Chapter 3 (Methodology) - Thesis or Dissertation Proposal

Comparison study

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(Not intended to be all encompassing, but a general overview)

Chapter 3 – Methodology

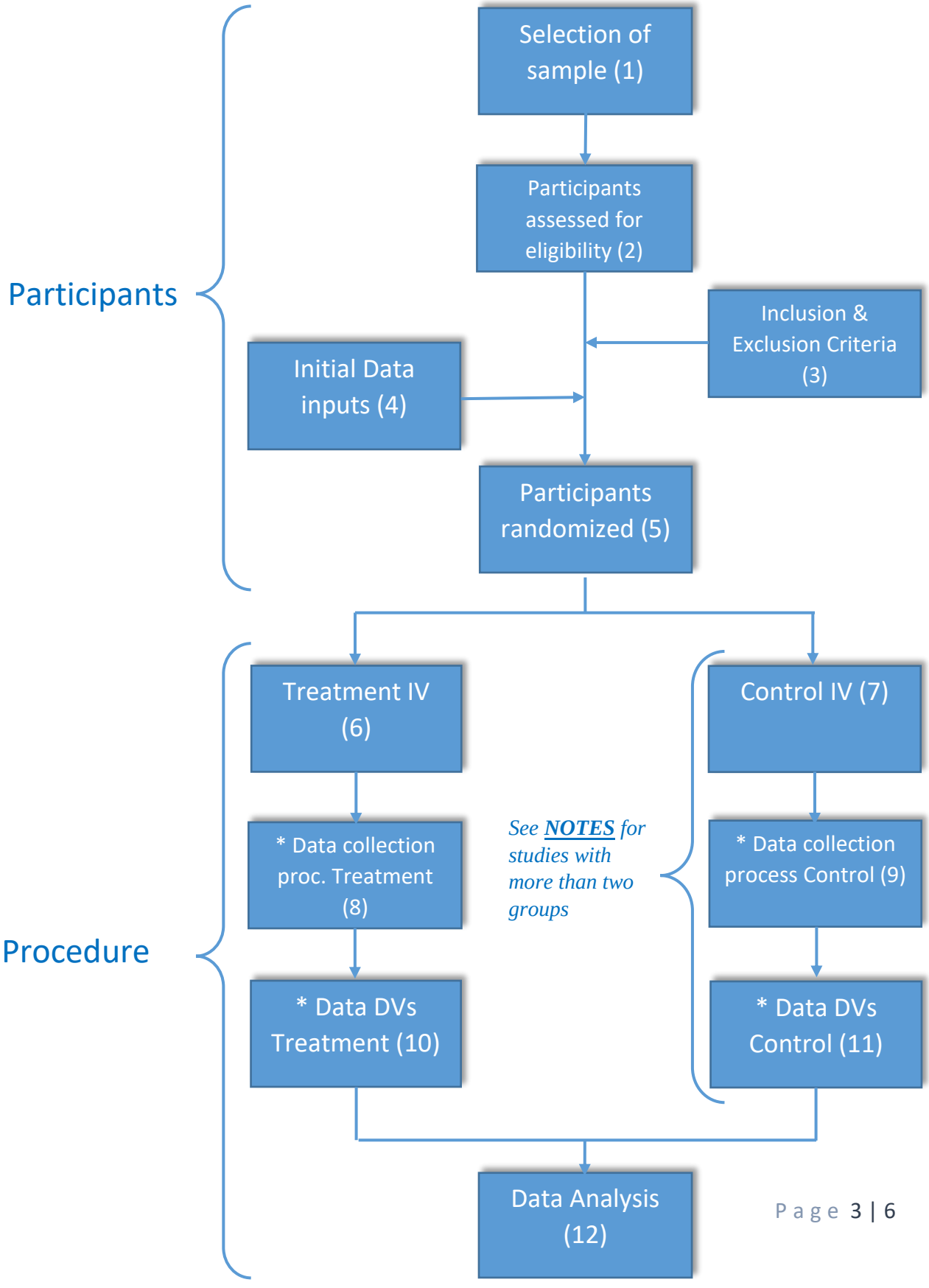
The primary objective of your methods chapter is to describe in detail, the steps you will complete to conduct your study. Typical sections of the methods chapter include; Introduction, Setting, Participants, Intervention, Materials, Instruments, Stimuli, Procedure, Data Collection, and Procedures. Beginning with the sixth edition of the *Publication Manual*, the Material, Instruments, and Stimuli sections are more likely to be lower-level subsections of the Procedure subsection. You are free to decide how subsections can best clarify your own work, and the titles for the subsections of the Methodology are flexible.

