Guidelines for Writing APA Style Method Sections

APA style research manuscripts have a standard format for the information presented in the Method section (note it is Method, not Methods). However, due to the wide variety of research designs, Method sections will vary based on the types of materials and techniques described. In many cases, a Method section will include at least the three subsections described below (i.e., Participants, Materials, Procedure); these sections will provide the basic information for a research project. Additional sections can be added when needed to explain more complex designs (e.g., Apparatus, Design).

Participants. The Participants subsection should be described in sufficient detail to help the reader determine characteristics of the individuals in the sample and make inferences regarding how well the results from the sample may generalize to the population. The Participants subsection may begin with a description of how research participants were recruited, and the number of participants in the study and in each group should be stated. For a research proposal, the number of participants targeted should be provided; for completed research, the actual number of participants should be stated.

Participants should also be described on basic demographic variables that are relevant to the project. Typically, general information such as age, gender, and any experience with variables related to the research project are provided (e.g., grade level in school for a study of academic ability). Additional participant variables will need to be described based on the variables examined in the project. For example, a study on relationship satisfaction in intimate couples should state the number of participants who are married, divorced, single, or dating and so on. This study may also need to report on relationship length though this information would not be relevant to research on a different variable such as academic ability.

Therefore, when selecting the variables to measure and report, carefully consider which variables are directly relevant to describing the sample given the research aims. Students should review the participant variables measured in existing research on their topic for assistance in critically considering whether the variables measured and reported in their proposals are necessary and sufficient to describe their targeted sample of research participants.

When writing a Participants section for a proposal (not a completed research project), it may be helpful to write the description of some variables using placeholders. Though students will know how many individuals they are targeting to participate in the project and in each group, students may not know what their specific characteristics will be. To address this lack of information, students can structure sentences for the Method section that can be easily modified to accommodate the final description of the participants after data collection. These sentences should include "placeholders" that will be modified later.

To illustrate the use of placeholders in the Participants subsection, students can write statements similar to these (as relevant to their own research projects), "Participants will be recruited by posting an announcement in the school newspaper and posting the announcement to the following social media forums... Participants (N = 120 projected; males = X, females = X) will be college students who will report affiliation with the military (n = X) or no affiliation with the military (n = X). Regarding marital status, X% (n = X) will indicate they are married, X% (n = X) will report that they are single, and X% (n = X) will indicate that they are divorced or widowed. "

The placeholder **X** is noted in **boldface** to distinguish it as a placeholder instead of an actual research result. The boldface serves as a reminder to replace the placeholder with the actual results from the project after data collection and statistical analysis are complete. The placeholder should be stated in a manner that makes it consistent with the student's hypothesis and the data that will be collected for the project. For example, if military affiliation is not a variable measured in the study, this variable should not be included in a description of the research participants. Only the variables that will be measured in the project should be included in the written description, and all variables that are measured should be described in the paper in the Participants and/or Results sections. It wastes research participants' time to collect data from them that will not be reported in the paper, so all data requested should be reported out of respect for their time and effort.

When using placeholders, the statements to describe the forthcoming research results can be written ahead of time and modified quickly by converting to past tense and replacing the placeholders with data when the results are finalized. Students are encouraged to use placeholders when drafting research proposals to verify that they have included all items they need to describe the sample in the Participants section in the Materials section. Having an explicit description of the variables needed helps to ensure alignment between the description of the variables assessed in the demographic items.

Materials. All information collected from research participants should be described in the Materials subsection (e.g., informed consent, scales, surveys, interview questions, demographic items). This subsection should be written in a manner thorough enough that others could replicate the study by gathering the same information from research participants. For research proposals, the materials should be briefly described in the Materials subsection, and every item to which research participants will respond should be included in corresponding appendices placed at the end of the document.

For example, for a research project using the Rosenberg Self-Esteem Scale, a description of the scale should be provided in the Materials section and the entire scale (i.e., all items with response scales and participant instructions) should be provided in a corresponding appendix. The source of the scale should be cited in text and in the References.

The following is an example scale description for the Materials subsection of a research proposal. The description includes the name of the scale, in text citation, the variable it measures, a reference to the appendix containing the full scale (i.e., "see Appendix A"), the number of items on the scale, a description of the response options including numerical values explaining how the options are scored, example items to illustrate the nature of the scale, explanation of reverse scoring (if required), the statistic that is computed on the scale (i.e., overall mean), how the statistic is interpreted (i.e., higher means indicate higher levels of the variable), and previous research support for the reliability/validity of the scale (i.e., Cronbach's alpha). For research manuscripts, students should include published, valid, and reliable scales in their projects whenever possible, and include all of this information to describe the scale selected:

"The Rosenberg Self-Esteem scale (Rosenberg, 1965) will measure participants' levels of global self-esteem (see Appendix A). The scale consists of 10 items that are measured on a 4-point Likert-type scale ranging from 1 (*strongly disagree*) to 4 (*strongly agree*). The

scale consists of five positively phrased items (e.g., "On the whole, I am satisfied with myself.") and five negatively phrased items (e.g., "At times I think I am no good at all."); the negatively phrased items will be reverse scored. An overall scale mean will be computed for each participant after reverse scoring the negatively phrased items. Higher means will indicate higher levels of global self-esteem. The scale demonstrates satisfactory internal reliability in previous research (Cronbach's alpha = .88; Schmitt & Allik, 2005)."

The following is an example appendix corresponding to the scale described in the Materials subsection (see APA Publication Manual for formatting instructions):

Appendix A

Feelings about the Self

Below is a list of statements dealing with your general feelings about yourself. Please indicate how strongly you agree or disagree with each statement.

1. On the whole, I am satisfied with myself.

strongly agree agree disagree strongly disagree

2. At times I think I am no good at all.

strongly agree agree disagree strongly disagree

3. I feel that I have a number of good qualities.

strongly agree agree disagree strongly disagree

[full scales with all items should be included in each appendix]

Procedure. The Procedure subsection of the Method section should describe all steps that research participants will encounter as they take part in the study, stated in chronological order. It should use the scale/survey names that were introduced in the Materials section. The procedure should briefly note how participants will be recruited (a full description is provided in the Participants section), how participants will provide informed consent, any random assignment procedures that are used, the surveys and materials participants encounter and how they are processed (e.g., presented on computer screens, read as printed documents), debriefing techniques, and how participants are dismissed from study participation. The following is a brief example of a Procedure section for a research proposal.

"Research participants will be recruited via flyers handed out on campus and announcements read by instructors of their courses. Research participants will agree to an online consent document prior to completing the survey. The participants who do not agree to participate will exit the study and be thanked for their time. For students who agree to participate, the first section of the study will include demographic items, then participants will respond to questions about [variable]. Next, participants will be randomly assigned to read a passage about either a [describe condition] or a [describe condition]. After reading the passage, participants will rate [variable], then participants will rate [variable]. Finally, participants will rate [variable]. At the conclusion of the study, participants will be debriefed. When all participants' questions are answered, they will be thanked for their time and dismissed from the study."