

MARYWOOD UNIVERSITY
Ph.D. in HUMAN DEVELOPMENT
Dissertation Guidelines for a Mixed Methods Research Study

The guidelines presented in this document provide a framework for formatting your Dissertation based on a mixed methods study. Your Dissertation chair and committee members should be consulted to define the components and sequence of your Dissertation based on these guidelines. All students using a mixed methods study for their research must follow the **Marywood Dissertation**

Format found in the Ph.D. Student Handbook:

- a.) Title Page
- b.) Copyright Page/Information
- c.) Abstract/Statement by Author
- d.) Dedications (Optional)
- e.) Acknowledgements (Optional)
- f.) Table of Content:
 - a. Chapter 1: Introduction
 - b. Chapter 2: Review of Literature
 - c. Chapter 3: Research Methodology
 - d. Chapter 4: Results/ Discussion

- e. Chapter 5: Conclusion and Recommendations
- g.) References
- h.) Appendices
- i.) List of Figures
- j.) List of Tables

Guidelines pertaining to the 'Table of Content' have been elaborated in the Ph.D. Student Handbook. When forming a Dissertation Committee, Marywood's Ph.D. program requires the submission of a research proposal that includes all the items listed in Chapters 1, 2, 3, and the appropriate literature references, written in the future tense. Upon completion of the research study, then all chapters within the Dissertation are revised and written in the past tense. References included in the research proposal and Dissertation are written and listed according to the most current edition of APA (American Psychological Association).

(Note: *The items listed below are not intended to be headings in the dissertation, but simply outline the elements that are included in a typical dissertation.*)

Table of Content:

- I. **Chapter 1: Introduction** – Describe the topic of study and why the study needs to be conducted.

a.) Background: Briefly summarize research literature related to the scope of the research study. Describe the gap in knowledge in the discipline that the research study will address. End the section by explaining why the study is needed.

b.) Statement of the problem: State the research problem. Provide evidence of consensus that the research study is current, relevant, and significant to the discipline. Frame the problem in a way that builds upon or counters previous research findings. Address a meaningful gap in the current research literature.

c.) Purpose of the Research Study: Indicate that a mixed methods paradigm is being used in this research study. Describe, compare, correlate, explore, and develop the intent of the study. List the independent variable, dependent variable, and covariant variables and/or concept/phenomenon as related to the research study.

d.) Research Question(s) and Hypotheses: State the research question(s). For quantitative components, state the null and alternative hypotheses

that identify the independent and dependent variables being studied, the association being tested, and how the variables are being measured.

e.) Theoretical and/or Conceptual Framework for the Research Study:

Identify the theory or theories and provide the origin of source. State concisely the major theoretical propositions and/or major hypotheses with a reference to more detailed information in Chapter 2. Explain how the theory related to the study approach and research question(s).

Identify and define the concept and/or phenomenon that grounds the study. Describe concisely the conceptual framework (for qualitative components, the contextual “lens;” for quantitative components, the body of research that supports the need for the study) as derived from the literature with more detailed analysis in Chapter 2. State the logical connections among key elements of the framework with a reference to a more thorough explanation in Chapter 2. State how the framework relates to the study approach and key research questions, as well as to the instrument development and data analysis, where appropriate.

f.) Nature of the Study: Provide a concise rationale for the selection of the study design. Briefly describe the key study variables (independent, dependent, and covariant in quantitative components) or concept(s)

and/or phenomenon being investigated for qualitative components.

Briefly summarize the methodology, e.g., from whom and how the data will be collected and analyzed.

g.) **Definition of Terms:** Provide concise definitions of key concepts or

constructs. Define terms used the study that have multiple meanings.

Include citations that identify support for professional literature for the definition or operational definition.

h.) **Assumptions:** Clarify aspects of the study that are believed, but cannot

be demonstrated to be true. Include only those assumptions that are

critical to the meaningfulness of the study. Describe the reasons why the assumptions were necessary in the context of the research study.

i.) **Scope and Delimitations:** Describe specific aspects of the research study

that are addressed in the study and why the specific focus was chosen

(issue of internal validity). Define the boundaries of the research by

identifying populations included and excluded and theories/conceptual

frameworks most related to the area of research that were not

investigated (issue of external validity). Address any potential

generalizability (quantitative components) or transferability (qualitative components).

- j.) **Limitations:** Describe the limitations of the research study related to the design and/or methodological weaknesses (including issues related to limitations of internal and external validity, construct validity, and confounder variables). Describe any biases that could influence the research study outcomes and how they will be addressed. Describe any reasonable measures to address the limitations.
- k.) **Significance:** Identify potential contributions of the research study that advance the knowledge in the discipline, practice, and/or policy.
- l.) **Summary:** Summarize the main points of Chapter 1 and provide a transition into Chapter 2.