The first section of Chapter Three should be an Introduction containing three parts. The first part is a brief reminder of the general research problem. This is where purposeful redundancy is a good writing technique. Use purposeful redundancy to connect chapter three seamlessly to the previous chapter, but also to enable it to "stand alone." The second part is a re-statement of the research question(s). Remember, the research question drives the research design and not the other way around. Finally, the third part is an overview of the research design which should include a brief overview of the following: methodology, setting, participants, variables, procedure, apparatus, and materials.

The Second section in Chapter Three is the Setting. Describe the research site(s) where the research will be conducted. First provide a broad description of the setting (e.g., school, hospital, community center). Next provide a description of the specific area(s) where the data will be collected (e.g., classroom, patient room). Be sure to include any demographic data related to the setting as appropriate.

The third and remaining sections follow a general workflow which is outlined over the following pages. These remaining sections may be altered depending on the specifics of your study. The following flow diagram is for a typical comparison study. This is not meant to serve as an all-

inclusive workflow, but a template to display the fundamental steps in a comparison study. Working with a methodologist is imperative at this point.



Participants: The purpose of this section is to not only indicate who will be the participants in your investigation, but also describe how they will be assessed for eligibility, any inclusion and exclusion criteria, specific characteristics, and any randomization process.

The following are general steps and factors that should be considered while writing the Participants section.

1. **Selection of sample.** Fully describe the population / sample to be used in the study. In addition, Describe the recruitment plan including how the population will be identified and how initial contact will be made with potential subjects (for example, directly, by phone, by letter, etc.). Describe the setting in which an individual will be interacting with an investigator. Specify if any advertising will be performed and indicate how this will be done (e.g., written materials, online communication, word of mouth, etc.)

2. **Participants assessed for eligibility**. Provide numbers of subjects to be studied and justification for the sample size. Consider using a software program such as g*power to conduct a priori sample size calculation. Explain the rationale for the use of vulnerable groups such as pregnant women, children, institutionalized or cognitively impaired persons, prisoners or others who are likely to be vulnerable.

3. **Inclusion & Exclusion criteria**. Identify and describe criteria for inclusion & exclusion. This may include factors such as age, gender, education, medical status, etc.

4. **Initial Data inputs**. State all variables that will be collected prior to the experiment. This may include gender, race, ethnicity, age, SES, medical records, etc. Statistics may be reported in the Participants subsection if they describe preexisting differences (or similarities) between groups. Also, provide details to how these variables will be obtained and transferred to study database***.

5. **Participants randomized**. Describe the randomization process. Discuss if researchers will be aware of participants group (Treatment or Control). Note – If study is a

comparison of certain groups (e.g., gender, ethnicity), then there is no randomization of participants.

Procedure: Consider two points of view in this section. First, use the researcher's point of view to describe how the experiment will be organized. What were the conditions, did everyone participate (within-subjects design) or grouped in some way (between-groups design), grouped by a characteristic or randomly assigned. Next, use the participant's point of view to describe the task. This typically includes a summary of the instructions to the participants. Explain the task from general to specific. Typical factors in the Procedure section of a comparison study:

6. **Treatment**. Provide explicit details as to the treatment procedures. * See NOTES for alternative options.

7. **Control**. Provide explicit details as to the procedures the Control group will experience.

8. **Data collection process Treatment**. State all variables that will be collected during research. State and describe the processes for collecting data. This will typically include the who (who will collect the data), where (where the data will be collected, and when (when will the data be collected). Also, provide details to how these variables will be obtained and transferred to study database***.

9. **Data collection process Control**. State all variables that will be collected during research. State and describe the processes for collecting data. This will typically include the who (who will collect the data), where (where the data will be collected, and when (when will the data be collected). Also, provide details to how these variables will be obtained and transferred to study database***.

10. **Data DVs Treatment**. State all variables of the Treatment group that will be collected post treatment. This should include all dependent variables (DVs). Also, provide details to how these variables will be obtained and transferred to study database***.

11. **Data DVs Control**. State all variables of the Control group that will be collected during research. This should include all dependent variables (IVs). Also, provide details to how these variables will be obtained and transferred to study database***.

12. **Data Analysis**. Describe in detail the statistical analyses to be conducted. This should be a clearly written section providing details of IVs, DVs, covariates, and the analyses to be conducted.

NOTES:

* The Treatment and Control groups may include the same variables and processes. Also, the groups may not be differentiated by a treatment, but rather different levels of a variable. For example, your Independent Variable may be gender (Male, Female), or education attainment (High school, Associates, bachelor's, Master's, Doctorate).

** Repeat steps 7, 9, and 11 for additional groups.

*** The study database may be in the form of an MS Excel file, MS Access, or another database application. The study database should have the ability to interact with a data analysis package such as SPSS or SAS. IMPORTANT. Consider confidentiality or anonymity of the participants. In some instances, you may want to mask the participants with numbers while maintaining a mask key.

References

American Psychological Association. (2009). *Publication Manual of the American Psychological Association (6th ed.)*. Washington, DC: American Psychological Association.

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