Checklist for Critiquing Research Articles

Title and Abstract

* Does the title accurately reflect the content of the article?
* If an abstract is provided, does the abstract properly summarize the content of the article?

Introduction

* Is pertinent background information presented in sufficient detail for the reader to understand the context of the research?
* Are important citations missing and is the salient literature reviewed?
* Is the background clearly and concisely written, or is unnecessary detail included?
* Does the article include clear statements regarding the purpose of research, its objectives and hypotheses?
* Is the stated hypothesis clearly derived from the rationale? Are other hypotheses consistent with the model or theory being tested?
* Are the main variables clearly defined in both positive and operationalized terms?

Participant Selection (Sampling Procedures)

* Does the article include clear statements regarding the sampling procedure used (probabilistic vs. non-probabilistic)?
* Are sample characteristics reported?
* Is the sample appropriate for the research question?
* Does the article include a statement of ethics, informed consent, or debriefing of participants?
* If deception was involved in the instructions to the participants, how were participants debriefed?
* If some participants withdrew from the study, does the article include information on possible differential attrition?
* Is the sample size adequate for the study?
* Can results be generalized from this sample to the intended population?

Procedure Section

* In general, are the procedures appropriate to the research question?
* Are there possible confounds in the study?
* Are the procedures described in sufficient detail to allow replication?
* Is the training of raters/clinicians reported?
* If more than one measure was used, was the administration order counterbalanced? Were possible order effects addresses?

Measures Section

* Is there an explicit rationale for the measures selected?
* Is method selection derived logically from the hypotheses?
* Are the psychometric properties of the measures (i.e., reliability and validity) reported and are they adequate?
* If variables are scored by observers using categories or codes, is the inter-rater reliability reported?
* Are possible effect of testing and instrumentation decay addressed and/or ruled out?

Statistical Analysis and Results

* Are the statistical analyses appropriate for the research design and the types of variables involved?
* Are the assumptions of parametric tests addressed and satisfied?
* Is the sample size sufficient for the chosen statistical tests?
* Are tests of statistical significance properly used and reported (e.g., risk of type-I and type-II errors, Bonferroni adjustment, etc.)?
* Are practical significance (magnitude of effect size) and clinical significance addressed?
* Are standard error of measurement and confidence intervals reported?
* Are the results clearly explained and displayed? Are tables and figures used appropriately?

Discussion and Interpretation

* Are the results discussed fully?
* Is the discussion focused on findings, or is it digressive or speculative?
* Are limitations of the study and/or methodological biases addressed?
* Are the results generalizable?
* Are directions for future research suggested?
* Are discrepancies from previous findings in the research literature explained?
* Are possible alternative interpretations considered?

General Issues

* Is the writing style understandable, clear, and appropriate to the intended audience?
* Are the various sections of the report integrated in a coherent manner?
* Do sentences and paragraphs follow one another logically?
* Are references (citations and quotations) used and identified appropriately?

Additional Resources:

Holosko, M. J. (2006a). A suggested authors’ checklist for submitting manuscripts to Research on Social Work Practice. *Research on Social Work Practice, 16*(4), 449-454.

Holosko, M. J. (2006b). *Primer for critiquing social research: A student guide.* Belmont, CA: Thomson Brooks/Cole.

Hyman, R. (1995). How to critique a published article. *Psychological Bulletin, 118*(2), 178-182.

Oxman, A. D. (1994). Checklists for review articles. *British Medical Journal, 309*(6955), 648-651.

Some useful guidelines for writing article critiques can also be found at the Writing Center of Saint Mary’s University of Minnesota (<http://www2.smumn.edu/deptpages/tcwritingcenter/forms_of_writing/summ_crit.php>): “Critiques” by Susan Katz and Jennie Skerl.