II. Chapter 2: Literature Review

This chapter constructs a platform, using the known literature/ knowledge that will help to achieve a substantive knowledge about the problem being addressed. Review of literature involves exploring all the previous research studies and knowledge relevant to your anticipated research. It should be used to inform:

- The problem and its significance
- The theoretical or conceptual framework

- Key variables and/or Concepts
- The research methods

Advisors/Dissertation Chairs should be contacted to make sure that all the elements of the topic are being covered in the review and that the research studies are appropriate and thorough.

The following elements are the framework for the process and components of a literature review and are not intended to be subheadings of Chapter 2:

A.) Introduction: Restate the research questions and the purpose of the study. Provide a concise synopsis of the current literature that establishes the relevance to the research study.

B.) Description and Critique of Scholarly Literature:

Keep in mind that scholarly review of literature focusses on **primary sources** such as peer-reviewed research and journal articles rather than **secondary sources** like textbooks. Each literature should be described and briefly critiqued identifying their strengths and weaknesses, for example:

- “For theoretical discourses, indicate: source of theory, overlap/disparity with other theories, how well they have been empirically verified.

- For conceptual discussions, indicate: sources of concepts, overlaps/disparity with other concepts, how well they have been empirically verified.
- For empirical studies, indicate: research questions, strengths and weaknesses of methodology, results, conclusions and implications.”

(UALR, 2013)

The written review/studies should be organized under major topics, theories, research questions or methods. Be careful, not to create a biased review by covering only prior literature that supports your predispositions and disregards other literature. Literature should be consistently critiqued as failure to do so is likely to compromise your research. Pay attention not to ignore weaknesses in studies that support your predispositions and not to over-critique studies that contradict your predispositions.

C.) Theoretical Foundation (as appropriate)

Name the theory or theories. Provide a source or origin of the theory.

Describe major theoretical propositions and/or major hypotheses, including delineation of any assumptions appropriate to the application

of the theory. Provide a literature- and research-based analysis of how the theory has been applied previously in ways similar to the research study. Provide the rationale for the choice of this theory. Describe how and why the selected theory relates to the present research study and how the research questions relate to, challenge, or build upon existing theory.

D.) Conceptual Framework (as appropriate):

Identify and define the concept/phenomenon. Synthesize primary writings by key theorists, philosophers, and/or seminal researchers related to the concept or phenomenon. Provide key statements and definitions inherent in the framework. Describe how the concept of phenomenon has been applied and articulated in previous research and how the current research study benefits from this framework.

E.) Literature Review Related to Key Variables and/or Concepts:

Describe studies related to the constructs of interest and chosen methodology and methods that are consistent with the scope of the current research study. Describe ways researchers in the discipline have approached the problem and the strengths and weakness inherent in

their approaches. Justify from the literature the rationale for selection of the variables or concepts.

For Quantitative Components: Review and synthesize studies related to the key independent, dependent, and covariate variables to produce a description and explanation of what is known about the variables, what is controversial, e.g., mixed findings by researchers, and what remains to be studied. Review and synthesize studies related to the research questions.

For Qualitative Components: Review and synthesize studies related to the key concepts and/or phenomena under investigation to produce a description of what is known about them, what is controversial, and what remains to be studied. Review and synthesize studies related to the research questions and why the approach selected is meaningful.

F.) Summary and Conclusions:

Concisely summarize major themes in the literature. Summarize what is known as well as what is not known in the discipline related to the research study. Describe how the current research study fills at least one of the gaps in the literature and will extend the knowledge in the

discipline. Provide transitional material to connect the gap in the literature to the methods described in Chapter 3.

III. Chapter 3: Research Methodology

The type of method to be used in a research study is dictated by the literature review and the research question/hypothesis, i.e., what is the author planning to test? *The information provided in the research proposal related to methodology is written in the future tense, however after conducting the study and data collection Chapter 3, it is then converted to past tense. (NOTE: Participant recruitment and data collection cannot start until you have received an approval from the Institutional Review Board (IRB)).*

A sample brief outline is shown as follows:

A.) Introduction:

Restate the research study purpose as described in Chapter 1.

Preview the major sections of the chapter.

B.) Research Design and Rationale:

Restate the research question(s) as described in Chapter 1. State and define the central concept/phenomenon of the research study.

Identify and justify the mixed methods design and how the two data collections and analyses work together as the best approach to answering your research questions, e.g., quantitative → qualitative or qualitative → quantitative. Describe why both methods are important to answering the research questions. Provide rationale for the chosen data collection, analysis, and interpretation of timing decisions, e.g., concurrent and sequential, including how the integration between quantitative and qualitative data occurs.

