Dissertation Methodology Check List

*The method chapter discusses the procedures to be followed in conducting the study (in the final draft, the methods that were followed) and the overall research design. The content and format of Chapter III will vary depending on whether the study is a qualitative, quantitative, or mixed methods study.*

**Introduction**
- Begins with the purpose of the chapter, how it fits in the dissertation, and the organization of the chapter.
- Describes the method of inquiry used (e.g., quantitative, qualitative, mixed method, meta-analysis, program evaluation, etc.).
- Describes the specific research methodology chosen and how it derives logically from the **Statement of Problem** and the research questions.

**[Qualitative]**

**Methodology Selected**
- Describes which qualitative methodology will be used.
  - Justifies choice of methodology using major and foundational sources.
  - Explains why other possible choices would be less effective.
- Describes specific research questions and sub-questions (where appropriate) that are:
  - Clear and succinct.
  - Congruent with the **Statement of Problem**.
  - Answerable.
  - Few in number.
  - Clearly stated.
  - Open-ended (*not* yes/no questions).
- Describes the role of the researcher in the data collection procedure.
- Addresses the potential impact and minimization of researcher bias through methodological approaches.

**Study Participants**
- Describes and justifies the context (including site) for the study.
- Clearly defines both the general study population and the specific population.
  - Demonstrates (and documents) the ability to access the population.
  - Describes and justifies the sampling approach.
  - Describes how the characteristics of the sample population align with the general...
population

Discuss how the sample selection impacts the generalizability of the study

Identifies strategies for recruiting participants

Specifies appropriate criteria for selecting participants

Addresses the relationship between the researcher and the participants

Justifies the number of participants

Data Collection

Describes and justifies the data collection method(s) (e.g., interview, focus group, observation)

Addresses what types of data will be collected and the unit(s) of analysis

Includes detailed protocol(s) in appendix for data collection (e.g., interview protocol, focus group protocol, etc.)

Justifies contents of data collection protocols by connection to the research questions posed in relation to the qualitative paradigm chosen

Clearly describes the process by which the data was generated, gathered, and recorded

Clearly describes the systems used for keeping track of data and emerging understandings (research logs, reflective journals, and cataloging systems)

Procedures Followed

States the sequence of steps followed in conducting the research from development of the research instrument(s) to data analysis

Details all steps in a way that another researcher could follow the steps to reproduce the study

Explains the relation of the pilot study to the full study

Trustworthiness

Addresses credibility, transferability, dependability, and confirmability

Shows evidence of quality by discussing how procedures will be/were followed to assure the accuracy of the data and lessen the impact of researcher bias (e.g., trustworthiness, member checks, triangulation, etc.)

Ethical Concerns

Provides adequate measures for ethical protection of participants

Includes detailed information about the informed consent process and how informed consent will be obtained

Includes detailed information about how confidentiality is addressed
Data Analysis

_____ Articulates how and when the data will be or was analyzed

_____ Aligns the detailed data analysis plan with the specific research design to generate answers to the research questions

_____ Describes procedures for dealing with discrepant cases

_____ If a software program was used to aid analysis, clearly describes how it was used

_____ Gives details about the coding procedure and how themes or categories were developed

[Quantitative]

Methodology Selected

_____ Includes a description of the research design and approach

_____ Provides justification for using the research design and approach

_____ Demonstrates that the research design and approach derive logically from the problem or issue statement

_____ Supports the research design and its application with major and foundational sources

Research Questions/Hypotheses

_____ Describes specific research questions and hypotheses (where appropriate) that

_____ Are clear and succinct

_____ Are congruent with the Statement of Problem

_____ Are answerable/testable

_____ Correspond to the number of variables of interest

_____ Have hypotheses that correspond to research questions

_____ Are clearly stated

_____ Are open-ended (not yes/no questions)

Population and Sample

_____ Identifies and describes the source of the specific population and the population’s characteristics

_____ Identifies that permission has been obtained to access the population, if relevant

_____ Describes the sampling method, its appropriateness, and the sampling frame

_____ Identifies the sample size as sufficient in terms of statistical power to support the analyses

_____ Identifies the criteria for selecting subjects
Describes the sample characteristics

**Ethical Concerns**

- Identifies procedures for protection and ethical treatment of human subjects
- Describes the informed consent process in detail, including how human subjects will provide their informed consent, where applicable
- Describes procedures to protect confidentiality and anonymity in data collection, analysis, reporting, and storage
- Where applicable, describes in detail any treatment or intervention to which human subjects will be exposed
  - Identifies concealment or deception as part of the treatment, if used
  - Identifies the process for debriefing human subjects following use of concealment or deception
  - Identifies if a control group will be used, if the group will receive a standard intervention, and the nature of that intervention

**Instrumentation**

List and describe the survey, research, or testing instruments and data collection forms (to be) used in gathering data for the study. The reason for the use of these instruments should also be given. Defend the choice of instruments and address reliability, validity, and utility of the instruments.

- Describes in detail all instrumentation or data collection tools, including
  - The instrument name, if using an existing instrument
  - The specific type of instrument
  - The instrument’s measures in terms of constructs, concepts, or variables
  - The scoring of scales, subscales, typologies and their interpretation
  - Whether a new instrument is developed or an existing instrument is modified and describes its use
  - The published reliability and validity statistics for existing instruments OR a detailed plan for statistically assessing the reliability and validity of new or modified instrument(s) or existing instruments without established reliability or validity
- Includes a detailed description of data that comprises each variable in the study
- Includes operational definitions of variables
  - Provides a clear explanation of how the value of each variable will be derived from the instrument
  - Identifies the level of measurement (NOIR) for each variable
Either describes established (published) reliability and validity statistics or a clear plan to statistically validate the instrument (for modified or created instruments).

