

JOURNAL ARTICLE EVALUATION OUTLINE

TITLE:

AUTHOR(S):

JOURNAL:

DATE:

VOLUME:

PAGES:

A. INTRODUCTION

1. DOES THE TITLE OF THE RESEARCH ARTICLE GIVE ANY INDICATION OF THE TYPE OF STUDY BEING REPORTED: IE., DESCRIPTIVE, CORRELATIONAL, OR CAUSAL - COMPARATIVE.
2. WERE THE INDEPENDENT AND DEPENDENT VARIABLES MENTIONED IN THE TITLE?
3. IN WHAT PART OF THE ARTICLE DID YOU FIND WHAT KIND OF STATISTICAL TOOLS WERE BEING USED?

B. ANALYZING THE VARIABLES.

1. WHAT IS (ARE) THE **INDEPENDENT** VARIABLES(S). BE SPECIFIC!
 - A. WHAT IS (ARE) THE NATURE OF THE MEASUREMENTS: IE., NOMINAL, ORDINAL, RATIO, INTERVAL, AS WELL AS WHETHER OR NOT THEY ARE CONTINUOUS OR DISCRETE.
2. WHAT IS (ARE) THE **DEPENDENT** VARIABLES(S). BE SPECIFIC!
 - A. WHAT IS (ARE) THE NATURE OF THE MEASUREMENTS: IE., NOMINAL, ORDINAL, RATIO, INTERVAL, AS WELL AS WHETHER OR NOT THEY ARE CONTINUOUS OR DISCRETE.

C. HYPOTHESES.

1. WERE THE HYPOTHESES CLEAR AND UNDERSTANDABLE?
2. WHAT WAS THE HYPOTHESIS (OR HYPOTHESES)? WHAT WAS THE NULL HYPOTHESIS (ES)? WAS IT APPROPRIATE FOR THE STUDY?
3. DID THE INTRODUCTION ADEQUATELY SET UP THE HYPOTHESES?
3. IF THE AUTHORS DID NOT PROVIDE HYPOTHESES, TRY TO "CREATIVELY" GENERATE WHAT YOU THINK THEY SHOULD HAVE BEEN.

4. ATTEMPT TO STATE THE NULL HYPOTHESIS FOR EACH ALTERNATIVE HYPOTHESIS.
5. DID THE AUTHORS SPECIFY A SPECIFIC **ALPHA RISK LEVEL** FOR REJECTING THE NULL HYPOTHESIS? IF SO, WHAT WAS IT? IF THEY DID NOT SPECIFY THE **ALPHA RISK LEVEL**, WHAT DO YOU THINK IT MUST HAVE BEEN?

D. SAMPLE.

1. DO YOU BELIEVE THAT THE SAMPLE WAS LARGE ENOUGH?
 - A. GIVEN THE SAMPLE SIZE COULD YOU COMPUTE THE **STANDARD ERROR OF THE MEAN**. TO ACCOMPLISH THIS YOU WOULD NEED THE VALUES FOR BOTH **N** AND THE **STANDARD DEVIATION**. DID THEY PROVIDE YOU WITH THIS DATA. WHAT DO YOU BELIEVE THE "CRITICAL REGION" FOR REJECTION OF THE NULL HYPOTHESIS SHOULD HAVE BEEN.

E. RESULTS AND CONCLUSIONS.

1. ARE APPROPRIATE STATISTICAL TOOLS USED?
 - A. EG., WAS THE "HOMOGENEITY OF VARIANCE" ASSUMPTION TESTED (AN F-MAX TEST). COULD YOU DO ONE?
 - B. EG., THE NATURE OF MEASUREMENT FOR THE INDEPENDENT AND DEPENDENT VARIABLES AND HOW MANY OF THEM MIGHT INDICATE THE TYPE OF STATISTICAL TOOL THAT SHOULD HAVE BEEN USED?
3. WERE GRAPHIC CHARTS USED?
 - A. IF SO, WERE THEY HELPFUL IN SHOWING THE RESULTS.
 - B. IF GRAPHIC CHARTS WERE NOT USED, TRY TO CONSTRUCT THEM FROM THE REPORTED DATA: IE., SKETCH OUT A BAR GRAPH, HISTOGRAM, OR FREQUENCY POLYGON.
4. DOES THE INVESTIGATOR RELATE THE RESULTS TO THE HYPOTHESES?
5. DOES THE INVESTIGATOR OVER-CONCLUDE, THAT IS, ARE THE CONCLUSIONS SUPPORTED BY THE DATA.