Beck (1990) has developed a list of insightful questions that every researcher should answer satisfactorily before submitting a final version of a research report. Although she created it for students and professional colleagues in the field of nursing, we have adapted her list of questions to apply to research report writers in general. The following checklist, based on Beck's original list, should both help you evaluate the reports you read and serve as a guide as you assess your own writing.

**CHECKLIST**

**Criteria for Critiquing a Research Report**

**STEP 1. THE PROBLEM**

- Is the problem clearly and concisely stated? [YES] [NO]
- Is the problem adequately narrowed down into a researchable problem? [ ] [ ] [ ]
- Is the problem significant enough to warrant a formal research effort? [ ] [ ] [ ]
- Is the relationship between the identified problem and previous research clearly described? [ ] [ ] [ ]

**STEP 2. LITERATURE REVIEW**

- Is the literature review logically organized? [ ] [ ] [ ]
- Does the review provide a critique of the relevant studies? [ ] [ ] [ ]
- Are gaps in knowledge about the research problem identified? [ ] [ ] [ ]
- Are important previous research studies relevant to the topic included in the literature review? [ ] [ ] [ ]
- Are all cited works included in the reference list? [ ] [ ] [ ]
- Are all works included in the reference list cited in the literature review or elsewhere in the report? [ ] [ ] [ ]

**STEP 3. THEORETICAL OR CONCEPTUAL FRAMEWORK**

- Is the theoretical framework clearly applicable to the problem (as opposed to being a "stretch" in which the theoretical framework in only marginally relevant to the problem)? [ ] [ ] [ ]
- If a conceptual framework is used, are the concepts adequately defined, and are the relationships among these concepts clearly identified? [ ] [ ] [ ]

**STEP 4. RESEARCH VARIABLES**

- Are the independent and dependent variables operationally defined? [ ] [ ] [ ]
- Are any confounding variables present? If so, are they identified? [ ] [ ] [ ]

**STEP 5. HYPOTHESES**

- Are the hypotheses clear, testable, and specific? [ ] [ ] [ ]
- Does each hypothesis describe a predicted relationship between two or more variables included in each hypothesis? [ ] [ ] [ ]
- Do the hypotheses flow logically from the theoretical or conceptual framework? [ ] [ ] [ ]
STEP 6: SAMPLING

Is the sample size adequate?
Is the sample representative of the defined population?
Is the method for selection of the sample appropriate?
Is any sampling bias in the method acknowledged?
Are the criteria for selecting the sample clearly identified?

STEP 7: RESEARCH DESIGN

Is the research design adequately described?
Is the design appropriate for the research problem?
Does the research design address issues related to the internal and external validity of the study?

STEP 8: DATA COLLECTION METHODS

Are the data collection methods appropriate for the study?
Are the data collection instruments adequately described?
Do the measurement tools have reasonable validity and reliability?

STEP 9: DATA ANALYSIS

Is the results section clearly and logically organized?
Is the type of analysis appropriate for the measurement scale (nominal, ordinal, interval; ratio) for each variable?
Are the tables and figures clear and understandable?
Is each statistical test an appropriate one for answering the research question?

STEP 10: INTERPRETATION AND DISCUSSION OF THE FINDINGS

Does the investigator clearly distinguish between actual findings and interpretations?
Are the interpretations based on the data obtained?
Are the findings discussed in relation to previous research and to the conceptual/theoretical framework?
Are all generalizations warranted and defended?
Are the limitations of the results identified?
Are implications of the results discussed?
Are recommendations for future research identified?
Are the conclusions justified?