**Data Collection**
- Describes any pilot study results, if applicable
- States the sequence of steps followed in conducting the research from development of the research instrument(s) to data analysis
  - Details all steps such that another researcher could follow the steps to reproduce the study.

**Data Analysis**
Addresses how the data will be/was analyzed. What statistical methods were used?
- Includes a detailed analysis plan that explains the descriptive and/or inferential analyses proposed or used, such as
  - Descriptive statistical procedures
  - Whether the data are normally distributed or the distribution is skewed
  - Parametric and/or nonparametric statistical procedures
  - Statistical power

**Validity**
- Addresses internal and external validity threats and how they will be or were addressed

*[Mixed Method]*

**Methodology Selected**
- Includes a description of the specific mixed method research design and approach
  - Research questions reflect the two phases, qualitative and quantitative, and the ordering of the two phases consistent with the specific mixed method design (explanatory, exploratory, or triangulation); hypotheses correspond to quantitative RQs, where appropriate

- Provides justification for using the specific research design and approach
- Shows that the research design and approach derives logically from the problem or issue statement
- Supports the research design and its application with major and foundational sources
Research Questions/Hypotheses

_____ Describes specific research questions and hypotheses (where appropriate) that
    _____ Are clear and succinct
    _____ Are congruent with the Statement of Problem
    _____ Are answerable/testable
    _____ Correspond to the number of variables of interest
    _____ Correspond to research questions (if they are hypotheses)
    _____ Are clearly stated
    _____ Are open-ended (*not* yes/no questions)

Population and Sample

_____ Identifies and describes the source of the specific population and the population’s
    characteristics for both phases
_____ Identifies that permission has been obtained to access the population, if relevant
_____ Describes for both phases the sampling method, its appropriateness, and the sampling
    frame
_____ Identifies the sample size as sufficient in terms of statistical power to support the
    quantitative analyses
_____ Identifies the sample size as sufficient in terms of data saturation for the qualitative
    phase
_____ Identifies the criteria for selecting subjects for both phases
_____ Describes the sample characteristics for both phases

Ethical Concerns

_____ Identifies procedures for protection and ethical treatment of human subjects
_____ Describes the informed consent process in detail, including how human subjects will
    provide their informed consent, where applicable
_____ Describes procedures to protect confidentiality and anonymity in data collection,
    analysis, reporting, and storage of data
_____ Describes in detail, where applicable, any treatment or intervention to which human
    subjects will be exposed
    _____ If concealment or deception will be used, identifies that as part of the treatment
    _____ Identifies the process for debriefing human subjects following use of
        concealment or deception
    _____ Identifies if a control group will be used, if the group will receive a standard
        intervention, and the nature of that intervention
Instrumentation
List and describe the survey, research or testing instruments; interview or observational protocols; and data collection forms (to be) used in gathering data for the study. The reason for the use of these instruments should also be given. Defend the choice of instruments and address reliability, validity, and utility of the instruments.

Quantitative phase:
_____Describes in detail all instrumentation or data collection tools, including
   _____The instrument name, if using an existing instrument
   _____The specific type of instrument
   _____The instrument’s measures in terms of constructs, concepts, or variables
   _____The scoring of scales, subscales, typologies, and their interpretation
   _____Whether a new instrument is developed or an existing instrument is modified and describes its use
   _____The published reliability and validity statistics for existing instruments OR a detailed plan for statistically assessing the reliability and validity of new or modified instrument(s) or existing instruments without established reliability or validity

Qualitative phase:
_____Describes and justifies data collection method(s) (e.g., interview, focus group, and observation)
_____Justifies choices about which data to collect
   _____Addresses what types of data will be collected and the unit(s) of analysis
   _____Includes detailed protocol(s) in appendix for data collection (e.g., interview protocol, focus group protocol, etc.)
   _____Justifies contents of data collection protocols by connection to the research questions posed in relation to the qualitative paradigm chosen

Data Collection
_____Describes any pilot study results, if applicable
_____States the sequence of steps followed in conducting the research, from development of the research instrument(s) to data analysis
   _____Details all steps such that another researcher could follow the steps to reproduce the study
   _____Describes the role of the researcher in the qualitative data collection procedure
Addresses through methodological approaches the potential impact and minimization of researcher bias

**Data Analysis**

Addresses how the data were analyzed. What statistical methods were used?

- Includes an explanation of descriptive and/or inferential analyses used in the study, such as
  - Level of measurement (NOIR) for each quantitative variable
  - Description of parametric, nonparametric, or descriptive analytical tools used
  - Distribution of the quantitative data
  - Statistical power
  - A detailed explanation of how qualitative data will be or were analyzed, procedures used, and units of analysis used

- Data analysis reflects the phases in alignment with the simultaneous or sequential mixed method design and explains how analysis of qualitative and quantitative data will generate or generated answers to the research questions

**Quality**

- Addresses internal and external validity threats
- Addresses trustworthiness, including: credibility, transferability, dependability, and confirmability

*[For all Methods of Inquiry]*

**Summary**

- Summarizes key points in the chapter
- Bridges to Chapter IV
- Conforms to the recommended length of 10–25 pages for Chapter III