C. Role of the Researcher:

Define and explain your role as the observer, participant, or observer-participant. Reveal any personal and professional relationships the researcher may have with participants, with emphasis on supervisory or instructor relationships involving power over the participants. State how any researcher biases and/or power relationships will be managed. Report any other ethical issues as applicable, e.g., conducting the study within one's own work environment, conflict of interest or power differentials, justification

for use of incentives, etc. Describe the plan for addressing any ethical issues within the study.

D. Methodology: Needs to be described in sufficient depth and detail so that other researchers can replicate this study.

Identify the population (if appropriate). Identify and justify the sampling strategy. State the criterion/a on which the participant selection was based. Establish how participants were known to meet the criterion. State the number of participants/cases and the rationale for that number (for quantitative components, if applicable, justify the sample size using a power analysis that includes justification for the effect size, alpha level, and power level chosen).

Explain the specific procedures for how participants will be identified, contacted, and recruited. Describe the relationship between saturation and sample size (qualitative components).

Qualitative Components: Identify each data collection instrument and source (observation sheet, interview protocol, focus group protocol, video-tape, audio-tape, artifacts, archived data, and other kinds of data collection instruments. Identify the source for each data

collection instrument (published or produced by the researcher).

Permission to use is included in the Appendix.

For Published data collection instruments: Who developed the instrument and what is the date of publication? Where and with which participant group has the instrument been used previously? How appropriate is the instrument for the current research study? Where modifications implemented? Describe how content validity will be/was established. Address any context- and culture-specific population in developing the instrument.

For Researcher-Developed Instruments: Basis for instrument development (literature resources, pilot study). Describe how the content validity will be/was established.

Quantitative Components: For all instruments, establish sufficiency of instrumentation to answer research questions.

For Published data collection instruments: Name of developer(s) and year of publication. Appropriateness to the current study. Mention of permission from developer to use instrument in current study (permission letter is included in the Appendix). Published

reliability and validity values relevant to their use in the study. Where and with which populations the instrument has been used previously and how validity/reliability are/were established in the study sample.

For Researcher-Developed Instruments: Literature resources. Other bases, such as a pilot study. Evidence you will provide for reliability (internal consistency and test/retest). Evidence you will provide for validity (predictive and construct validity).

Intervention Studies or Those Involving Manipulation of an Independent Variable: identify materials and/or programs applied as treatment or manipulation. Provide information on the developer of the materials and/or programs: if published, then state where, how, and with what populations they were used previously. If researcher-developed, then state basis for their development and how they were developed. Provide evidence that another agency will sponsor intervention studies, such as clinical interventions.

Procedure for Pilot Studies (as appropriate): Include all procedures for recruitment, participation, and data collection associated with the pilot study. Describe the relationship of the pilot study to the main

research study, e.g., what was the purpose of the pilot study? Include the IRB approval letter in the completed dissertation.

Procedures for Recruitment, Participation, and Data Collection: For each data collection instrument and research question, provide the following details: Thoroughly describe the recruiting procedures.

Describe how the participants will be given informed consent.

Describe how the data will be collected. Explain how participants exit the study (debriefing procedures, etc.). Describe any follow-up procedures such as requirements to return for follow-up interviews, treatments, etc.

For Qualitative Components: For each data collection instrument, provide the following: where the data will be collected. Frequency of the data collection events. Duration of the data collection events. How the data will be recorded.

For Pilot Studies: Describe the relationship of the pilot study to the main study, e.g., what is the purpose of the pilot study?

For Intervention Studies: Describe clearly and thoroughly the nature of the treatment, intervention, or experimental manipulation; how it

will be designed and administered; and by whom and to whom it will be administered.

For Studies Using Archival data: Include all procedures for recruitment, participation, and data collection associated with the main study. Describe the procedures for gaining access to the data set. Describe the necessary permissions to gain access to the data (with permission letters included in the Appendix). If historical or legal documents are used as resources of data, then demonstrate the reputability of the sources and justify why they represent the best source of data.

Data Analysis Plan: For Quantitative Components: Identify software used for analysis. Provide detailed explanation of data cleaning and screening procedures. Restate the hypotheses from Chapter 1 (null and alternative) and for each describe in detail the analysis plan including: statistical tests that will be used to test the hypothesis, rationale for inclusion of potential covariates/confounding variables, how results will be interpreted (key parameter estimates, confidence intervals/probability values, odds ratios, etc.), explanation of data

cleaning and screening procedures as appropriate. **For Qualitative**

Components: type of coding used, any software used for

management and analysis of data, manner of treatment of

discrepant cases. State the plan for how quantitative and qualitative

data will be integrated in the analysis.

