Research Manuscript Critique Form

Citation
- Write the reference for the article you have chosen to critique in APA style. See the guidelines listed on the web site for week 2, point III, “Using APA Format.”

Problem
- What are the researchers trying to find out? What is the problem they are studying? Why is this problem important to study? Why bother to conduct this study? What benefits do the researchers cite?

Purpose
- Do the researchers aspire to explain a particular phenomenon? To predict a certain outcome given certain inputs? To evaluate a program, policy, or practice? To explore the possibility that a relationship may exist between variables? To describe a phenomenon, setting, environment, or aspect of culture?

Constructs
- What are the constructs they mention, or that you can reasonably infer? These will be single words or short phrases. If the researchers are testing or describing a particular theoretical framework, this should be mentioned, if appropriate, in the “Problem” section.

Hypothesis
- In experimental design, the hypothesis is a testable prediction about the relationship between two or more variables. In non-experimental articles, investigators often attempt to establish a causal relation between two or more variables even though they may not state a hypothesis explicitly.

Variables
- Constructs are expressed in abstract, high level, global terms. A variable is usually somewhat more concrete and often represents only one, limited aspect of a construct.
- Be sure to identify exogenous and endogenous variables, along with other variables that may be present.

Operational definitions
- Describe how the variables are observed or measured. Be sure to identify any instruments, such as an achievement test, personality inventory, or attitude scale.
- How well are the variables, and by inference, the constructs, related to the empirical research?

Subjects
- Who are the subjects? How many? How were they selected? From what location/setting? Is the population identified clearly? Can these data be generalized? What is the rationale for generalization? If more than one group is present, how were subjects assigned to groups?

Procedures
- **Data collection:** How were the data collected? Are the data quantified? What are exogenous (independent/selected/predictor/input) variables? What are the endogenous (dependent/criterion/predicted/outcome) variables?
- **Instruments:** What evidence do the researchers present to convince the reader that the measures are reliable and valid (trustworthy)?
- **Design:** Do the researchers use a design that enables them to rule out alternative explanations?
- **Reactivity:** Do the researchers discuss the potential problem of experimenter expectancy? (A particularly important consideration in face-to-face interviews, participant observation, etc.). Do researchers implement controls for this effect (e.g., blind or double-blind procedures)?
Data Analysis

- Do the researchers describe in detail how the data were analyzed? That is, given the raw data, can the reader duplicate the analysis (presuming that the reader possesses the necessary data analytic skills)?
- Do the researchers make unwarranted assumptions about the data?
- If the description of data analysis is not sufficiently detailed to permit replication by the reader, be sure to discuss the implications.

Results

- Do the results confirm the researchers' expectations, or are they contrary to expectations?
- Summarize the results as succinctly as possible. Consider a tabular presentation.

Believe

- What do the researchers want us to believe? The results may not be supportive.
- Do the researchers consider seriously alternative hypotheses? Do they acknowledge problems in the study?
- Do they mention limitations? Are they aware of implicit assumptions?

Substantiation

- **Data**: Do the data they present substantiate what they want the reader to believe?
- **Logical structure**: Does the design of the study support what they want us to believe?

How strong is the case?

- How adequate are the data and logical structure for supporting what they want us to believe?
- Is sufficient procedural information provided to enable replication of this study?
- Are the participants described in sufficient detail that we are justified in generalizing the results to the population?
- Are the tasks/manipulation/techniques/materials described sufficiently to permit generalization to other settings?
- Do you believe their conclusions? Is your decision based on the empirical evidence or on your own intuition?
- Do you see any critical flaws in the study? Can you suggest improvements in design?
- Did we find out anything from this study that we didn't already know? Was the study worth doing?