

Proposal Exercise Assignment 2

Now that you have identified a research paper, we are going to assess it from the bottom-up. We will study what they did and why they did it.

To begin with, identify all the variables in the study and point out how they were operationalized and measured. A variable is a construct which can be assigned a value which varies. Put differently, it is a quantity capable of assuming any of a set (multiple) values.

Sometimes people confuse a variable with a value of a variable. For example, a study may have two groups: An experimental and a control group. In this case, the variable GROUP varies in one of two ways (control and experimental). The control group then is a value of the variable GROUP and is itself not a variable (The control group does not itself vary). Remember the opposite of a VARIABLE is a CONSTANT.

A variable may be measured on a simple scale and thus vary in only limited ways. For example, gender as a variable usually varies between two values: male or female. Alternatively, a variable may be measured on a more complicated scale and thus vary in more extensive ways. For example, aggression as a variable may be measured as the frequency (from 0 to any number) of behaviors identified as aggressive (hitting, etc.)

Identifying all the variables in a paper will involve carefully reading the method section of a paper. In this section, all the procedures the researchers employed to collect data will be described. The procedure to collect some of the variables in the study may not be specifically reported in the method section but even these variables need to be reported. So you should read other sections of the paper, just to be sure that you report all the variables in the paper. For example, scan the abstract and the introduction to get a sense of which variables the authors talk about measuring. Also, scan the results section to see what variables were analyzed.

Your write-up of this assignment should include the variables measured and how each one was operationalized. An example is given below:

Variables Measured

Gender

Aggression

Operationalization

Self report of male or female

Checklist of behavior identified as aggressive, like hitting, biting, pushing.

As we continue with lecture today and next week, we will discuss operationalization and measurement issues in psychology. We will identify factors associated with poor operationalization and measurement techniques. As we go through the lecture, find ways in which these issues apply to your paper. It is important to tear into the study your paper details in order to understand it thoroughly. **Figuring out where all the numbers came from, what they mean, and the problems associated with them is a central step to fully appreciating your paper.** So as my favorite science teacher would say, "ASK QUESTIONS, GET MESSY, MAKE MISTAKES!" (that teacher would be Ms. Frizzle on the Magic School Bus).