Methodology

Quantitative Research Designs

Subjects

Describe the subjects. Focus here on sample size, and the proportion in the sample of males, females, various ethnic groups, and age.

Design

Describe the overall research plan, and type of research, i.e. experimental, survey, case study.

Variables

Describe the variables used, characteristics of measurements, reliability and validity. Here, go into detail about your *independent* variable; that is, the variable that you are manipulating. Also, go into detail about your *dependent* variable; that is, the variable you are measuring. If you are using surveys or other instruments, describe these instruments. How were they normed? What are their validity and reliability coefficients?

Use operation definitions to discuss your variables. For example, how is self-esteem defined in your study? What instrument did you use to operationalize this construct? *Operational definitions* are important. These definitions allow anyone interested to reproduce your study using exactly the same measures.

Procedures

Describe the steps required to carry out the data collection, especially what happens to subjects if you have them.

Statistical Hypothesis

There are two types of hypotheses. The research hypotheses which is what you are expecting to find, and the null hypotheses which is the hypothesis of no difference or the status quo. The hypothesis you test is the null hypothesis.

Analysis

Here you want to name the specific statistical procedure you used to analyze your data.

Qualitative Research Methods

Type of Design

- Tell the reader specifically about the design of the study— the *approach* to data collection, analysis and report writing (go back to table of Research Paradigms)
- Describe the characteristics of design
 - Typical unit of measure
 - Any other specific characteristics of design
 - Subjects or informants in the study (may need to be especially conscious of anonymity here)

Researcher's Role

- In some studies it is appropriate to include statements about the researcher's past experiences with the topic, the setting or the subjects
- Steps taken to gain access to the subjects if Institutional Review Board Permission was required indicate it here
- Comment on any sensitive ethical issues that need to be taken into consideration to maintain anonymity of subjects

Data Collection Procedures

- Indicate types of data collection used
 - o Interview
 - o Observations
 - o Focus Groups
 - Document Analysis (Meeting Minutes, Newspapers)
 - Audio Visual (photographs, art, film)
- Qualitative data analysis procedure can be eclectic—unlike quantitative procedures which
 make distinct separations between procedures qualitative procedures can simultaneously
 engage in numerous procedures
 - o Collecting from the field, sorting into categories, formatting the information
- Describe the process of "reduction" or interpretation that you will use to organize the data
- Discuss matrices or coding systems/ programs you will be using

Verification

- Discuss the issues of internal validity—accuracy of the information and whether it matches reality
 - o Member checks
 - Inter-rater procedures
 - Triangulation
- Discuss limitations to generalizability
 - Remember that the purpose of qualitative data is not to generalize findings but to form an interpretation of events but you still need to indicate limitations to generalizability