The Method Section

Method Section

The Method section comes after the title page, abstract, and introduction, but we discuss it before all of those because it is the only section you have enough information to write about before you collect your data. The Method section is the section in which you describe the details of how your study was conducted. You haven’t conducted your study yet, but go ahead and write in the past tense because that is the tense you will eventually need (e.g., “Participants completed a questionnaire…”).

How Much Detail?

You should provide sufficient detail so that your study could be replicated in all its essential characteristics. However, you should omit aspects of the study that are unlikely to be important to the outcome: exact room temperature, color of the room, or details about the furniture can be omitted (assuming they are not independent variables). In addition, you should not repeat information that was presented in another section. If you describe the questionnaire in the Materials subsection, do not also describe it in the Procedure subsection.

General Advice on Style

Labels. Come up with labels for your independent and dependent variables and the levels of the independent variable that are concise and easy to understand. DO NOT refer to the two levels of your independent variable as “Group A” and “Group B” or “Group 1” and “Group 2.” Nobody will ever remember which one is which. Instead, call them “the $1 condition” and “the $20 condition” or the “low anxiety group” and the “high anxiety group.” Make your label stick closely to how you are measuring or manipulating your variable: the label “I.Q. score” would be preferred to the more abstract label of “intelligence.”

Numbers. APA style requires that numbers that appear at the beginning of a sentence be spelled out: “Fifty percent of the participants…” rather than “50% of the participants.” In addition, all numbers less than 10 should also be spelled out: “…nine…”

The Method section has three main subsections: Participants, Materials, and Procedure. Each subsection has its own heading, the formatting of which is described in the APA Publication Manual (6th edition) on pages 29-32 and demonstrated on pages 44 and 54.

Formatting Headings

The headings are the words that are offset from the text that organize the text into sections. You can read about the official guidance on heading formatting on pages 62-63 of the 6th edition APA manual. In general, the rules for headings are to put words in bold and to either center them (for major sections: abstract, intro, methods, results, discussion, references) or make them flush-left (for subsections, like within the Method section).

Participants

1. How many?

2. How were they selected (e.g., from introductory psychology courses, acquaintances of the experimenter, etc.)? If you got participants from different sources, describe the percentage obtained from each.

3. Essential demographics information: percentage female (or male), age range and average age, and the percentage of participants belonging to various ethnic groups (include at least “Caucasian,” “African American,” “Latino/a,” “East Asian,” “Indian,” “Native American,” and “other”). Note: names of ethnic groups are proper nouns and should be capitalized. The proper form for using a label to describe a group of people is to use the label that is generally approved by that group.

4. If you did not use data from some of the participants, you must explain the rule you used to exclude the data: error rates above ____%, participant expressed suspicion, etc. You will not know these until you conduct your study. If no data was excluded, you do not have to mention anything.

by Bill Altermatt, last updated 01/19/2012
Note: An error commonly made by beginning researchers is to state that participants were obtained "randomly." Do not use the term "random" lightly: it implies that every member of the population had an equal probability of inclusion in your study. Unless you went to great pains to obtain a truly random sample, do not use the word "random." You could say that you obtained a "convenience sample," or you could simply not mention the sampling procedure you used and the reader will assume that it was a convenience sample.

Materials

In this section, you should provide a description of any equipment or physical settings that were important aspects of your study. If you are conducting a study that involves precise measurement, you will want to be very specific about the equipment you used. For example, if you are measuring how quickly a participant responds to a stimulus on a computer screen, you would need to describe the software you are using, important characteristics of the monitor (size, refresh rate, contrast, etc.), and distance of participants from the monitor. Do not bother describing the size of the room you used or its general layout unless these are important to the study.

Questionnaires. One of the most common elements of the Materials subsection is a questionnaire. If you used a questionnaire in your study, you will want to describe:

1. The source of the questionnaire (if it was originally created by someone else, you should cite the original source and include it in your References section)

2. What construct the questionnaire is designed to measure: "...designed to measure the degree to which people believe in government conspiracies." Note: your questionnaire is not designed to test your hypothesis, it is designed to measure a variable. For example, your questionnaire cannot directly measure "whether men and women differ in their attitudes toward gun control." That's what your study might be designed to test, but the questionnaire in that study would only measure attitudes toward gun control.

3. The number of items in your questionnaire

4. One to three sample items. If you are creating a new questionnaire, place the full set of items in an Appendix and refer the reader to the Appendix: "(see Appendix for complete list of questionnaire items).". An Appendix would appear after the References section but before any Figures or Tables.

5. Evidence that the questionnaire is reliable and valid. This includes any reliability estimates (e.g., Cronbach's alpha, test-retest reliability) that might be available from previous research. Occasionally, researchers will put the reliability that they obtain in the present study into the Method section rather than the Results section. If you are creating the questionnaire yourself, discuss how you are guaranteeing construct validity.

Procedure

In the procedure section, the researcher provides a step-by-step description of the participants' experience. Do not describe any data analysis or other actions taken by the researcher that do not directly involve the participants themselves. Some common elements in the Procedure section include:

1. Instructions to participants. What were they told the study was about? "Participants were told that the study was designed to explore the first impressions people form when they see a picture of someone."

2. Informed consent. Did the researcher obtain informed consent? Was any deception used? Were participants informed about the confidentiality of any sensitive information?

3. Assignment to conditions. How was this done? Were participants randomly assigned? Did you use matching? Did participants assign themselves to levels of the independent variable?

4. Experimental manipulations. How were participants treated differently across conditions? Be careful not to duplicate information you have already presented in the Materials section. For example, if...
you’ve already described a high-fear video and a low-fear video, do not describe them again here. Instead, assume that the reader will remember the labels you introduced in the Materials section and simply state that participants watched either the high-fear or the low-fear video.

5. *Measurements.* Describe the format, time, place, and personnel who collected the data. “The authors went door to door in a residence hall between 7pm and 10pm to solicit participants, who generally completed the questionnaire within 10 minutes.”

6. *Experimenter bias.* If the researcher or someone else who knew the hypothesis collected the data, how did you reduce the possibility of experimenter bias?

7. *Debriefing.* Were participants debriefed? Were they given a written debriefing or did the researcher conduct an oral debriefing?

8. *Dismissal.* This is a concise way to conclude the Procedure section, e.g., “Participants were given a written debriefing, thanked for their participation, and were dismissed.”