Threats to Validity: Describe threats to external validity, e.g., testing

reactivity, interaction effects of selection and experimental variables,

specificity of variables, reactive effects of experimental

arrangements, and multiple treatment interference, as appropriate

to the study, and how will these items be addressed. Describe threats

to internal validity, e.g., history, maturation, testing,

instrumentation, statistical regression, experimental mortality, and

selection maturation interaction, as appropriate to the study, and

how will these items be addressed. Describe any threats to construct

or statistical conclusion validity.

Issues of Trustworthiness: Credibility (internal validity): describe

appropriate strategies to establish credibility, such as triangulation,

prolonged contact, member check, saturation, reflexivity, and peer

review. Transferability (external validity): describe appropriate strategies to establish transferability such as thick description and variation in participant selection. Dependability (the qualitative counterpart to reliability): describe appropriate strategies to establish dependability such as audit trails or triangulation.

Confirmability (the qualitative counterpart to objectivity): describe appropriate strategies to establish confirmability such as reflexivity.

Intra- and intercoder reliability (where appropriate).

Ethical Procedures: Agreements to gain access to participants or data should include the actual documents from the IRB application.

Describe the treatment of human participants to include IRB approvals, ethical concerns related to the recruitment materials and procedures and the plan to address them. Ethical concerns related to the data collection/intervention activities including participant refusal or early withdraw from the study and a plan to address them.

Describe the treatment of data concerning whether the data were anonymous or confidential and any concerns related to each.

Protections for confidential data storage, dissemination, who will have access to the data collection, and when the data will be

destroyed. Describe any additional ethical concerns such as conducting the research study within one's own work environment, conflict of interest or power differentials, and justification of incentives.

Summary: Summarize the main points of the chapter and transition to Chapter 4.

IV. Chapter 4: Results/Discussion

This chapter contains the results/findings by performing data analysis of the data collected from the research study. Briefly review the purpose of the research study and research question(s). If a pilot study was conducted, then report any impact of the pilot study on the main study, e.g., changes in the instrumentation and/or data analysis strategies. Describe any personal or organizational conditions that influenced participants or their experience at the time of the study that may influence interpretation of the study results, e.g., changes in personnel, budget cuts, or other life-events.

Present participant demographics and characteristics relevant to the research study. State the number of participants, the location, frequency,

and duration of the data collection. Describe how the data were recorded. Present any variations in the data collection from the plan presented in Chapter 3. Describe any unusual circumstances encountered in the data collection.

Data Analysis: Report the process used to move inductively from coded units to larger representations including categories and themes. Describe the specific codes, categories, and themes that emerged from the data using quotations as needed to emphasize their importance. Describe the qualities of discrepant cases and how they were factored into the analysis.

Results (order of presentation is dependent upon the specific design):

Qualitative Components: Address each research question by presenting data to support each finding (quotes from transcripts, documents, etc.). Discuss discrepant cases and/or disconfirming data, as applicable. Include tables and figures to illustrate results, as appropriate.

Quantitative Components: Report descriptive statistics that appropriately characterizes the sample. Report statistical analysis findings, organized by research questions/hypotheses, including: exact statistics and associated probability values, confidence intervals around the statistics, as appropriate, effect sizes, as appropriate. Report results of post-hoc

analyses of statistical tests, if applicable. Report any additional statistical tests of hypotheses that emerged from the analysis of main hypotheses, as appropriate. Include tables and figures to illustrate results, as appropriate.

Evidence of Trustworthiness: Credibility: describe implementation of and/or adjustments to credibility strategies stated in Chapter 3.

Transferability: describe implementation of and/or adjustments to transferability strategies stated in Chapter 3. Dependability: describe implementation of and/or adjustments to dependability strategies stated in Chapter 3. Confirmability: describe implementation of and/or adjustments to confirmability strategies stated in Chapter 3. Intra- and intercoder reliability: describe implementation of and/or adjustments to consistency strategies stated in Chapter 3.

Summary: Summarize the answers to the research questions and provide a transition to Chapter 5.

V. Chapter 5: Conclusions and Recommendations

In this chapter provide a brief summary of the problem along with the nature of the study and why it was conducted. Concisely summarize the key findings.

Interpretation of the Findings: Describe in what ways findings confirm, disconfirm, or extend knowledge in the discipline by comparing them with what has been found in the peer-reviewed literature described in Chapter 2. Analyze and interpret the findings in the context of the theoretical and/or conceptual framework.

Conclusions: Provide a strong “take home” message that captures the key essence of the study.

Recommendations: Describe the recommendations for future research that are grounded in the strengths and limitations of the current study as well as the literature reviewed in Chapter 2.