Which ones?

8. Analytical Techniques – (i) How appropriate are the analytical techniques (statistical or other) given the data, research questions, and research design? (ii) Do the data provide clear support for the main argument? (iii) Does the author adequately discuss dissonant findings and alternate interpretations?

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1 Send comments, questions, or suggestions for improvements to chris.weible@ucdenver.edu. This guideline has been improved based on the feedback from many students and colleagues and was based initially on similar guidelines written by Jim Wilen and Paul Sabatier.
9. **Generalizability** – (i) To what extent does the author seek to generalize his/her basic argument to the context studied and to other contexts? (ii) How valid are the generalizations?

10. **Implications** – (i) What are the policy implications from the article? (ii) In what ways are the implications drawn from the arguments, research design, and data as found in the article? (iii) Are the policy implications adequately justified as important to society?

11. **Clarity of Writing** – (i) Is the article well-written? (ii) Is the writing clear? (iii) Could the article be written more succinctly?

**Section Two. Putting the criteria together and reading a journal article.**

Sometimes it is useful to have a strategy for applying the criteria above. The steps below provide one way for reading/critiquing a journal article.

**Step 1.** Read the title and abstract. Then skim through the whole paper taking about 10 seconds to get a feel for the methods of argument. Is the paper theoretical, empirical, or both? Decide whether this article contributes to your current research objectives before investing anymore time and effort.

**Step 2.** Read the introductory section. The introductory section usually starts with a broad introductory sentence/paragraph before narrowing down to the particular focus or topic of the paper. Look for the **contribution to the literature, basic arguments,** and **research question/objective.** Sometimes the basic argument is not mentioned in the introduction or only foreshadowed.

**Step 3.** Read the conclusions and scan the table and figures. Look for the **main arguments** and the **explanatory/descriptive approach?** The main arguments are often in the first paragraph in the conclusion, the last paragraph of the introduction, or in the abstract. Sometimes the main arguments are not clear at all. You will usually find a statement about the **generalizability** and the **policy implications** near the end of the conclusion.

Steps 1 through 3 should take about 10 minutes. At this point, you should have a good sense of the article and be able to answer some of the questions related to the **research question/objective,** the **contribution to science,** the **policy implications,** **generalizability,** and the **basic arguments.**

**Step 4.** Read the article through. The last sentence of the introduction usually describes the general layout of the paper. As you read the paper you will come across the theory and methods sections. Identify the **explanatory/descriptive approach** and the **research design/data sources.** Look for the expectations, propositions, or hypotheses. Usually there is a section on the case study or topic. Make sure that the author justified the importance of the case or topic of study.

Check out the tables and figures. Identify, if any, the independent and dependent variables. What analytical techniques (e.g., statistics) are used? Are the variables in the tables/figures clearly and consistently labeled? Is it easy to connect the variable label with the hypotheses, operationalization, and concept? Does the author describe the layout of each table and figure? Does the author adequately describe the methods used, explain why a particular method is used, and provide a clear and thoughtful interpretation of the results? How robust are the results?

At the end of the article is a section for discussions and conclusions. Does the author discuss the limitations of the article and the **generalizability** of the findings (usually found near the end of the conclusion)? Check again for the **main arguments, research questions/objectives, policy implications,** and the **contribution to science.** You will want to go back and reread sections of the paper to check for the consistency of the parts. Do the descriptive/empirical approach, data sources, and research design support the **main arguments**, answer the **research question/achieve the objective,** and support the claimed **contributions to the literature?** What have you learned from this result? What is the important insight? Is the paper important? What new research questions arise as a result of this paper, or are new directions for future research identified?

Completing steps 1 through 4 can take more than an hour. You will probably want to reread the article and skip back and forth to critique it.